INDEX OF IMPACT ASSESSMENT REPORTS FOR FY 2024-25

Sr. No.	Thrust Area	CSR Project	Name of Independent Agencies	Appendix No.
1	Health & Hygiene	SAFAR-Truckers Well-being Interventions (Multiple Locations)	Grant Thornton Bharat LLP	A
2	Health & Hygiene	Static Health Clinics and Mobile Medical Units (Multiple Locations)		B
3	Water Stewardship	Water Resource Management and Agriculture activities (Ankleshwar)	KPMG Assurance and Consulting Services LLP	C
4	Water Stewardship	Participatory Water Resource Management for Enhancing Livelihood in villages (Vizag)		D
5	Water Stewardship	Improvement of left bank of Sarada River near Ganapathi village of Munagapaka Mandal (Visakhapatnam)		E
6	Water Stewardship	Nama Jal Bhadrate - Mass Scale Rejuvenation of Water Bodies (Mysuru)		F
7	Water Stewardship	Water Resource Development Project (Patancheru)		G
8	Water Stewardship	Integrated Water Resource Management in Mahadevimangalam cluster of village (Sripi)		H
9	Water Stewardship	Water Body Rejuvenation Project (Kasna)		I
10	Water Stewardship	Water Resource Rejuvenation Project (Mysuru)		J
11	Water Stewardship	Water Resource Management - Water Rejuvenation Project (Penta)		K
12	Water Stewardship	Integrated Watershed Management (Khandala)		L
13	Health & Hygiene	Mobile Medical Units (Multiple Locations)		M
14	Enhancing Vocational Skills	Beautiful Homes Academy		N

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Grant Thornton

Impact assessment of SAFAR program

Asian Paints Ltd.

December 2024

Contents

List of abbreviations

BCC	Behaviour Change Communication
CSR	Corporate Social Responsibility
CSI	Child Survival India
CHC	Community Health Center
CHW	Community Health Workers
FGD	Focus Group Discussion
FY	Financial Year
GTBLLP	Grant Thornton Bharat LLP
IDI	In-depth Interview
INR	Indian Rupee
KAP	Knowledge, Attitude and Practice
NGO	Non-Governmental Organisation
PHC	Primary Health Centres
OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection

Executive Summary

The SAFAR program, initiated by Asian Paints Ltd. (APL), has achieved significant success in improving healthcare accessibility and quality for truckers, a vital yet underserved demographic. This comprehensive Truckers' Health and Road Safety program aims to enhance truckers' well-being by providing accessible and quality healthcare services along with road safety education. By addressing the unique challenges faced by truckers, the program promotes healthy lifestyles and safe driving practices, ultimately contributing to their overall well-being.

Program Relevance and Context

India's truckers, who transport over 70% of the nation's freight, face alarming health risks due to harsh working conditions. Chronic back pain, respiratory issues, gastrointestinal problems, and mental health challenges are prevalent, affecting 56%, 48%, 30%, and 40% of truckers, respectively. Furthermore, truckers are disproportionately affected by HIV/AIDS, with a 2.59% prevalence rate, underscoring the urgent need for targeted health interventions to address these critical concerns.

Key Achievements

Access to Healthcare:

- **95% of beneficiaries expressed satisfaction** with the services provided.
- **96%, benefited from the easy and free access to healthcare** provided by the SAFAR program.
- **Reliance on unqualified local practitioners and self-medication decreased,** indicating a shift towards more reliable and formal healthcare services.
- **73% of beneficiaries enrolled in health insurance schemes** through SAFAR's support, ensuring financial protection against medical expenses.
- **90% of truckers received medical kits that empowered them to adopt healthier habits,** promoting preventive care and self-management of health.

Cost and Time Savings:

- **67% beneficiaries reported average cost savings of less than INR 499 per consultation**, indicating a notable reduction in out-of-pocket expenses.
- **54% beneficiaries reported average annual cost savings on medicine below INR 2,000, indicating a notable decrease in out-of-pocket expenses** for essential medications.
- **88% of beneficiaries reported saving money** by not opting for alcohol, highlighting the program's positive impact on their financial well-being.
- **70% beneficiaries reported waiting less than 30 minutes for consultation**, highlighting the program's efficiency in managing patient flow and minimizing wait times.

Health Outcomes:

- **83% of respondents felt that they can manage their health better** due to the SAFAR program.

- **100% respondents agreed that essential medicines are always available through at SAFAR program locations.** The results indicate a statistically significant correlation between SAFAR's pharmacy services and essential medicine availability.
- The SAFAR program provided critical treatment for various health issues commonly affecting truckers, including:
    - Orthopaedic problems (e.g., back pain, joint issues)
    - Dermatological issues (skin problems)
    - Gastrointestinal problems (e.g., digestive issues, stomach ailments)
    - COVID-19 and related respiratory issues

Beneficiary Perception:

- **86% credited the road safety training and awareness programs with preventing accidents**, underscoring the program's contribution to improved road safety.
- **84% of beneficiaries reported improved overall well-being** due to the healthcare services provided by SAFAR.
- **86% agreed that their health status and awareness had increased** because of the program.
- **93% did not encounter any challenges when seeking healthcare** through SAFAR.
- **95% expressed satisfaction with the services, highlighting strong appreciation for the initiative.**
- **88% of beneficiaries felt comfortable visiting the SAFAR clinic** and interacting with the medical staff.

Community Engagement:

- The Behaviour Change Communication (BCC) component of the SAFAR program has also shown promising results in promoting positive behaviour change among truckers. A majority of respondents (65%) found BCC sessions to be helpful, indicating the program's effectiveness in influencing behaviour and promoting healthy practices.
- **40%, learned about the services through family and friends, highlighting the importance of word-of-mouth referrals.**

Community needs and Recommendations

The SAFAR program has achieved significant milestones, including increased health insurance enrolment, improved health-seeking behaviours, and reduced road accidents. To further enhance its impact, the program aims to:

- Enhance diagnostic services for chronic conditions
- Strengthen road safety training for drivers
- Boost community engagement through local leaders and influencers
- Leverage government health schemes for expanded healthcare access and social security benefits.

Sustainability and Long-term Impact

The project has demonstrated sustainability through its partnerships with local NGOs and healthcare providers, leveraging local resources and expertise to build capacity and ensure continuity of services. By establishing a network of local healthcare providers and empowering truckers to take charge of their own health, the project has achieved improved health outcomes, increased satisfaction, and increased adoption of healthy behaviors. While the program has been successful in providing accessible and effective healthcare, areas for improvement include encouraging consistent usage of medical kits, enhancing medical instrument availability, increasing doctor numbers, and expanding vaccination services to include Influenza and Hepatitis vaccines.

In conclusion, the SAFAR program has achieved notable success in enhancing the health and well-being of truckers through its comprehensive provisions. By providing accessible and free of cost healthcare services, promoting awareness and education on healthy practices, and addressing the social determinants of health, the program has effectively addressed the complex health concerns of this vulnerable population. Ultimately, the SAFAR program's demonstrated effectiveness paves the way for continued innovation and expansion, further improving the lives of India's truckers.

1. Introduction

About Asian Paints Ltd.

With a rich history spanning over eight decades, Asian Paints Ltd. has established itself as India's leading paint and decor company. Founded in 1942 by four visionary friends, the company has grown from a small partnership firm to a global leader in the paints industry.

Today, Asian Paints Ltd. is a renowned name in the global paints industry, with a consolidated turnover of INR 354 billion. The company is ranked 2nd in Asia and 8th amongst the top coating's companies in the world. With a strong consumer-focus and innovative spirit, Asian Paints has been the market leader in paints since 1967.

Asian Paints operates in 15 countries and has 27 paint manufacturing facilities worldwide, servicing consumers in over 60 countries. The company offers a wide range of paints for decorative and industrial use, including interior paints, exterior paints, wood paints, and metal paints. Additionally, Asian Paints provides waterproofing, adhesives, and wall coverings under its portfolio.

The company has also formed strategic joint ventures with PPG Inc, USA, to cater to the growing demands of the Indian automotive coatings market. Furthermore, Asian Paints has approved the setup of a manufacturing facility for VAE and VAM in India, with a proposed investment of approximately INR 2,100 crores over three years.

Home Decor

In the Home Decor space, Asian Paints offers a wide range of products, including modular kitchens, bath and sanitary solutions, tiles, wardrobes, fabrics, furniture, and more.

Investing for the future

Asian Paints is committed to innovation and growth. Recently, the company announced strategic partnerships and investments in nanotechnology and white cement manufacturing. These initiatives aim to drive business expansion, enhance product offerings, and strengthen Asian Paints' position in the industry.

About Asian Paints Ltd. CSR

CSR Vision

Asian Paints Ltd.'s CSR vision is based on embedded tenets of trust, fairness, and care to maximise efforts in this regard. Following are keystones of their CSR philosophy:

- To actively initiate projects and / or participate in projects that together make it the local lighthouse for the region which significantly improves the lives of the people where we operate and are present.
- To provide vocational training and impart skilling to enhance the livelihood and skills of people who are primarily from the unorganized sector.
- To commit to creating social and economic value as a corporate citizen and encourage employees to participate and contribute to various CSR programmes.

- To manage operations using principles of sustainable development to minimize resource footprint and protect health & safety of all the stakeholders.

Scope and Approach

APL believes in responsible growth and thus undertakes CSR initiatives that will make a difference to the communities and the environment in which it operates. The outcome of these activities when measured will stand testimony to the Company being a responsible & a caring organization.

The CSR Committee has identified the following thrust areas around which the Company shall be focusing its CSR initiatives and channelizing the resources on a sustained basis:

- **Health & Hygiene:** Under Health & Hygiene, it aspires to deliver primary health care support through diagnosis and treatments to our communities. Interventions will include promoting preventive healthcare, building awareness about hygiene, sanitation, maternal & child health care, setting up medical infrastructure, instrumenting clean drinking water habits, etc.

3,65,000+

Beneficiaries have been impacted through healthcare initiatives.

- **Disaster Management:** APL contribute towards relief, rehabilitation, and reconstruction activities as a part of its disaster management intervention. As a responsible Company, it focuses towards mitigating the effects of the crisis created by natural disasters, pandemic or likewise. APL has partnered with the Government on various instances to provide support and aid. It has also worked with different partners for distribution of essentials among communities during the time of crisis.
- **Enhancing Vocational Skills:** In the area of Vocational training and skilling, APL provides specialized and skill-based training to painters, carpenters, plumbers, etc., to enhance their skills, empower them, provide opportunities to secure better employment and improve their livelihood.
- **Water:** Water being a valuable and scare resource that APL shares with its surrounding communities, APL has identified water conservation and management as a key area of intervention. APL's focus will be an integrated approach across (a) to (d) below:
    a) Reducing overall specific water consumption.
    b) Reuse/recycle wastewater back within the factories and communities in the vicinity of APL's manufacturing locations and other areas of operations.
    c) Rainwater harvesting in APL's factories and communities in the vicinity of APL's manufacturing locations and other areas of operations.
    d) Watershed management and community outreach programs thus making more water available for the communities than what APL consumes every year.

The initiatives in this thrust area would, inter alia, include (i) creating capacities in conserving water through significant investments in partnership with relevant stakeholders, with the objective of water conservation, (ii) educating farmers in looking at various Government schemes with the objective of water management(iii) undertaking water replenishment projects in the communities surrounding APL's factories. The approach would include providing support and infrastructure at each stage of water conservation, water preservation, water re-charge and waste-water treatment. Vocational Skilling and Water conservation will continue to remain our key thrust areas of intervention.

The CSR areas highlighted in this policy shall be monitored and reviewed by the Management, CSR Committee, and the Board of Directors of the Company from time to time. All CSR Initiatives/projects/programs/activities will continue to fall under the purview of Schedule VII of the Companies Act, 2013 (the Act) and Sustainable Development Goals (SDG). The CSR Committee may include any other areas falling within the ambit of Schedule VII of the Act, and amendments thereto, from time to time.

The CSR initiatives as stated aforesaid will either be one-time initiative or ongoing initiatives of the Company and the latter is proposed to be implemented on a continuous basis subject to review and monitoring by the CSR Committee and Board.

The approach of the Company shall be based on the following principles:

- CSR initiatives to focus on the areas around where the Company has its presence and operations.
- CSR initiatives to create awareness amongst employees and ensure their involvement in volunteering. To develop substantial programs to promote active participation at all levels.
- Company will acquire/ obtain/ provide the expertise required to carry out the above activities and engage with any agencies and third parties of repute if the need arises.
- Company will actively participate in the CSR initiatives through structured programs and projects and its involvement will be more towards participation on the ground rather than mere administering of the expenditure. The Company will have an internal structure to implement its CSR philosophy under supervision of the CSR Committee and Board.

Implementation

The CSR activities are undertaken by the Company, either itself or jointly along with any other companies, and/or in collaboration with its stakeholders which, inter alia, include the Government, the village panchayats, NGOs, local communities, and District Authorities. The Company may also join hands with external experts and implementation partners with an established track record in the area of the CSR initiatives.

CSR Committee and its Role

The CSR committee shall comprise of such number of members as prescribed under the provisions of the Act read with the Companies (Corporate Social Responsibility Policy) Rules, 2014 (CSR Rules) (including any statutory modification(s) and/or re – enactment(s) for the time being in force).

The CSR committee formed as such shall work in co-ordination and in accordance with directions given by the Board of Directors.

Role of CSR Committee shall include inter-alia the following:

- Formulate, review, and recommend the CSR Policy to the Board for its approval.
- Provide strategy and direction to enrich the CSR policy
- Monitor implementation and adherence to the CSR Policy.
- Approve the budgets for the CSR Expenditure and recommend to the Board for its approval.
- Formulate and review the annual action plan for each financial year and recommend the same to the Board for its approval.
- Review and recommend to the Board, certain CSR projects/programmes as ongoing projects in accordance with the CSR Rules.
- Review the impact assessment reports of CSR projects undertaken.
- Review and recommend to the Board, the Annual Report on CSR formulated as per the requirements of the Act and disclosed as part of the Report of the Board of Directors.
- Any other activity as may be decided by the Board from time to time.

The Constitution and the role of the CSR Committee shall be in accordance with Section 135 and other applicable provisions of the Act and the CSR Rules, including any modifications or amendments thereto. All the CSR activities recommended by the CSR Committee and approved by the Board shall be in compliance with Schedule VII of the Act and SDG principles.

Monitoring/ Review Mechanism

- Internal Monitoring Structure: In-house structure for roll-out and implementation of the CSR activities to be in place. The CSR activities shall be centrally monitored by the Management.
- Review and Monitoring mechanism: The following Review Mechanism shall be followed for the CSR initiatives, which shall ensure a top-down review and delivery:
    - The CSR team shall in consultation and through supervision of the CSR Committee submit monthly MIS on CSR activities to the CFO & Company Secretary and the members of the CSR and Colour Academy Functions.
    - The CSR Committee shall periodically review and monitor the CSR expenditure vis-à-vis Annual Action Plan. Additionally, the CSR team will obtain feedback from the beneficiaries about the programs and shall share the same with the CSR Committee as a part of the progress reports from time to time.
    - The Board shall on a periodic basis monitor the implementation of the ongoing projects with reference to the approved timelines and year-wise allocation.
    - The head of relevant line function shall certify to the CFO the utilisation of funds disbursed for CSR projects for each financial year.

- Regular audits of the amount spent on CSR initiatives shall be carried on by the Internal Audit Function of the Company and report/observations shall be forwarded to hierarchy for their review.
- The CSR Committee shall be responsible for overseeing the planning, coordination, and implementation of CSR activities, and compliance of the same shall be reported to stakeholders through the Company's Annual Report on CSR.

- <u>External Monitoring:</u>
  - Operational/ progress reports on periodical basis from the partners, depending on the size and scale of the project.
  - Periodic field visits by the Company representatives.
  - Impact assessment reports of the CSR projects - To ensure steady progress and proper utilization of CSR amount against the goals and objectives of the project. The following monitoring mechanism may be adopted depending upon the size of contribution and the implementing partner shall:
    - Obtain Utilization Certificates (UCs) from all the implementing partners by the end of the financial year.
    - The UCs in certain cases will be required to be certified by chartered accountant in practice if contribution crosses prescribed threshold.
    - Conduct third-party independent audits, as and when required.

About the Program

Background and context

Health on the Move: Addressing the challenges faced by India's Truckers

Truckers in India, who transport over 70% of the nation's freight, endure harsh working conditions that significantly impact their health. Approximately 56% of truckers report chronic back pain due to prolonged sitting, and 48% experience respiratory problems from exposure to dust and vehicular pollution 12. Additionally, about 30% suffer from gastrointestinal issues caused by irregular meals and poor dietary habits. The population also faces a high prevalence of mental health challenges, with nearly 40% of truckers showing signs of stress or depression due to extended hours, isolation, and lack of familial contact. Alarmingly, truckers represent one of the most at-risk groups for HIV/AIDS, with a prevalence rate of 2.59% in 2022, compared to the national adult average of 0.22%[3]

Major health concerns include key diseases which are:

- Musculoskeletal disorders (56% prevalence)
- Respiratory issues (48%)
- Dermatological issues (12%)
- Cardiovascular illnesses linked to sedentary lifestyles
- STIs, including HIV/AIDS

Despite these challenges, truckers in specific regions such as Vizag, Kasna, Sriperambadur, and Khandala face additional barriers in accessing healthcare. In these areas, truckers often struggle to find quality medical facilities, and those available may lack specialized services or have limited hours of operation. Furthermore, language barriers, lack of awareness about available healthcare services, and the transient nature of their work can exacerbate the difficulties truckers face in accessing necessary healthcare.

Following are the key interventions for addressing challenges faced by truckers in India:

- Health camps and checkups: Programs like "Sehat Ka Safar" provide free medical checkups and treatments, benefiting over 50,000 truckers annually. These camps focus on blood pressure, diabetes screening, and general health evaluations
- Behaviour changes communication sessions: The Behaviour Change Communication (BCC) initiative raised awareness among truckers, prompting them to seek access to primary healthcare services. CSI established satellite clinics

[1] Autocar Professional. (n.d.). Most truckers in India are sleep deprived, compromise road safety: SaveLife's hard-hitting report. *Autocar Professional*. https://www.autocarpro.in/news-national/most-truck-truckers-in-india-are-sleep-deprived--compromise-road-safety-savelife%E2%80%99s%C2%A0hardhitting-report-55710
[2] Bansal, K. (2018, June 21). *Health Issues Faced By Indian Truckers - Blog-TruckSuvidha*. Blog-TruckSuvidha. https://blog.trucksuvidha.com/2018/06/health-issues-faced-indian-truck-truckers/

[3] Journal, C. (2024, May 7). *Top CSR projects taking care of Truckers in India - The CSR Journal*. The CSR Journal. https://thecsrjournal.in/csr-news-top-csr-projects-truck-truckers-india/#google_vignette

at parking sites, providing truckers with convenient access to primary healthcare facilities. The primary focus was on preventing Sexually Transmitted Infections (STIs) and HIV/AIDS, which was achieved through awareness creation, STI screenings, physical examinations, counselling, treatment, and referrals to nearby government HIV testing and treatment facilities.

- HIV/AIDS prevention: Partnerships such as Varuna Group and AHF India Cares deliver HIV/AIDS awareness through free testing camps, distributing over 200,000 condoms, and organizing counselling sessions
- Roadside clinics: New initiatives are establishing mobile health units and roadside wellness centers to address common ailments and provide vaccinations at transit hubs.
- Corporate CSR programs: Companies like Mahindra have funded scholarships for truckers' children and sponsored health insurance for truckers, reducing their long-term financial and health burdens.

Government Response: Flagship Healthcare Programs

The Ayushman Bharat Arogya Yojana is a flagship program initiated by the Government of India that includes providing comprehensive health insurance coverage to truck drivers and their families. Under this scheme, beneficiaries are entitled to receive cashless treatment for various illnesses and medical procedures at empanelled hospitals, with coverage of up to ₹5 lakhs per family per year.

The objectives of the Ayushman Bharat Arogya Yojana for truckers are as follows:

1. Provide comprehensive health insurance coverage to truck drivers and their families.
2. Ensure access to quality healthcare services, including hospitalization and medical treatment.
3. Reduce out-of-pocket expenses for truckers and their families, thereby alleviating financial hardship.
4. Improve health outcomes and reduce mortality rates among truckers.
5. Enhance the overall well-being and quality of life of truckers and their families.
6. Provide cashless treatment at empanelled hospitals, reducing the financial burden on truckers.
7. Promote preventive healthcare and encourage truckers to adopt healthy lifestyles.

SAFAR – A Health & Road Safety Intervention for Truckers

The Truckers' Health and Road Safety program by Asian Paints Ltd. aims to enhance the well-being of truckers by providing accessible, quality healthcare services and essential road safety education. This comprehensive program addresses the unique challenges faced by truckers, promoting healthy lifestyles and safe driving practices.

The objectives of the program are:

- To provide quality Health Care services to truckers in parking sites in and around APL locations and to promote STI prevention and treatment among truckers.
- To promote Behaviour, Change Communication and improve Health & Road Safety practices among Truckers.
- To promote linkage with social protection schemes for truckers (increase Health and Life insurance enrolment of the Truckers.

The components of the program are as follows:

Figure 1: Objectives of the program

Monitoring and evaluation framework

The SAFAR program's monitoring framework was designed to continuously assess the program's implementation and improve its quality. The framework involves developing a management information system (MIS) to capture quantitative and qualitative data, setting indicators for process and outcome evaluation, and processing data to analyse progress on a periodic basis. Regular monitoring visits were conducted by the project coordinator/manager and project director to track activities at the field level.

The program's reporting system was also robust, with daily diaries, live location sharing, and brief daily reports. Weekly and fortnightly reviews were conducted at the project level, and reports were collated and circulated to stakeholders. The program's reporting lines were clear, with defined accountability at each level. Monthly reviews by the project team and organizational-level staff meetings help keep the project progress on track, achieve deliverables within allocated time and cost, and facilitate two-way communication among team members.

About implementing partner – Child Survival India

Child Survival India (CSI) is a non-governmental organization committed to transforming the lives of disadvantaged children across India. Since its inception, CSI has tirelessly addressed pressing issues impacting child survival, development, and protection, ensuring access to quality healthcare, education, and growth opportunities.

CSI's mission focuses on empowering marginalized children (0-18 years) to reach their full potential. Key objectives include:

- Healthcare Access
- Enhancing healthcare infrastructure and services
- Education
- Improving educational quality and accessibility
- Child Protection
- Preventing exploitation and ensuring safety
- Nutrition
- Addressing malnutrition through sustainable solutions
- Disaster Response
- Providing critical aid and rehabilitation

Through strategic partnerships with government agencies, international organizations, local communities and corporate partners, CSI crafts sustainable solutions to combat child poverty, illness and exploitation.

CSI's initiatives have yielded remarkable results. Over 50,000 children have benefited from improved healthcare, while 20,000 have gained enhanced educational opportunities. Additionally, 10,000 children have been protected from exploitation and 30,000 received nutrition support. CSI's dedication has profoundly impacted countless lives, shaping a brighter future for India's most vulnerable citizens.

2. Purpose and scope of evaluation

Objective of Assessment

The Asian Paints Ltd. engaged Grant Thornton Bharat LLP to conduct an impact assessment (July 2019 to March 2023) of its healthcare program to assess the extent and nature of impact. The program is based out of five (05) locations Khandala in Maharashtra, Vizag in Andhra Pradesh, Sriperambadur in Tamil Nadu, Rohtak in Haryana and Kasna in Uttar Pradesh.

Objectives of the Impact Assessment study

- To create awareness amongst the truckers on health issues
- To promote health seeking behaviours
- To provide access to quality health services
- To create awareness about maintaining road safety

Design (methodology, sampling design and plan)

The study was conducted using a pre-defined approach to understand the program and its stakeholders. It relied on an impact assessment framework that focused on conceptualization, design, data collection, analysis, and reporting of key findings. The approach was divided into three stages: planning, data collection, and reporting.

Table 1: Our methodology

Stage 1 Planning	Stage 2 Data collection	Stage 3 Analysis and reporting
Quality assurance across all stages		
• Inception meeting with CSR team of APL to gain better understanding of the project and objectives of the study. • Review available project documents and relevant reports • Study design including identification of key stakeholders and areas of enquiries in consultation with the CSR team of APL • Development of tools and translation in local languages of the state	• Pre-testing of the tools and finalization following consultation with CSR team of APL • Training and orientation of field teams to ensure efficiency and standardization. • Use the agreed study methodology. • Employ the developed data collection tools (both qualitative and quantitative). • Adhere to the data collection plan and	• Data analysis to identify relevant trends and key statistics. • Submission of draft impact assessment report with data analysis of beneficiaries to the CSR team of APL. • Incorporating comments made on the draft report by CSR team of APL • Submit and present the final report.

post approval from the CSR team of APL. • Define sample size for each location sand detailed methodology for data collection	quality assurance protocols.	

Stage 1: Conceptualisation

Inception meeting

An inception meeting was held with the program team of APL to develop a detailed understanding of the healthcare program, and key activities undertaken from FY 2020 to 2023. Following the initial discussion, the required program documents, including a list of current activities, target locations, and stakeholder information, were shared with GTBLLP.

Review of documents and secondary research

The program documents were reviewed in detail. This step also included secondary research on rural healthcare system in India.

Study design

The study utilized the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) principles, which enabled a comprehensive understanding of the program and effectively captured the outcomes of the initiative. These principles provide a framework for evaluating development program.

Table 2: OECD DAC framework principles

S/N	Principle	Definition[4]	Key areas of enquiry
1	Relevance	The extent to which the intervention objectives and design responds to beneficiaries need and continue to do so if circumstances change.	• Health care infrastructure • Primary health care services • Type of health issues • Health care seeking behaviour
2	Effectiveness	The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.	• Medical team • Infrastructure as per guidelines • Medical team • Medical equipment and medicines • Accessibility to primary health care services

[4] https://web-archive.oecd.org/temp/2024-05-13/81829-daccriteriaforevaluatingdevelopmentassistance.htm

			• Knowledge and adoption level of hygiene & sanitation practices
3	Efficiency	The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.	• Number of visits made by the SHU/MMU • Number of visits made • Average number of patients consulted • Percentage of community members able to access the primary health care services • Referral services in a month
4	Impact	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level of effects.	• Quality of medical services • Knowledge, Attitude and Practice (KAP) of hygiene and sanitation • Affordable medical consultations, medicines and treatment • Adoption and awareness of healthy lifestyle practices • Perceptions and opinions of the community members
5	Sustainability	The extent to which the net benefits of the intervention continue or are likely to continue.	• Maintenance management • Infrastructure • Home visits by Community Health Workers (CHW) • Awareness on government healthcare schemes
6	Coherence	The extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.	• Scope for leveraging Govt. schemes / programmes • Value addition and associated growth

Data collection tools

To capture information from different stakeholders, quantitative and qualitative data collection tools were developed based on the nature of the program and areas of enquiry highlighted in the table below.

In-depth interviews were conducted with both types of stakeholders to gather qualitative insights. This approach allowed us to understand the program from each stakeholder's perspective and capture their perceptions. These interactions also helped us assess whether the program objectives were met and if the outcomes aligned with expectations.

Stakeholders for the program were categorized into primary and secondary. To comprehensively grasp the current situation, beneficiary perception and areas for improvement, questions were tailored as per the stakeholder's role in the program.

Table 3: Stakeholder matrix

Stakeholder type	Stakeholder	Quantitative	Qualitative
Primary stakeholder	Trucker's community	✓	
Secondary stakeholder	Local community leaders		✓
	Panchayati Raj Institution (PRI) members		✓
	Implementing partner team		✓
	Asian Paints CSR team		✓

Stage 2: Collection of data and stakeholder interaction

Sampling

The study followed a mix-method approach for interactions (quantitative and qualitative) with stakeholders across all the five (05) locations Khandala in Maharashtra, Vizag in Andhra Pradesh, Sriperambadur in Tamil Nadu, Rohtak in Haryana and Kasna in Uttar Pradesh.

Table 4: Sample coverage

Location	Field visit dates	SAFAR target	SAFAR Achieved
Khandala, Maharashtra	18th November	90	95
Kasna, UP	14th November	60	69
Rohtak, Haryana	14th November	90	94
Sriperambadur, TN	19th November	90	67
Vizag, Andhra Pradesh	18th November	52	61
Total		**382**	**386**

Note: The sample distribution consisted of 70% quantitative and 30% qualitative data collection*

Qualitative

Table 5: Stakeholders covered across each location through qualitative interviews

Location	Field visit dates	Project team	Doctor	Nurse	Pharmacist	Lab Technician	CSI Implementing team	Yoga instructor	Truckers	Total
Khandala, Maharashtra	18th November	0	2	0	1	1	2	0	30	36
Kasna, Uttar Pradesh	14th November	0	0	0	0	0	0	0	22	22
Rohtak, Haryana	14th November	2	1	NA	NA	NA	4	1	33	41
Sriperumbudur, Tamil Nadu	19th November	1	NA	NA	NA	NA	1	NA	20	22
Vizag, Andhra Pradesh	18th November	1	NA	NA	NA	NA	1	NA	42	44
Total										165

Stage 3: Analysis and reporting

Data Analysis

The collected data was collated and organised qualitatively, following the OECD DAC principles. This analysis documented all responses, allowing for meaningful inferences to be drawn about the performance and outcome of the program.

Draft and final report

A draft report with study findings was prepared and shared with the CSR team for the feedback. Thereafter, the final report was issued incorporating feedback and included findings, inferences from stakeholder discussions, and recommendations.

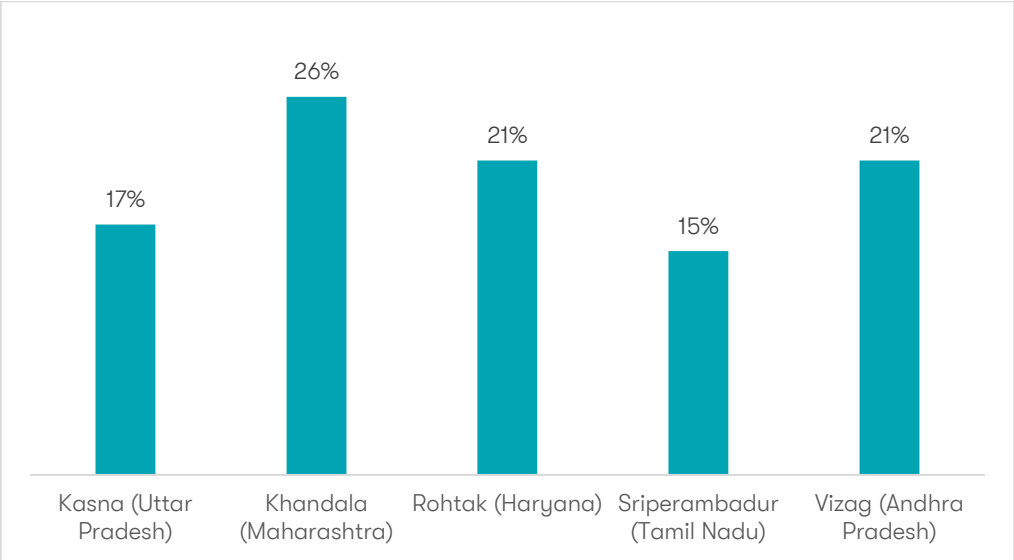
Limitations of the assessment

1. Truckers' unpredictable driving schedules hinder mobilization efforts in Rohtak, Kasna and Vizag.
2. Frequent mobile number changes obstruct linking truckers to social schemes in Rohtak, Kasna and Vizag.
3. Truckers' availability is constrained by delivery schedules, loading/unloading duties, and varied work hours in Maharashtra.

Coverage

This section focuses on the demographic data of the beneficiaries. The quantitative survey captured information on key aspects such as age, gender, socio-economic status, healthcare services and awareness of the project among the residents.

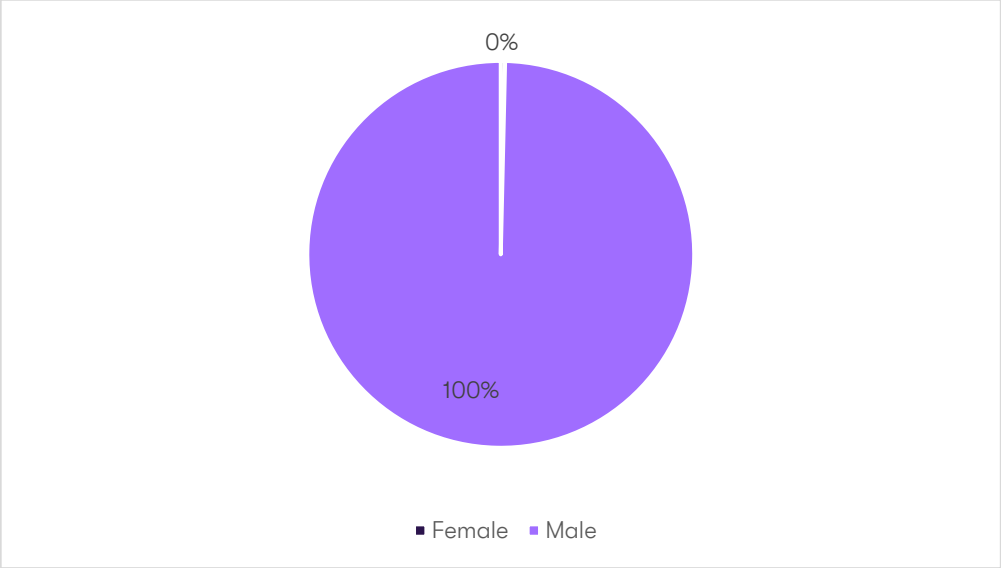
Figure 2: Distribution of the respondents across five states (n=278)



The study sample's geographical composition comprised Rohtak (21%), Khandala (26%), Sriperumbudur (15%), and Kasna (17%), reflecting diverse regional representation. This broad coverage underscores the project's reach and impact across multiple locations, each with distinct socio-economic characteristics.

Gender

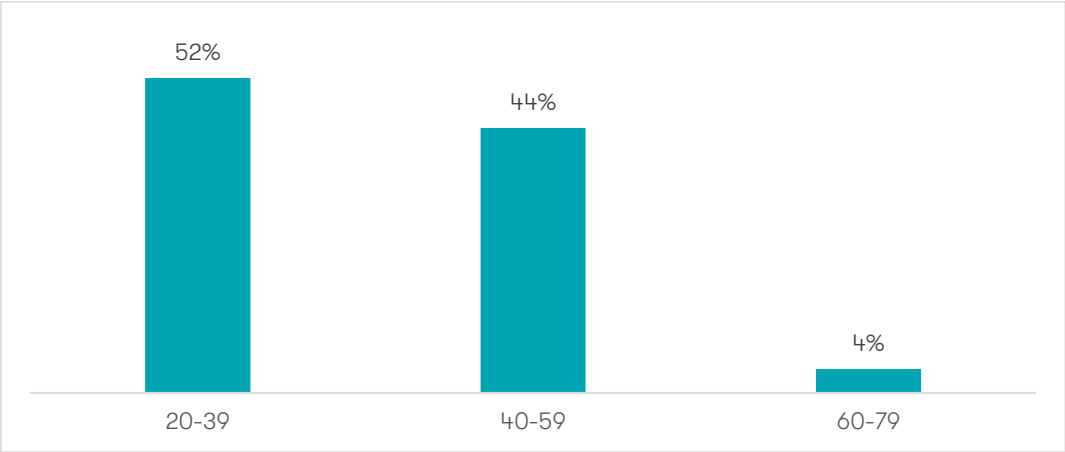
Figure 3: Gender-wise distribution of the beneficiaries (n=278)



The gender distribution shows a uniform male population, comprising 100% of participants.

Age

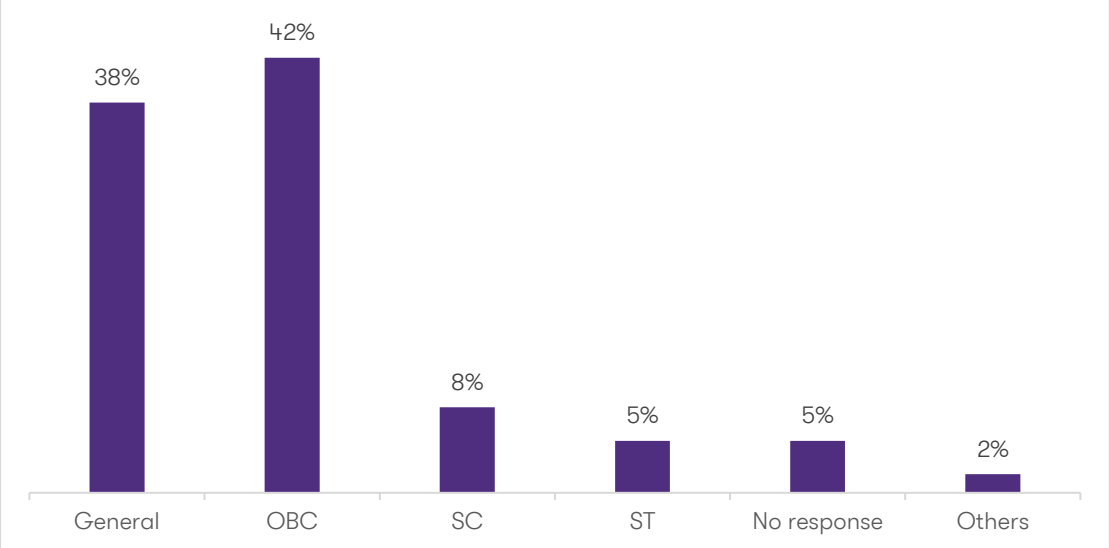
Figure 4: Age - wise distribution of beneficiaries (n=278)



The age distribution analysis indicates a concentration of respondents within the 20-39 age range (52%), followed by the 40-59 age group (44%), and a smaller proportion in the 60-79 age range (4%).

Caste

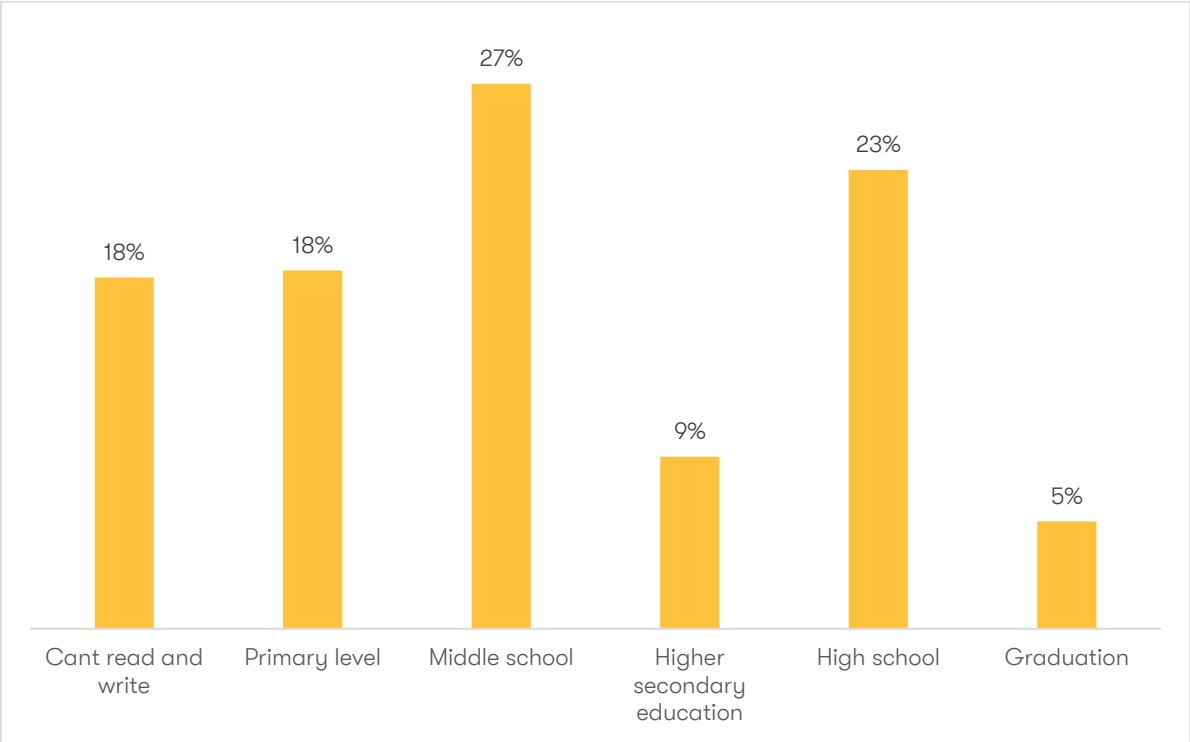
Figure 5: Social category of the beneficiaries (n=278)



The demographic breakdown of 278 respondents reveals a diverse distribution across categories. The majority, 42%, identified as Other Backward Classes (OBC), followed by 38% from the general category. Scheduled Castes (SC) and Scheduled Tribes (ST) accounted for 8% and 5%, respectively, indicating a notable presence of marginalized communities. A small percentage, 5%, chose not to respond, while 2% identified with other categories

Education

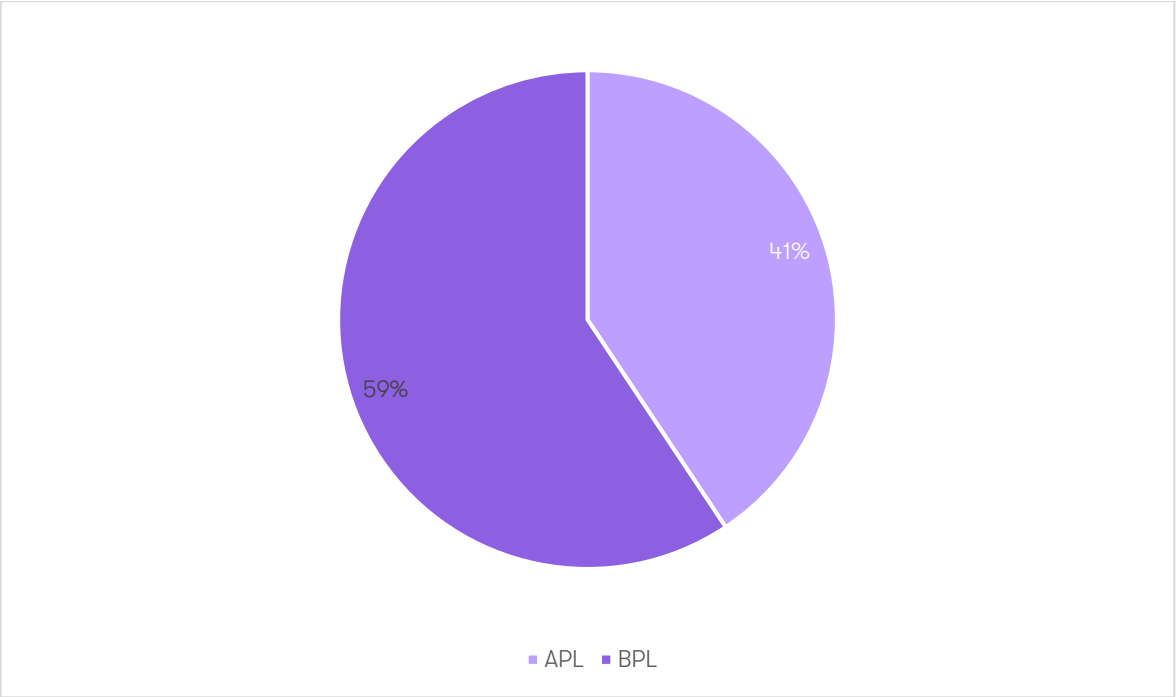
Figure 6: Educational background of the beneficiaries (n=278)



The educational qualification distribution exhibits a heterogeneous respondent profile, with the following proportions: primary education (18%), middle school (27%), high school (32%), graduation (5%), and illiterate (18%).

Economic status

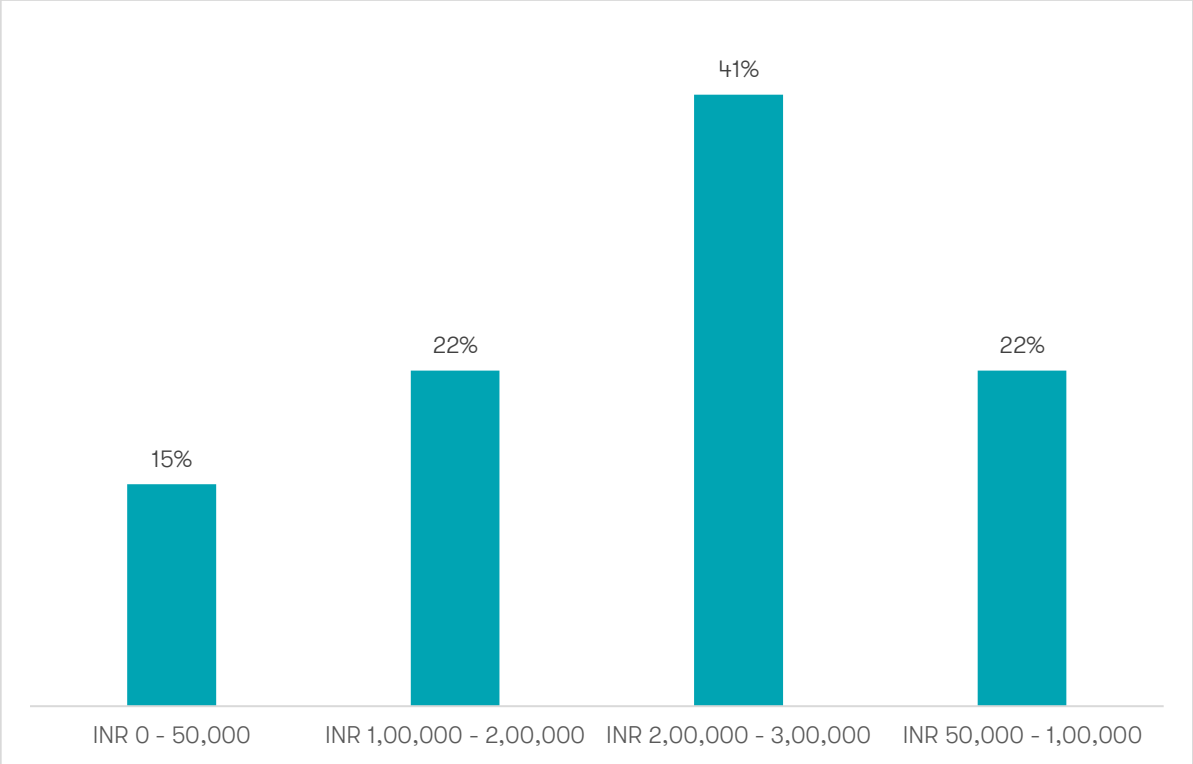
Figure 7: Economic status of the beneficiaries (n=278)



The economic status distribution indicates a majority (59%) of respondents belong to Below Poverty Line (BPL) households, whereas 41% reside in Above Poverty Line (APL) households.

Annual household income (Average, in INR)

Figure 8: Average annual household income (in INR, n=278)



The average annual income distribution of respondents exhibits a diverse range, with four distinct segments. 15% of respondents earn up to INR 50,000, indicating a significant proportion living below or near the poverty line. A combined 44% of respondents comprise the middle-class, with 22% earning between INR 50,000-1,00,000 (low-middle) and 22% earning INR 1,00,000-2,00,000 (middle). Notably, 41% of respondents belong to the upper-middle-income segment, earning INR 2,00,000-3,00,000, signifying a higher standard of living.

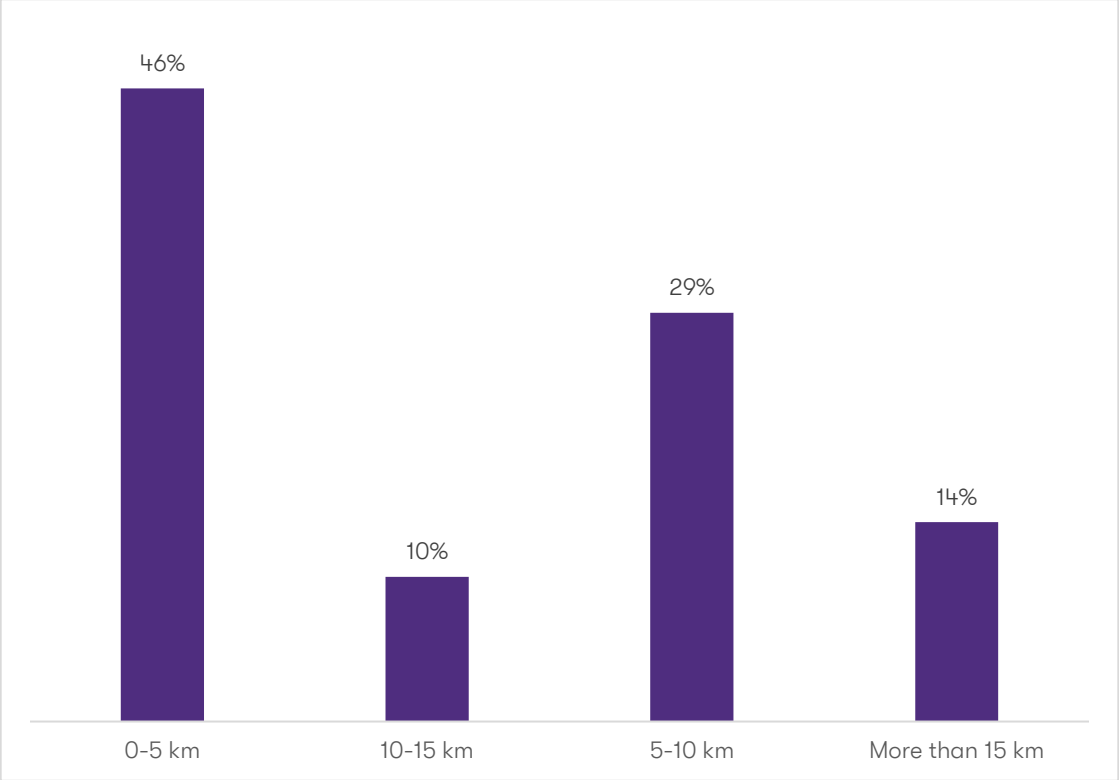
3. Findings

This chapter presents the findings of the assessment study highlighting the key impact areas. The findings are based on the inferences from analysis of beneficiary and stakeholder responses.

3.1 Pre-intervention healthcare practices

Before program – distance travelled from their home to medical health facility

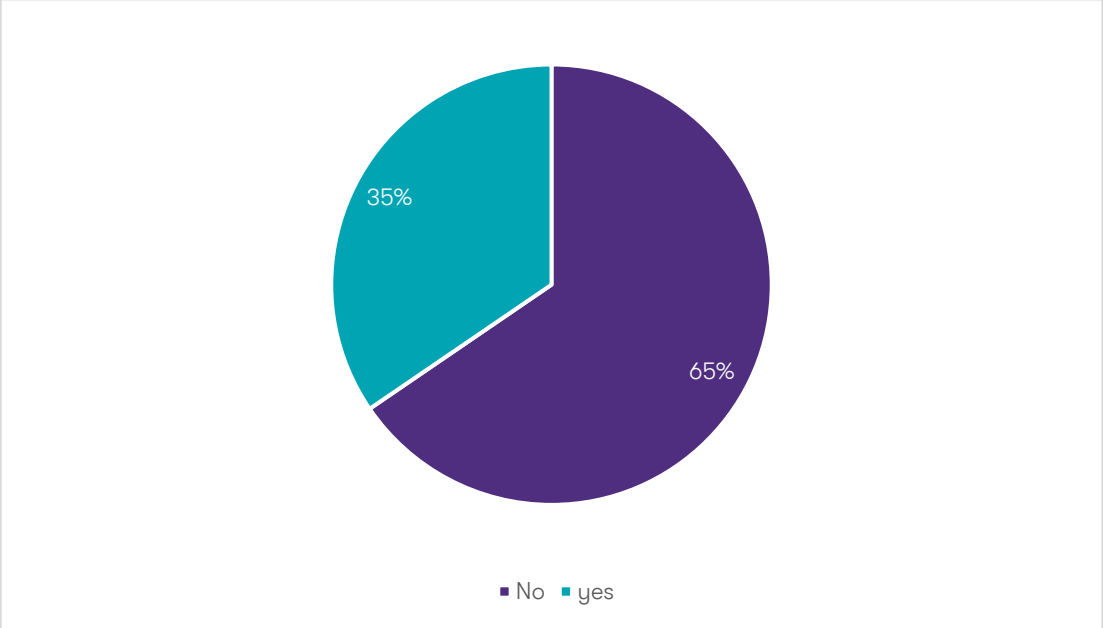
Figure 9: Pre-program distance travelled by the beneficiaries to visit a medical health facility (n=278)



The introduction of SAFAR medical services by APL has revolutionized healthcare accessibility for beneficiaries. Initially, they faced significant barriers in accessing medical care, **with nearly a third (29%) traveling 5-10 km, 46% covering 0-5 km, 10% traversing 10-15 km, and a notable 14% journeying more than 15 km.** However, with the strategic placement of medical camps near warehouses and truck truckers' hubs, beneficiaries can now access healthcare services with unprecedented ease. **This deliberate effort to bridge the geographical gap has substantially improved healthcare accessibility, ultimately enhancing the overall well-being of the beneficiaries.**

Pre-program: Wage Loss if any due to illness

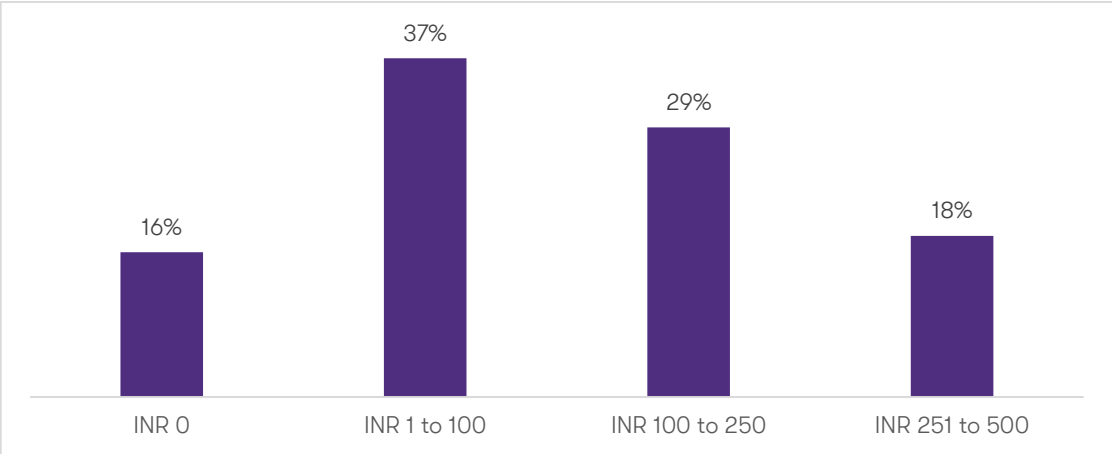
Figure 10: Wage loss experienced by the beneficiaries due to illness (n=278)



35% truckers experienced wage loss due to illness before the intervention. This substantial percentage highlights the vulnerability of truckers to income disruption due to health issues, underscoring the need for accessible healthcare services to mitigate this risk.

Cost saved due to SAFAR medical health facilities

Figure 11: Estimated transportation cost savings per visit through SAFAR program (n=278)



The SAFAR program has yielded notable transportation cost savings for truckers, with a significant majority experiencing financial benefits. **Specifically, 37% of truckers saved INR 1-100 per visit, while 29% saved INR 100-250, and 18% saved INR 251-500.** These savings are substantial, considering the frequency of visits and the cumulative impact on truckers' finances. Conversely, 16% of truckers did not experience any

transportation cost savings. **Overall, the SAFAR program has demonstrated its potential to reduce transportation costs and alleviate financial burdens on truckers.**

Establishing the profound impact of the SAFAR program, Ashok Chavan, a 47-year-old trucker, reflects on the transformative change it has brought to his life. "I am deeply grateful for the SAFAR medical camps," he shares. "Since I began participating in these camps several months ago, I have experienced a significant improvement in my overall well-being."

Previously plagued by chronic back pain that hindered his daily work, Ashok received comprehensive care at the SAFAR clinic. The medical team provided him with appropriate medication, conducted thorough diagnostics, and offered tailored advice on nutrition and self-care practices.

"I used to spend ₹100 on each consultation and an additional ₹300 on pain relief medication," Ashok recalls, "but now, I no longer face these expenses. The savings have been a tremendous help to my family, supporting our monthly household needs."

Through the SAFAR program, Ashok has not only regained his health but also gained the financial stability to provide for his loved ones—a testament to the profound difference SAFAR has made in his life.

Ashok Chavan | Truck Driver | Khandala, Maharashtra

3.2 During or post-intervention healthcare practices

Preference for healthcare facility pre and post the intervention

Figure 12: Change in preference of healthcare facility (multiple coding, n=278)

Healthcare facility type	Pre intervention	Post intervention
PHC / CHCs	63%	12%
Private hospital / Clinic	18%	18%
Self-medication (over the count medicines)	4%	1%
Local quacks (Unqualified Doctors)	13%	6%
Clinic by APL	NA	23%
District Govt. hospital	1%	40%

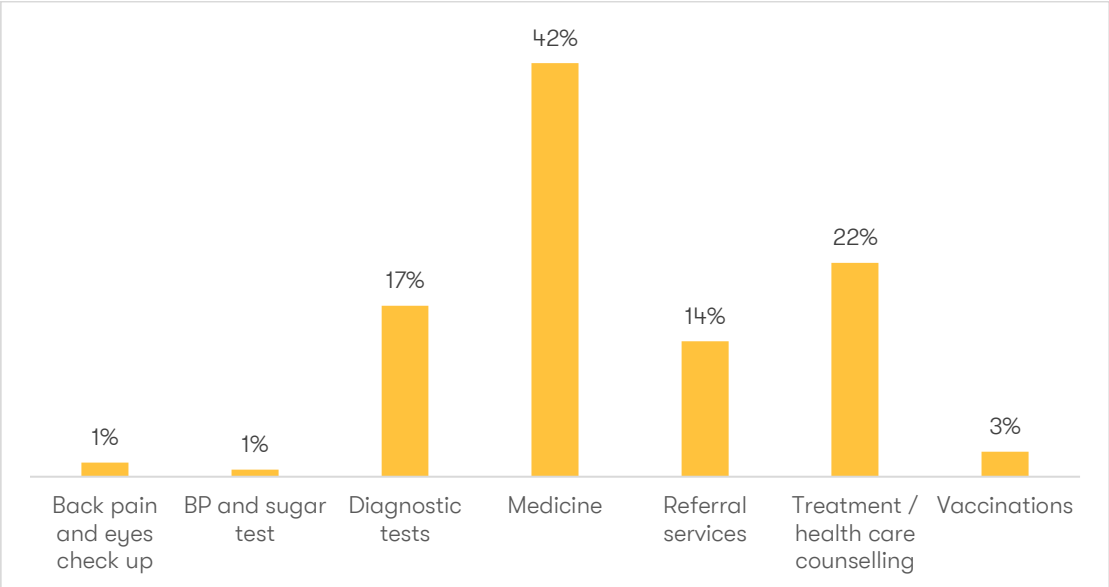
A shift in preference for healthcare facilities is evident among the beneficiaries, pre and post the intervention. Prior to the intervention, 63% of beneficiaries relied on Primary Health Centers (PHCs) or Community Health Centers (CHCs) for their healthcare needs. However, post-intervention, this percentage drastically decreased to 12%. Conversely, there was a notable increase in **preference for District Government hospitals, rising from 1% pre-intervention to 40% post-intervention.** Additionally, 23% of beneficiaries opted for clinics set up by APL, a new and preferred option post-intervention.

Notably, reliance on unqualified local practitioners and self-medication decreased, indicating a shift towards more reliable and formal healthcare services.

Healthcare Services

To identify the primary health concerns addressed through the SAFAR program, respondents were queried about the specific diseases or health conditions for which they sought treatment.

Figure 13: Purpose of visiting SAFAR Clinics (multiple coding, n=278)



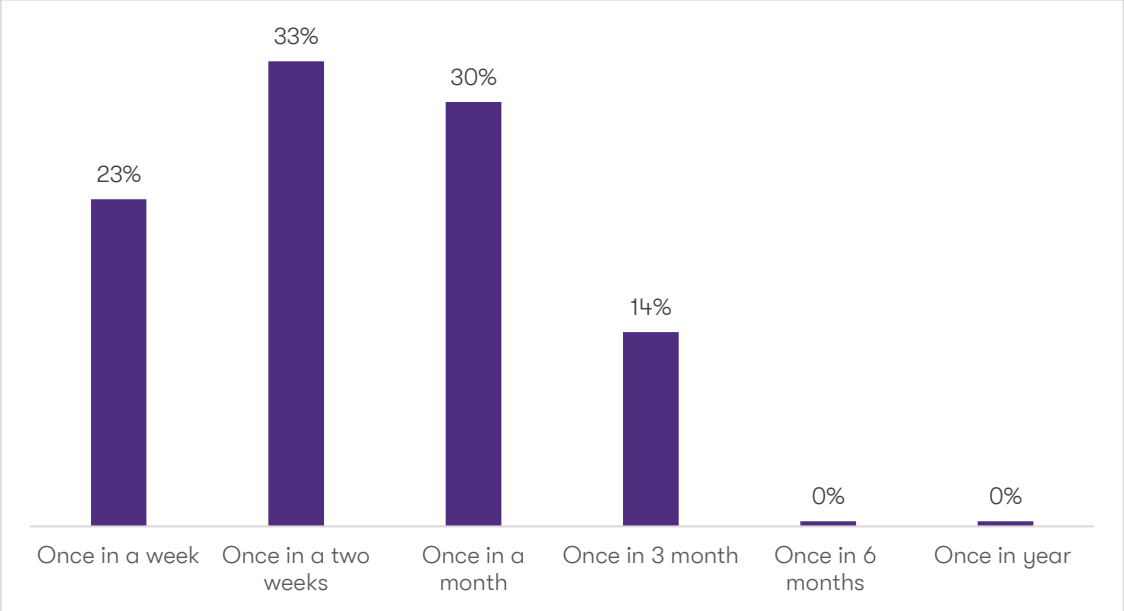
The data provides insight into the primary health concerns that prompt respondents to seek healthcare services. **Medication is the most common reason, with a substantial 42% of respondents seeking healthcare services for this purpose.** This is followed by treatment and healthcare counselling, which accounted for 22% of respondents. **Diagnostic tests and referral services were also significant, with 17% and 14% of respondents seeking these services, respectively.** In contrast, relatively few respondents sought healthcare services for specific health issues, such as back pain and eye check-ups (1%), BP and sugar tests (1%), and vaccination (3%). These findings suggest that **respondents primarily seek healthcare services for general medical needs,** such as medication and counselling, rather than specific health concerns.

The SAFAR program has provided critical treatment for various health issues commonly affecting truckers, including:

- Orthopaedic problems (e.g., back pain, joint issues)
- Dermatological issues (skin problems)
- Gastrointestinal problems (e.g., digestive issues, stomach ailments)
- COVID-19 and related respiratory issues

Frequency of visit

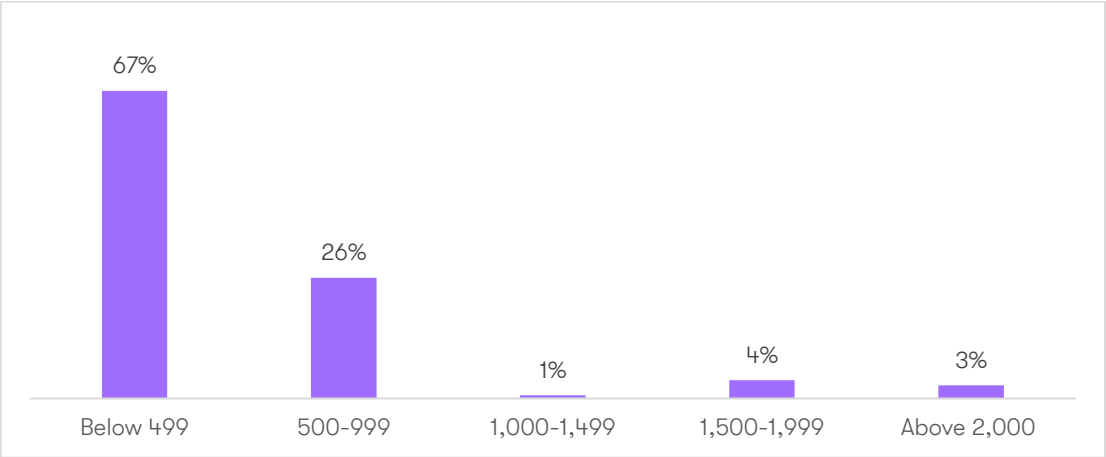
Figure 14: Frequency of availing SAFAR services (n=278)



The data reveals a notable frequency of utilization of SAFAR services among truckers. A large proportion of truckers, **33%, avail SAFAR services once every two weeks, indicating a high level of reliance on these services**. Additionally, 23% of truckers use SAFAR services once a week, further emphasizing the regularity of their engagement with these services. 30%, access SAFAR services once a month, while 14% do so once every three months. **Notably, none of the respondents reported using SAFAR services only once a year, suggesting that these services are an integral part of their regular healthcare routine.** Overall, these findings indicate that truckers are actively utilizing SAFAR services, with a majority accessing them at least once a month.

Cost saved per consultation (average)

Figure 15: Beneficiary cost saving per consultation post-program (n=278)



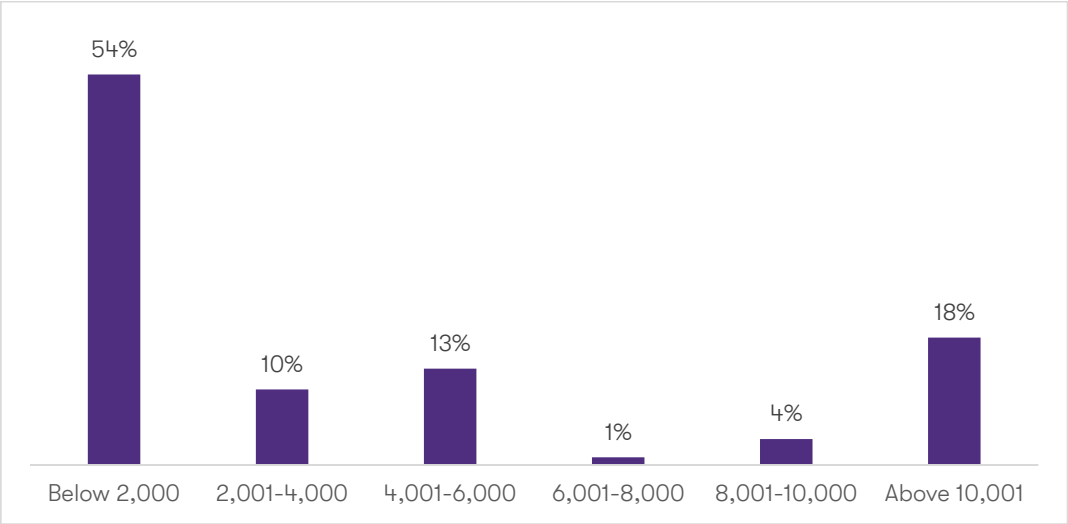
The post program data demonstrates a significant impact on reducing healthcare-related expenses for beneficiaries. **100% of the respondents have seen significant cost savings, across varying expense brackets** . A majority of **67% reported average cost savings of less than INR 499 per consultation, indicating a notable reduction in out-of-pocket expenses.** Additionally, 26% of beneficiaries saved between INR 500 to INR 999, further highlighting the program's effectiveness in mitigating healthcare costs.

While a smaller proportion of beneficiaries reported higher savings, with 1% saving INR 1000-1499, 4% saving INR 1500-1999, and 3% saving above INR 2000, the overall trend suggests that the program has been successful in reducing healthcare-related expenses for most of the beneficiaries.

Feedback from beneficiaries corroborates these findings, with many expressing relief and gratitude for the reduced financial burden. One beneficiary from Mysore, Karnataka noted, "*I was able to save INR 800 on my last consultation, which is a huge relief for my family.*" Another beneficiary shared, "*The program has helped me access quality healthcare without breaking the bank. I'm grateful for the support.*" These testimonials underscore the program's positive impact on beneficiaries' financial well-being and access to healthcare

Cost saved on medicine in a year (average)

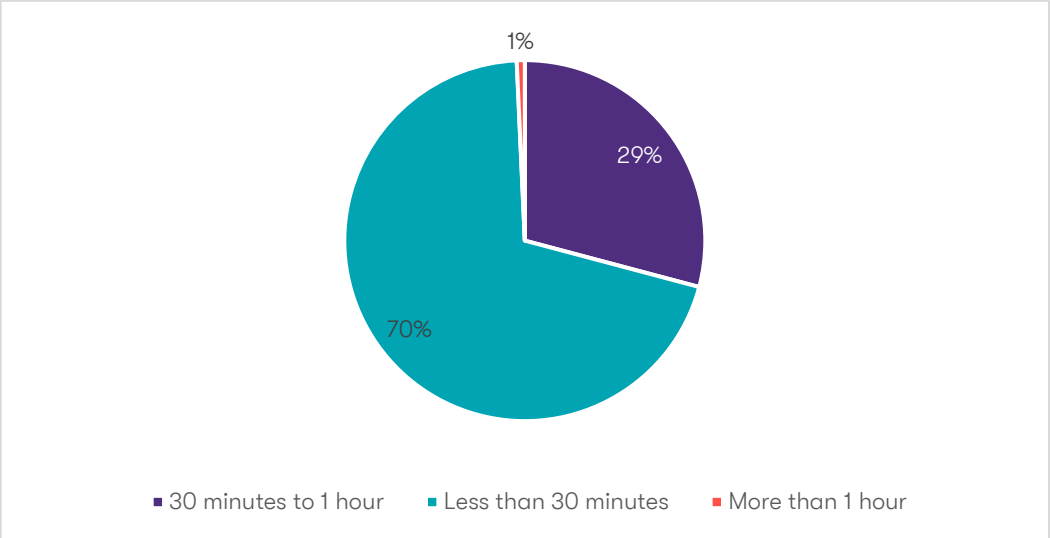
Figure 16: Beneficiary cost saving on medicine post-program (n=278)



The data reveals a substantial reduction in medicine-related expenses for beneficiaries' post-program. **100% of the respondents have seen significant cost savings, across varying expense brackets. 54%, reported average annual cost savings on medicine below INR 2,000, indicating a notable decrease in out-of-pocket expenses for essential medications.** Furthermore, 23% of beneficiaries saved between INR 2,001 to INR 6,000, with 10% saving INR 2,001-INR 4,000 and 13% saving INR 4,001-INR 6,000. While a smaller proportion of beneficiaries reported higher savings, with 1% saving INR 6,001-INR 8,000, 4% saving INR 8,001-INR 10,000, and 18% saving above INR 10,001, the **overall trend suggests that the program has been highly effective in reducing medicine-related expenses for beneficiaries.**

Time saved by beneficiaries

Figure 17: Waiting time for the consultation through SAFAR (n=278)

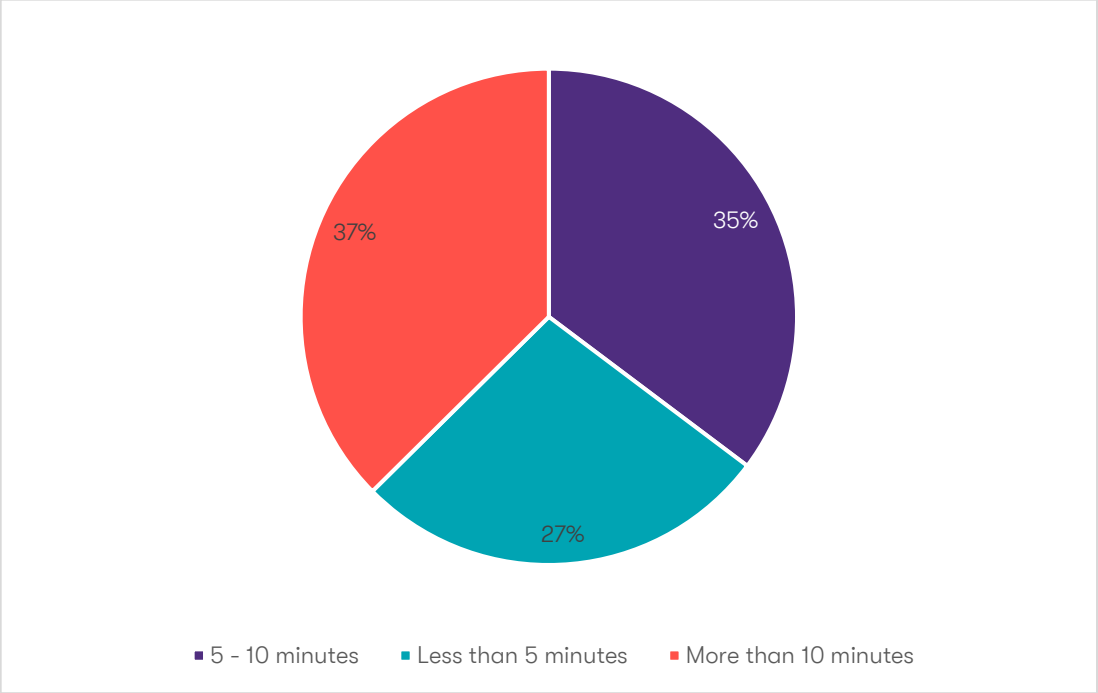


The data indicates that the SAFAR program has been successful in providing timely access to healthcare services for its beneficiaries. A large number of beneficiaries,

70%, reported waiting less than 30 minutes for consultation, highlighting the program's efficiency in managing patient flow and minimizing wait times. Additionally, nearly a third of the beneficiaries**, 29%, waited between 30 minutes to 1 hour, which is still a relatively reasonable wait time.** Notably, only, 1%, reported waiting more than 1 hour, suggesting that the program has been effective in streamlining its services to minimize delays. Overall, these findings suggest that the SAFAR program has been successful in providing timely and efficient healthcare services to its beneficiaries.

The SAFAR medical facilities offer numerous benefits to truck drivers. By reducing waiting time, drivers can quickly return to work, ensuring their daily wages remain unaffected. This, in turn, leads to increased productivity and efficiency, as well as reduced opportunity costs from delayed or cancelled trips. Moreover, faster access to medical care enables drivers to prioritize their health and well-being, improving their overall quality of life. Ultimately, the timely medical attention provided by SAFAR facilities enhances job satisfaction among truck drivers, reducing driver turnover and absenteeism.

Figure 18: Average time spent by doctor on each patient at SAFAR (n=278)

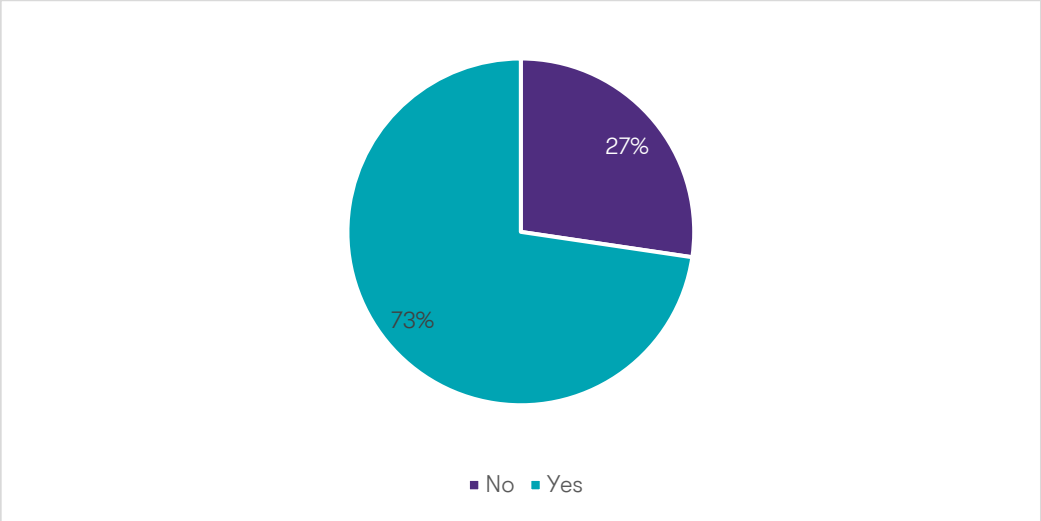


The data provides insight into the average time spent by doctors on each patient at SAFAR. The findings suggest that a notable number of patients, **37%, received consultations that lasted more than 10 minutes, indicating a substantial investment of time by doctors in addressing their health concerns.** Additionally, 35% of patients reported consultations lasting between 5-10 minutes, which is a reasonable duration for a meaningful interaction. However, 27% of patients received consultations that lasted less than 5 minutes, which may be considered brief. **Overall, the data suggests that doctors at SAFAR are dedicating a considerable amount of time to patient**

consultations, with a significant proportion of patients receiving more extensive interactions.

Insurance

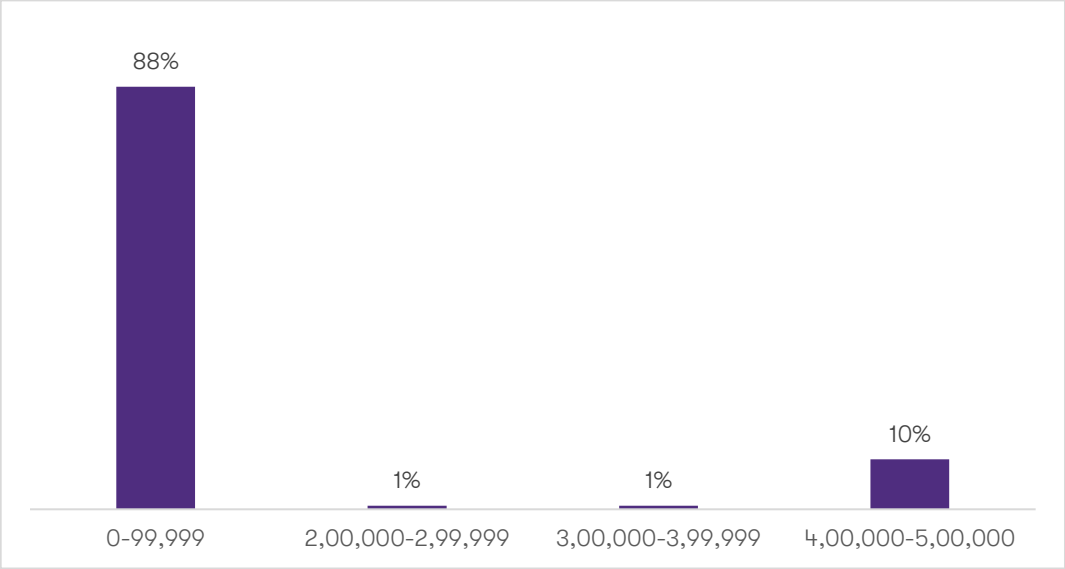
Figure 19: Beneficiaries who got enrolled in insurance scheme through SAFAR's support (n=278)



The data highlights the achievement of SAFAR program in facilitating health insurance enrolment among its beneficiaries. **73% of beneficiaries who received support from SAFAR successfully enrolled in a health insurance scheme.** This impressive enrolment rate underscores the effectiveness of SAFAR's efforts in promoting health insurance coverage among its target population.

By providing support and facilitating access to health insurance, SAFAR has empowered its beneficiaries to better manage their healthcare expenses and mitigate the financial risks associated with medical emergencies.

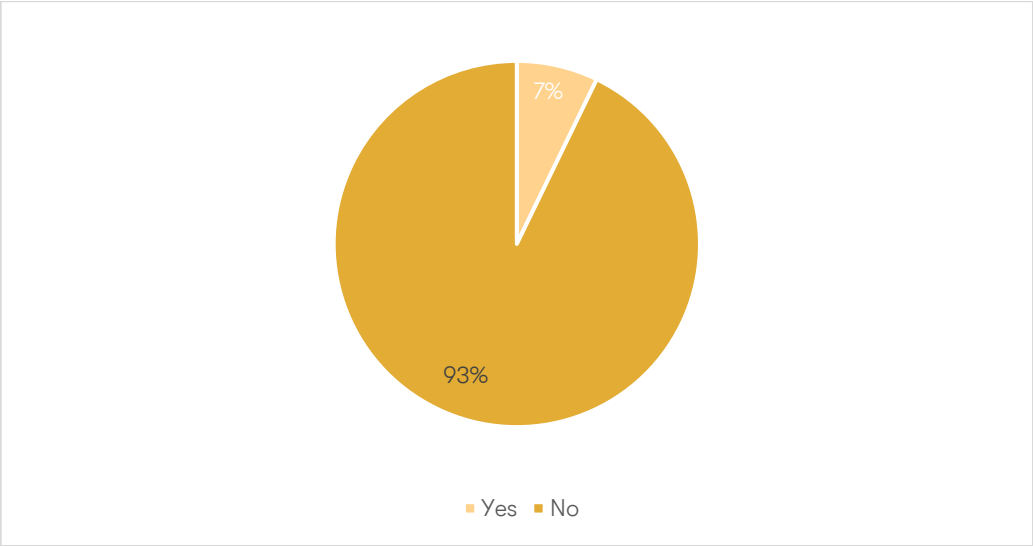
Figure 20: Cost saved by the beneficiaries by seeking medical treatment through insurance (n=278)



The data shows that **88% of beneficiaries saved between INR 0 to INR 99,999 by seeking medical treatment through insurance facilitated by the SAFAR program.** This indicates that the insurance coverage provided through the program has been highly effective in reducing out-of-pocket medical expenses for most beneficiaries. Additionally, 10% of beneficiaries reported saving between INR 4,00,000 to INR 5,00,000, demonstrating that the insurance coverage has also provided substantial financial protection for those with higher medical expenses. The remaining 2% of beneficiaries reported savings in the ranges of INR 2,00,000-INR 2,99,999 and INR 3,00,000-INR 3,99,999.

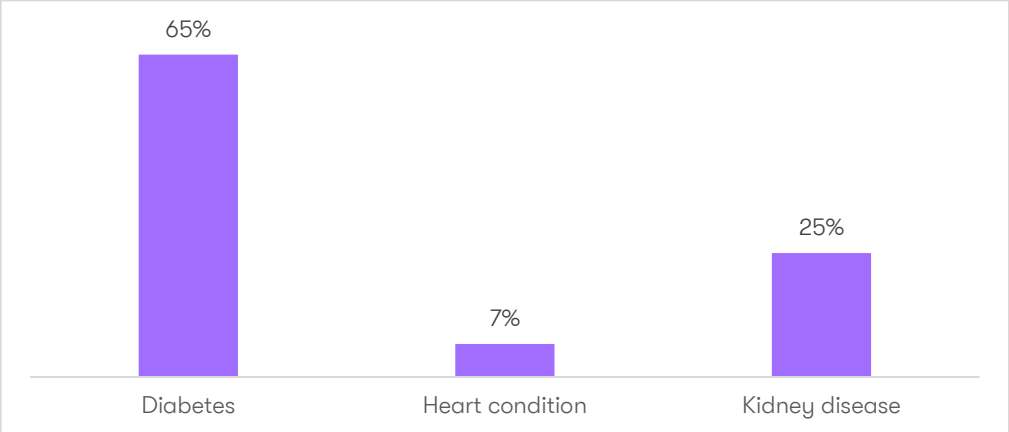
Referrals

Figure 21: Beneficiaries who availed the referral service (n=278)



A notable 7% of beneficiaries utilized the referral service provided by the program. The utilization of referral services also indicates that the program is effectively addressing the comprehensive healthcare needs of its beneficiaries, going beyond primary care to provide a continuum of care.

Figure 22: Illnesses for which beneficiaries sought referral services (n=20)

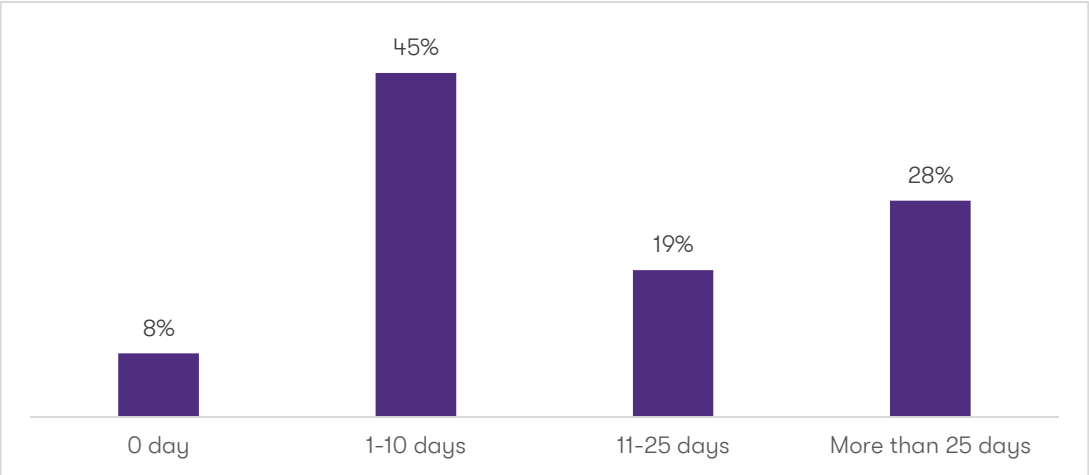


The above graph reveals that beneficiaries sought referral services primarily for chronic and potentially debilitating health conditions. A majority of **65%, sought referral services for diabetes management, indicating a high demand for specialized**

care to manage this condition. Additionally, **25% of beneficiaries sought referral services for kidney stones,** suggesting a need for further medical attention to address this painful and potentially recurring condition. A smaller proportion, 7%, sought referral services for heart conditions, which may indicate a need for ongoing cardiovascular care. **Overall, these findings highlight the importance of referral services in providing beneficiaries with access to specialized care for complex and chronic health conditions.**

Workdays / income days saved by beneficiaries due to early detection of diseases

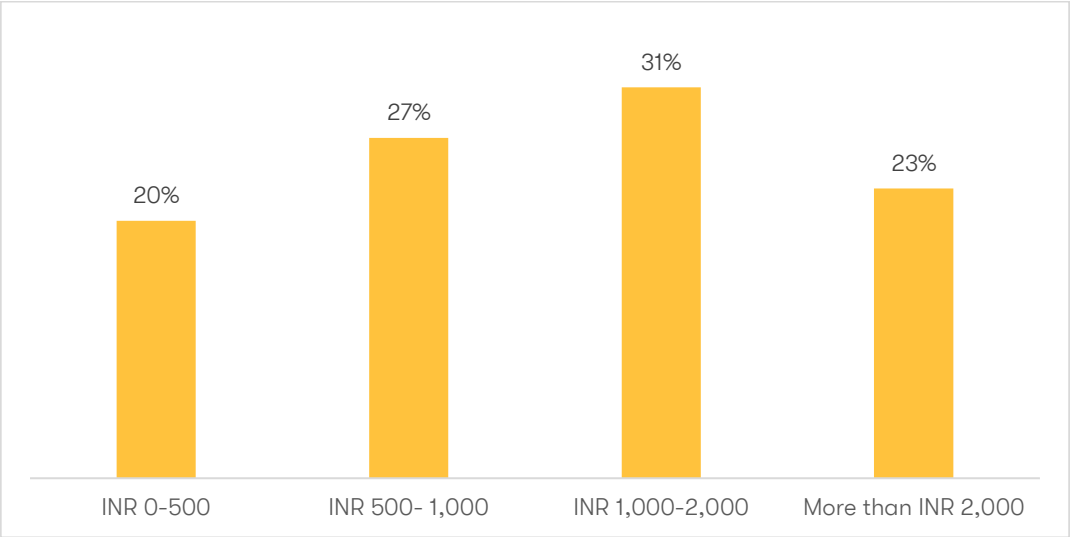
Figure 23: Number of working / income days saved by the beneficiaries due to early detection of disease at SAFAR medical facility (n=278)



The data demonstrates the tangible benefits of the SAFAR medical services in enabling early detection of diseases, which in turn has helped beneficiaries minimize lost workdays and protect their income. **92% beneficiaries are able to avoid wage loss because of better management of illness through SAFAR Programme** . A sizeable share of 45% truckers reported saving 1-10 days of income, while 19% saved 11-25 days of workdays/income. Most impressively, **28% of beneficiaries reported saving more than 25 days of workdays/income, indicating a positive impact on their livelihoods.** Conversely, 8% of beneficiaries reported losing no days of work, suggesting that they may have received preventive care or timely interventions that prevented illness-related absences altogether. Overall, these findings underscore the value of the SAFAR medical services in supporting the health, well-being, and economic stability of its beneficiaries.

Annual Cost Savings: Reduced Accidents and Associated Expenses

Figure 24: Beneficiary who experienced cost saving due to reduced accidents (n=278)

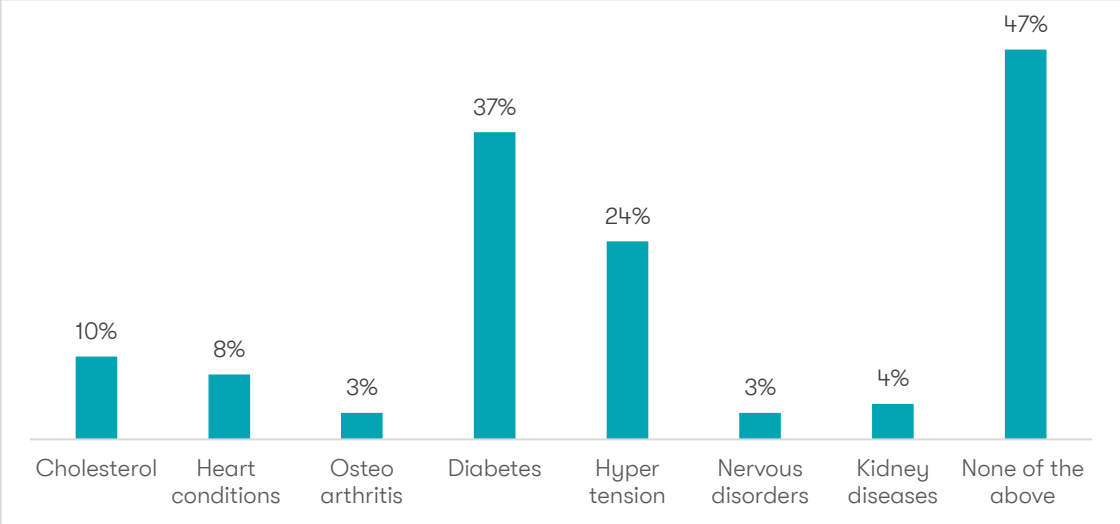


The implementation of road safety initiatives has yielded significant economic benefits for truckers, resulting in substantial cost savings from reduced accidents. A notable proportion of truckers (31%) reported savings ranging from INR 1,000 to INR 2,000 per year. Additionally, 27% saved INR 500 to INR 1,000 annually, while 23% saved up to INR 2,000 per year. Although 20% reported modest savings of INR 0 to INR 500 per year, the overall trend indicates that most truckers have benefited from reduced accident-related expenses, resulting in notable cost savings and enhanced economic stability.

Treatment

To identify the primary health concerns and disease pattern, respondents were queried about issues they have suffered in the last three years.

Figure 25: Illnesses suffered by respondents in the last three years (multiple coding, n=278)



The data provides insight into the health profiles of the respondents over the last three years. A notable 37% reported suffering from diabetes, while 24% experienced

hypertension, **indicating a high prevalence of lifestyle-related diseases.** Additionally, 10% of respondents suffered from cholesterol-related issues, and 8% experienced heart conditions, further **highlighting the burden of cardiovascular diseases.** In contrast, fewer respondents reported suffering from osteoarthritis (3%), nervous disorders (3%), and kidney diseases (4%). Interestingly, 47% of respondents did not experience any illnesses in the last three years.

Figure 26: Insights from qualitative interactions

Interaction with implementing partner

The CSI implementing team, led by Project Manager Survesh, operates SAFAR clinics across 5 locations, providing essential health services to truckers. The clinics offer first aid, regular tests, and monitoring of blood sugar and blood pressure levels. Additionally, the team conducts awareness and outreach activities, including distributing printed materials and conducting awareness sessions. Partnerships with local labs and hospitals facilitate further testing and treatment.

The project has reached 161447 unique truckers since the inception of the program. Outreach and engagement activities, such as interpersonal communication sessions, health games, and celebrations of special days like Yoga Day and Truckers' Day, have been effective in educating truckers about various health issues. However, challenges persist, including mobilizing truckers due to their unpredictable schedules and linking them to social schemes due to frequent changes in their mobile numbers.

Interaction with medical staff

The visiting doctor at the clinic, a compensated based on the number of visits, reported that the majority of patients are treated for orthopedic issues, followed by hypertension and diabetes. The clinic's approach to patient care has been effective, with most patients adhering to advice and taking prescribed medicines, leading to improved health outcomes. There has been a noticeable increase in awareness among truckers regarding non-communicable and communicable diseases, including HIV/AIDS and STIs, with the clinic playing a vital role in educating them on preventive measures and promoting safer sexual practices. As a result, truckers now willingly visit the clinic to discuss health issues, demonstrating a proactive approach to health and trust in the clinic's services.

Interaction with truckers

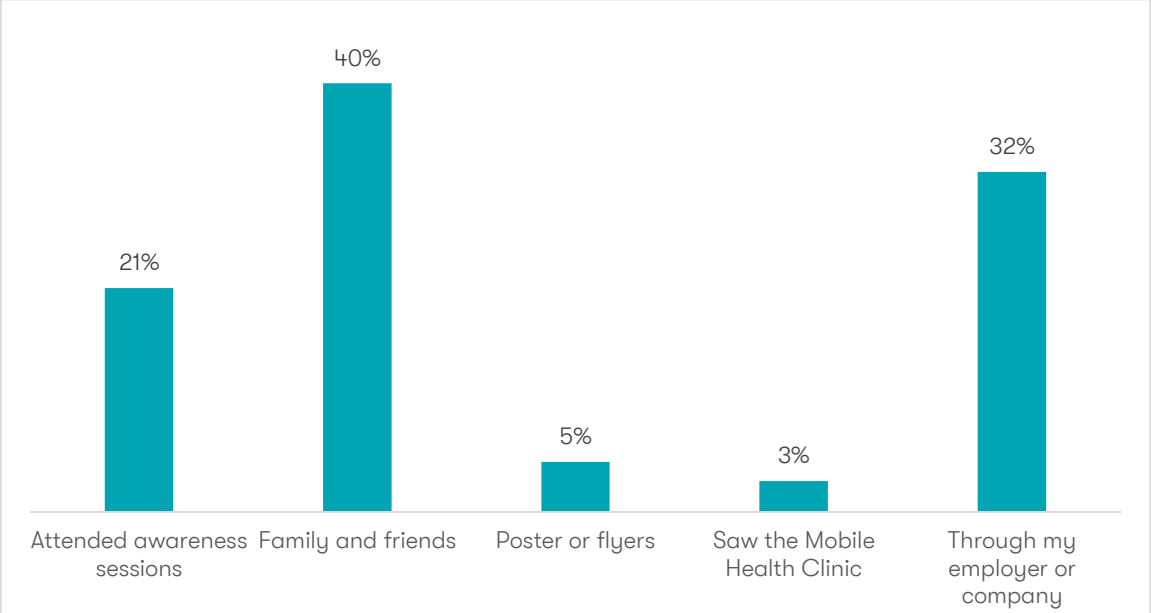
Truckers reported learning about the project through regular visits to the union centre, where the clinic is conveniently located. The clinic has been instrumental in educating them on proper dietary habits, road safety, and safe driving practices. Regular health monitoring, including blood pressure checks and free medicines for blood pressure, diabetes, and cholesterol, have been particularly beneficial. The clinic also raises awareness about HIV and other sexually transmitted infections (STIs), providing education on prevention, precautions, and contraceptive use.

Truckers appreciated the engaging and interactive approach to learning, including games and workshops on medical services, road safety, contraception, driving, and disease prevention. The clinic's support in addressing addiction issues, such as drinking and tobacco use, has also been helpful. However, truckers suggested restarting physiotherapy sessions, which were previously beneficial for managing joint and muscle pain. Additionally, they recommended providing spectacles to hypermetropia patients, ensuring all truckers with vision issues receive necessary support. Overall, truckers expressed high satisfaction with the clinic's services and workshops.

3.3 Awareness and accessibility

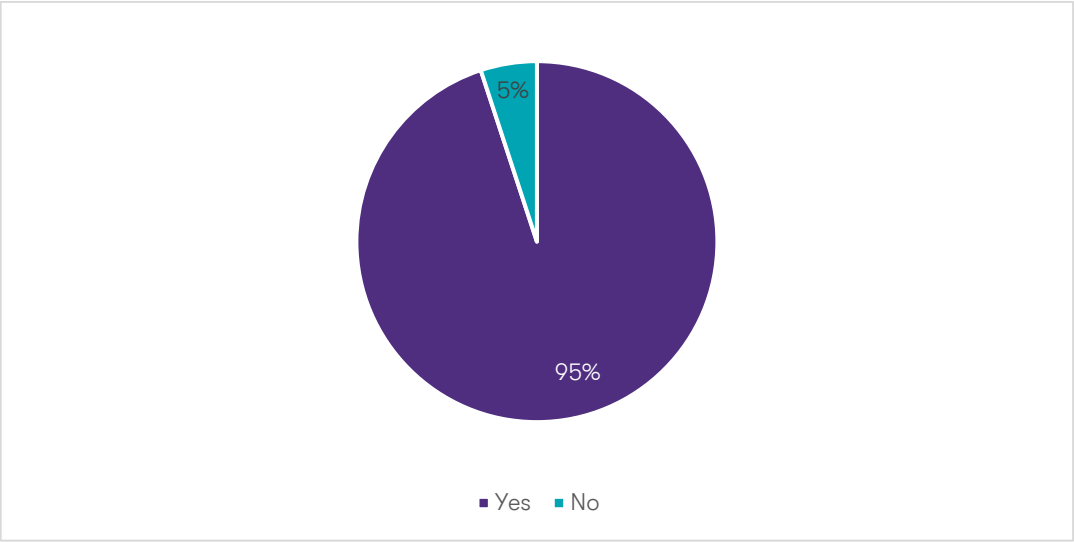
Community outreach and Awareness channels

Figure 27: Modes through which respondents became aware of SAFAR services



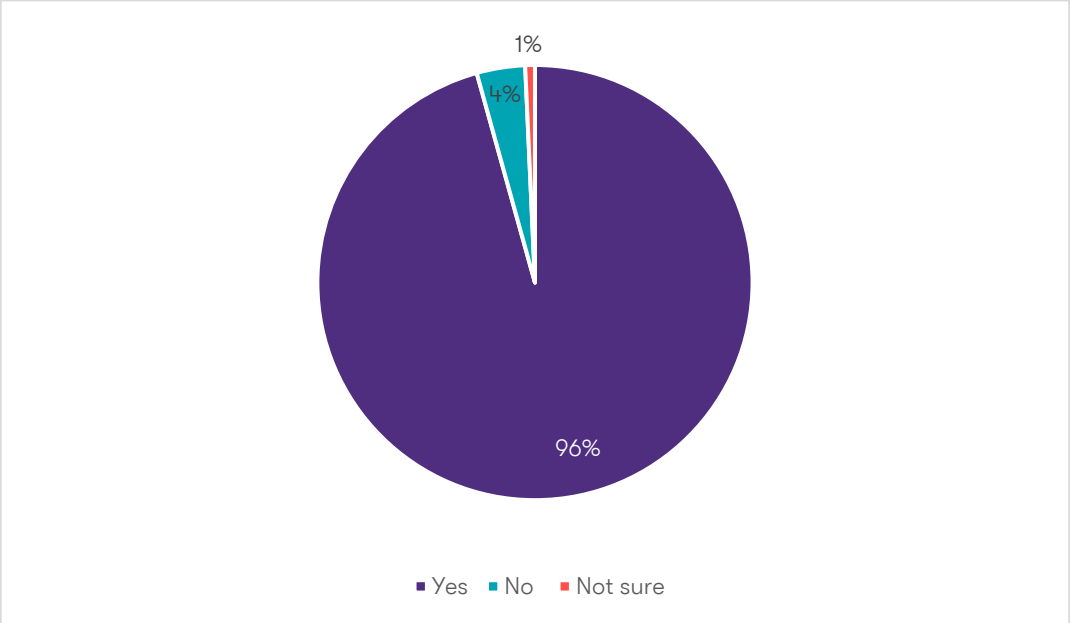
The data reveals the various channels through which respondents became aware of SAFAR medical services. The majority, **40%, learned about the services through family and friends, highlighting the importance of word-of-mouth referrals.** Employer communications also played a crucial role, with 32% of respondents discovering the services through their employer. Awareness sessions, which were attended by 21% of respondents, also contributed to the dissemination of information about SAFAR medical services. In contrast, more passive methods, such as posters and flyers (5%) and encountering the mobile health clinic (3%), had a relatively smaller impact on raising awareness about the services.

Figure 28: Beneficiaries who received prior information about SAFAR services (n=278)



The data indicates that most of the beneficiaries, **95%, received prior information about SAFAR services.** This suggests that the outreach efforts, particularly the health camps conducted near halt locations or warehouse units, were effective in disseminating information about the services to the target population. By providing information in advance, the program was able to raise awareness and likely increase the uptake of its services among beneficiaries. The strategic location of health camps near areas where beneficiaries frequent appears to have been a successful approach in reaching this population.

Figure 29: Percentage of beneficiaries who were able to save time/ money due to easy and free access to the healthcare through the SAFAR (n=278)

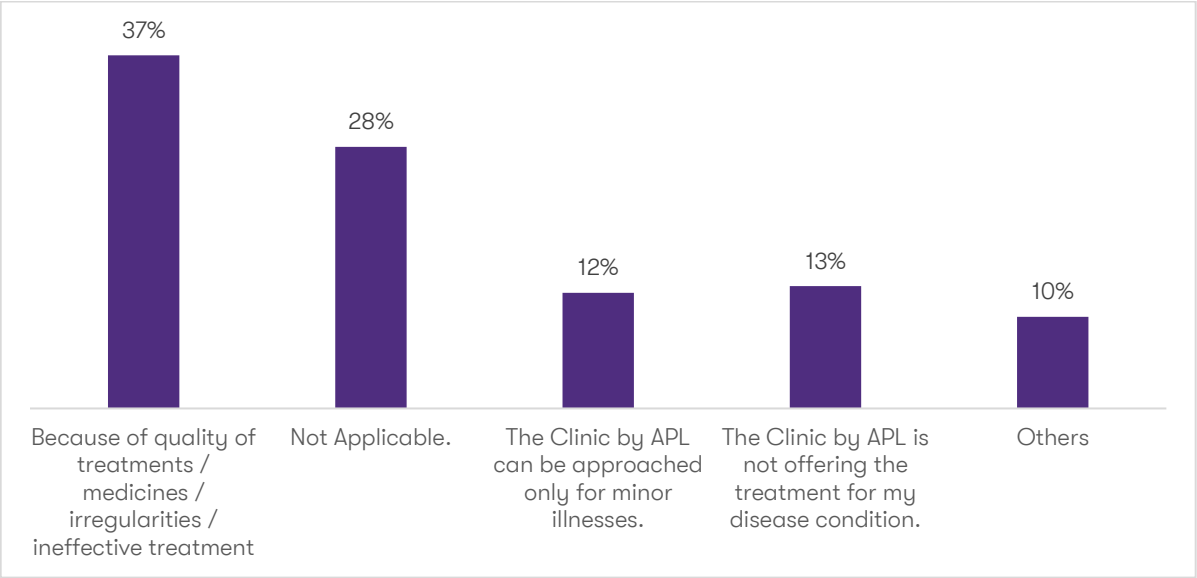


The pie chart above suggests that an overwhelming majority of beneficiaries, **96%, benefited from the easy and free access to healthcare provided by the SAFAR program.** This indicates that the program has been highly effective in saving beneficiaries both time and money, likely by reducing the need for costly and time-consuming trips to healthcare facilities. By providing convenient and free access to healthcare, the SAFAR program has likely improved the overall well-being and financial stability of its beneficiaries.

100% respondents agreed that they would refer their relatives and friends to seek medical services from SAFAR program. The results indicate a statistically significant positive correlation between respondent satisfaction and willingness to refer SAFAR medical services.

Reason for seeking healthcare at other facilities

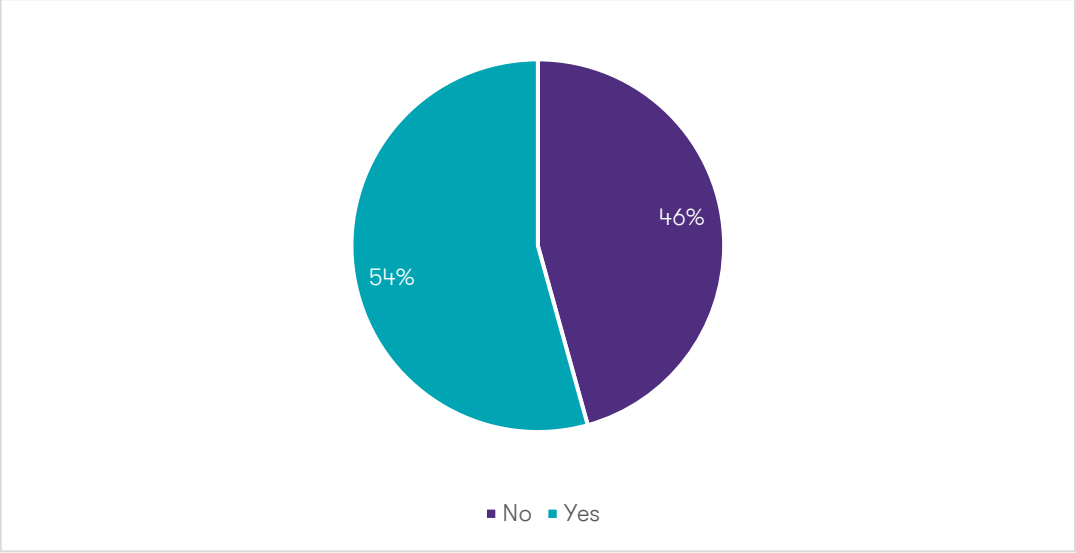
Figure 30: Reason for seeking healthcare at other facilities (n=278)



The data sheds light on the reasons why beneficiaries sought healthcare at facilities other than the one provided by APL. The primary reason, cited by 37% of respondents, was related to concerns about the quality of treatments, medicines, or effectiveness of treatment. This suggests that some beneficiaries may have had doubts about the quality of care provided by the APL clinic. Another 13% of respondents indicated that the APL services did not offer treatment for their specific disease condition, implying that the clinic's services may not have been comprehensive enough to meet all their healthcare needs. **Additionally, 12% of respondents felt that the APL clinic was only suitable for minor illnesses, further highlighting potential limitations in the scope of services offered.**

Awareness sessions

Figure 31: Beneficiaries who attended community awareness sessions under SAFAR program (n=278)

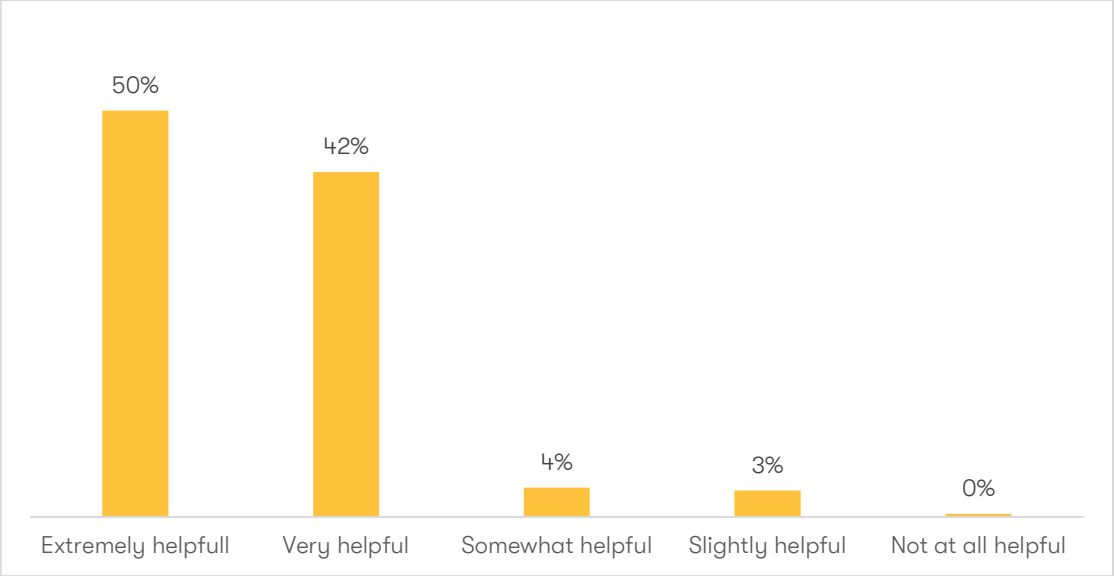


56% of beneficiaries participated in community awareness sessions, which included a range of activities such as:

- Health check-ups (blood, dental, and overall health)
- Counselling services
- Nutrition and health awareness programs
- Yoga sessions
- Road safety awareness initiatives

These sessions aimed to educate and empower beneficiaries, promoting overall well-being and healthy lifestyles.

Figure 32: Helpfulness of community awareness sessions (n=151)



Attending health awareness sessions has had a profoundly positive impact on the health and well-being of truckers. By participating in sessions focused on health check-ups, counselling services, nutrition and health awareness programs, yoga sessions, and road safety awareness initiatives, truckers have gained valuable knowledge and skills to manage their health effectively.

As a result, there has been a significant reduction in the number of sick days taken by truckers. This can be attributed to several factors:

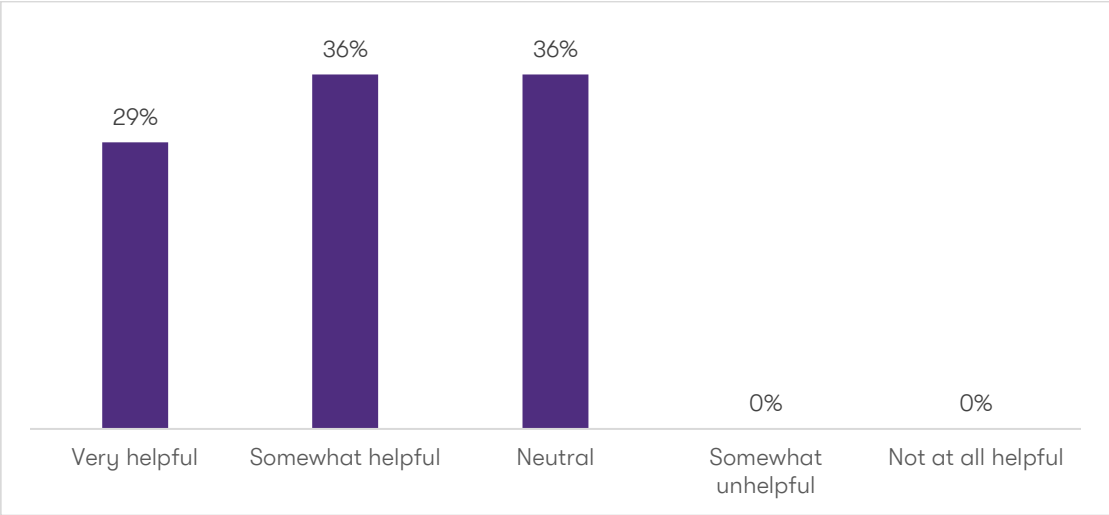
- Early detection and prevention: Regular health check-ups have enabled truckers to detect health issues early, preventing them from escalating into more severe problems.
- Improved health literacy: Nutrition and health awareness programs have empowered truckers to make informed decisions about their diet, lifestyle, and health habits.
- Stress management: Yoga sessions and counselling services have helped truckers manage stress and anxiety, reducing the likelihood of mental health-related sick days.

- Enhanced road safety awareness: Road safety awareness initiatives have educated truckers on safe driving practices, reducing the risk of accidents and related sick days.

By investing in the health and well-being of truckers, organizations can reap numerous benefits, including reduced absenteeism, improved productivity, and enhanced overall health outcomes.

Behaviour Change Communication

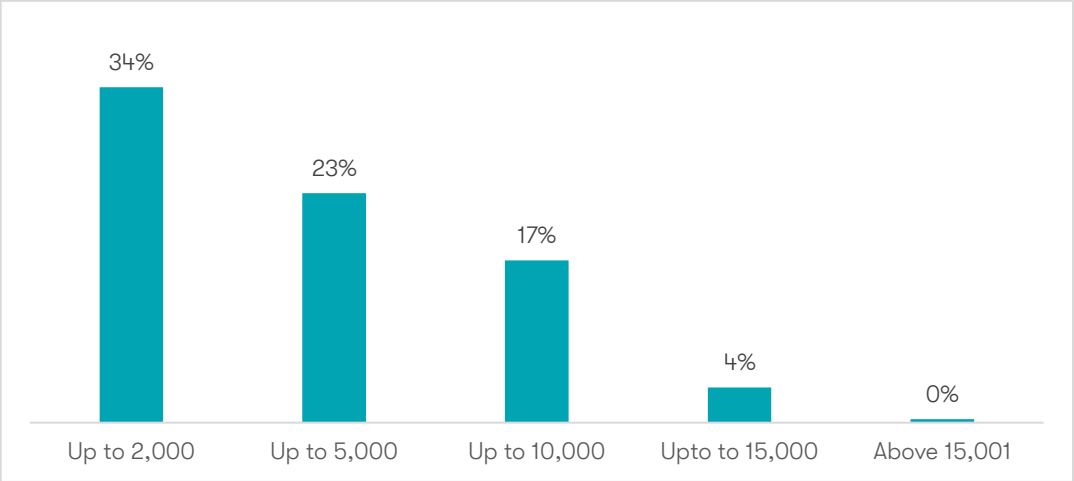
Figure 33: Perceived Helpfulness of BCC Sessions in Changing Attitude and Behaviour (n=278)



The data reveals the perceived helpfulness of the BCC sessions in changing attitudes and behaviours related to various topics. Majority of respondents, **65%, found the sessions to be at least somewhat helpful, with 29% considering them very helpful.** This suggests that the sessions were effective in resonating with the participants and influencing their perspectives. The remaining 36% of respondents reported a neutral response, indicating that the sessions may not have had a profound impact on their attitudes and behaviours. However, **it is encouraging to note that none of the respondents found the sessions to be unhelpful, suggesting that the content and delivery were well-received overall.**

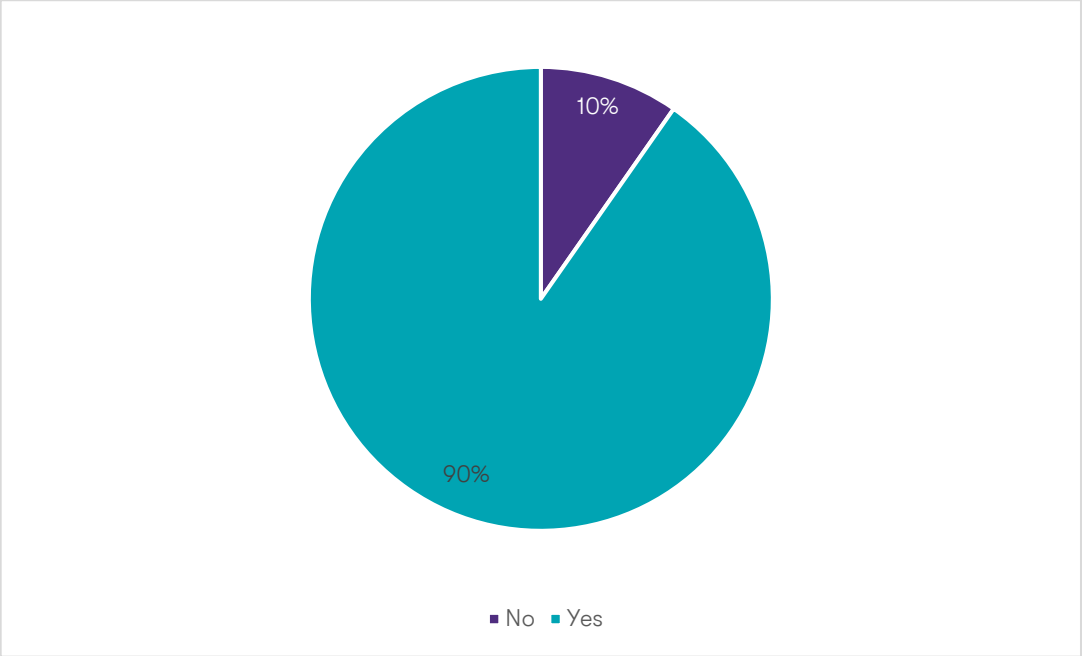
The SAFAR program has yielded a significant outcome: a notable increase in truckers' adherence to road safety norms and rules. By adopting safer driving practices, truckers have demonstrated a positive behavioural shift, contributing to reduced accidents and improved road safety (refer to figure 38). **This outcome is a direct result of the SAFAR program's efforts to educate and raise awareness among truckers about the importance of road safety, ultimately leading to a safer and more responsible driving culture.**

Figure 34: Cost saved by beneficiaries by not opting for alcohol (n=278)



The data highlights the financial benefits accrued by beneficiaries who abstained from alcohol. **A considerable proportion of respondents, 34%, reported saving up to 2,000 INR, while 23% saved up to 5,000 INR.** Furthermore, 17% of respondents managed to save up to 10,000 INR, and 4% saved up to 15,000 INR. These findings suggest that abstaining from alcohol has resulted in cost savings for the beneficiaries, which could potentially be allocated towards more productive or essential expenses, ultimately improving their overall financial well-being.

Figure 35: Beneficiaries who received medical kits (n=278)

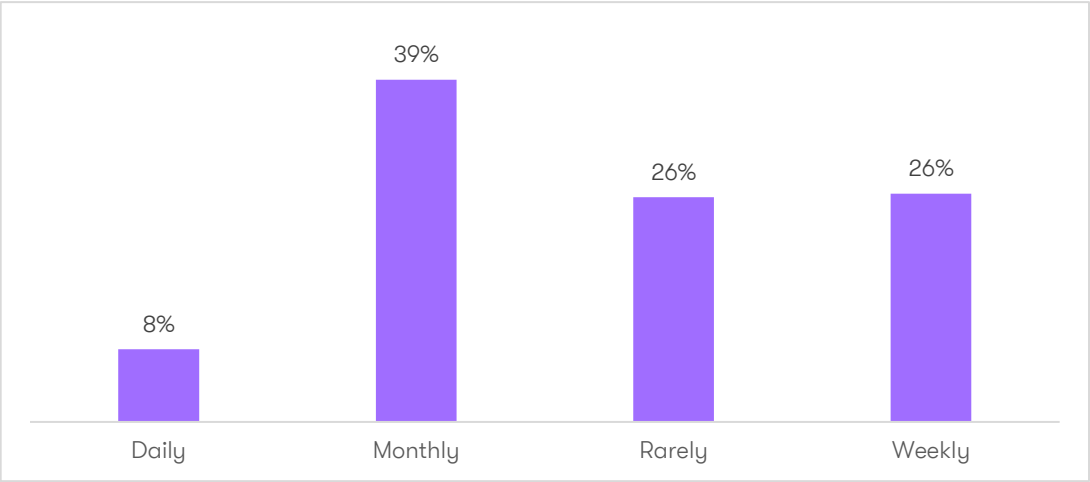


A remarkable 90% of truckers received medical kits through Behaviour Change Communication (BCC) sessions. These kits, comprising essential items like toothbrushes, toothpaste, soap, and other bathing materials.

The provision of these kits through BCC sessions indicates a holistic approach to health promotion, addressing not only the truckers' medical needs but also their overall well-being. By emphasizing the importance of personal hygiene, these kits

empower truckers to adopt healthier habits, reducing the risk of illnesses and improving their quality of life.

Figure 36: Frequency of medical kit which was provided through SAFAR (n=251)



The frequency of use of the medical kits provided to truckers reveals a mixed pattern of adoption and utilization. While a notable proportion of truckers (8%) reported using the kits daily, indicating a high level of integration into their daily routine, others demonstrated more sporadic usage.

The majority of truckers (65%) used the kits either weekly (26%) or monthly (39%), suggesting a moderate level of adherence to healthy hygiene practices. However, a significant proportion (26%) reported using the kits rarely, indicating a need for further encouragement and support to foster consistent usage.

The kits, containing essential items like bathing materials, toothbrushes, and toothpaste, are designed to promote good hygiene and health practices. The varied frequency of use suggests that while some truckers have successfully incorporated these habits into their daily lives, others may require additional motivation, education, or support to achieve optimal benefits.

Table 6: Beneficiary outreach numbers for counselling

Counselling & Beneficiary Reach			
Location	**2020-21**	**2021-22**	**2022-23**
Kasna	3,360	5,343	7,352
Khandala	2,682	5,820	7,745
Mysuru	2,846	4,848	7,379
Patancheru	2,808	5,868	7,175
Rohtak	2,810	5,264	7,754
Sriperumbudur	3,641	7,350	10,151
Vizag	3,314	6,603	6,062
Total	**21,461**	**41,096**	**53,618**

Table 7: Beneficiary outreach numbers for Behaviour Change Communication sessions

BCC Reach			
Location	2020-21	2021-22	2022-23
Kasna	3,353	9,807	19,972
Khandala	5,026	10,842	12,807
Mysuru	3,591	6,569	12,306
Patancheru	2,953	5,956	8,649
Rohtak	3,704	12,528	22,914
Sriperumbudur	4,829	7,826	15,612
Vizag	3,951	11,750	14,188
Total	**27,407**	**65,278**	**1,06,448**

Figure 37: Insights from qualitative interactions

Interaction with yoga instructor

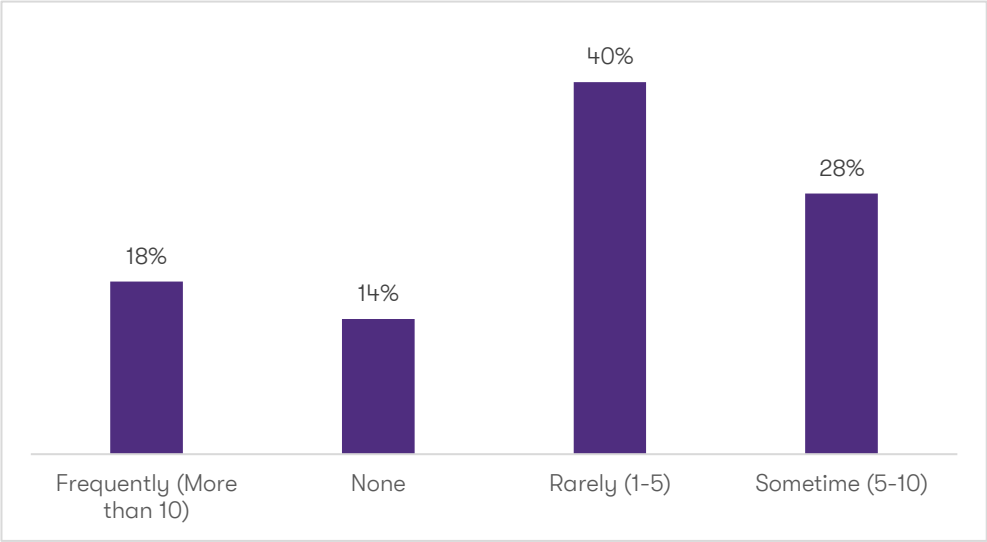
The yoga instructor's dedication to the project has been instrumental in promoting the well-being of truckers. Through regular yoga sessions, meditation, and tailored exercises, the instructor addresses the unique health challenges faced by truckers, including knee and joint pain, cervical issues, and constipation. With eight sessions conducted monthly, the instructor's efforts have been well-received, with truckers expressing a strong desire for regular sessions and appreciating the incentives provided, such as fruits, to promote healthy habits. Overall, the yoga instructor's work has been highly beneficial, and his continued involvement is crucial to maintaining the health and well-being of the truckers.

Interaction with APL's CSR team

The APL CSR team has demonstrated a commitment to the wellbeing of truckers, acknowledging their significant role within the transportation sector. Through this initiative, the team has addressed the ergonomic, lifestyle, and medical needs of truckers, providing holistic care to improve their quality of life. While some activities, such as physiotherapy sessions, were discontinued due to challenges with the NGO, the team remains open to expanding the scope of these activities in the future. Regular monitoring and evaluation, including field visits, have ensured the effectiveness of the initiative, with truckers providing positive feedback and expressing appreciation for the support and services provided.

Road safety

Figure 38: Reduction in traffic accidents in a year post attending the road safety awareness sessions with SAFAR (n=278)



The road safety training and awareness programs have yielded notable results, with a significant proportion of participants reporting a reduction in traffic incidents and accidents. Specifically, **86% of respondents credited the programs with preventing accidents**, with 18% averting more than 10 accidents and 28% preventing 5-10 accidents. Furthermore, 40% of participants reported preventing 1-5 accidents, underscoring the positive impact of these initiatives. Conversely, 14% of respondents did not prevent any accidents, highlighting opportunities for further improvement and targeted interventions. **Overall, these findings demonstrate the effectiveness of road safety training and awareness programs in reducing accidents and promoting safer driving practices.**

3.4 Satisfaction and perception of healthcare services

Ranking of healthcare facilities by SAFAR

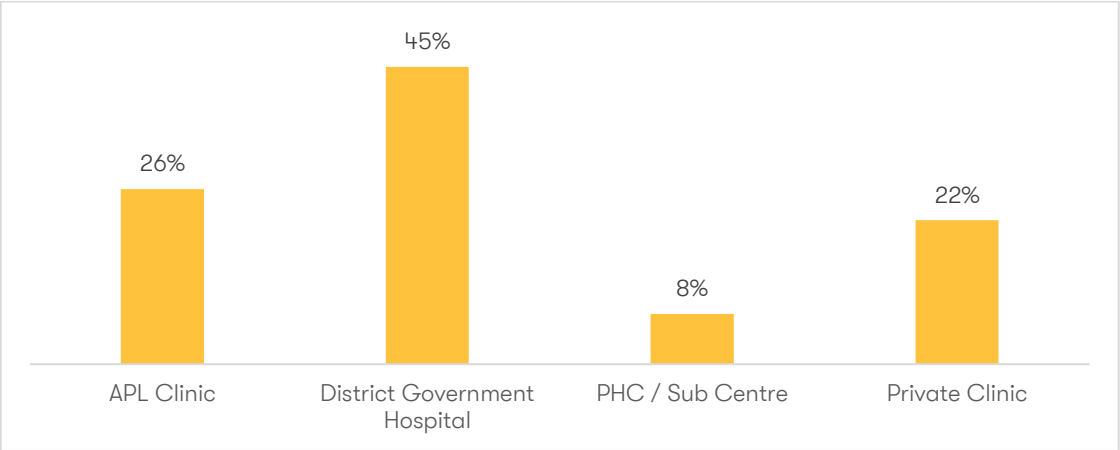
Figure 39: Beneficiary satisfaction perception on ranking of healthcare SAFAR medical services (n=278) *(Scale: 1-5, where 5 is highest and 1 is lowest)*

The above data reveals an overwhelmingly positive perception of healthcare services provided by SAFAR Medical Services among its beneficiaries. **A staggering 81% of respondents ranked the services as 5, the highest rating on the scale.** This is further reinforced by an additional 15% of respondents who ranked the services as 4. The combined total of 96% of respondents rating the services as either 4 or 5 suggests a remarkably high level of satisfaction with the quality of care provided. The remaining 4% of respondents ranked the services as either 3 or 2, with **no respondents rating the services as the lowest rating of 1.** Overall, the data indicates that SAFAR Medical Services has successfully delivered high-quality healthcare services that have met, if not exceeded, the expectations of its beneficiaries.

The SAFAR initiative has brought transformative change to the lives of truckers in Kasna, Uttar Pradesh and Vizag, Andhra Pradesh. They received comprehensive healthcare support, including eye checkups and back pain treatment. They also received medical assets like backrests and spectacles to alleviate chronic health issues. The initiative's healthcare system enabled consistent monitoring of their health treatment progress, significantly improving their lifestyle and overall well-being.

Preference of medical facility

Figure 40: Beneficiary preference on disease consultation (n=278)



The above graph provides insight into the perceptions of truckers regarding the quality of medical consultations offered by different types of healthcare facilities. Interestingly, most respondents, 45%, believed that doctors at district government hospitals offer good consultations for diseases. This suggests that truckers have a high level of trust in the public healthcare system, particularly at the district level. A significant **26% of respondents praised the quality consultations provided by doctors at APL clinics.** Truckers from various locations, including Rohtak and Vizag, prefer SAFAR clinics, valuing the free tests and medicines offered. Additionally, they appreciated the efficient lab testing, quality medicines, and courteous staff at SAFAR clinics. They particularly commended the doctors for patiently listening to their concerns and providing effective prescriptions.

Private clinics were preferred by 22% of respondents, while a relatively small proportion, 8%, opted for PHC/Sub-centre doctors. These findings highlight the varying levels of trust and satisfaction that truckers have with different healthcare providers.

Beneficiary perception

Beneficiaries expressed a high level of satisfaction with the services provided by the SAFAR program. Key insights include:

- 84% of beneficiaries reported improved overall well-being due to the healthcare services provided by SAFAR.
- 86% agreed that their health status and awareness had increased as a result of the program.
- 93% did not encounter any challenges when seeking healthcare through SAFAR.
- 95% expressed satisfaction with the services, highlighting strong appreciation for the initiative. The remaining 5% remained neutral, suggesting a need for additional medical equipment to further enhance service delivery.
- 88% of beneficiaries felt comfortable visiting the SAFAR clinic and interacting with the medical staff.

Truckers from Sperimabadur and Khandala have expressed overwhelming satisfaction with the healthcare services provided by SAFAR. They reported significant benefits, including improved overall well-being, increased health awareness, and seamless access to healthcare services.

Moreover, truckers who attended SAFAR awareness sessions demonstrated positive behavioural changes, adopting safer practices such as adhering to road safety rules, using contraception, and embracing healthy lifestyle habits, particularly in nutrition.

Table 8: Beneficiaries' Satisfaction with SAFAR Medical Services: Level of Agreement (n=278)

S.no	Statements	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	I sense a general improvement in my health due to APL	37%	45%	13%	4%	1%
2.	The doctor listens to the symptoms patiently	33%	42%	18%	4%	3%
3.	The Doctor explains the dosage of medicine to be taken every time.	38%	46%	12%	4%	1%
4.	The Doctor explains the diet that must be followed.	36%	47%	12%	3%	1%
5.	I am better relieved of any anxieties regarding medical treatment now.	36%	40%	19%	1%	3%
6.	I can manage a better health because of APL	40%	40%	13%	6%	2%
7.	My financial burden for medical care has decreased.	38%	41%	14%	4%	3%
8.	Elderly truckers can get better treatment due to APL	42%	46%	9%	1%	1%
9.	The SAFAR health services should continue in the coming years.	41%	46%	12%	1%	0%
10.	SAFAR medical staff tell us about maintaining hygiene.	38%	40%	18%	2%	0%
11.	I can manage seasonal illnesses better now due to availability of SAFAR health services.	37%	44%	15%	3%	1%

12.	The Doctor does a physical examination based on the symptoms.	29%	53%	13%	3%	2%
13.	The Doctor prescribes me effective medicines every time.	36%	49%	13%	1%	2%
14.	The CLINIC BY APL staff treat us in cordial manner.	34%	44%	12%	7%	3%

The data reveals positive perception of the SAFAR medical services among its beneficiaries. Across various aspects of the program, **a majority of respondents expressed strong agreement with statements indicating satisfaction with the services.** For instance, **82% of respondents agreed that the doctor listens to their symptoms patiently, while 84% stated that the doctor explains the dosage of medicine effectively.** Similarly, **83% of respondents felt that they can manage their health better** due to the SAFAR program, and **79% reported a decrease in their financial burden for medical care.**

The data also highlights the beneficiaries' appreciation for the program's focus on preventive care, with **78% agreeing that the SAFAR medical staff provide guidance on maintaining hygiene.** Furthermore, **81% of respondents believed that the program should continue in the coming years, underscoring their satisfaction with the services and their desire for sustained access to quality healthcare.**

Overall, the findings suggest that the SAFAR medical services have been successful in providing beneficiaries with accessible, patient-centred, and effective healthcare, leading to improved health outcomes and increased satisfaction among the target population.

100% respondents agreed that essential medicines are always available through at SAFAR program locations. The results indicate a statistically significant correlation between SAFAR's pharmacy services and essential medicine availability.

Table 9: Impact of program through Knowledge, Attitude and Practice (KAP) framework

Aspect	Findings
Knowledge	• 65% of respondents found Behavior Change Communication (BCC) sessions to be at least somewhat helpful in changing attitudes and behaviors. • 86% of respondents credited road safety training and awareness programs with preventing accidents. • Respondents gained knowledge on healthy practices, nutrition, and road safety through various awareness programs.
Attitude	• 29% of respondents considered BCC sessions to be very helpful, indicating a positive attitude towards behavior change. • 90% of truckers received medical kits, indicating a willingness to adopt healthy habits. • Respondents reported a reduction in traffic incidents and accidents, indicating a positive attitude towards road safety.
Practice	• 34% of respondents reported saving up to 2,000 INR by abstaining from alcohol, indicating a positive change in behavior. • 8% of truckers reported using medical kits daily, while 65% used them either weekly or monthly, indicating a moderate level of adherence to healthy hygiene practices. • 86% of respondents credited road safety training and awareness programs with preventing accidents, indicating a positive change in behaviour • Respondents reported a reduction in traffic incidents and accidents, indicating a positive change in behaviour.

Rating

The ratings indicate a high level of satisfaction among beneficiaries regarding SAFAR medical services. Average ratings range from 4.1 to 4.4, suggesting a strong performance across parameters.

Table 10: Beneficiary rating across different parameters related to the program

Perception	Rating (average)
Accessibility to SAFAR clinics	4.2
Quality of services	4.4
Quality of staff (Doctors & Pharmacists)	4.3
Availability of doctors	4.2
Techniques used to educate on road safety (snake and ladder game)	4.2
Effectiveness of the treatment provided	4.3
Effectiveness of the awareness sessions	4.2
Quality of Health camps (if any)	4.4
Efficiency of SAFAR medical services during Covid19	4.2
Peer education program (Probe: dissemination of information related to Health and Road Safety/STI/HIV/AIDS)	4.1
Facilitating life insurance	4.1

Areas of improvement as per the respondents include:

Respondents identified key areas for improvement in SAFAR medical services:

- Enhancing the availability of medical instruments
- Increasing the number of doctors
- Expanding the availability of vaccinations

4. Project evaluation: OECD DAC Principles

The section highlights the key aspects of the program basis five key principles: relevance, effectiveness, efficiency, impact, and sustainability.

Relevance

The SAFAR project has made significant strides in addressing the health and wellbeing needs of truckers, a vulnerable population that previously struggled to access medical care. **Prior to the intervention, a staggering 35% of truckers suffered wage loss due to illness, highlighting the urgent need for accessible healthcare services.**

The project's targeted approach has yielded impressive results, with 2,411 unique individuals accessing clinics and **2,060 benefiting from outreach activities**. The introduction of SAFAR medical services has revolutionized healthcare accessibility, reducing travel distances that once ranged from 0-5 km (46%) to over 15 km (14%). Strategically placed medical camps have bridged geographical gaps, improved healthcare access and overall well-being, and aligning with the company's CSR goals and national health priorities.

Effectiveness

The SAFAR program has demonstrated remarkable effectiveness in enhancing the health and well-being of truckers. Through regular health check-ups, medical care, and health education, the program has led to positive outcomes, including improved health knowledge, reduced morbidity, and enhanced quality of life. Notably, 86% of respondents credited road safety training and awareness programs with preventing accidents, while **90% of truckers received medical kits.** The program's outreach activities have also been effective in engaging truckers and promoting behaviour change. A staggering **95% of beneficiaries expressed satisfaction with the services** provided, while **96% benefited from easy and free access to healthcare.**

Additionally, **67% of beneficiaries reported average cost savings of less than INR 499 per consultation**, and **83% felt they could manage their health better due to the program.** Impressively, **100% of respondents agreed that essential medicines are always available through SAFAR program locations.** Overall, these statistics underscore the program's success in providing accessible, affordable, and quality healthcare services to truckers, ultimately contributing to their overall well-being.

Efficiency

The SAFAR program has demonstrated exceptional efficiency in resource utilization. By partnering with local NGOs and healthcare providers, the program has successfully reached **2,411 unique individuals through outreach activities.**

This translates to a cost per beneficiary of just INR 312, highlighting the program's impressive cost-effectiveness. Furthermore**, 70% of beneficiaries reported waiting less than 30 minutes for consultation, demonstrating the program's efficiency** in managing patient flow and minimizing wait times. With **95% of beneficiaries expressing satisfaction** with the services and **96% benefiting from easy and free access to healthcare,** the SAFAR program's efficiency and effectiveness are undeniable.

Impact

The project has had a positive impact on the health and wellbeing of truckers. The provision of regular health check-ups and medical care has led to improved health outcomes, including reduced morbidity and mortality. For example, **34% of respondents reported saving up to INR 2,000 by abstaining from alcohol,** and **65% of respondents found Behaviour Change Communication (BCC) sessions to be at least somewhat helpful.** The project's focus on health education and behaviour change has also had a positive impact, with truckers reporting improved knowledge and practices related to healthy eating, physical activity, and stress management.

The SAFAR program has had a profound impact on the health and well-being of truckers. With **95% of beneficiaries expressing satisfaction with the services provided, and 96% benefiting from easy and free access to healthcare, the** program has successfully addressed the complex health concerns of this vulnerable population. Notably, **73% of beneficiaries enrolled in health insurance schemes,** ensuring financial protection against medical expenses, while **90% received medical kits to promote preventive care and self-management of health.** The program has also led to significant cost savings, with **67% of beneficiaries reporting average cost savings of less than INR 499 per consultation.** Furthermore, **83% of respondents felt they could manage their health better due to the program**, and **86% credited the road safety training and awareness programs with preventing accidents.** Overall, the SAFAR program has achieved remarkable success in enhancing the health and well-being of truckers, with a reach of 2,411 unique individuals.

Sustainability

The SAFAR Program has ensured sustainability through **strategic partnerships with local NGOs and healthcare providers**, effectively leveraging local resources and expertise. By establishing a robust network of local healthcare providers and empowering truckers to manage their health, the program has achieved long-term improvements in health outcomes, satisfaction, and adoption of healthy behaviours. With a strong foundation in place, the program is well-positioned for continued success and expansion, with identified areas for further enhancement including medical kit usage, medical instrument availability, doctor numbers, and vaccination services.

Additionally, expanding collaboration with existing welfare schemes, such as government and private sector initiatives that support truckers' health and wellbeing, would ensure continued support. Technology-enabled access, such as the development of a digital portal or mobile app to aggregate information about health programs, helplines, and welfare resources, would further enhance the program's reach and impact.

5. SROI

Social Return on Investment (SROI) is a critical metric used to evaluate the overall value generated by the program. It provides a quantitative expression of the social, economic, and environmental benefits relative to the resources invested. By engaging stakeholders, identifying outcomes, and assigning monetary values to these outcomes, the SROI offers a comprehensive view of the program's impact. This analysis allows decision-makers to assess the program's efficiency and sustainability, highlighting the tangible and intangible benefits delivered to the target community.

SROI Estimation for value created till March 2023	
Total Investment	42,323,294
SROI Ratio	1.72180077

6. Corporate Benchmarking

Company	CSR Focus Areas	Outreach	Scope for Improvement for APL	Source
Berger Paints	Healthcare, Education, Environmental Sustainability, Rural Development, Vocational Training (iTrain Program)	National	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.bergerpaints.com/about-us/policies/corporate-social-responsibility-policy | https://www.bergerpaints.com/about-us/sustainability
Nerolac	Environment, Health, Education, Community Development	National, with a focus on areas around manufacturing locations	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.nerolac.com/sustainability/community-initiatives.html
HP	Bridging the digital divide in rural India, Education through technology solutions	National, targeting isolated and disadvantaged groups in rural areas	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.hpindiacsr.com/

Asian Paints Limited (APL) has demonstrated a strong commitment to Corporate Social Responsibility (CSR), focusing on areas such as health and hygiene, skill development, disaster management, and water conservation.

To further enhance its CSR impact, APL might consider the following areas for improvement:

1. Geographical expansion: While APL has made commendable efforts in communities near its manufacturing facilities, expanding CSR initiatives to underserved regions across the country could amplify its positive impact.
2. Educational initiatives: Beyond vocational training, APL could invest in broader educational programs, such as supporting primary and secondary education, scholarships, and digital literacy initiatives, to foster long-term community development.

3. Environmental Sustainability: APL has engaged in water conservation efforts. Building upon this, the company could implement comprehensive environmental programs focusing on renewable energy adoption, waste reduction, and promoting sustainable practices within communities.
4. Employee Engagement: Encouraging greater employee participation in CSR activities through volunteer programs can not only benefit communities but also foster a culture of social responsibility within the organization.

By exploring these areas, APL can continue to strengthen its CSR initiatives and contribute more significantly to sustainable community development.

7. Conclusion

The SAFAR program has demonstrated remarkable success in enhancing healthcare accessibility and quality for truckers. The assessment study's key findings highlight the program's positive impact, including **95% of beneficiaries expressing satisfaction with the services** provided and **73% enrolling in health insurance schemes through SAFAR's support**. Additionally, **88% of beneficiaries reported saving money by not opting for alcohol**, and **86% credited the road safety training and awareness programs with preventing accidents.**

The Behaviour Change Communication (BCC) component of the SAFAR program has also shown promising results in promoting positive behaviour change among truckers. A majority of **respondents (65%) found BCC sessions to be at least somewhat helpful**, and **90% of truckers received medical kits that empowered them to adopt healthier habits.** However, the data also reveals opportunities for improvement, including the need for further encouragement and support to foster consistent usage of medical kits.

Overall, the SAFAR program has made significant strides in improving the health and well-being of truckers. By building on these successes and addressing areas for improvement, the program can further enhance its impact and contribute to improved health outcomes among truckers.

8. Recommendation

The SAFAR Program has proven to be a **transformative initiative**, successfully enhancing healthcare access and road safety for truck drivers. Through strategic interventions such as **health camps, medical kits, road safety training, and health insurance facilitation**, the program has made significant strides in improving the wellbeing of drivers across multiple states.

Key achievements include **higher enrollment in health insurance schemes, improved health seeking behaviors, and a notable reduction in road accidents**. However, there are still opportunities for further improvement and sustainability.

- **Expand diagnostic services**: Increase the availability of advanced diagnostic facilities during health camps to better manage chronic conditions like diabetes, hypertension, and respiratory diseases.
- **Strengthen road safety training**: Provide more in depth and ongoing road safety education to drivers to help further reduce accidents and improve safe driving practices.
- **Enhance community engagement**: Involve local community leaders and influencers to spread awareness and encourage broader participation in the SAFAR program, especially in remote areas.
- **Leverage government health schemes**: Build stronger partnerships with government initiatives to enhance healthcare access and support truck drivers' enrollment in national health insurance and social security schemes.
- **Awareness creation campaigns:** Organize health camps, interactive sessions, and distribute informational pamphlets at trucking hubs. Additionally, use radio, WhatsApp groups, and SMS alerts to notify truckers about health services and helplines.
- **Partnerships with Helplines & Support Institutions**: Link truckers with mental health support lines, government welfare schemes, and NGO-run wellbeing initiatives, ensure emergency medical response services are accessible through a toll-free number.

9. Case study

Explicit and unambiguous consent was sought from the beneficiaries for using their photos and testimonials for the reporting.

1) Beneficiary

Name: Rajesh

Age: 50 years

Occupation: Truck truckers

Location: Kasna, Uttar Pradesh

Rajesh, a 50-year-old truck driver from Kasna, Uttar Pradesh, has spent decades navigating India's challenging roads. His physically demanding job has often taken a toll on his health, particularly his eyesight and back. In 2022, Rajesh benefited from Project SAFAR, a healthcare initiative dedicated to supporting the well-being of truckers. Through the project, Rajesh accessed a range of healthcare benefits, including regular health check-ups and specialized treatments for eye vision, back pain, and knee joint pain.

Rajesh appreciated that the health camps were conveniently organized near his halt locations or warehouses. Under the initiative, he received comprehensive healthcare support, including eye check-ups and back pain treatment. Additionally, he was provided with medical assets such as backrests to alleviate chronic back pain caused by long hours of driving and spectacles for improved vision while driving. The project also introduced a healthcare system to track his check-ups and camp visits, ensuring consistent monitoring of his health treatment progress.

Rajesh credits Project SAFAR for significantly improving his lifestyle and believes it has positively transformed the lives of many truckers like him. By fostering better health and safety in their demanding profession, Project SAFAR has made a tangible difference in the lives of India's truckers.

2) Beneficiary

Name: Rajkumar Sehgal

Age: 62 years

Occupation: Truck truckers

Location: Rohtak, Haryana

Rajkumar has been availing the APL's health services for some time and has experienced significant improvements in his health and well-being. The truckers, who suffers from knee joint pain and hypertension, has been able to effectively manage his conditions through the centre's services.

The centre provides the truckers with regular blood pressure checks, necessary medicines, and even spectacles to address his eyesight issues. The truckers has reported a significant improvement in his quality of life, thanks to the centre's comprehensive services.

One of the key benefits of the Health and Safety Centre is that all tests and medicines are provided free of charge. This has been a huge financial relief for the truckers, who has been able to manage his health expenses more effectively.

The truckers have also reported a significant positive impact on his health after quitting smoking and drinking five years ago, following the advice of the doctor at the clinic. This decision has had a profound impact on his overall health and well-being, and he is grateful for the guidance and support he received from the Health and Safety Centre.

3) Beneficiary

Name: Ashok

Age: 45 years

Occupation: Truck truckers

Location: Rohtak, Haryana

Ashok, a trucker, has been a regular visitor to the Safar Clinic for the past five years. As a trucker, Ashok faces several health challenges, particularly muscle pain during the winter season and acidity issues due to long hours of driving.

The Safar Clinic has been instrumental in helping Ashok manage these conditions effectively. The clinic provides him with the necessary medicines and valuable advice from the doctor. One of the most significant pieces of advice he received was to use rock salt instead of common salt, which has been beneficial for managing his blood pressure.

In addition to medical care, the clinic offers valuable information on safer driving habits and the importance of taking adequate rest. He has found this guidance to be extremely helpful in adopting safer driving practices and ensuring he gets enough rest to stay alert on the road.

Overall, Ashok's experience with the Safar Clinic has been highly positive, and he credits the clinic with helping him achieve better health and safer driving habits.

10. Annexures

Field visit photographs

Figure 411: GT team's interaction with truckers in Kasna.

Figure 422: Qualitative interaction with truckers in Rohtak, Haryana

Figure 43: Yoga session for the truckers

Figure 44: Respondents from Kasna, Uttar Pradesh

11. Notice to the reader

This report is intended for restricted circulation and has been prepared exclusively for Asian Paints Limited as part of the impact assessment of the SAFAR program. It should not be used, reproduced, or circulated for any other purpose, in whole or in part, without prior written consent. If used or referred to for any other inference or study as an input or reference document, Grant Thornton Bharat LLP would only grant such consent after full consideration of the circumstances.

The information collected for this study is based on field visits, meetings with various stakeholders, and backend data provided by Asian Paints Limited. We have relied on the accuracy of the information shared by these sources. The scope of work does not constitute an audit or due diligence of the information provided; therefore, the data received was assumed to be accurate.

This report should not be considered as an expression of opinion or any form of assurance on the financial statements or financial position of Asian Paints Limited or any other associated entity.

The recommendations provided in this assessment are suggestive and may be implemented after analysing their feasibility and prioritization. The decision to implement any recommendations lies solely with the management of Asian Paints Limited. The field visits and data collection process were conducted in coordination with Asian Paints Limited, following prior acceptance of the approach, methodology, coverage plan, survey tools, and indicators.

Due to potential communication gaps and the inherent human tendency to report everything as above expectations or without issues, it was challenging to ensure interviewees fully understood the purpose of the survey and provided accurate responses.

Grant Thornton Bharat LLP accepts no liability in relation to the use of the analysis, findings, or recommendations contained in this report by any third party. The report relies on responses provided by stakeholders. We have not independently verified the accuracy or completeness of the information shared by the implementing partner, stakeholders, or any other involved parties, and any conclusions drawn are based on the provided data.

For and on behalf of Grant Thornton Bharat LLP,

Authorized Signatory

Name: Rohit Bahadur

Designation: Partner

Email: rohit.bahadur@in.gt.com

Date: 05 March 2025

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Grant Thornton

Impact assessment of Static Health Units (SHU) and Mobile Medical Units (MMU)

Asian Paints Ltd.

December 2024

Contents

List of abbreviations

CSR	Corporate Social Responsibility
CHC	Community Health Center
CHW	Community Health Workers
FGD	Focus Group Discussion
FY	Financial Year
GTBLLP	Grant Thornton Bharat LLP
IDI	In-depth Interview
INR	Indian Rupee
KAP	Knowledge, Attitude and Practice
MMU	Mobile Medical Unit
NGO	Non-Governmental Organisation
PHC	Primary Health Centres
OECD-DAC	Organisation for Economic Co-operation and Development's Development Assistance Committee
SHU	Static Health Unit
STD	Sexually Transmitted Disease
US	United States of America

Executive Summary

The Asian Paints Nirog Health Services program, established as part of Asian Paints' Corporate Social Responsibility (CSR) initiatives, addresses critical healthcare challenges in underserved communities near its plant locations, including Mysore, Khandala, Vizag, Patancheru, and Kasna. This impact assessment evaluates the program's relevance, effectiveness, efficiency, impact, and sustainability over its implementation from FY 2019 to 2023, focusing on the delivery of primary healthcare services through 5 Static Health Units (SHUs) and 1 Mobile Medical Unit (MMU).

Program Relevance and Context

The program is a direct response to the healthcare disparities in rural India, where inadequate infrastructure, high out-of-pocket expenses, and limited accessibility affect vulnerable populations. With **72% of beneficiaries belonging to Below Poverty Line (BPL) households, the program targets those most in need, providing services such as non-communicable disease (NCD) management**, General disease, maternal and child health, and eye care. By bridging gaps in healthcare delivery, the program aligns closely with community needs.

Key Achievements

Access to Healthcare:

- Over 3,65,000 beneficiaries received healthcare services through the SHUs and MMU, with daily footfalls ranging from 50-100 beneficiaries per clinic across locations per day.
- The majority of beneficiaries sought care for chronic conditions such as **diabetes (54%), hypertension (32%),** and **cholesterol issues (9%),** as well as common ailments **like joint pain and seasonal illnesses.**
- **Antenatal (AN) and Postnatal Care (PNC) registrations were actively promoted**, benefiting 70-80 pregnant women annually, with a focus on safe motherhood practices.

Cost and Time Savings:

- 63% of beneficiaries availed doorstep medical services, significantly improving convenience for those with limited mobility.
- **88% saved up to ₹9,999 annually** on diagnostic tests, and 31% saved ₹5,999 on medicines, demonstrating the program's financial impact.
- The program reduced travel distances to healthcare facilities, with **48% of respondents saving ₹100 per visit** and 30% saving ₹250-₹500 on transportation costs.
- 61% of beneficiaries avoided wage loss due to the program's localized services, which allowed them to seek timely medical care without missing work.

Health Outcomes:

- Beneficiaries reported improved management of chronic diseases, with regular follow-ups ensuring medication adherence and lifestyle changes.
- Preventive practices increased by 41%, highlighting the success of awareness campaigns and health camps.

Beneficiary Perception:

- Nearly all beneficiaries **(99%) expressed high satisfaction with the services**, ranking the clinic doctors as providing the best consultation quality among healthcare providers in the area.
- **95% reported that their family members also utilized the services, indicating the program's broader impact** within households.

Community Engagement:

- The program organized 24 health camps per month per location, focusing on NCD screenings, general health check-ups, and awareness activities.
- Events such as World Diabetes Day and Nutrition Week drew significant participation, enhancing community understanding of health risks and prevention strategies.

Community needs and Recommendations

The program successfully addressed several healthcare needs but also highlighted additional areas of community demand:

- **Maternal healthcare**: Focus on antenatal and postnatal care registration helped improve maternal health outcomes; however, gaps in gynecological services remain.
- **Orthopaedic and geriatric care**: Senior citizens, who formed a significant portion of beneficiaries, requested specialized services for joint pain and arthritis.
- **Eye care**: Beneficiaries emphasized the need to reinstate eye camps for vision testing and cataract referrals.
- **Advanced diagnostics**: Adding ECGs, X-rays, and thyroid tests could address unmet diagnostic needs.
- **Expanded referrals**: While effective, the referral system for higher-level care requires enhanced communication and follow-up.

Sustainability and Long-term Impact

The program's foundation for sustainable healthcare delivery is built on community trust, effective stakeholder engagement, and a robust operational framework. By integrating telemedicine, strengthening partnerships, and adopting adaptive strategies, the initiative has the potential to serve as a replicable model for CSR-driven healthcare interventions in India.

In conclusion, the Asian Paints Nirog Health Services program has significantly improved healthcare accessibility and outcomes for underserved populations. By addressing the highlighted gaps and scaling its successful strategies, the initiative can continue to serve as a transformative force in community health and well-being.

1. Introduction

1.1. About Asian Paints Ltd.

With a rich history spanning over eight decades, Asian Paints Ltd. has established itself as India's leading paint and decor company. Founded in 1942 by four visionary friends, the company has grown from a small partnership firm to a global leader in the paints industry.

Today, Asian Paints Ltd. is a renowned name in the global paints industry, with a consolidated turnover of ₹354 billion. The company is ranked 2nd in Asia and 8th amongst the top coating's companies in the world. With a strong consumer-focus and innovative spirit, Asian Paints has been the market leader in paints since 1967.

Asian Paints operates in 15 countries and has 27 paint manufacturing facilities worldwide, servicing consumers in over 60 countries. The company offers a wide range of paints for decorative and industrial use, including interior paints, exterior paints, wood paints, and metal paints. Additionally, Asian Paints provides waterproofing, adhesives, and wall coverings under its portfolio.

The company has also formed strategic joint ventures with PPG Inc, USA, to cater to the growing demands of the Indian automotive coatings market. Furthermore, Asian Paints has approved the setup of a manufacturing facility for VAE and VAM in India, with a proposed investment of approximately ₹2,100 crores over three years.

Home Decor

In the Home Decor space, Asian Paints offers a wide range of products, including modular kitchens, bath and sanitary solutions, tiles, wardrobes, fabrics, furniture, and more.

Investing for the future

Asian Paints is committed to innovation and growth. Recently, the company announced strategic partnerships and investments in nanotechnology and white cement manufacturing. These initiatives aim to drive business expansion, enhance product offerings, and strengthen Asian Paints' position in the industry.

1.2. About Asian Paints Ltd. CSR

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1.3. About Asian Paints Ltd. CSR

CSR Vision

Asian Paints Ltd.'s CSR vision is based on embedded tenets of trust, fairness, and care to maximise efforts in this regard. Following are keystones of their CSR philosophy:

- To actively initiate projects and / or participate in projects that together make it the local lighthouse for the region which significantly improves the lives of the people where we operate and are present.
- To provide vocational training and impart skilling to enhance the livelihood and skills of people who are primarily from the unorganized sector.
- To commit to creating social and economic value as a corporate citizen and encourage employees to participate and contribute to various CSR programmes.
- To manage operations using principles of sustainable development to minimize resource footprint and protect health & safety of all the stakeholders.

Scope and Approach

APL believes in responsible growth and thus undertakes CSR initiatives that will make a difference to the communities and the environment in which it operates. The outcome of these activities when measured will stand testimony to the Company being a responsible & a caring organization.

The CSR Committee has identified the following thrust areas around which the Company shall be focusing its CSR initiatives and channelizing the resources on a sustained basis:

- **Health & Hygiene:** Under Health & Hygiene, it aspires to deliver primary health care support through diagnosis and treatments to our communities. Interventions will include promoting preventive healthcare, building awareness about hygiene, sanitation, maternal & child health care, setting up medical infrastructure, instrumenting clean drinking water habits, etc.

3,65,000+

Beneficiaries have been impacted through healthcare initiatives.

- **Disaster Management:** APL contribute towards relief, rehabilitation, and reconstruction activities as a part of its disaster management intervention. As a responsible Company, it focuses towards mitigating the effects of the crisis created by natural disasters, pandemic or likewise. APL has partnered with the Government on various instances to provide support and aid. It has also worked with different partners for distribution of essentials among communities during the time of crisis.
- **Enhancing Vocational Skills:** In the area of Vocational training and skilling, APL provides specialized and skill-based training to painters, carpenters, plumbers, etc., to enhance their skills, empower them, provide opportunities to secure better employment and improve their livelihood.
- **Water:** Water being a valuable and scare resource that APL shares with its surrounding communities, APL has identified water conservation and management as a key area of intervention. APL's focus will be an integrated approach across (a) to (d) below:
  a) Reducing overall specific water consumption.
  b) Reuse/recycle wastewater back within the factories and communities in the vicinity of APL's manufacturing locations and other areas of operations.
  c) Rainwater harvesting in APL's factories and communities in the vicinity of APL's manufacturing locations and other areas of operations.
  d) Watershed management and community outreach programs thus making more water available for the communities than what APL consumes every year.

The initiatives in this thrust area would, inter alia, include (i) creating capacities in conserving water through significant investments in partnership with relevant stakeholders, with the objective of water conservation, (ii) educating farmers in looking at various Government schemes with the objective of water management(iii) undertaking water replenishment projects in the communities surrounding APL's factories. The approach would include providing support and infrastructure at each stage of water conservation, water preservation, water re-charge and waste-water treatment. Vocational Skilling and Water conservation will continue to remain our key thrust areas of intervention.

The CSR areas highlighted in this policy shall be monitored and reviewed by the Management, CSR Committee, and the Board of Directors of the Company from time to time. All CSR Initiatives/projects/programs/activities will continue to fall under the purview of Schedule VII of the Companies Act, 2013 (the Act) and Sustainable

Development Goals (SDG). The CSR Committee may include any other areas falling within the ambit of Schedule VII of the Act, and amendments thereto, from time to time.

The CSR initiatives as stated aforesaid will either be one-time initiative or ongoing initiatives of the Company and the latter is proposed to be implemented on a continuous basis subject to review and monitoring by the CSR Committee and Board.

The approach of the Company shall be based on the following principles:

- CSR initiatives to focus on the areas around where the Company has its presence and operations.
- CSR initiatives to create awareness amongst employees and ensure their involvement in volunteering. To develop substantial programs to promote active participation at all levels.
- Company will acquire/ obtain/ provide the expertise required to carry out the above activities and engage with any agencies and third parties of repute if the need arises.
- Company will actively participate in the CSR initiatives through structured programs and projects and its involvement will be more towards participation on the ground rather than mere administering of the expenditure. The Company will have an internal structure to implement its CSR philosophy under supervision of the CSR Committee and Board.

Implementation

The CSR activities are undertaken by the Company, either itself or jointly along with any other companies, and/or in collaboration with its stakeholders which, inter alia, include the Government, the village panchayats, NGOs, local communities, and District Authorities. The Company may also join hands with external experts and implementation partners with an established track record in the area of the CSR initiatives.

CSR Committee and its Role

The CSR committee shall comprise of such number of members as prescribed under the provisions of the Act read with the Companies (Corporate Social Responsibility Policy) Rules, 2014 (CSR Rules) (including any statutory modification(s) and/or re – enactment(s) for the time being in force).

The CSR committee formed as such shall work in co-ordination and in accordance with directions given by the Board of Directors.

Role of CSR Committee shall include inter-alia the following:

- Formulate, review, and recommend the CSR Policy to the Board for its approval.
- Provide strategy and direction to enrich the CSR policy
- Monitor implementation and adherence to the CSR Policy.
- Approve the budgets for the CSR Expenditure and recommend to the Board for its approval.
- Formulate and review the annual action plan for each financial year and recommend the same to the Board for its approval.

- Review and recommend to the Board, certain CSR projects/programmes as ongoing projects in accordance with the CSR Rules.
- Review the impact assessment reports of CSR projects undertaken.
- Review and recommend to the Board, the Annual Report on CSR formulated as per the requirements of the Act and disclosed as part of the Report of the Board of Directors.
- Any other activity as may be decided by the Board from time to time.

The Constitution and the role of the CSR Committee shall be in accordance with Section 135 and other applicable provisions of the Act and the CSR Rules, including any modifications or amendments thereto. All the CSR activities recommended by the CSR Committee and approved by the Board shall be in compliance with Schedule VII of the Act and SDG principles.

Monitoring/ Review Mechanism

- Internal Monitoring Structure: In-house structure for roll-out and implementation of the CSR activities to be in place. The CSR activities shall be centrally monitored by the Management.
- Review and Monitoring mechanism: The following Review Mechanism shall be followed for the CSR initiatives, which shall ensure a top-down review and delivery:
    - The CSR team shall in consultation and through supervision of the CSR Committee submit monthly MIS on CSR activities to the CFO & Company Secretary and the members of the CSR and Colour Academy Functions.
    - The CSR Committee shall periodically review and monitor the CSR expenditure vis-à-vis Annual Action Plan. Additionally, the CSR team will obtain feedback from the beneficiaries about the programs and shall share the same with the CSR Committee as a part of the progress reports from time to time.
    - The Board shall on a periodic basis monitor the implementation of the ongoing projects with reference to the approved timelines and year-wise allocation.
    - The head of relevant line function shall certify to the CFO the utilisation of funds disbursed for CSR projects for each financial year.
    - Regular audits of the amount spent on CSR initiatives shall be carried on by the Internal Audit Function of the Company and report/observations shall be forwarded to hierarchy for their review.
    - The CSR Committee shall be responsible for overseeing the planning, coordination, and implementation of CSR activities, and compliance of the same shall be reported to stakeholders through the Company's Annual Report on CSR.
- External Monitoring:
    - Operational/ progress reports on periodical basis from the partners, depending on the size and scale of the project.
    - Periodic field visits by the Company representatives.
    - Impact assessment reports of the CSR projects - To ensure steady progress and proper utilization of CSR amount against the goals and

objectives of the project. The following monitoring mechanism may be adopted depending upon the size of contribution and the implementing partner shall:

- Obtain Utilization Certificates (UCs) from all the implementing partners by the end of the financial year.
- The UCs in certain cases will be required to be certified by chartered accountant in practice if contribution crosses prescribed threshold.
- Conduct third-party independent audits, as and when required.

1.4. About the Program

Background and context

Rural health system in India

India's rural health landscape faces significant disparities in healthcare access, with over 75% of healthcare infrastructure concentrated in urban areas. For rural populations, **long travel distances, high out-of-pocket expenses, and inadequate medical facilities contribute to delayed or missed treatments**. These systemic issues often force communities to rely on unqualified practitioners and private clinics, resulting in suboptimal health outcomes.

The disease burden in rural India reflects a dual challenge of communicable diseases and non-communicable diseases (NCDs):

- Communicable diseases such as tuberculosis, malaria, dengue, and diarrheal infections remain prevalent due to poor sanitation, lack of awareness, and limited access to preventive measures.
- Non-communicable diseases (NCDs) like diabetes, hypertension, cardiovascular conditions, and chronic respiratory disorders are on the rise, driven by changing lifestyles, poor dietary habits, and limited early screening facilities. The lack of timely interventions for NCDs often leads to severe complications and increased mortality rates.

Rural areas also contend with a range of contagious diseases like **diarrhoea, amoebiasis, typhoid, infectious hepatitis, worm infestations, measles, and respiratory infections,** often exacerbated by insanitary living conditions, insufficient government action, and community apathy.[1]The poor state of the health system in rural areas is not the outcome of a particular occurrence but a consolidated

Underutilisation of existing rural hospitals
Rural health infrastructure remains underutilized as patients prefer urban hospitals, influenced by factors like size, ownership, and accessibility. Poor road connectivity and weather-dependent access worsen the issue. Many rural hospitals lack patients, while public doctors often prioritize private practice, leading to absenteeism and facility closures.

[1] Jaysawal, N. (2015). Rural health system in India: a review. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2608313

outgrowth of degraded system. Following are the challenges faced in rural health system:

Inefficient physical infrastructure
Sub-centres (SCs), Primary Health Centres (PHCs), and Community Health Centres (CHCs) form India's rural healthcare backbone, but poor infrastructure hampers their efficiency. Many lack electricity, water, and life-saving vaccines. Nearly 50% of SCs, 78% of PHCs, and 91% of CHCs operate in dilapidated buildings, highlighting critical gaps in healthcare delivery.

Inadequate human resource
Rural public health faces severe manpower shortages and high absenteeism, crippling healthcare delivery. Vacancy rates for doctors are 12% at PHCs and 47% at CHCs. Absenteeism among health providers reaches 40%, with 45% of doctors and 27-50% of nurses often absent, reflecting inadequate administrative oversight and commitment.

Dominance of unregulated private medical professional
Rural health infrastructure often goes underutilized as patients bypass local hospitals for urban ones, influenced by factors like hospital size, ownership, and accessibility. Poor road connectivity and weather-dependent access exacerbate the issue. Additionally, public doctors frequently opt for private practice, leading to absenteeism and closure of rural health facilities.

Lack of community participation
Rural public health systems often overlook community needs, neglecting disease prevention, hygiene, and sanitation. Lack of consultation with residents hinders effective disease monitoring, driving epidemics. To improve outcomes, communities must actively participate in designing, staffing, and managing local healthcare facilities, fostering collaboration between health professionals and residents.

Government Response: Flagship Healthcare Programs

To address these challenges, the Government of India has launched several flagship programs aimed at improving healthcare delivery and outcomes:

- National Health Mission (NHM) includes initiatives like the Revised National Tuberculosis Control Program (RNTCP) and the National Vector Borne Disease Control Program (NVBDCP), focusing on communicable diseases through preventive, diagnostic, and treatment measures.
- National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) emphasizes early detection and management of NCDs through community-level screening and enhanced healthcare capacity at Primary Health Centers (PHCs).
- Ayushman Bharat Program provides comprehensive primary healthcare through Health and Wellness Centers (HWCs), targeting both communicable and NCDs, with a focus on health promotion, screenings, and referrals. It also offers financial protection for secondary and tertiary care through the Pradhan Mantri Jan Arogya Yojana (PM-JAY), alleviating the economic burden on vulnerable populations.
- National Urban Health Mission (NUHM), though primarily urban-focused, complements rural health initiatives by addressing healthcare challenges in areas that overlap urban and rural populations.

Asian Paints Nirog Health Services

The Asian Paints Nirog Health Services were established to address the healthcare challenges faced by communities residing near the company's plant locations. These services focus on providing comprehensive healthcare solutions, including reproductive and maternal health, non-communicable diseases such as diabetes and hypertension, eye care, and general health ailments. Through static clinics and mobile medical unit, the program aims to bridge the gap in primary healthcare access for vulnerable communities, particularly in rural areas with limited or no healthcare services. By providing a continuum of care, the program seeks to identify and address common health issues, ultimately improving the health and well-being of these communities.

Asian Paints has collaborated with Piramal Swasthya to launch healthcare projects in five locations - Vizag, Mysore, Khandala, Kansa, and Patancheru - as part of its Corporate Social Responsibility (CSR) initiatives. The Asian Paints Nirog Health Services offers two types of healthcare services: static clinics and integrated mobile medical unit that work in conjunction with static clinics.

Static Clinic

The static clinic provides primary healthcare services to nearby villages of Asian Paints, focusing on the following objectives:

- Reduce complications and premature mortality due to diabetes and hypertension.
- Provide basic eye care, including refraction error identification, prescription of glasses, and referrals for cataract treatment.
- Deliver high-quality primary healthcare services to underserved populations in remote and inaccessible areas.
- Ensure reliable and consistent service quality.
- Foster trust and credibility within the community.

Integrated Mobile Medical Unit + Clinic (This model is operational at Vizag only; description looks like its common model that is implemented across the locations)

The Integrated Mobile Medical Unit + Clinic combines outreach services with a static clinic to provide primary healthcare services to nearby villages. This hybrid model enables the company to reach remote and inaccessible areas, ensuring that underserved populations receive quality healthcare. The staff at MMU involves 1 Doctor (MBBS), 1 Nurse, 1 Pharmacist and a Pilot. Whereas the clinic staff includes 1 Doctor (MBBS), 1 Nurse, 1 Lab Technician, 1 Pharmacist and an Optometrist.

Objectives:

- Provide high-quality primary healthcare services to underserved populations in remote and inaccessible areas
- Reduce complications and premature mortality due to diabetes and hypertension

- Offer basic eye care, including refraction error identification and prescription of glasses
- Ensure reliable and consistent service quality
- Build trust and credibility within the community.

Asian Paints Nirog Health Services Program: Alignment with Government Initiatives

The Asian Paints Nirog Health Services program aligns closely with government initiatives, addressing critical gaps in healthcare access and delivery in underserved rural and semi-urban areas near its plant locations. By offering free diagnostic tests, consultations, and medicines, the program reduces the economic burden on beneficiaries and promotes preventive care through health camps and awareness sessions.

The program focuses on NCD management, maternal health, and communicable disease prevention, complementing the objectives of Ayushman Bharat and NPCDCS. Its operational model, integrating static clinics and mobile medical units, strengthens community-level healthcare delivery and mirrors the comprehensive approach envisioned by the government's flagship programs.

About implementing partner - Piramal Swasthya

Piramal Swasthya, a non-profit initiative of the Piramal Foundation, strives to provide accessible, affordable, and quality healthcare to India's underserved communities. Founded by Ajay Piramal in 2008, its mission is to bridge the rural-urban healthcare gap through comprehensive primary care services, infrastructure strengthening, health awareness, and community empowerment.

Key initiatives include establishing primary healthcare centers, mobile health units, telemedicine services, community health worker training, and health awareness campaigns. Focus areas encompass maternal-child health, infectious diseases, non-communicable diseases, mental health, and nutrition. Piramal Swasthya's impact is substantial, with over 10 million beneficiaries served, 1,500+ healthcare centers established, 10,000+ community health workers trained, and 50,000+ health camps conducted, ultimately achieving significant reductions in disease prevalence and infant mortality rates.

Team Structure

Role	Responsibilities	Number
Doctor	• Provide comprehensive healthcare services (preventive, promotive, curative) • Refer complicated cases and ensure follow-up • Lead Clinic/MMU operations, supervise staff, and manage team performance • Identify patients requiring Telemedicine services (Phase II) and facilitate access	1
Nurse	• Register beneficiaries and issue OP forms • Document complaint and medical history • Record and update measurements and vitals • Assist doctors in antenatal examinations and procedures • Maintain accurate registers and records	1
Lab technician	• Conduct laboratory tests as ordered by physicians • Maintain lab and medical equipment inventory and ensure functionality • Manage accurate records and registers • Provide nursing support as needed	1
Pharmacist	• Dispense medications as prescribed by physicians • Educate beneficiaries on dosage, administration, and potential side effects • Manage optometry and inventory • Ensure daily medication requirements are met • Maintain accurate records and registers	1
Optometrist	• Conduct refractive error assessments • Prescribe corrective eyewear (spectacles/lenses) as needed	1
Project Coordinator	• Dissemination of the details of the services in the target coverage areas • Mobilizing and involving the community in redefining the package of services as per local needs • Motivation and mobilization of villagers to attend the clinic/MMU and avail of the services	

	• Lesioning with local field health workers (ANM/AWW and ASHAs), Local SHGs and village leader's/PRI members etc. • Networking with the PHC's/CHCs/Govt hospitals for continued care or higher care to needy patients. • Assist the doctor and nurse in conducting capacity-building activities for local health workers and SHGs etc • Spread the health awareness and health education messages • Follow up of referred screened positive cases for cataract surgeries, NCDs, and common cancers • Logistic Management • Team Management • Coordination with local health department/NGO's • Internal & External Stake holder Management
Community Mobilizer	• Dissemination of the details of the services in the target coverage areas • Mobilizing and involving the community in redefining the package of services as per local needs • Motivation and mobilization of villagers to attend the clinic/MMU and avail of the services • Lesioning with local field health workers (ANM/AWW and ASHAs), Local SHGs and village leader's/PRI members etc. • Networking with the PHC's/CHCs/Govt hospitals for continued care or higher care to needy patients. • Assist the doctor and nurse in conducting capacity-building activities for local health workers and SHGs etc • Spread the health awareness and health education messages • Follow up of referred screened positive cases for cataract surgeries, NCDs, and common cancers

Collaboration with Government Health Workers

The Asian Paints Nirog program delivers comprehensive healthcare services through strategically established SHUs & MMU. While there is no formal partnership with the government, the program collaborates with government health workers to enhance its impact and identify areas for improvement based on gaps in government healthcare infrastructure.

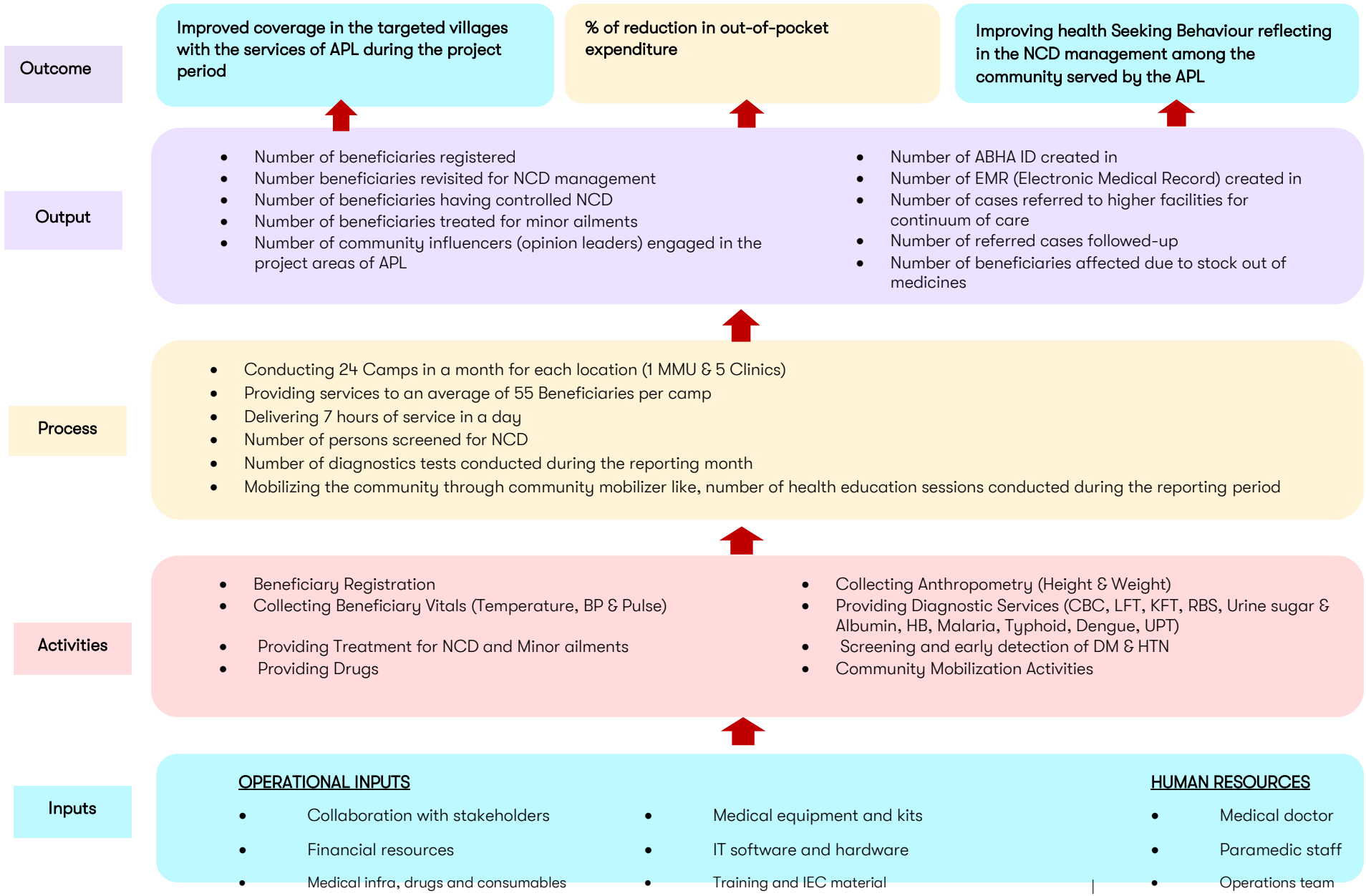
To ensure regulatory compliance, the program secures essential licenses and certifications, including static clinic permits, pollution control board clearances for laboratories, and pharmacy licenses. In collaboration with healthcare department staff and AAA teams, awareness programs and health education sessions are conducted in communities and local schools. Additionally, patients are screened for Non-Communicable Diseases (NCDs) and referred to nearby Community Health

Centers (CHCs), Primary Health Centers (PHCs), and district hospitals for specialized care, further strengthening the healthcare system's effectiveness.

Monitoring and evaluation framework

The Asian Paints Nirog Program features a comprehensive reporting framework, comprising monthly, quarterly, and annual formats. Additionally, the Monitoring, Learning, and Evaluation (MLE) framework and baseline study conducted at program inception are attached for reference (figure 1).

Figure 1: Logical framework of the program



2. Purpose and scope of evaluation

2.1. Objective of assessment

The Asian Paints Ltd. engaged Grant Thornton Bharat LLP to conduct an impact assessment (July 2019 to March 2023) of its healthcare program to assess the extent and nature of impact. The program is based out of five (05) locations Khandala in Maharashtra, Mysore in Karnataka, Vizag in Andhra Pradesh, Patancheru in Telangana, and Kasna in Uttar Pradesh.

Objectives of the Impact Assessment study

- Evaluate the overall infrastructure of Static Health Units (SHU) and Mobile Medical Units (MMU).
- Understand health status, disease trends, consultation quality, medicine availability, and laboratory services.
- Assess the effectiveness of referral pathways for primary, secondary, and tertiary healthcare services.

Design (methodology, sampling design and plan)

The study was conducted using a pre-defined approach to understand the program and its stakeholders. It relied on an impact assessment framework that focused on conceptualization, design, data collection, analysis, and reporting of key findings. The approach was divided into three stages: planning, data collection, and reporting.

Table 1: Our methodology

Stage 1 Planning	Stage 2 Data collection	Stage 3 Analysis and reporting
Quality assurance across all stages		
• Inception meeting with CSR team of APL to gain better understanding of the project and objectives of the study. • Review available project documents and relevant reports • Study design including identification of key stakeholders and areas of enquiries in consultation with the CSR team of APL	• Pre-testing of the tools and finalization following consultation with CSR team of APL • Training and orientation of field teams to ensure efficiency and standardization. • Use the agreed study methodology. • Employ the developed data collection tools	• Data analysis to identify relevant trends and key statistics. • Submission of draft impact assessment report with data analysis of beneficiaries to the CSR team of APL. • Incorporating comments made on the draft report by CSR team of APL • Submit and present the final report.

• Development of tools and translation in local languages of the state post approval from the CSR team of APL. • Define sample size for each location sand detailed methodology for data collection	(both qualitative and quantitative). • Adhere to the data collection plan and quality assurance protocols.	

Stage 1: Conceptualisation

Inception meeting

An inception meeting was held with the program team of APL to develop a detailed understanding of the healthcare program, and key activities undertaken from FY 2019 to 2023. Following the initial discussion, the required program documents, including a list of current activities, target locations, and stakeholder information, were shared with GTBLLP.

Review of documents and secondary research

The program documents were reviewed in detail. This step also included secondary research on rural healthcare system in India.

Study design

The study utilized the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) principles, which enabled a comprehensive understanding of the program and effectively captured the outcomes of the initiative. These principles provide a framework for evaluating development program.

Table 2: OECD DAC framework principles

S/N	Principle	Definition[2]	Key areas of enquiry
1	Relevance	The extent to which the intervention objectives and design responds to beneficiaries need and continue to do so if circumstances change.	• Health care infrastructure • Primary health care services • Type of health issues • Health care seeking behaviour
2	Effectiveness	The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results,	• Medical team • Medical equipment and medicines at the SHU/MMU

[2] https://web-archive.oecd.org/temp/2024-05-13/81829-daccriteriaforevaluatingdevelopmentassistance.htm

		including any differential results across groups.	• Accessibility to primary health care services through SHU/MMU • Knowledge and adoption level of hygiene & sanitation practices
3	Efficiency	The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.	• Number of visits made by the SHU/MMU • Average number of patients consulted • Percentage of community members able to access the primary health care services • Referral services in a month
4	Impact	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level of effects.	• Quality of medical services through SHU/MMU • Knowledge, Attitude and Practice (KAP) of hygiene and sanitation • Affordable medical consultations, medicines and treatment • Adoption and awareness of healthy lifestyle practices • Perceptions and opinions of the community members
5	Sustainability	The extent to which the net benefits of the intervention continue or are likely to continue.	• Maintenance management • Home visits by Community Health Workers (CHW) • Awareness on government healthcare schemes
6	Coherence	The extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.	• Scope for leveraging Govt. schemes / programmes • Value addition and associated growth

Data collection tools

To capture information from different stakeholders, quantitative and qualitative data collection tools were developed based on the nature of the program and areas of enquiry highlighted in the table below.

In-depth interviews were conducted with both types of stakeholders to gather qualitative insights. This approach allowed us to understand the program from each stakeholder's perspective and capture their perceptions. These interactions also

helped us assess whether the program objectives were met and if the outcomes aligned with expectations.

Stakeholders for the program were categorized into primary and secondary. To comprehensively grasp the current situation, beneficiary perception and areas for improvement, questions were tailored as per the stakeholder's role in the program.

Table 3: Stakeholder matrix

Stakeholder type	Stakeholder	Quantitative	Qualitative
Primary stakeholder	Elderly and community members	✓	
Secondary stakeholder	Local community leaders		✓
	Panchayati Raj Institution (PRI) members		✓
	Implementing partner team		✓
	Asian Paints CSR team		✓
	Government agencies		✓

Stage 2: Collection of data and stakeholder interaction

Sampling

The study followed a mix-method approach for interactions (quantitative and qualitative) with stakeholders across all the five (05) program locations (Khandala, Mysore, Vizag, Patancheru and Kasna).

Table 4: Sample coverage

Location	Field visit dates	Target sample	Target sample achieved
Khandala, Maharashtra	18th November	180	194
Kasna, UP	14th November	28	70
Vizag, Andhra Pradesh	18th November	75	87
Mysore, Karnataka	15th November	180	175
Patancheru, Telangana	19th November	134	140
Total		**597**	**666***

Note: Stratified sampling is used to determine the sample distribution across the five locations. The number of people sampled from each location is based on the total population who have been benefitted at each respective location. Nearly 75% covered through quantitative survey and 25% through qualitative survey.

Qualitative

Table 5: Stakeholders covered across each location through qualitative interviews (n=157)

Location	Field visit dates	Total achieved
Khandala, Maharashtra	18th November	50
Kasna, UP	14th November	27
Vizag, Andhra Pradesh	18th November	25
Mysore, Karnataka	15th November	25
Patancheru, Telangana	19th November	45
Total		**172**

Note: The above table includes discussions with Doctors, Nurse, Project Coordinator, PRI Members, ASHA workers, and beneficiaries.

Quantitative

Location	Field visit dates	Target sample achieved
Khandala, Maharashtra	18th November	144
Kasna, UP	14th November	43
Vizag, Andhra Pradesh	18th November	62
Mysore, Karnataka	15th November	150
Patancheru, Telangana	19th November	95
Total		494

Stage 3: Analysis and reporting

Data Analysis

The collected data was collated and organised qualitatively, following the OECD DAC principles. This analysis documented all responses, allowing for meaningful inferences to be drawn about the performance and outcome of the program.

Draft and final report

A draft report with study findings was prepared and shared with the Foundation for feedback. Thereafter, the final report was issued incorporating feedback and included findings, inferences from stakeholder discussions, and recommendations.

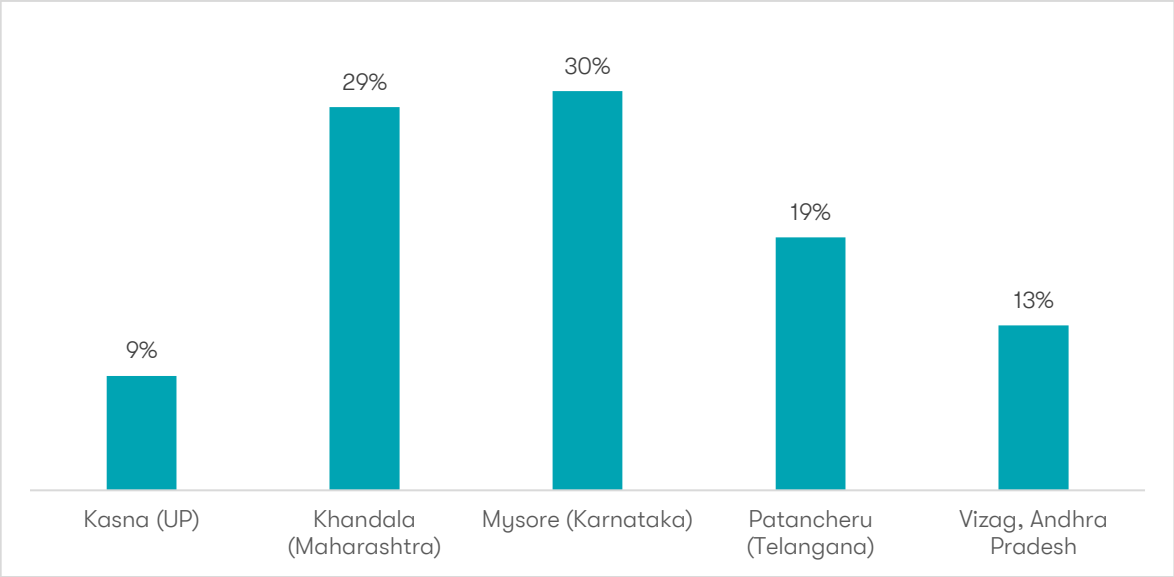
2.2. Limitations of the assessment

1. A local festival at the location impacted the data collection process in Mysore.
2. PRI members were unavailable in Patancheru and Kasna.
3. Across all clinics, particularly in Mysore and Vizag, senior citizens frequently visited, making their interactions highly valuable. However, due to mobility constraints, not all could be mobilized.
4. A Zila Parishad meeting was scheduled during the data collection period in Mysore, resulting in the unavailability of PRI members for interactions.
5. The data collection period coincided with elections in Maharashtra, making it difficult to mobilize villagers due to increased local engagement with election-related activities in Khandala.

2.3. Coverage

This section focuses on the demographic data of the beneficiaries. The quantitative survey captured information on key aspects such as age, gender, occupation, socio-economic status, healthcare services and awareness of the project among the residents.

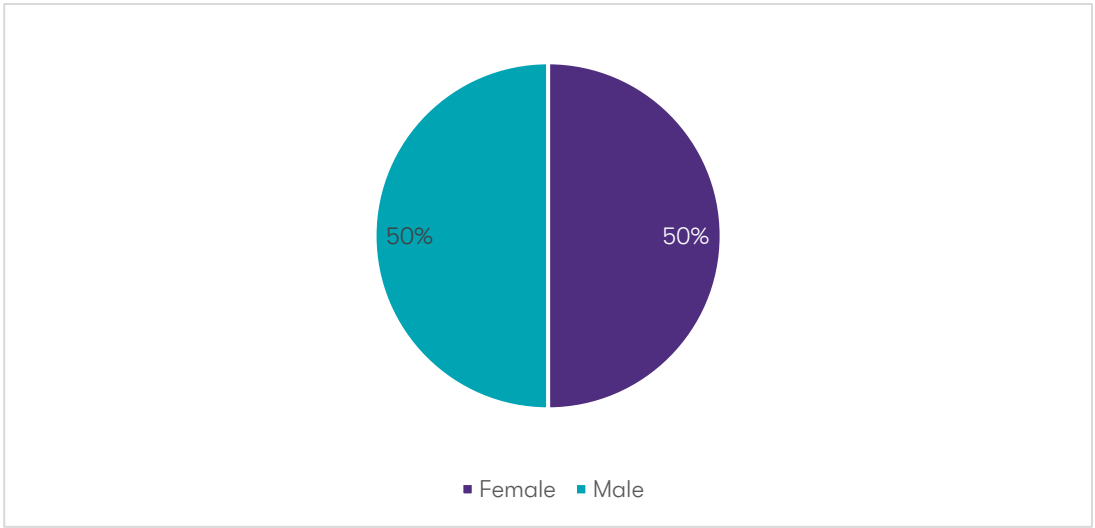
Figure 2: Distribution of the respondents across five states (n=494)



The study sample's geographical composition comprised **Mysore (31%), Khandala (30%), Patancheru (20%), and Kasna (9%),** reflecting diverse regional representation. This broad coverage underscores the project's reach and impact across multiple locations, each with distinct socio-economic characteristics.

Gender

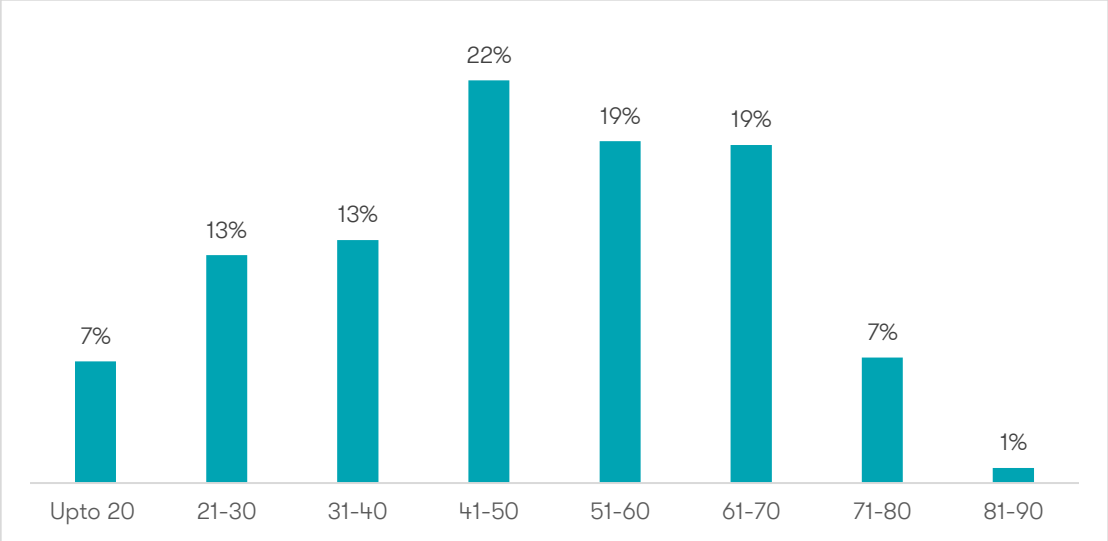
Figure 3: Gender - wise distribution of beneficiaries (n=494)



The gender distribution reveals an **almost equal split**, with approximately 50% of respondents identifying as male and 50% as female.

Age

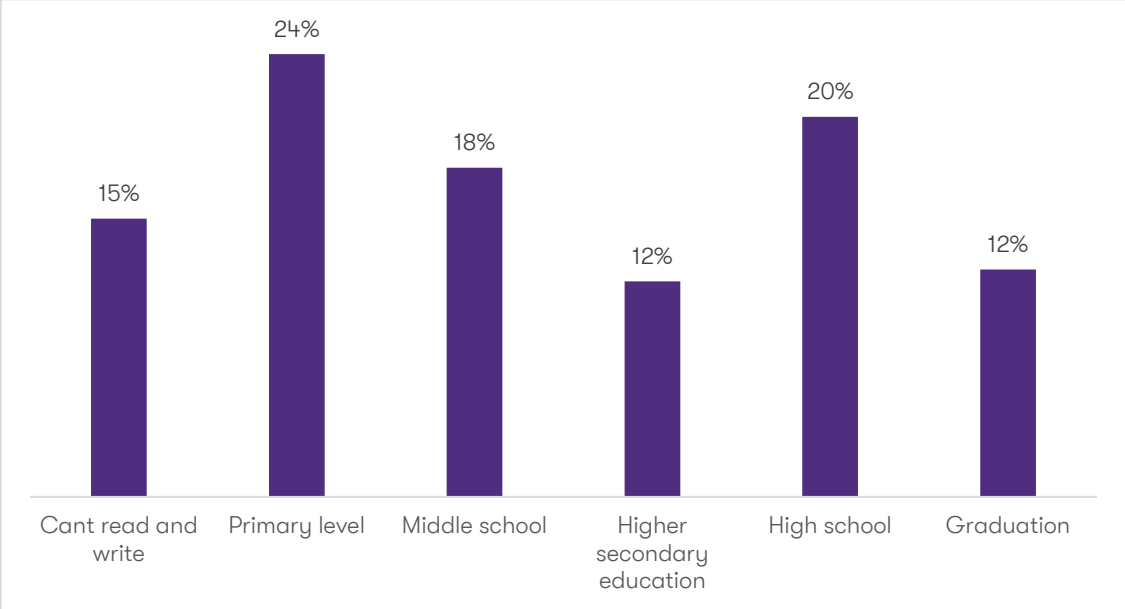
Figure 4: Age - wise distribution of beneficiaries (n=494)



The age-wise distribution graph reveals that respondents primarily fall within the 41-70 years age range, accounting for 60% of the sample. Specifically, 41-50 years (22%), 51-60 years (19%), and 61-70 years (19%) dominate the distribution.

Education

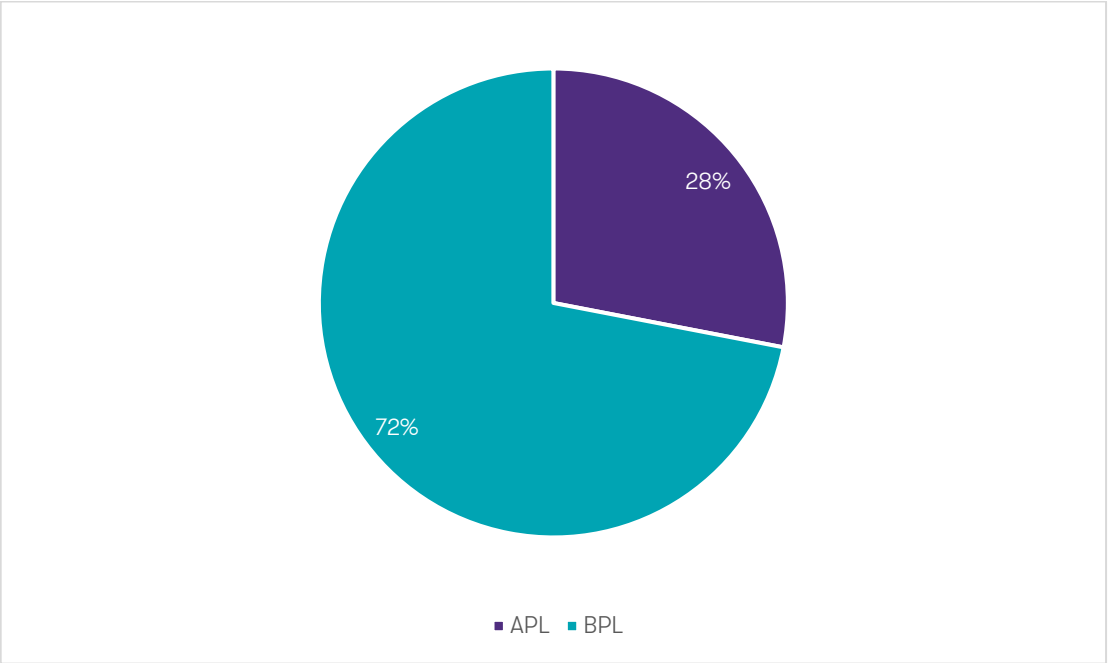
Figure 5: Educational background of the beneficiaries (n=494)



The educational qualification distribution graph reveals a diverse respondent base, with primary education holders comprising 21%, followed closely by high school (20%), middle school (18%), and illiterate (15%) individuals, while graduates account for 12%.

Economic status

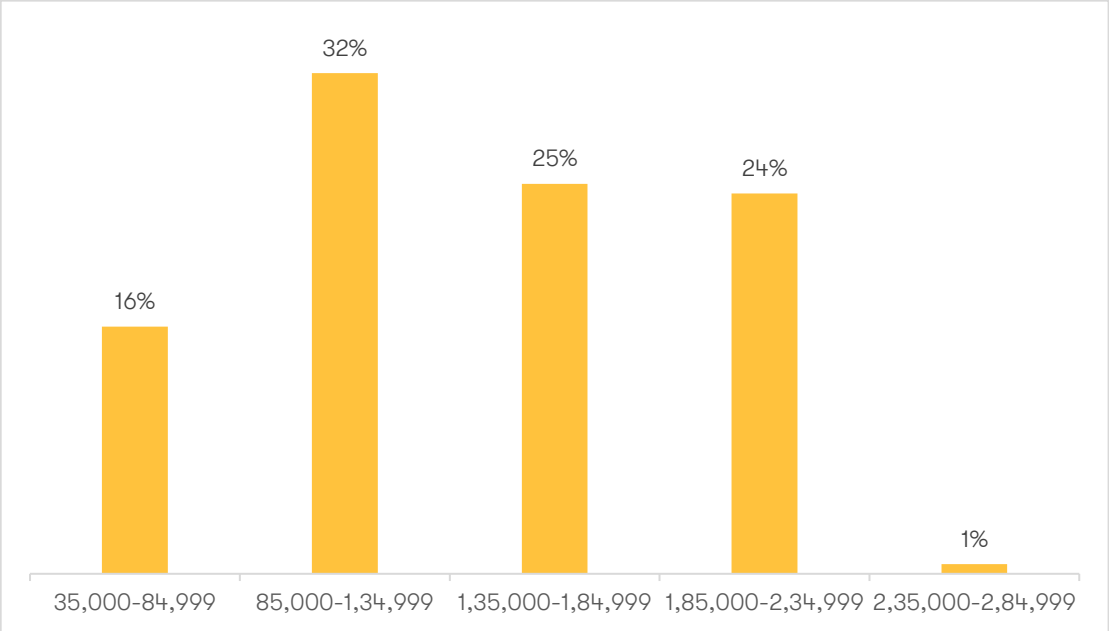
Figure 6: Economic status of the beneficiaries (n=494)



The economic status distribution of respondents revealed a significant proportion (72%) belonged to Below Poverty Line (BPL) households, while 28% resided in Above Poverty Line (APL) households.

Annual household income (Average, INR)

Figure 7: Average annual household income (in INR, n=494)



The average annual income graph reveals a concentrated distribution, with **32% of respondents earning between ₹85,000-₹1,34,999**, followed by 24% in the ₹1,85,000-₹2,34,999 bracket.

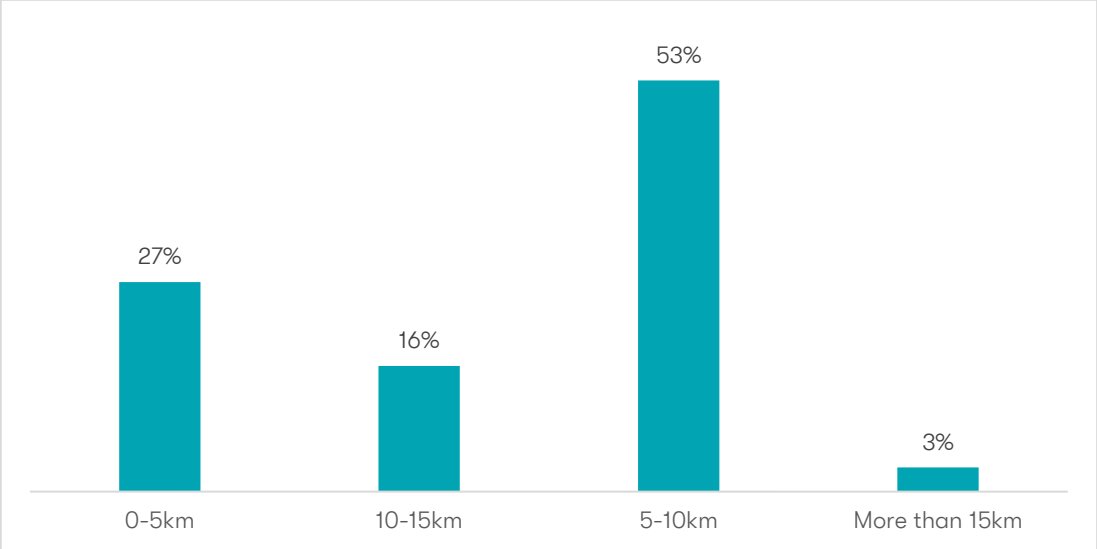
3. Findings

This chapter presents the findings of the assessment study highlighting the key impact areas. The findings presented in this chapter are based on the inferences from analysis of beneficiary and stakeholder responses.

3.1 Pre-intervention healthcare practices

Before program - distance travelled by the community members

Figure 8: Pre-program distance travelled by beneficiaries to visit a healthcare facility (n=494)



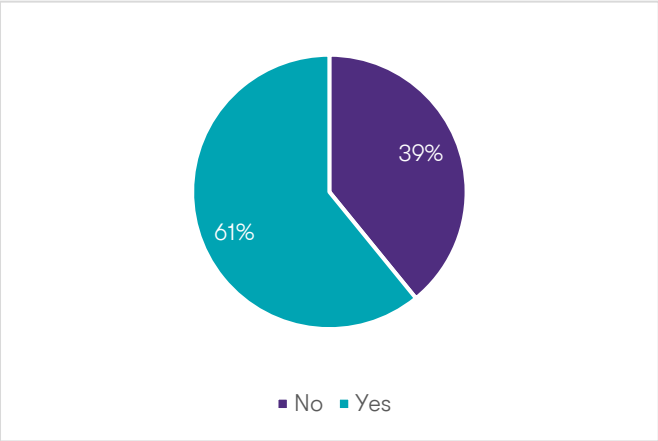
Before the project's implementation, beneficiaries in Kasna travelled an average of 5-10 km to access healthcare, while those in Mysore reported distances of 0-15 km. In Vizag, some respondents travelled over 15 km to reach the nearest facility.

The deployment of Static Health Units (SHUs) near Asian Paints Limited (APL) plants and Mobile Medical Units (MMUs) significantly reduced these distances. In Khandala, MMUs now serve 15-20 villages, reducing travel for remote beneficiaries. In Mysore, the clinic's accessible location cut travel times and distances, while in Vizag, the urban clinic attracted patients from up to 30 km away.

This improved accessibility has enhanced healthcare outcomes, especially for elderly and vulnerable populations, addressing urban and rural challenges effectively.

Pre-program: Wage Loss if any due to illness

Figure 9: Wage loss experienced by the beneficiaries due to illness (n=494)



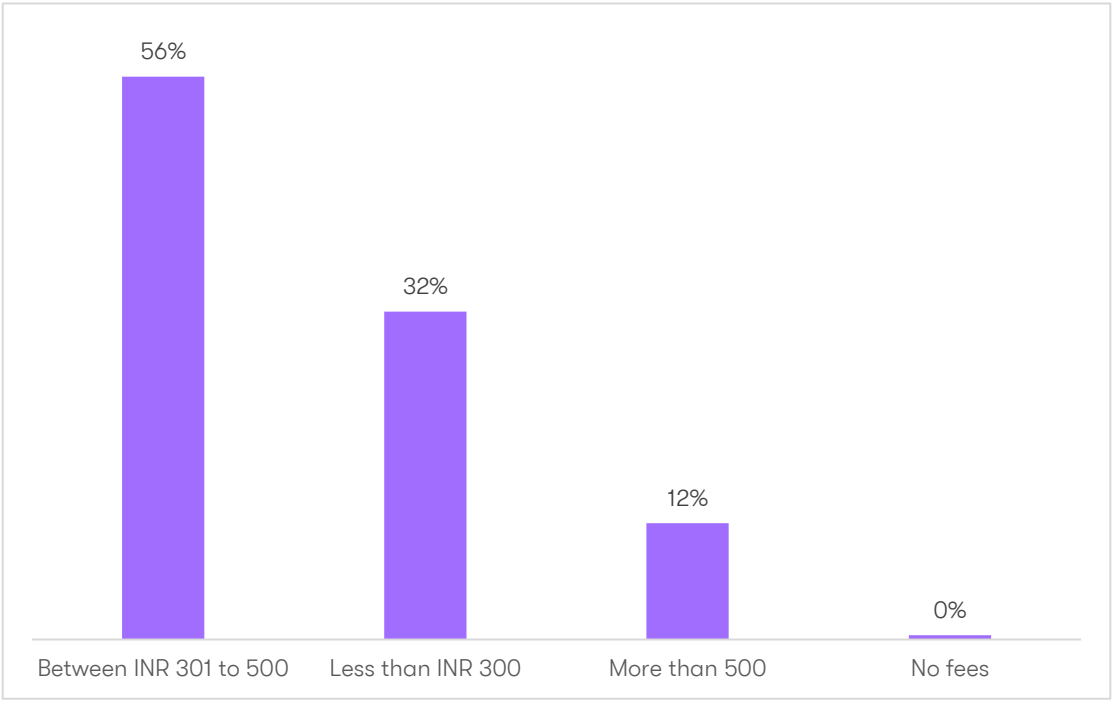
Before the intervention, **61% of beneficiaries experienced wage loss due to illness,** highlighting the economic burden faced by many respondents when accessing healthcare.

Farmers in Mysore mentioned that sickness impacted their ability to work in the fields, further exacerbating their financial challenges.

Expense on health facilities before SHU/MMUs

Before the intervention, a substantial 88% of respondents incurred healthcare costs. 56% spent between ₹301-500, 32% spent under ₹300, and 12% spent over ₹500, indicating a financial burden on families for accessing healthcare.

Figure 10: Beneficiary expenditure on healthcare during pre-program (n=494)



Qualitative input from Kasna and Patancheru highlighted that many respondents used to spend a significant portion of their income on transportation and consultations at private clinics or PHCs, often without receiving adequate care. This financial strain was alleviated with the introduction of SHUs and MMUs.

3.2 During or post-intervention healthcare practices

Preference for healthcare facility pre and post the intervention

The preference for healthcare facilities saw a notable change before and after the intervention. Prior to the program, 61% of respondents sought care from private hospitals/clinics, indicating a strong reliance on the private sector for healthcare. 60% also utilized PHC/CHCs, though public healthcare facilities were not fully accessed. Additionally, 19% of respondents relied on self-medication, and 10% sought care from local quacks (unqualified doctors), pointing to gaps in access to qualified healthcare.

Figure 11: Change in preference of healthcare facility (multiple coding n=494)

Healthcare facility type	Pre intervention	Post intervention
PHC / CHCs	60%	4%
Private hospital / Clinic	61%	27%
Self-medication (over the count medicines)	19%	1%
Local quacks (Unqualified Doctors)	10%	0%
Clinic by APL	0%	64%
District Govt. hospital	0%	4%

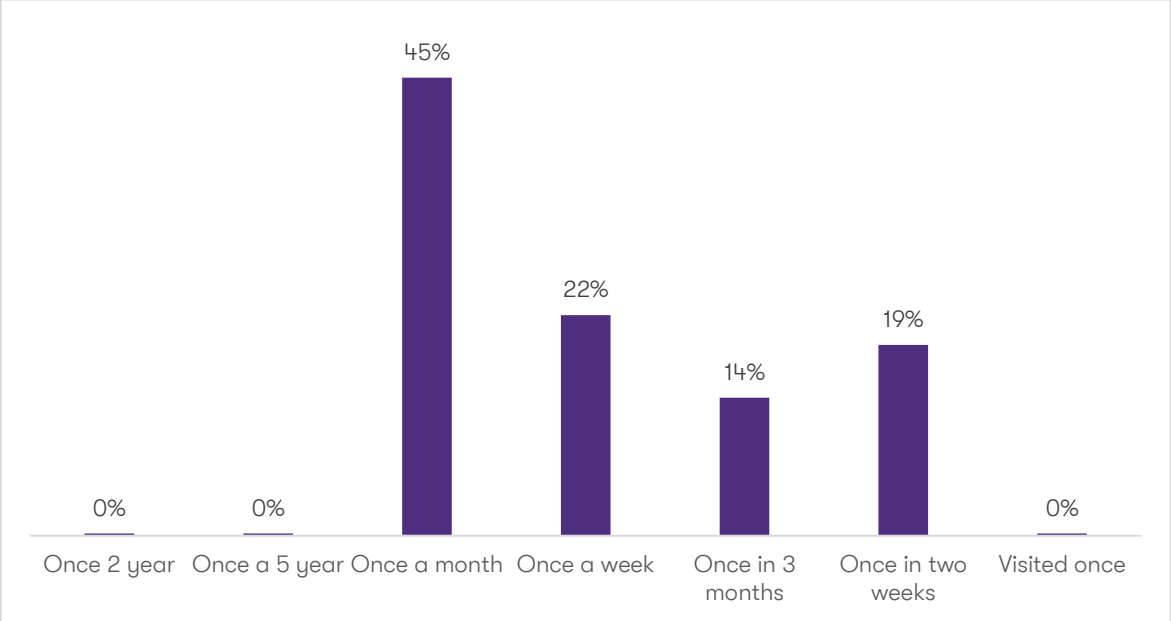
Qualitative data from Kasna and Khandala highlighted that respondent preferred private clinics due to perceived better care and shorter waiting times, though many faced financial strain due to the high costs.

After the intervention, 64% of respondents utilized the clinic by APL, marking a significant shift towards the program's healthcare facility. Use of private hospitals/clinics dropped to 27%, and the reliance on local quacks fell to 0%, showing increased trust in formal healthcare. Self-medication decreased to 1%, signalling improved healthcare awareness and reliance on professional services. PHC/CHC use dropped to 4%, suggesting that the clinic by APL successfully met community healthcare needs.

This shift in healthcare preferences indicates the program's success in providing a reliable, accessible alternative to private and informal healthcare, while also improving trust in public healthcare services.

Frequency of visit

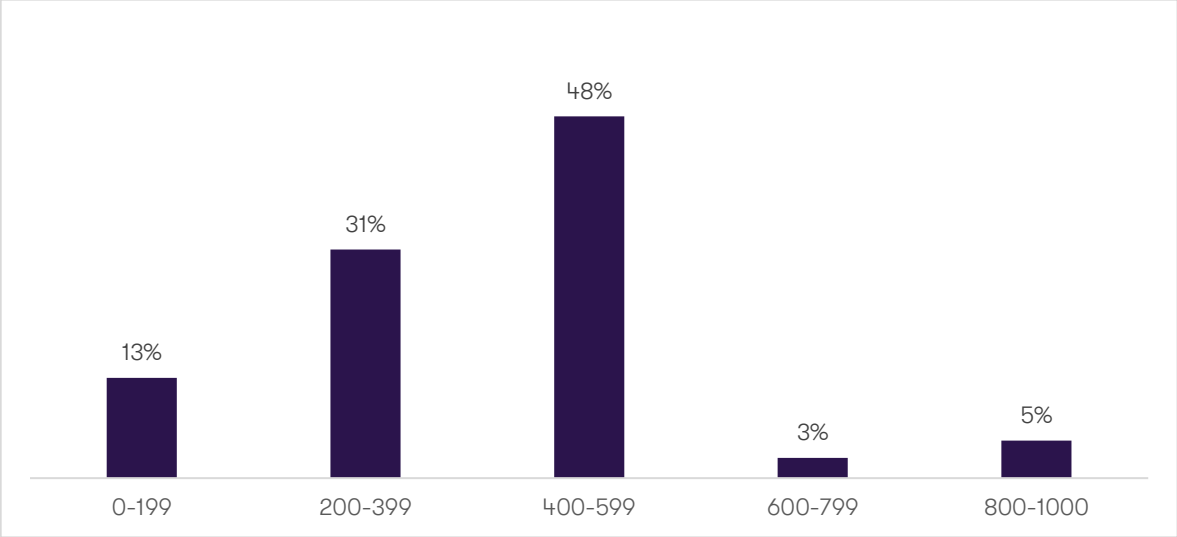
Figure 12: Frequency of visit at SHU / MMUs



The frequency of visits to Static Health Units (SHUs) and Mobile Medical Units (MMUs) varied significantly across regions. **45% of respondents reported accessing healthcare services monthly**, while **22% visited weekly, 19% biweekly, and 14% quarterly**. In Khandala, many patients with chronic conditions such as hypertension and diabetes visited the units monthly for follow-ups and medication refills, **whereas in Kasna, biweekly visits were common due to the regular screening camps held in nearby villages.**

Cost saved per consultation (average)

Figure 13: Beneficiary cost saving per consultation post-program (n=494)



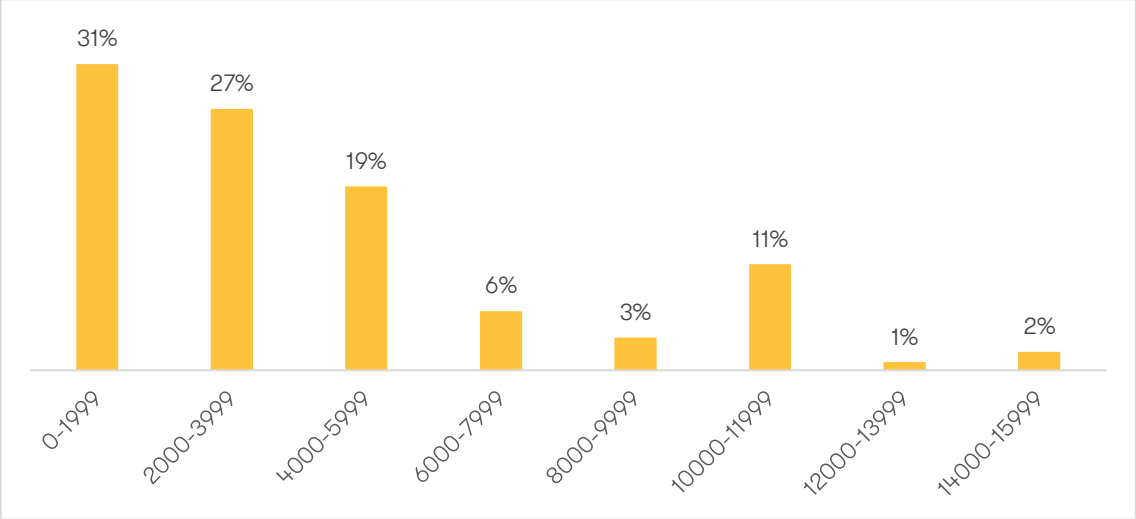
Post-program, respondents reported significant cost savings per consultation. 48% saved between ₹400-599, 31% saved between ₹200-399,

and 13% saved between ₹0-199. This demonstrates the financial relief provided by the availability of SHUs and MMUs.

In Mysore, beneficiaries noted that the cost savings allowed them to spend their money on other essential needs, such as food and education, improving their overall well-being.

Cost saved on medicine in a year (average)

Figure 14: Beneficiary cost saving on medicine post-program (n=494)

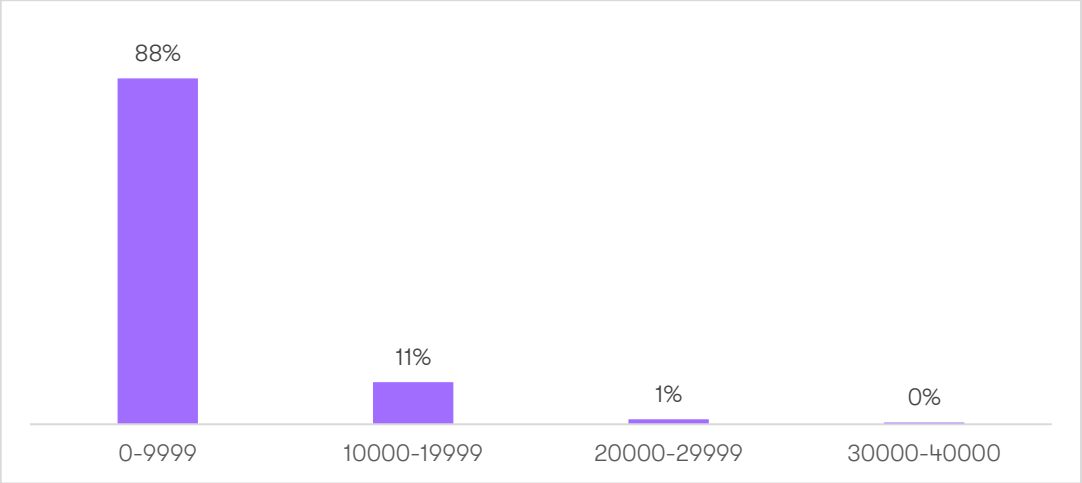


The provision of free medicines through SHUs and MMUs resulted in substantial savings. 31% of respondents saved up to ₹1,999, 27% saved up to ₹3,999, and 19% saved up to ₹5,999 on medicines in a year.

**Respondents in Khandala shared that the free medicine provision significantly reduced their financial burden, especially for those with chronic conditions that required long-term medication.

Cost saved on lab tests in a year (average)

Figure 15: Beneficiary cost saving on lab tests post-program (n=494)

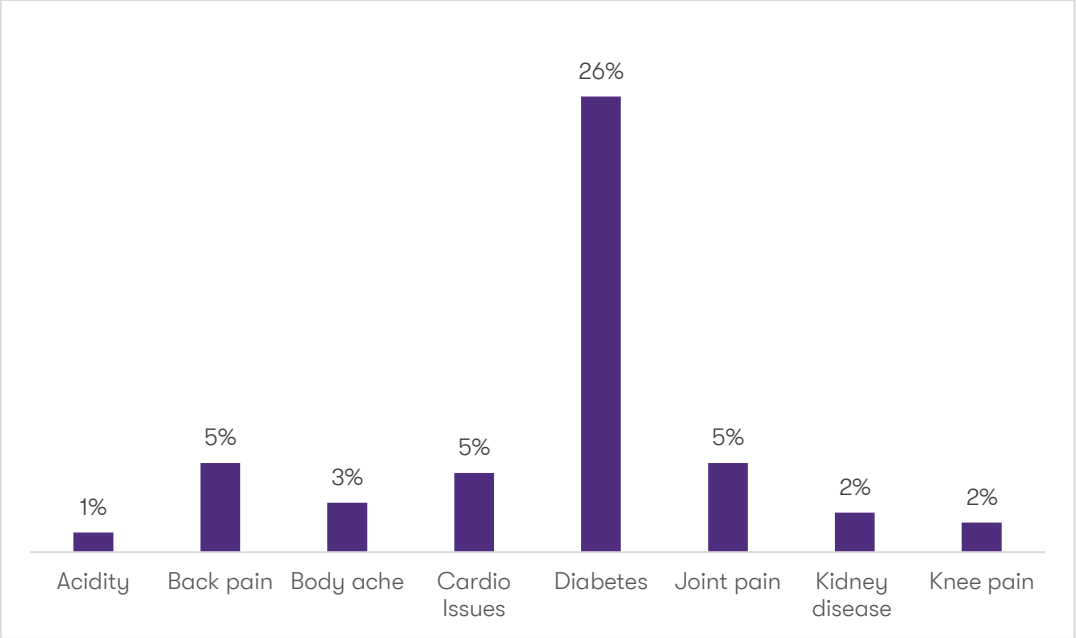


Beneficiaries also saved on diagnostic costs, with 88% saving up to ₹9,999 on lab tests in a year, and 11% saving up to ₹19,999, thanks to free testing services at the SHUs and MMUs.

Qualitative responses from Patancheru and Kasna highlighted that the free lab tests were a major relief for low-income families, who previously could not afford diagnostic tests at private facilities.

Referrals

Figure 16: Illnesses for which beneficiaries sought referral services (n=88)



100% agreed that the saved time/money due to easy and free access to the health care through the SHU / MMUs.

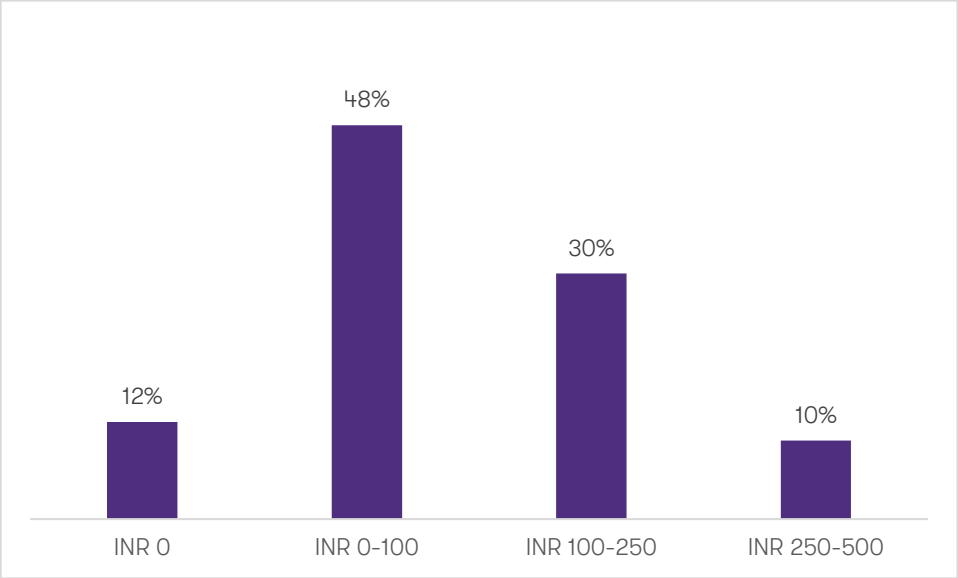
18% of respondents utilized the referral services offered by the SMUs/MMUs, facilitating access to specialized medical treatment for various ailments. This indicates the program's ability to connect beneficiaries to higher-level healthcare services when necessary.

**In Mysore, beneficiaries mentioned that referrals to higher-level hospitals helped them receive specialized care for conditions like heart disease and diabetes that required more advanced treatment.

41% beneficiaries participated in community health camps organized under the program, focusing on awareness and screening for Dengue, Malaria, eye health, blood tests, and overall health check-ups.

Cost saved by respondents due to availability MMU

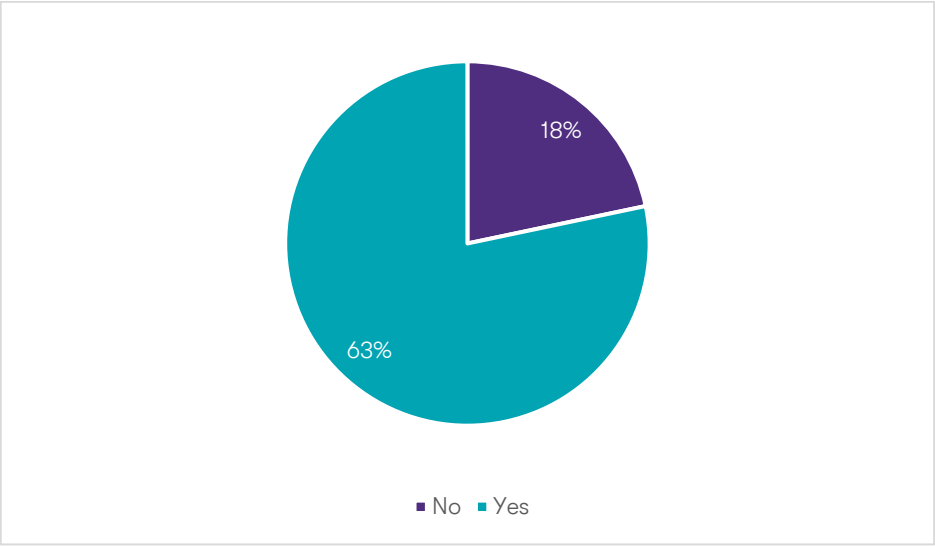
Figure 17: Estimated transportation cost saved (per visit) by the beneficiaries due to presence of MMUs (n=494)



The availability of MMUs and SHUs led to substantial savings in transportation costs. 48% of respondents saved up to ₹100 per visit, while 30% saved up to ₹250, and 10% saved up to ₹500. In Mysore, beneficiaries highlighted the cost savings as a critical factor, particularly for those from Below Poverty Line (BPL) households, which constituted 72% of the respondents. The project reduced the financial burden on these families, enabling them to allocate their limited resources to other essential needs.

Provision of door-to-door by MMU

Figure 18: Provision of door-to-door services in case the patient could not visit. (n=494)



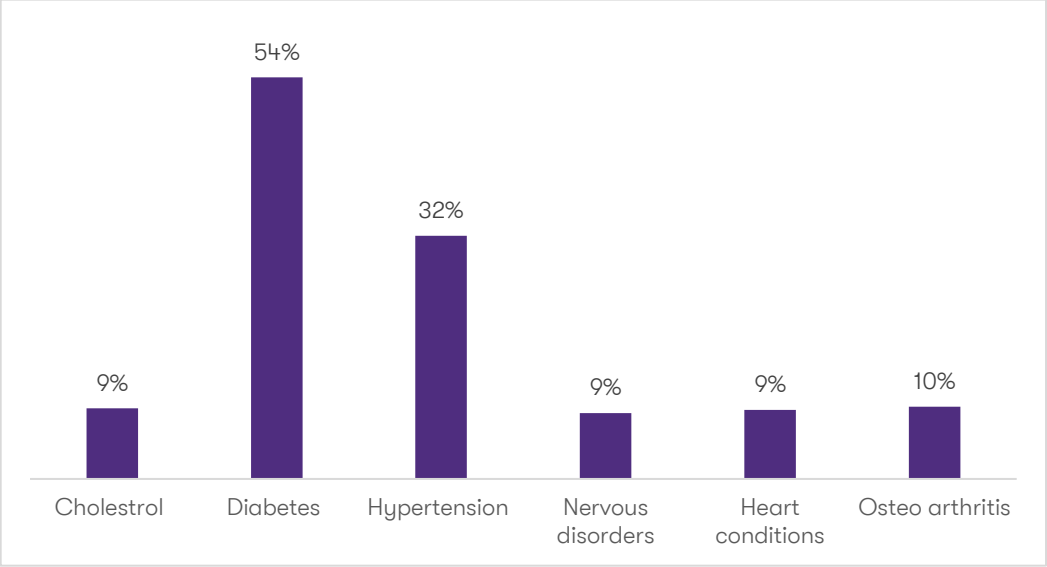
A significant 63% of respondents confirmed receiving door-to-door medical services from MMU staff. **This service was particularly beneficial in Kasna and Patancheru, where patients with severe health conditions or limited**

mobility could not visit the healthcare centers. The MMU staff ensured timely medical interventions, improving healthcare access and continuity of care for vulnerable populations.

Treatment

To understand the reason for availing services from the SHU and MMUs, the respondents were asked which diseases they suffered in the Past 3 years and more.

Figure 19: Illnesses for which the respondents seek healthcare services (multiple coding, n=494)



Respondents primarily sought services for chronic conditions, with 54% seeking care for diabetes, and 32% for hypertension. Other common health issues included nervous disorders (9%), heart conditions (9%), cholesterol issues (9%), and osteoarthritis (10%). This reflects the critical role of SHUs and MMUs in managing long-term, non-communicable diseases.

94% beneficiaries were asked for their feedback after they availed the services. The high feedback solicitation rate (94%) implies robust quality assurance mechanisms and patient-centered care.

Qualitative feedback from Mysore and Khandala indicates that chronic conditions like diabetes and hypertension were the most common reasons for seeking healthcare**. In Kasna, nervous disorders and joint pain were also prevalent among older populations.** Many respondents mentioned that the clinic by APL provided consistent care for these conditions, helping them better manage their symptoms.

Teleconsultation services

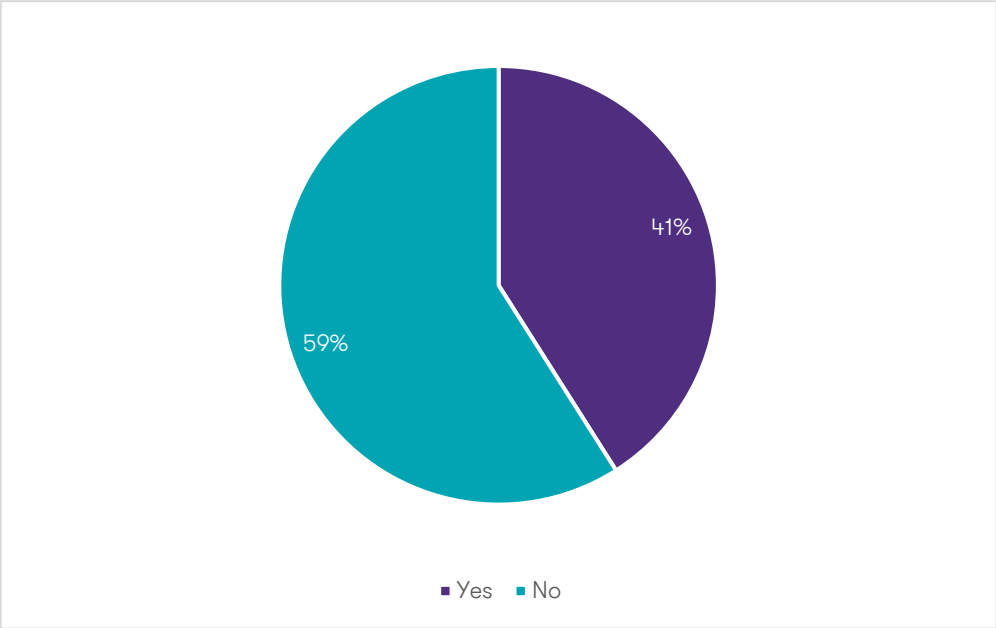
Following COVID-19, APL launched teleconsultation services in August 2021 across PAN India Sub Health Centers (SHCs) to provide basic healthcare services via mobile phone. This initiative maintained social distancing and alleviated COVID-19 transmission fears. Dedicated mobile numbers facilitated exclusive teleconsultations for SHCs, ensuring accessible healthcare. Details of beneficiaries served are provided below.

Figure 20: Teleconsultation services across program locations

Location	FY 21-22	FY 22-23
APL KASNA	1036	2752
APL Khandala	1239	2766
APL Mysore	1446	2830
APL Patancheru	972	2674
APL Vizag	552	1971
Total	**5245**	**12993**

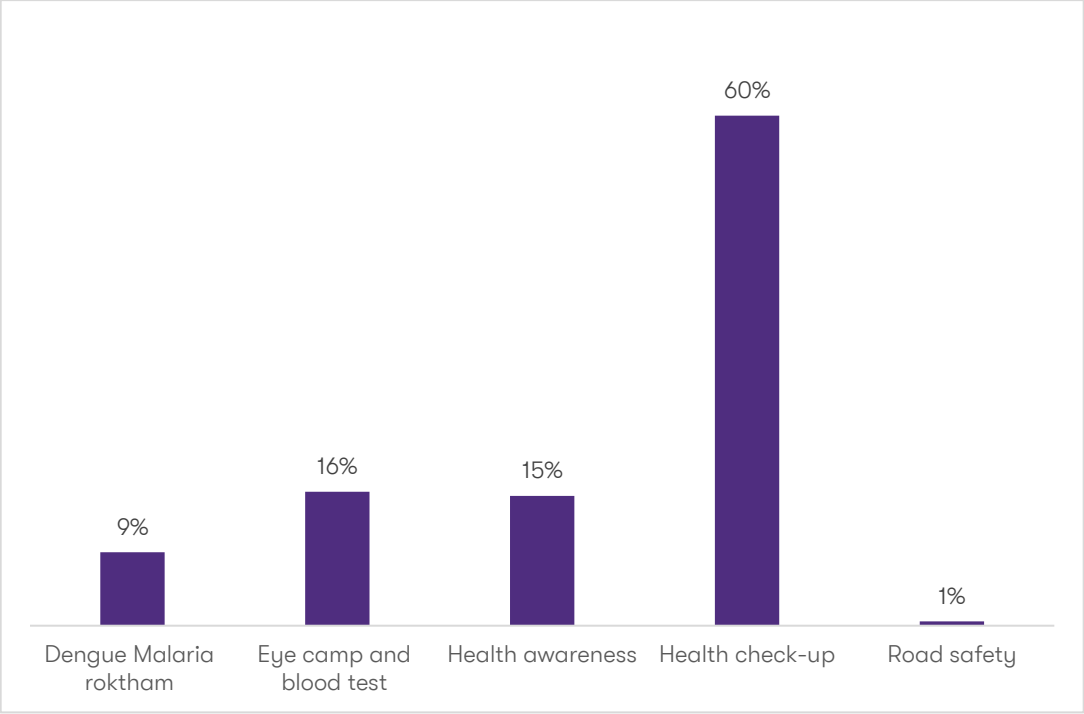
Health camps

Figure 21: Beneficiaries who have attended health camps (n=494)



The pie chart above illustrates the proportion of beneficiaries who have attended health camps, with a significant 41% having participated. This indicates that nearly half of the beneficiaries have accessed healthcare services through these camps, highlighting their importance in reaching this population.

Figure 22: Health camps attended by the beneficiaries (n=197)

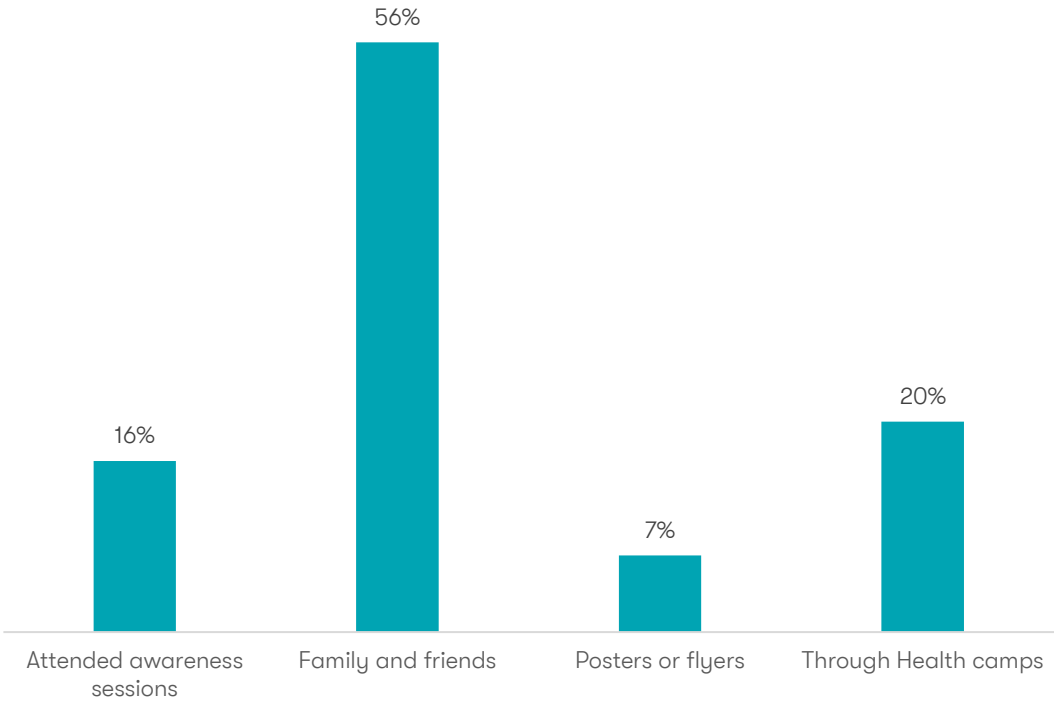


The above bar graph illustrates beneficiaries' attendance at various health camps. Health check-up camps drew the largest proportion (60%) of attendees, indicating strong demand for general health services. Eye and blood test services followed with 16% attendance, highlighting the importance of diagnostic services. Health awareness camps engaged 15% of beneficiaries, suggesting moderate interest in preventive measures. Dengue malaria *roktham* camps attracted 9% of attendees, while road safety camps had 1% attendance.

3.3 Awareness and accessibility

Community outreach and Awareness channels

Figure 23: Modes through which respondents became aware of SHU / MMU services



100% respondents agreed that essential medicines are always available at SMUs / MMUs. The results indicate a statistically significant correlation between SMU/MMU pharmacy services and essential medicine availability.

Awareness about the Static Health Units (SHUs) and Mobile Medical Units (MMUs) primarily spread through **word of mouth, cited by 56% of respondents.** Personal recommendations from family and friends were particularly effective in regions like **Kasna and Mysore,** where trust in healthcare services relied on community experiences.

Health camps accounted for 20% of the awareness,

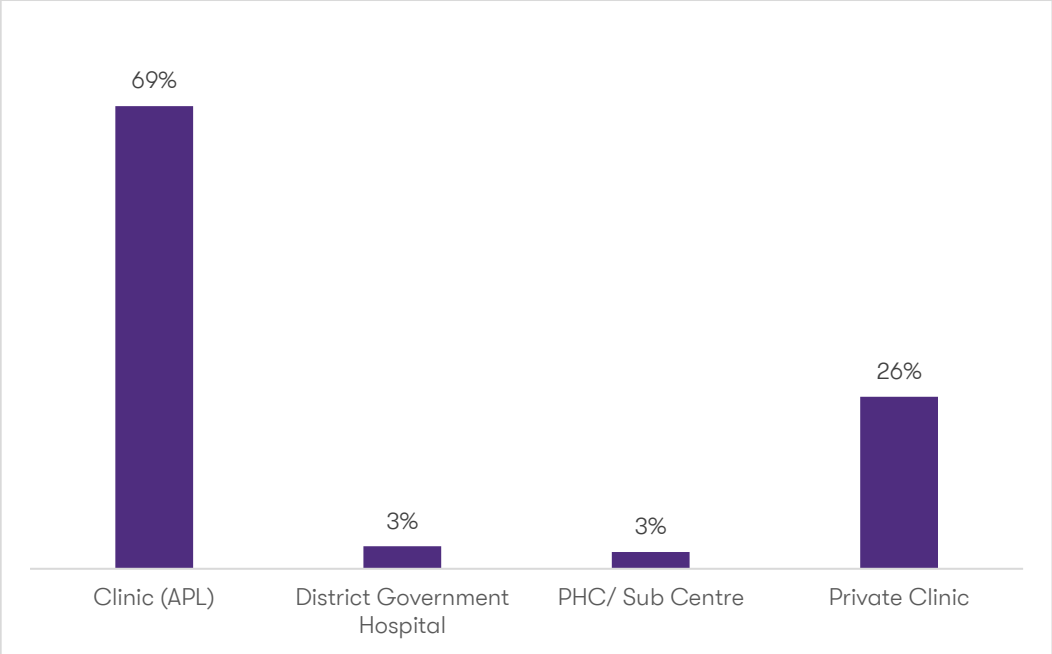
mobilizing patients from villages within a 20-25 km radius. In Khandala, these camps played a crucial role in educating residents about chronic disease management. **Awareness sessions conducted on occasions like World Diabetes Day and Nutrition Week contributed 16%, with participants in Kasna reporting better understanding of preventive care.**

ASHA workers and local NGOs supported outreach efforts, especially in Mysore, where they facilitated follow-ups for patients managing chronic conditions. In Khandala and Vizag, community members noted the need for more frequent health camps and improved communication about the range of available services.

3.4 Satisfaction and perception of healthcare services

Ranking of healthcare facilities by consultation quality

Figure 24: Beneficiary perception on ranking of healthcare facilities by consultation quality



69% of respondents ranked APL Clinic doctors as providing the best quality consultations. The high satisfaction rate indicates that beneficiaries perceived the quality of care at the APL clinic to be superior compared to other available healthcare options.

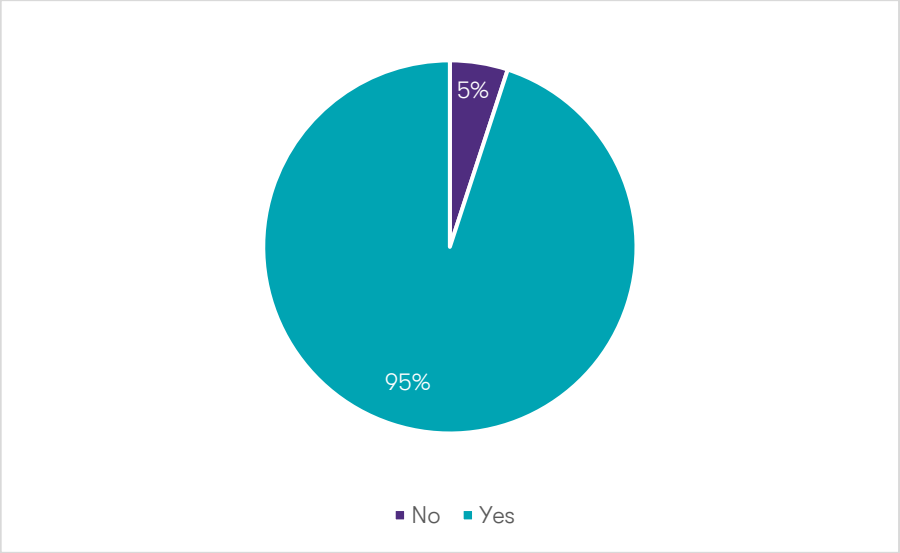
The 26% preference for private clinics can be attributed to a combination of factors, including perceptions of better facilities and more modern equipment, positive past experiences, trust, and brand reputation. These elements collectively explain the 26% ranking, reflecting a blend of perceptions, convenience, trust, and personal experiences influencing beneficiary choices.

Feedback from beneficiaries in Patancheru and Vizag confirmed that they valued the doctors' expertise and the personalized attention they received at the clinic by APL. Many respondents mentioned that the doctors took the time to listen to their concerns and explained treatment plans in detail.

94% beneficiaries were asked for their feedback after they availed the services. The high feedback solicitation rate (94%) implies robust quality assurance mechanisms and patient-centered care.

Utilization of SMU/MMU Services by Family Members

Figure 25: Utilization of SMU/MMU Services by Family Members (n=494)



Nearly all respondents (95%) reported that their family members also accessed healthcare through the SMUs/MMUs, demonstrating the broad reach and impact of the services within households.

In Mysore, respondents mentioned that family members, especially children and elderly individuals, benefited from regular check-ups and the availability of free medicines, which reduced healthcare costs for the entire household.

99% respondents agreed that they would refer their relatives and friends to these SMUs / MMU. The results indicate a statistically significant positive correlation between respondent satisfaction and willingness to refer SMU/MMU services.

Beneficiary perception

Beneficiaries expressed high levels of satisfaction with the services provided by the SHUs and MMUs. Key perceptions include:

- **69% of respondents agreed that doctors listen to their symptoms patiently.** In Vizag and Patancheru, respondents praised doctors for taking the time to explain treatment plans and being attentive to symptoms, whereas in Kasna respondents felt that the consultation time was too short during peak hours, reducing their satisfaction with the overall experience.

- **68% reported that doctors prescribe effective medicines.** Beneficiaries in Mysore appreciated doctors' thorough physical examinations, which contributed to trust in healthcare services.
- **69% expressed confidence in the clinic's disease management.**
  - ASHA workers and project coordinators noted that beneficiaries often sought services at the SHUs/MMUs due to the perceived expertise of the doctors compared to local alternatives.
  - In Mysore, some beneficiaries mentioned inconsistent follow-ups for chronic conditions, which impacted their ability to manage symptoms effectively.

- **43% felt that their medical expenses had significantly decreased.**
  - While in Kasna, beneficiaries reported saving INR 3000-5000 annually due to free consultations and medicines. In Kasna, respondents noted that certain medicines were unavailable at the clinic, forcing them to purchase from private pharmacies at higher costs.
  - Project teams emphasized that free medicines and diagnostics reduced the financial burden for Below Poverty Line (BPL) households.

- **41% of women and elderly respondents agreed that the clinic provided better treatment for their specific needs.**
  - While a majority of women and elderly individuals found the clinics accessible, few respondents disagreed, stating that the lack of a female doctor in some clinics, such as in Mysore, discouraged women from discussing sensitive health issues.
  - Elderly individuals in Kasna expressed difficulties traveling to clinics during seasonal weather conditions.

- **38% felt improvement in general health.**
  - In Mysore, beneficiaries credited the program for helping them manage chronic conditions like diabetes through regular follow-ups and awareness sessions.
  - Kasna respondents highlighted improved accessibility, particularly for senior citizens who could visit the clinics independently.

- Whereas in Patancheru, respondents mentioned delays in receiving follow-up care and limited availability of specialized diagnostic tests like thyroid function tests etc.
- PRI members observed that communities were better informed about lifestyle diseases and preventive care.

Areas for Improvement: Respondents suggested **increasing diagnostic capabilities, enhancing home visits, providing specialized orthopaedics care, and conducting regular health check-ups to further improve the services.**

Table 6: Beneficiary perception rating (n=494)

S.no.	Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	The Doctor listens to my symptoms patiently	28%	54%	13%	5%	1%
2.	The Doctor does physical examination based on the symptoms.	33%	61%	0%	2%	2%
3.	The Doctor prescribes me effective medicines every time.	20%	68%	8%	4%	0%
4.	The Doctor explains the dosage of medicine to be taken every time.	41%	49%	8%	3%	0%
5.	I feel a speedy recovery by visiting CLINIC BY APL compared to other Health Facilities.	36%	50%	10%	3%	0%
6.	I can manage a better health because of CLINIC BY APL	37%	41%	12%	8%	2%
7.	My medical expenses have significantly decreased	43%	39%	9%	5%	3%
8.	The Doctor explains the diet that must be followed.	36%	50%	9%	3%	2%
9.	The CLINIC BY APL staff treat us in cordial manner.	38%	51%	10%	1%	0%
10.	Women can get better treatment because of the CLINIC BY APL	41%	51%	0%	0%	0%
11.	Elderly can get better treatment because of the CLINIC BY APL	41%	51%	7%	1%	0%
12.	The CLINIC BY APL should continue with its services in our community in the coming years also.	43%	50%	7%	0%	0%
13.		36%	47%	5%	1%	11%

	CLINIC BY APL staff tell us about maintaining hygiene.					
14.	**Medical treatment no longer causes me undue stress or concern.**	42%	40%	13%	4%	1%
15.	**The Clinic by APL has enabled effective disease prevention.**	36%	48%	8%	4%	5%
16.	**I can better handle seasonal illness because of the availability of CLINIC BY APL.**	37%	46%	9%	4%	4%
17.	**I sense a general improvement in my overall health because of CLINIC BY APL.**	38%	43%	12%	4%	2%

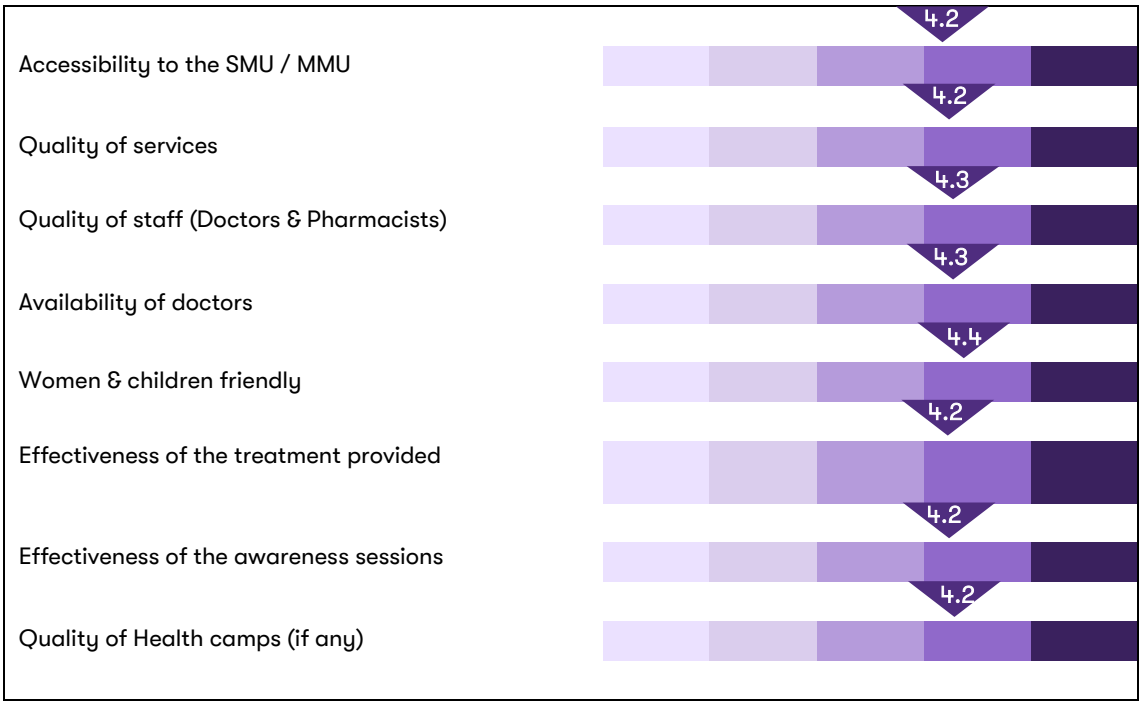
Table 7: Impact of program through Knowledge, Attitude and Practice (KAP) framework

Aspect	Findings
Knowledge	Beneficiaries demonstrated increased awareness of chronic disease management, including conditions like diabetes, hypertension, and joint disorders. Awareness campaigns and health camps significantly enhanced knowledge of preventive healthcare, proper nutrition, and lifestyle modifications. Additionally, respondents became more informed about the importance of regular health check-ups, eye care, and STD prevention.
Attitude	The intervention fostered a positive shift in healthcare-seeking behaviour. Trust in formal healthcare services increased, with 64% of respondents preferring the clinic by APL over private or informal providers. Beneficiaries expressed high levels of satisfaction with the quality of consultations, availability of medicines, and the cordial behaviour of healthcare staff, leading to a favourable perception of the SMUs/MMUs.
Practice	Post-intervention, healthcare practices among beneficiaries improved significantly. The frequency of monthly or biweekly visits to SMUs/MMUs increased, while reliance on self-medication and local quacks dropped to near zero. Beneficiaries adopted healthier lifestyles, with regular monitoring of blood pressure and sugar levels, and sought timely treatment for both communicable and non-communicable diseases. Participation in community health camps further reinforced preventive healthcare practices.

Perception on healthcare services

The ratings indicate a high level of satisfaction among beneficiaries regarding SMU/MMU services. Average ratings range from 4.2 to 4.4, suggesting a strong performance across parameters.

Table 8: Beneficiary rating across different parameters related to the program



- Women and children friendly environment (4.4): Beneficiaries appreciate the welcoming and inclusive atmosphere.
- Quality of staff (Doctors) (4.3): Respondents are satisfied with the competence and professionalism of healthcare providers.
- Availability of doctors (4.3): Beneficiaries find doctors readily available, ensuring timely access to care.

Areas of improvement as per the respondents include:

Respondents identified key areas for improvement in SMU/MMU services, including:

- Enhanced diagnostic capabilities (ECG facility)
- Increased home visits by medical staff
- Specialized orthopedic care
- Regular health check-ups

Infrastructure of Clinics across locations

Mysore (Karnataka)

- Located along the main road, making it easily accessible for the community. Equipped with a consultation room, diagnostic lab, and pharmacy.
- Availability of essential diagnostic tools such as biochemical analyzers, blood pressure monitors, and blood sugar testing kits.
- Spacious waiting area that accommodates a higher number of patients, especially during summer months when patient flow increases to ~80 per day.

Limitations:

- Lack of advanced diagnostic facilities such as ECG or X-ray machines, which beneficiaries have requested.
- Absence of a female doctor for gynecological consultations, which limits services for women.

Khandala (Maharashtra):

- Serves a wide catchment area with coverage for 15–20 surrounding villages.
- Functional diagnostic lab with tests for CBC, liver and kidney function, and blood sugar monitoring.
- Stocked pharmacy providing free medicines for up to 15 days.
- Collaboration with local NGOs for specialized services such as eye camps.

Limitations:

- Space constraints in the clinic, leading to overcrowding during peak hours.
- Limited availability of specialized diagnostic tools such as thyroid tests.

Vizag (Andhra Pradesh):

- Diagnostic capabilities include biochemical and blood analysis for liver and renal function.
- Centrally located with good public transport connectivity, attracting patients from up to 30 km away.

Limitations:

- Patients reported the need for expanded infrastructure, including eye testing and additional staff to reduce wait times.
- Safety concerns were raised due to occasional disturbances by local miscreants near the clinic.

Patancheru (Telangana)

- Well-structured clinic situated in a market, making it highly accessible, providing primary healthcare services, including free medicines and basic diagnostics.
- Regular health awareness camps organized in the facility, encouraging greater utilization of healthcare services.
- Supported by teleconsultation services, enhancing accessibility during the COVID-19 pandemic.

Limitations:

- Limited waiting area, making it less comfortable for beneficiaries during busy hours.
- Beneficiaries requested additional infrastructure for specialized care, such as orthopaedic or ENT services.

Kasna (Uttar Pradesh)

- Accessible location near key transport routes, reducing travel barriers for elderly patients.
- Basic infrastructure includes a consultation room, diagnostic lab, and a pharmacy that caters to common ailments like hypertension and diabetes.
- Availability of free medicines, which beneficiaries found to be of superior quality compared to nearby PHCs.

Limitations:

- Beneficiaries noted the need for better diagnostic equipment and additional services like eye care and thyroid testing.

4. Project evaluation: OECD DAC Principles

The section highlights the key aspects of the program basis five key principles: relevance, effectiveness, efficiency, impact, and sustainability.

Relevance

The program demonstrates high relevance by addressing critical healthcare gaps in underserved rural and semi-urban areas near Asian Paints facilities, such as Mysore, Khandala, Vizag, Patancheru, and Kasna. These regions often lack adequate primary healthcare infrastructure, with challenges like long travel distances to healthcare facilities and financial burdens for low-income families. By establishing Static Health Units (SHUs) and Mobile Medical Units (MMUs), the program effectively aligns with **community needs, focusing on maternal and child health, non-communicable diseases (NCDs), and general healthcare**. A significant portion of beneficiaries **(72%) belong to Below Poverty Line (BPL) households**, emphasizing the program's direct response to financial hardships. However, the program's focus could be expanded to include greater community participation to enhance its long-term relevance.

Effectiveness

The program has effectively achieved its objectives, as demonstrated by multiple outcomes:

- Healthcare access**: 64% of beneficiaries now rely on SHUs/MMUs for healthcare,** a significant increase from pre-intervention preferences for private or informal providers.
- Financial relief: Beneficiaries **reported saving up to ₹9,999 annually on diagnostic tests and ₹5,999 on medicines.**
- Disease management: The program effectively reduced complications from NCDs, with a **41% increase in community awareness of healthy practices and regular monitoring.**
- Trust-building: 95% of respondents confirmed their families used the services, reflecting high levels of satisfaction.

Despite these successes, gaps remain in diagnostic capabilities and specialized services, such as orthopaedics, which could further improve outcomes.

Efficiency

The program's structured design ensured efficient service delivery:

- SHUs and MMUs were consistently staffed with trained doctors, pharmacists, and nurses, maintaining 7-hour daily operations.
- The program conducted 24 camps per month per location, reaching an average of 55 beneficiaries per camp.
- Cost-effective healthcare services eliminated out-of-pocket expenditures for diagnostics, consultations, and medicines.

However, the limited program duration (2019–2023) posed challenges for long-term mentorship and follow-up. Enhanced use of technology, such as telemedicine, has partially mitigated efficiency concerns during disruptions like the COVID-19 pandemic.

Impact

The program had significant positive impacts:

- Healthcare accessibility: Beneficiaries saved time and transportation costs, with **63% of respondents benefiting from door-to-door services by MMUs**.
- Economic impact: Reduced financial burden enabled families to allocate resources to education and essential needs.
- Community health outcomes: **76% of chronic patients (e.g., diabetes, hypertension) reported improved health conditions.**
- Behavioural change: Increased trust in formal healthcare resulted in a shift from self-medication and local quacks to professional services.

Challenges such as rising healthcare demands and limited diagnostic capabilities highlight the need for sustained efforts to ensure continued positive outcomes.

Sustainability

The program's sustainability is supported by several factors:

- High beneficiary confidence: **78% of participants expressed trust in the continuity of services, and 71% showed willingness to share healthcare knowledge with their communities.**
- Integration: Collaboration with local health workers (e.g., ASHAs, ANMs) and alignment with government healthcare schemes enhance program longevity.
- Capacity-building: Training of healthcare staff and community mobilizers ensures the program's lasting presence.

However, long-term sustainability may require greater emphasis on community ownership, extended mentorship, and partnerships to address evolving healthcare needs.

5. SROI

Social Return on Investment (SROI) is a critical metric used to evaluate the overall value generated by the program. It provides a quantitative expression of the social, economic, and environmental benefits relative to the resources invested. By engaging stakeholders, identifying outcomes, and assigning monetary values to these outcomes, the SROI offers a comprehensive view of the program's impact. This analysis allows decision-makers to assess the program's efficiency and sustainability, highlighting the tangible and intangible benefits delivered to the target community.

SROI Estimation for value created till March 2023		
Total Investment		8,79,49,896
SROI Ratio=		**1.422261764**

6. Corporate Benchmarking

Company	CSR Focus Areas	Outreach	Scope for Improvement for APL	Source
Berger Paints	Healthcare, Education, Environmental Sustainability, Rural Development, Vocational Training (iTrain Program)	National	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.bergerpaints.com/about-us/policies/corporate-social-responsibility-policy | https://www.bergerpaints.com/about-us/sustainability
Nerolac	Environment, Health, Education, Community Development	National, with a focus on areas around manufacturing locations	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.nerolac.com/sustainability/community-initiatives.html
HP	Bridging the digital divide in rural India, Education through technology solutions	National, targeting isolated and disadvantaged groups in rural areas	Geographical Expansion, Educational Initiatives, Environmental Sustainability, Employee Engagement	https://www.hpindiacsr.com/

Asian Paints Limited (APL) has demonstrated a strong commitment to Corporate Social Responsibility (CSR), focusing on areas such as health and hygiene, skill development, disaster management, and water conservation.

To further enhance its CSR impact, APL might consider the following areas for improvement:

1. Geographical Expansion: While APL has made commendable efforts in communities near its manufacturing facilities, expanding CSR initiatives to underserved regions across the country could amplify its positive impact.
2. Educational Initiatives: Beyond vocational training, APL could invest in broader educational programs, such as supporting primary and secondary education, scholarships, and digital literacy initiatives, to foster long-term community development.
3. Environmental Sustainability: APL has engaged in water conservation efforts. Building upon this, the company could implement comprehensive environmental programs focusing on renewable energy adoption, waste reduction, and promoting sustainable practices within communities.
4. Employee Engagement: Encouraging greater employee participation in CSR activities through volunteer programs can not only benefit communities but also foster a culture of social responsibility within the organization.

By exploring these areas, APL can continue to strengthen its CSR initiatives and contribute more significantly to sustainable community development.

7. Conclusion

The Asian Paints Limited (APL) healthcare program has demonstrated significant impact across underserved rural and semi-urban areas. Key findings indicate that the program effectively addressed critical healthcare gaps, providing essential services to low-income families. Establishing Static Health Units (SHUs) and Mobile Medical Units (MMUs) significantly reduced travel distances and financial burdens, making healthcare more accessible.

Pre-intervention, beneficiaries faced substantial healthcare challenges, including long travel distances, financial burdens, and reliance on informal providers**. The program mitigated these issues, with 64% of beneficiaries relying on SHUs/MMUs for healthcare, and 95% expressing satisfaction.** Significant cost savings were reported, with **beneficiaries saving up to ₹9,999 on diagnostics and ₹5,999 on medicines annually.**

The program's impact extends beyond healthcare access, with positive effects on economic and social well-being. **Beneficiaries reported improved health outcomes, reduced financial burdens, and increased trust in formal healthcare services.** Community outreach and awareness campaigns enhanced knowledge of preventive healthcare, leading to improved health practices. **The program's effectiveness is underscored by its high satisfaction ratings, with beneficiaries praising the quality of services, staff competence, and welcoming environment.**

The Asian Paints Limited (APL) healthcare program yielded remarkable outcomes across knowledge, attitude and practice dimensions. Beneficiaries demonstrated enhanced understanding of chronic disease management, preventive healthcare, and lifestyle modifications. **A significant shift in healthcare-seeking behaviour was observed, with 64% preferring APL clinics over private or informal providers, driven by high satisfaction with consultation quality, medicine availability and staff demeanour.** Notably, beneficiaries adopted healthier practices, increasing regular health check-ups, and reducing self-medication and reliance on local quacks. Overall, the program effectively promoted informed healthcare decisions, improved health outcomes, and fostered a culture of preventive care among underserved communities.

8. Recommendation

The APL's healthcare program has played an instrumental role in ensuring quality healthcare for people residing in remote locations. Following are key suggestions that may lead to further improved outcomes and impact.

- Implement a nominal weekly fee to promote accountability and ensure that services cater to beneficiaries with genuine needs, discouraging unnecessary utilization.
- Expand diagnostic capabilities: Include more advanced diagnostic tools and services for better disease detection and management.
- Strengthen community participation: Enhance awareness campaigns and involve local influencers (PRI members, SHGs) to improve program outreach.
- Leverage government healthcare schemes: Collaborate with existing government programs for referrals, subsidies, and additional resources.
- Focus on long-term sustainability: Develop a robust exit strategy that empowers local health workers and integrates telemedicine for continued care.

9. Case study

1) Beneficiary

Name: Seema

Age: 60 years

Location: Kasna, Uttar Pradesh

Seema, a 60-year-old resident of Kasna village in Uttar Pradesh, faced significant challenges in accessing healthcare treatments. Earlier, her family had to travel long distances to a private hospital, incurring high expenses for doctor consultations and medicines along with traveling cost. This burden led them to delay seeking treatment for health issues, often worsening their conditions.

The opening of a healthcare clinic in her village brought a transformative change. Located just one to two kilometers away, the clinic was easily accessible, especially for women who previously struggled to travel long distances. The facility provided comprehensive services, including a doctor, a pharmacist, and a lab technician. Crucially, there were no consultation or medication charges, which encouraged Seema and her family to prioritize timely treatment and regular checkups.

Seema shares that the clinic not only improved their access to healthcare but also had a significant positive impact on the overall health status of her family and the community. The reduced financial and logistical burden allowed them to address health concerns promptly. She believes the clinic was a vital initiative, especially for women, as it empowered them to seek medical care without undue challenges. For Seema, the healthcare clinic has been a life-changing facility for her family and village.

2) Beneficiary

Name: Narasimhachari

Age: 77 years

Village: Badampura, Nanjangud Taluk

Narasimhachari, an elderly man from a rural village, experienced a profound transformation in his healthcare journey after discovering the Asian Paints Nirog Clinic. Over six months, he received comprehensive care, including lab testing, consultations, and medicines, bridging the gap in quality healthcare he previously faced.

The clinic's staff demonstrated compassion and expertise, particularly the doctor, who listened attentively to Narasimhachari's concerns and provided personalized prescriptions. The holistic approach extended beyond medical treatment, offering valuable nutrition and dietary guidance. High-quality medicines were provided free of charge, alleviating financial burdens.

The Asian Paints Nirog Clinic's impact on Narasimhachari's life underscores the critical importance of accessible, affordable, and quality healthcare. By addressing health disparities and providing comprehensive services, the clinic has significantly improved the well-being of Narasimhachari and likely countless others in the community. This model serves as a beacon for replicable healthcare initiatives targeting vulnerable populations.

3) Beneficiary

Name: Mahadevamma and Rashmi

Age: 60 years and 32 years

Village: Thandavapura, Nanjangud Taluk

Mahadevamma, 60, and her daughter Rashmi, 32, from Thandavapura village, exemplify the transformative impact of accessible healthcare. For two years, they have been visiting the Asian Paints Nirog Clinic, where Mahadevamma receives treatment for diabetes and hypertension. The clinic's welcoming staff and doctor's empathetic approach made them feel valued, while thorough consultations and tailored prescriptions significantly improved Mahadevamma's condition.

The clinic's comprehensive services extend beyond chronic care, addressing minor health concerns for Rashmi's children, such as fever and cough. This one-stop solution for their family's healthcare needs has not only improved their well-being but also reduced financial burdens. By providing affordable, quality care, the clinic has made a tangible difference in their lives, demonstrating the effectiveness of community-based healthcare initiatives in rural areas.

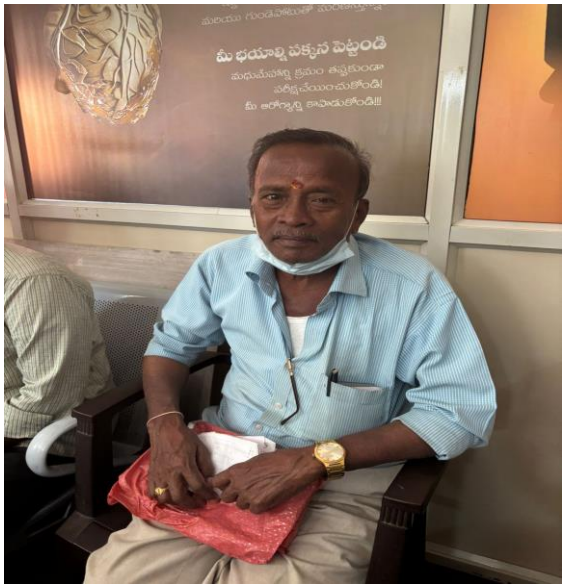
4) Beneficiary

Name: B Ramu

Age: 71 years

Ramu, a 71-year-old beneficiary, exemplifies the profound impact of comprehensive healthcare services. Since his first visit four years ago, Ramu has received personalized care from the Asian Paints Nirog Clinic's exceptional staff. The project coordinator's kindness, dedication and genuine interest in patients' well-being created a trusting relationship. Regular monitoring of blood pressure and sugar levels,

detailed report reviews and free medicines for 15 days significantly improved Ramu's health.



The clinic's holistic approach addressed Ramu's medical concerns, alleviating financial burdens. His blood pressure and sugar levels noticeably decreased, enhancing his quality of life. Ramu's unwavering satisfaction and loyalty to the clinic demonstrate the effectiveness of community-based healthcare initiatives in building trust and improving health outcomes among seniors. This model serves as a benchmark for replicable healthcare programs targeting vulnerable populations.

1) Beneficiary

Name: Manik Kanade

Age: 52 years

Manik Kanade, a 52-year-old beneficiary, exemplifies the transformative impact of the Asian Paints Nirog Clinic's diabetes management program. Since joining the program, Kanade has gained comprehensive knowledge about managing his sugar levels and diabetes. Regular check-ups every 15 days at the static medical unit and access to medicines have significantly improved his health outcomes. Kanade praises the program's organization, staff support and doctor's empathetic approach. The doctor's careful listening and clear guidance have empowered him to take charge of his health. Inspired by his positive experience, Kanade has recommended the clinic to his community members, fostering a ripple effect of improved health awareness and management. This case highlights the clinic's effectiveness in educating and supporting patients with chronic conditions, enhancing their quality of life.

10. Annexures

Field visit photographs

Figure 26: GT team's interaction with APL beneficiaries in Patancheru, Telangana

Figure 27: GT team's interaction with beneficiaries in Kasna, Uttar Pradesh

Figure 28: IEC material used for beneficiary awareness in Khandala, Maharashtra

Figure 29: APL Clinic in Mysore

Figure 30: GT team's interaction with women beneficiaries in Kasna, Uttar Pradesh

Figure 31: GT team's interaction with medical staff in Patancheru, Telangana

11. Notice to the reader

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The information collected for this study is based on field visits, meetings with various stakeholders, and backend data provided by Asian Paints Limited. We have relied on the accuracy of the information shared by these sources. The scope of work does not constitute an audit or due diligence of the information provided; therefore, the data received was assumed to be accurate.

This report should not be considered as an expression of opinion or any form of assurance on the financial statements or financial position of Asian Paints Limited or any other associated entity.

The recommendations provided in this assessment are suggestive and may be implemented after analysing their feasibility and prioritization. The decision to implement any recommendations lies solely with the management of Asian Paints Limited. The field visits and data collection process were conducted in coordination with Asian Paints Limited, following prior acceptance of the approach, methodology, coverage plan, survey tools, and indicators.

Due to potential communication gaps and the inherent human tendency to report everything as above expectations or without issues, it was challenging to ensure interviewees fully understood the purpose of the survey and provided accurate responses.

Grant Thornton Bharat LLP accepts no liability in relation to the use of the analysis, findings, or recommendations contained in this report by any third party. The report relies on responses provided by stakeholders. We have not independently verified the accuracy or completeness of the information shared by the implementing partner, stakeholders, or any other involved parties, and any conclusions drawn are based on the provided data.

For and on behalf of Grant Thornton Bharat LLP,

Authorized Signatory

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Impact Assessment of Water for Livelihood Project- Dediapada, Narmada District, Gujarat

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

CONTENT

DISCLAIMER AND NOTICE TO READERS

This report has been prepared exclusively for the Asian Paint ("Client") following the terms of the Engagement letter/agreement dated [4th April 2024] between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.

This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is it to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent, as per terms of business agreed under the Contract.

This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions are not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.

While performing the work, we have assumed the authenticity of all documents or information referred to or provided. We have not independently verified the correctness or authenticity of the same.

We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.

In accordance with its policy, KPMG advises that neither it nor any partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Paani Foundation in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.

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The performance of our work was based on information and explanations given to us by the staff of Paani Foundation. Neither KPMG nor any of its partners, directors or employees undertake responsibility in any way whatsoever to any person in respect of errors in this report, arising from incorrect information provided by Paani Foundation.

Our report may refer to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.

ABBRIVATIONS

AKRSP	Aga Khan Rural Support Programme
ANMs	Auxiliary Nurse Midwives
APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

01

Executive Summary

EXECUTIVE SUMMARY

Asian Paints Limited has imbibed the philosophy of transformation in its DNA and has consistently reinvented the industry. Aligning with this approach, the company's CSR efforts are focused on achieving holistic and sustainable community development. There is a strong emphasis on fostering robust trust-based relationships with communities located in the vicinity of its plants and people in the unorganized sector. These inclusive development initiatives are concentrated on health and hygiene, water conservation, skill development, and disaster management.

India is the largest groundwater user globally, and groundwater serves approximately 45% of total irrigation and 80% of domestic water needs. However, decades of unsustainable extraction practices have contributed to overexploitation and water scarcity, which creates a challenging landscape. In response, Asian Paints engaged in a holistic approach through its "Water for Livelihoods" program in the Dediapada block of Narmada district in Gujarat. This initiative addresses water scarcity, soil conservation, and natural resource management, aiming to ensure sustainable and resilient water resources for the country.

The objective of this impact study is to assess the impact of water stewardship activities, with a specific focus on access and availability of surface and ground water, potable water, agricultural practices, farmer livelihoods, and governance. The mixed-methods approach involved quantitative and qualitative research methodologies, utilizing primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of the Social Return on Investment (SROI) and Organisation for Economic Co-operation and Development-Development Assistance Committee (OECD-DAC) frameworks. During the survey, respondents from five villages in Narmada district of Gujarat, including farmers, community members, PRI members, and Water User Association members, were interviewed for data collection.

The sample size included respondents from diverse economic backgrounds, small to marginal farmers, and those whose primary source of income is agriculture. More than half of the respondents were between the age group of 40 to 60 years and had no formal education.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by the water for livelihood programme, INR 2.16 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

RELEVANCE

- 83% respondent indicated challenges they faced before the intervention was scarcity of water for their agricultural use
- 35% of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention
- 35% of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention

EFFECTIVENESS

- 98% improved water availability more than 4 months
- 81% Water availaibility in well due to GW recharge
- All beneficiries are aware of the sustainable agriculture practice

IMPACT

- Impact on awater- 87% rated improved water availability and accessibility
- Impact on agriculture- 100% improved pest management activities
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

COHERANCE

- Directly convergence with 'Jal Shakti Abhiyan' and 'Catch the Rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDG

EFFICIENCY

- The programme was completed on schedule and within the proposed budget.
- No duplication or overlap of activities was observed with any other programme on-ground and corroborated by respondents

SUSTAINABILITY

- 100% respondents rated overall experience in the water for livelihood project in bringing about positive change in their quality of life
- 100% respondents rate the support provided under the project
- Improved governance system for water resource management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007) [iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

1.2 Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including

decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 About the study

To understand the impact created by its interventions implemented in FY 2022-23, Asian Paints Ltd. empanelled KPMG to facilitate the impact assessment of its Water for Livelihood project. The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility, availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.

Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

1.4 About the project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

Water for Livelihood project was initiated by Asian Paints in 2015-16 with an aim to improve the quality of life in the Tribal community by implementing Integrated Development across 5,500 households and 11,000 hectares in the Dediapada Block of Narmada district. It also emphasises establishing institutional infrastructure for sustained development, covering seven villages in the Dediapada block. During the study period, the project has completed tasks such as constructing two check dams, repairing three check dams and deepening two ponds.

Objective of the project:

- To organise and strengthen village institutions. (UG, FIG, FPO)
- To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and Increasing water storage and availability.
- To improve and stabilize surface soil from converting it from Unirrigated to irrigated.
- To encourage enhanced farming practices in order to increase household income of tribal farming communities, along with benefiting the environment.

1.5 About implementing partner

Aga Khan Rural Support Programme (India) is a non-denominational, non-government development organization. AKRSP(I) works as a catalyst from 1985 for the betterment of rural communities by providing direct support to local communities. AKRSP(I) is active in over 3255 villages of Gujarat, Madhya Pradesh, Bihar, and Maharashtra. The backbone of AKRSP(I)'s work is to empower rural communities particularly underprivileged and women through collectivisation as well as promotion of individual micro-enterprises. Building self-reliant people's institutions for financial inclusion, livelihoods enhancement and improved rural governance is the heart of the organisation's approach.

APL has partnered with AKRSP(I), to implement its CSR projects in the Dediapada block of Narmada district, Gujarat. The partnership between APL and AKRSP focuses on promoting sustainable agriculture, enhancing livelihood opportunities, and managing natural resources. AKRSP is responsible for carrying out the activities, ensuring that they are completed on time, within budget, and meet the expected outcomes whereas APL provides technical and financial support to achieve these objectives and create a sustainable and inclusive development model that benefits marginalised communities.

1.6 Project geography

Gujarat faces a myriad of water challenges, with most of its geographical area falling under the arid to semi-arid climate category. Gujarat is one of India's highly industrialized state, rapid industrialisation, and population growth strain water resources in urban centres like Ahmedabad and Surat. The Narmada River, a lifeline for the state, is crucial for water supply, yet issues of equitable distribution persist. The state of Gujarat experiences drought every three or four years, with the frequency and severity of droughts also escalating over time, leading to a significant shortage of drinking water[v]. According to the Irrigation Commission, around 36 percent of the state's total area is drought prone and faces high water stress[vi].

Narmada district in Gujarat is one of the most impoverished districts in the state and is also one of the 112 aspiration districts in India[vii]. It is located in the eastern part of Gujarat, with its headquarters in Rajpipla, and is a tribal dominated district. The district is bounded by the state of Maharashtra and shares its borders with Surat in the south, Vadodara in the north, and Bharuch in the west. According to Census 2011, the district has a population of 590,297[viii], and is primarily rural, with a significant portion of the population dependent on agriculture for their livelihood. The district's economy is largely agrarian with cotton and pigeon pea as the major crops[ix]. Banana and cotton are the main horticultural crops in the district[x]. Small and backward farmers account for over half (58.2 percent) of the land holdings with an average size of 2.5 hectares[xi]. The district is working on water management initiatives to address the growing demand for water due to its agricultural activities. The Sardar Sarovar Project, Karajan Irrigation project, Kakadi Amba, and Chopadvav projects are a few of the significant irrigation projects in the district.[xii] The district consists of five talukas: Tilakwada, Garudeshwar, Nandod (including Rajpipla), Dediapada, and Sagbara. Through *Water for Livelihood* project, AKRSP has covered five villages of the Dediapada block in Narmada district.

Dediapada is a taluka in the Narmada district of Gujarat, India. The taluka is bounded by Zaghadia taluka, Sagbara taluka, Nandod taluka, Maharashtra state, and Mandavi taluka. The population of Dediapada taluka is 1,74,449 as per the 2011 Census of India, with 88,235 males and 86,214 females. The taluka is located in the forest range of Shoolpaneshwar Wildlife Sanctuary. Around 96.41 percent of Dediapada's population belongs to Scheduled Tribes (ST)[xiii], with Vasava and

Tadvi forming the majority. Due to the undulating topography of Dediapada, the cultivation of crops and water storage prove challenging, compounded by the poor economic conditions of farmers and fragmented land holdings. On average, 9.62 percent of the cultivated area in Dediapada taluka (Dist. Narmada) is irrigated, while the remaining 90.38 percent is dependent on rain for agriculture[xiv].

02

Approach & Methodology

2 APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 Our Approach

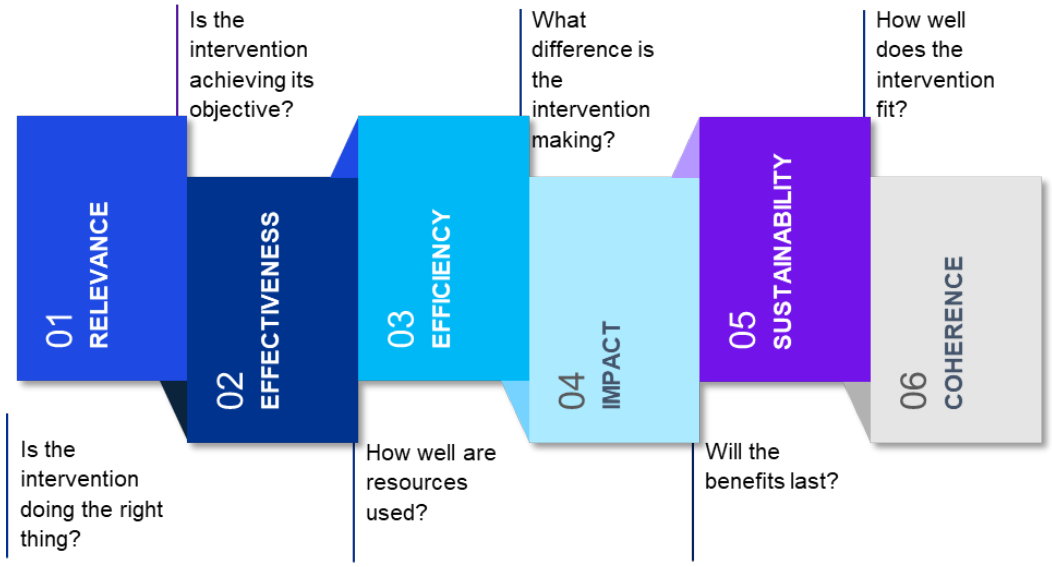
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.	*Achieved cross-cutting objectives during project implementation*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

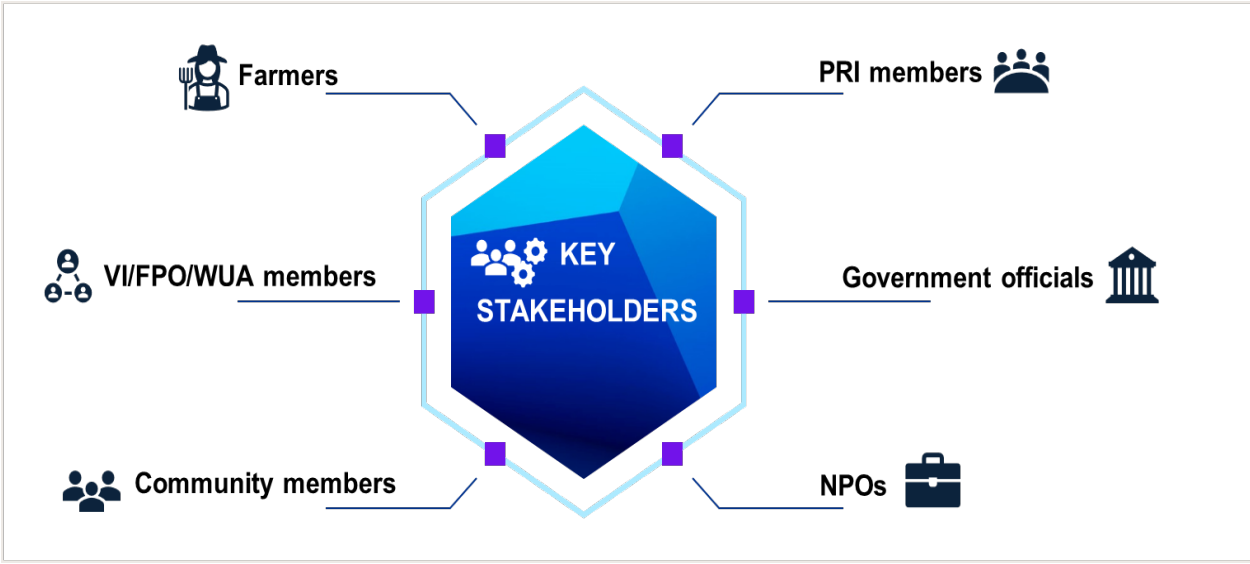
Impact map for the Water for Livelihood Project:

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment.	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures Number of water harvesting structures constructed	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices

	To organize and strengthen the village institutions around water harvesting and related livelihoods		No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area, Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to water intervention & Benefitted due to agriculture intervention	1151	100	109
VI/FPO/WUA members Community members	(Included in the above)	-	5

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which

constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI

framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

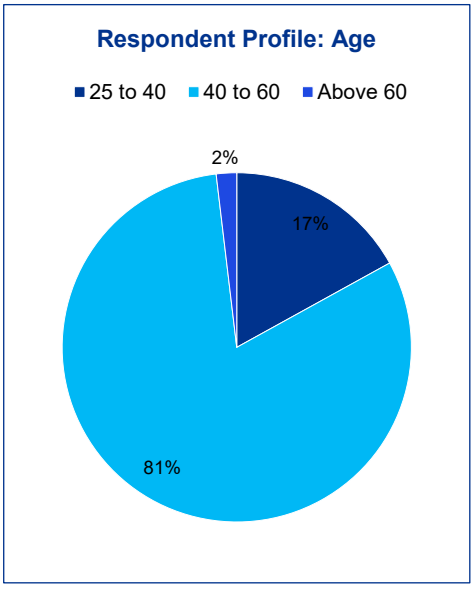
Analysis and Findings

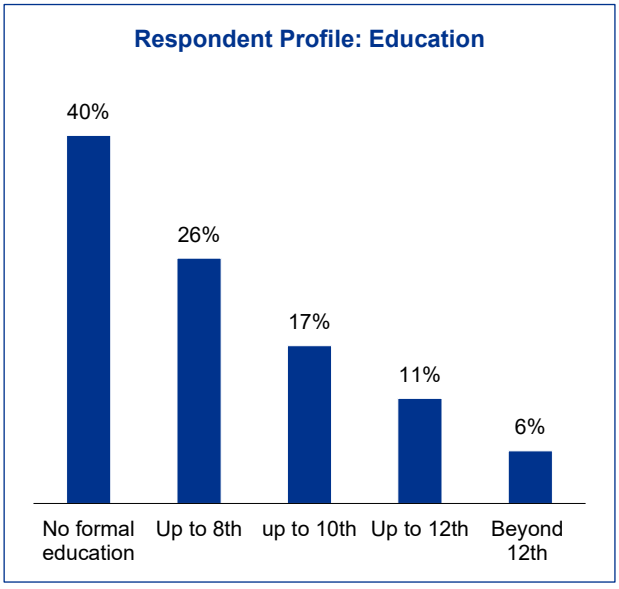
3 ANALYSIS AND FINDINGS

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water for Livelihood program supported by Asian Paints Limited. across five villages of Anjavani, Chikada, Kanbudi, Kundiamba and Moskut of Dediapada block in Narmada district of Gujarat.

3.1 Demography of respondents

The respondents interviewed were largely (81 percent) from the age group of 40 to 60 years, followed by 17 percent from 25 to 40 years age group and two percent whose age is more than 60 years. In terms of education levels, majority (40 percent) of respondents had no formal education whereas 17% completed their education up to 10th standard.





Support received through project intervention:

WHS	Pond renovation	Agriculture intervention	Training awareness program
36%	38%	57%	42%

The analysis of the table presented indicates that the beneficiaries of the project have received support through multiple interventions, indicating a strong emphasis on inclusivity in sample coverage. In addition to water resource management activities, the project promotes sustainable agriculture practices to enhance farm productivity through the provision of quality inputs, direct extension services, mechanization, and integration of agriculture with livestock.

The project adopts a holistic approach to ensure the sustainability of agriculture practices while improving productivity. This approach focuses on enhancing the efficient use of water resources, promoting sustainable practices, and improving the livelihoods of smallholder farmers. By addressing these key areas, the project is well-positioned to deliver meaningful impact and drive positive outcomes for the communities it serves.

Overall, the inclusive approach adopted by the project to support beneficiaries through multiple interventions represents a significant step forward in promoting sustainable agricultural

development and improved livelihoods for smallholder farmers. The continued implementation of these interventions will be crucial for long-term success and progress towards sustainable development goals.

Source of income

100% of respondents shared that their primary source of income is agriculture, followed by 60% and 40% rely on labour work and livestock respectively.

HH income

Annual HH income of majority of (77%) of respondents ranges between INR 50,000 to INR 1,00,000.

Land holding size

75% of respondents reported land size ranging from 2 to 5 acres.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Anjanvai	100%	91%	91%
Chikda	100%	25%	0%
Kanbudi	100%	75%	75%
Kundiamba	100%	100%	100%
Moskut	100%	88%	88%

The table reveals the percentage of farmers practicing farming in Kharif, Rabi, and Zaid seasons in different villages. Anjanvai has the highest percentage of farmers practicing agriculture in all seasons, while Chikda has the lowest percentage with no activities in Zaid season. Kanbudi has a consistent percentage of farmers practicing farming in all seasons, while Kundiamba and Moskut have 100% of farmers practicing farming in all seasons.

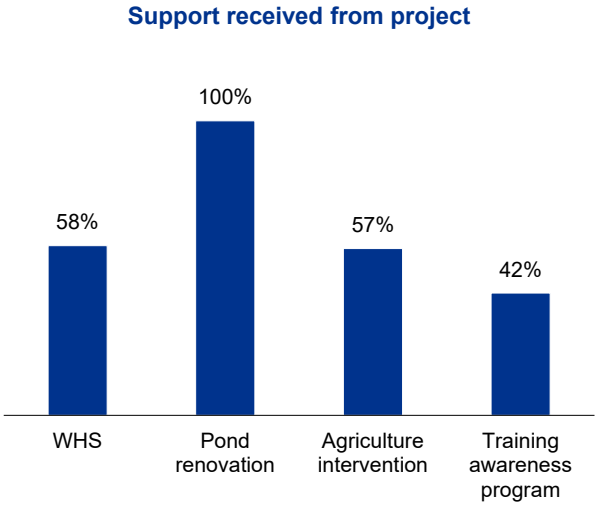
About Irrigation facility:

Village Name	Yes	No, only dependent on rains
Anjanvai	86%	14%
Chikda	25%	75%

Kanbudi	75%	25%
Kundiamba	100%	0%
Moskut	88%	13%

The table shows the percentage of villages with access to irrigation facilities and those dependent only on rainfall for farming. Anjanvai and Kanbudi have a high percentage of farmers with access to irrigation facilities, while Chikda has the lowest. Kundiamba and Moskut have 100% and 88%, respectively, of farmers with access to irrigation facilities. The data highlights the importance of irrigation facilities for agricultural activities and the need for more resources to improve infrastructure in the region for better crop yields and economic growth.

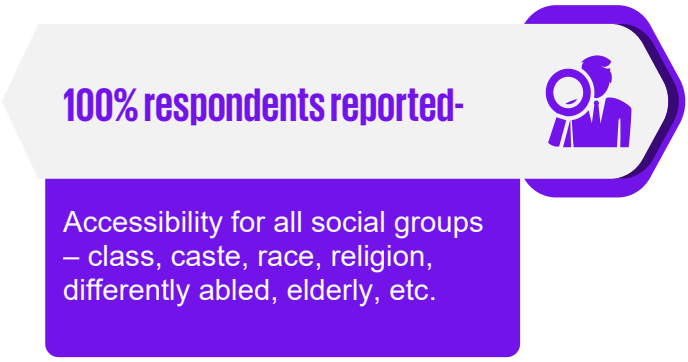
Support received from project:



The table presented indicates the percentage of beneficiaries who received support through different interventions of the project.

Pond renovation activity was completed in Chikada and Moskut villages, from the analysis, it is evident that pond renovation had the highest rate of support with 100% of the beneficiary's receiving assistance. WHS activity was implemented in Anjavani, Kanbudi, and Kundiamba villages. Whereas agriculture intervention and training programme were conducted across intervention villages.

About Accessibility of the project across all community groups:



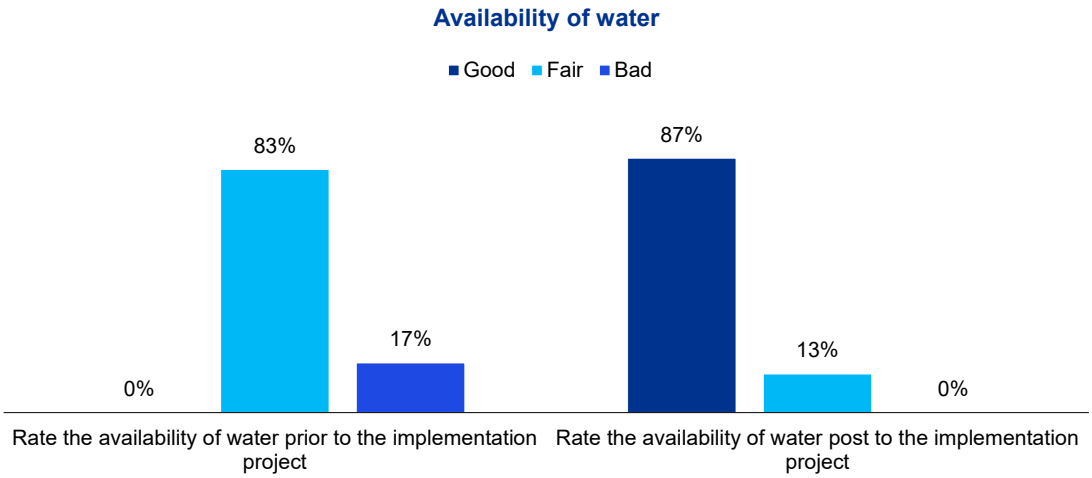
Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrate the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

3.2 Support for Water Harvesting Structures.

As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that 100% of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents stated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial in ensuring the successful implementation and sustainability of the project.

3.2.1 Impact on availability and accessibility of water



The graph presented indicates the respondents' rating of the availability of water pre- and post-implementation of the project. The ratings are segmented into three categories: Good, Fair, and Bad. From the analysis, it is evident that the implementation of project activities has significantly improved water availability in the region.

Before the project's implementation, no respondent rated the availability of water as 'good.' In contrast, the majority of the respondents rated the availability of water as 'fair' at 83%, while only 17% rated it as 'bad.' This indicates disparities in the availability of water pre-project implementation, with many beneficiaries facing challenges related to water scarcity.

However, after the implementation of the project interventions, the ratings have significantly improved, with 87% of the respondents rating the availability of water as 'good.' Only 13% rated water availability as 'fair,' and none rated it as 'bad.' These results demonstrate the positive impact of the project on water availability, leading to improved access to water resources, better irrigation, and enhanced agricultural productivity.

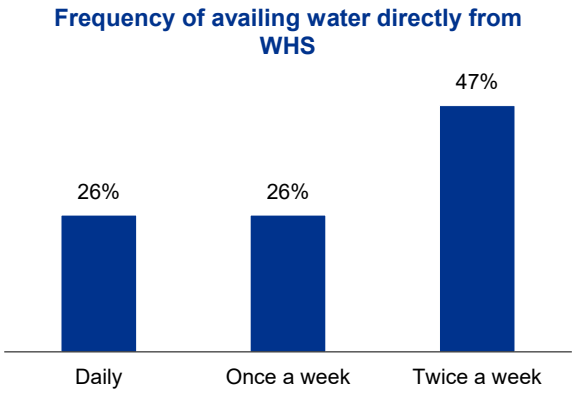
Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

81% Of respondents reported that intervention resulted in increased water availability in your well/borewell

98% Of respondents reported that the duration of improved water availability is more than four months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income generation. Above responses show the effectiveness of the project in improving water resource management in the region.



The data indicates that the majority of respondents (47%) avail water twice a week. 26% of the respondents access water from WHS once daily and weekly each, respectively. The results demonstrate that WHS has been effective in providing beneficiaries with a reliable and stable supply of water for their daily needs. Overall, the outcomes of the analysis showcase the positive impact of the project interventions in improving water access.

3.2.2 Improved water level

Season	Intervention	Depth of water in well/ borewell (Ft)	Delta Change (Ft)
Monsoon	Pre intervention	20	6
	Post intervention	14	
Winter	Pre intervention	53	13
	Post intervention	40	
Summer	Pre intervention	245	138
	Post intervention	107	

The table shows the impact of project interventions on water depth in wells/borewells during different seasons. The data demonstrate positive outcomes, with improved water availability

observed across all seasons, leading to enhanced groundwater table levels and better agricultural productivity. The efficacy of the interventions is evident from the significant delta change observed in the summer season at 138 feet, followed by the winter season with a delta change of 13 feet, and the monsoon season at 6 feet. Overall, the results highlight the importance of sustainable water management practices implemented through the project, leading to better access to water resources.

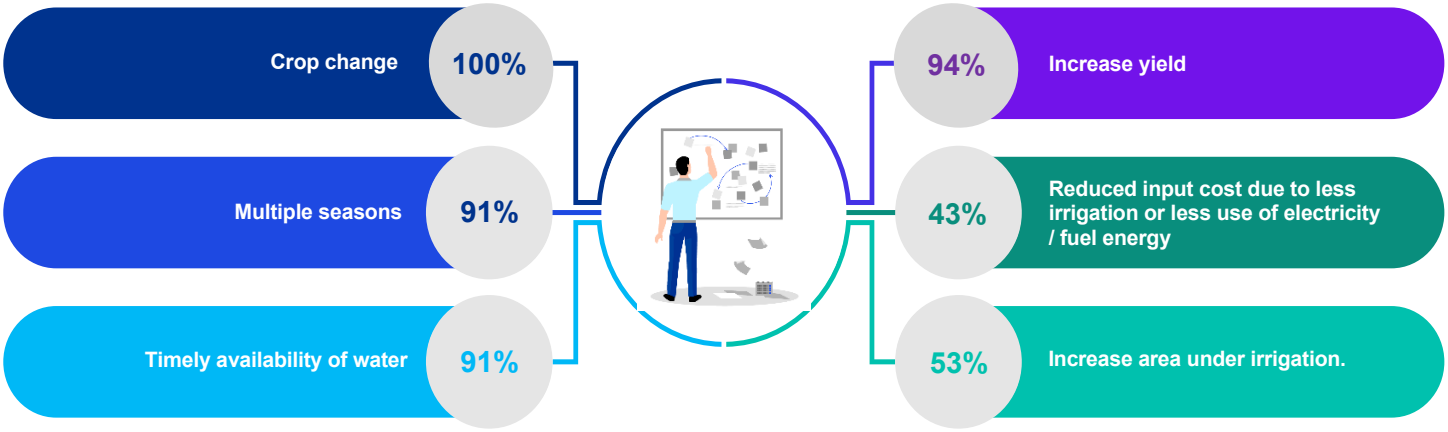
During the project evaluation, the beneficiaries reported positive outcomes resulting from pond rejuvenation activities as part of improving surface water availability. The data indicate that 100% of the respondents experienced an improvement in surface water availability, with 91% confirming surface water availability during summer. Improved surface water access indicates significant benefits in livestock and domestic use, leading to positive socio-economic outcomes.

> **The village women faced challenges in fetching water before the project interventions. The severity increased during water scarcity, making it difficult for livestock. After pond rejuvenation activities, the community experienced access to clean water, significantly improving the quality of life for villagers and their livestock.**
>
> ***- Farmer beneficiary from Chikada village***

3.2.3 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

3.2.4 Impact on agriculture practices



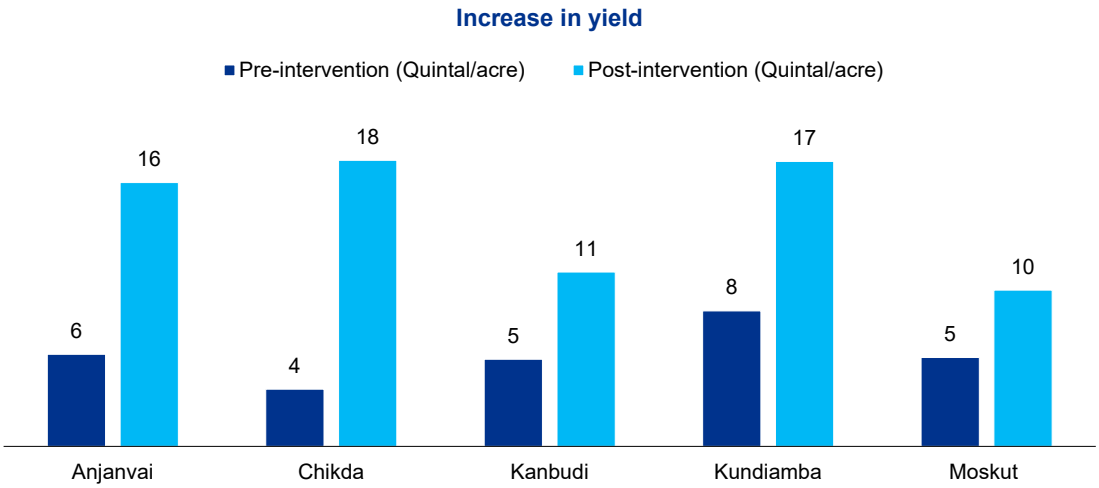
Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity, reduced input costs, and timely access

to water resources. These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.

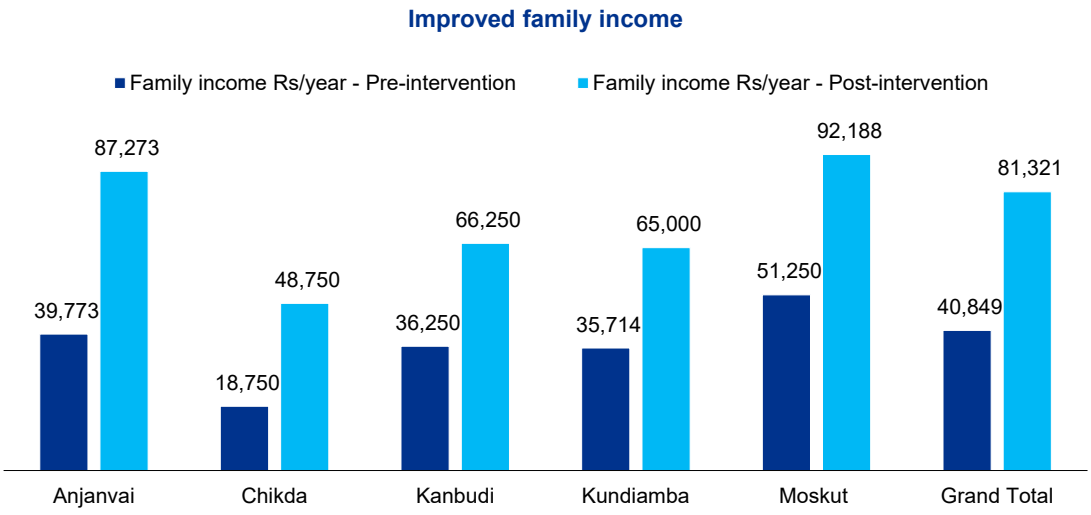
3.2.5 Increase in yield

The graph provided shows the impact of water availability and improved access on farming practices in the specified villages.



The data depicts a significant improvement in crop productivity after the interventions, with all villages showing an increase in yield. The delta change highlights a considerable difference between the pre- and post-intervention period. The analysis reveals that all villages experienced an increase in yield, with the most significant difference observed in Chikda and Anjanvai villages, with a 14 and 11 quintal/acre delta change, respectively. Kundiamba, Moskut, and Anjanvai villages also showed an increase in yield, ranging between 4-9 quintal/acre.

3.2.6 Impact family income



The graph focuses on the impact of the project interventions on the family income of the intervention villages. The data shows a significant increase in the average family income (99

percent), from Rs 40,849 per year to Rs 81,321 per year post-interventions, indicating the overall positive impact of the project's targeted interventions.

The analysis of the data highlights that all villages experienced an increase in family income post-interventions. Moskut village observed the highest delta change in family income, with an increase around Rs 40,000 per year. Chikda village also experienced a notable increase, with a family income increase of Rs 30,000 per year.

3.2.7 Impact on livestock

Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.

Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

Improved family income

The income generated through livestock business resulted in an average increment of INR 12,000 in the beneficiaries' annual family income.

The data presented suggests that the WHS has positively impacted livestock management practices. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS. The qualitative survey responses showing the quantifiable impact on family income indicate that the WHS has provided a reliable and stable supply of water, enabling efficient livestock management practices, leading to enhanced livelihoods and socio-economic outcomes for the beneficiaries.

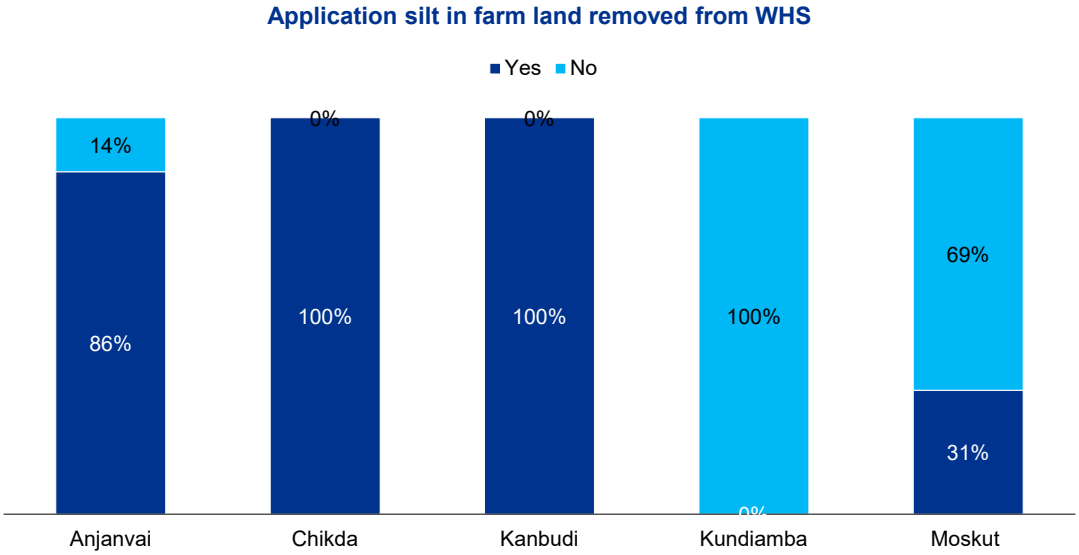
3.2.8 Impact on personal life

The project intervention has delivered several positive outcomes that significantly impact personal life. The responses from the beneficiaries suggest that the WHS has led to timesaving and a considerable reduction in physical effort. The data also indicates improved health outcomes, with 62% of the respondents highlighting the impact on their physical well-being. The outcomes demonstrate that the WHS has eased the burden of water collection and enabled beneficiaries to focus on their personal lives. The efficient and reliable access to water has reduced physical exertion, improved personal health, and enhanced overall quality of life. Thus, the project interventions have contributed to better socio-economic outcomes and improved the overall well-being of the beneficiaries.

3.2.9 Silt application on agriculture land

The application of silt on agricultural land has several benefits in promoting sustainable agriculture and improving soil fertility. Silt, which is a natural byproduct of water management activities like

the WHS system, is rich in nutrients and minerals that enrich the soil quality. The use of silt in agriculture improves soil texture, water retention, and soil fertility, promoting better plant growth and crop yields.



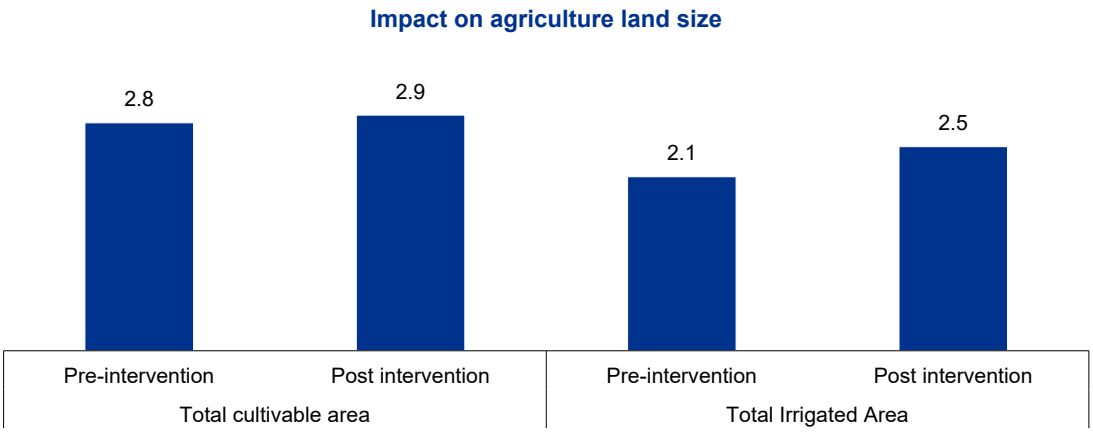
In discussions held with beneficiaries from four villages, Anjanvai, Chikda, Kanbudi, and Moskut, 60% of the respondents reported applying the silt generated from the WHS structure to their agricultural land with support from the implementation agency. The beneficiaries observed positive outcomes, including improved soil quality and enhanced soil productivity, leading to better crop yields and increased water retention capacity. The feedback underscores the significance of promoting sustainable agricultural practices and encouraging the utilization of significant resources like silt generated from the WHS structure to support sustainable development in the region.

All respondents (100%) reported improvements in soil health, with a subsequent reduction in the need for fertilizers. The response data also indicated 100% achievement in improving productivity and reducing irrigation cycles across all beneficiaries. The outcomes demonstrate that utilizing silt in agriculture practices has resulted in the provision of essential nutrients to the soil, promoting eco-friendly practices, and leading to an overall reduction in the use of chemical fertilizers.

3.3 Agriculture and Livelihood

3.3.1 Impact on agriculture land

Through discussion with respondents, it was reported that the increase in average total net sown area from 2.8 acres to 3.2 acres post-intervention. This suggests that the project interventions have yielded positive outcomes on agriculture and water resource management practices. The increase in net sown area reaffirms the efficiency of the WHS interventions in promoting sustainable water management practices and enhancing agricultural productivity in the project area. This can be explained further through below graph-



The increase in the total cultivable area from 2.8 acres to 2.9 acres and the increase in the total irrigated area from 2.1 acres to 2.5 acres post-intervention indicate a positive impact of the project interventions on agricultural productivity. The results suggest that the interventions have contributed to enhancing the agricultural potential of the project area through improved water resource management and sustainable practices.

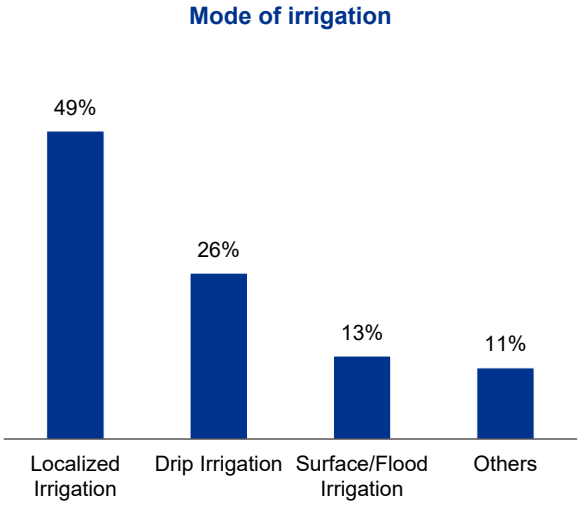
It is important to note that cultivable area and irrigated area are not the same. While cultivable area refers to the total area that is suitable for cultivation, irrigated area refers to the area of land that receives water through artificial means, such as the use of water pumps, canals, or other irrigation systems. Through project intervention many of the beneficiaries were supported for drip irrigation Hence, this has resulted into the potential increase on an average of total irrigated area.

The village wise details-

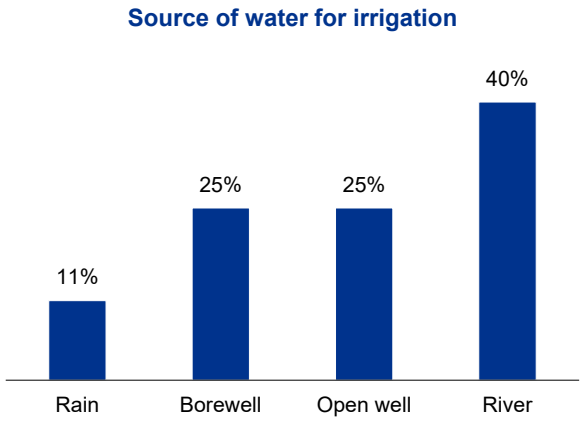
	Total cultivable area		Total Irrigated Area	
Village name	**Pre-intervention**	**Post intervention**	**Pre-intervention**	**Post intervention**
Anjanvai	3.5	3.7	2.8	3.2
Chikda	2.5	2.5	1.5	2.0
Kanbudi	1.0	1.1	0.5	1.1
Kundiamba	2.3	2.5	2.3	2.5
Moskut	2.5	2.5	1.7	2.0
Grand Total	**2.8**	**2.9**	**2.1**	**2.5**

The village-level analysis indicates variable outcomes across villages. Anjanvai, Kundiamba, and Moskut report an increase in both total cultivable area and total irrigated area, while Kanbudi records a marginal increase in both. Chikda, on the other hand, maintains its total cultivable area but reports a significant increase in the total irrigated area.

3.3.2 Mode of irrigation

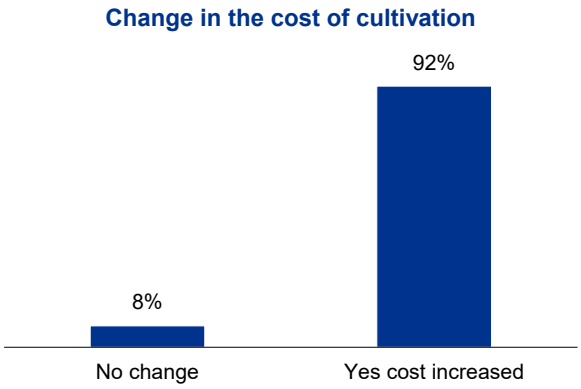


The distribution of irrigation practices in the project area indicates that the adoption of localized irrigation is the most prevalent, followed by drip irrigation, surface/flood irrigation, and other methods. The data highlights the shift towards localized and drip irrigation, which are more efficient and eco-friendlier compared to conventional irrigation methods like surface/flood irrigation. The results suggest that the agricultural interventions have yielded positive impacts on irrigation practices in the project area, encouraging beneficiaries to adopt sustainable and efficient irrigation methods.



The chart highlights the different sources of water for irrigation practices in the project area, indicating that the majority of the respondents rely on rivers for irrigation purposes (40%). Borewells and open wells each account for 25% of the sources of water for irrigation, while rainwater accounts for only 11% of the sources. The results emphasize the significance of proper management of water resources, particularly in arid and semi-arid regions such as the project area.

3.3.3 Cost of Cultivation



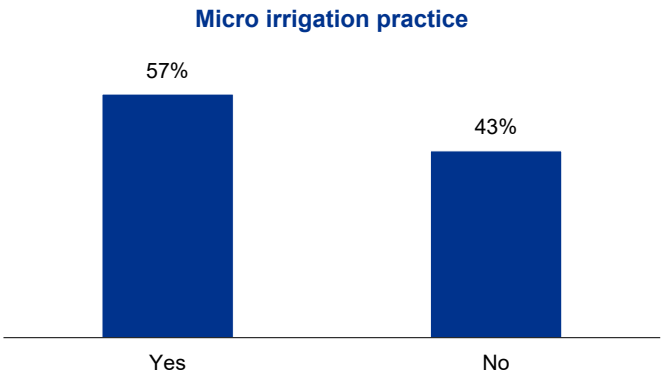
According to discussions with project beneficiaries, there has been an increase in the cost of cultivation. The beneficiaries have reported this rise in cost as a result of higher expenses incurred in purchasing chemical fertilizers and pesticides. Additionally, the increase in market rates has further escalated the cost of these inputs.

The project interventions included training on non-pesticide management (NPM) techniques and demonstration sessions on organic farming. However, despite this, the respondents shared that they are only practicing organic and NPM techniques on the farming land that they intend to consume for personal use, whereas for the remaining land they continue to use chemical fertilizers.

The beneficiaries shared that the yield through organic farming is less in comparison to chemical usage. Moreover, there is no demand for organic produce in nearby marketplaces. The reluctance to switch to organic farming entirely serves as a hindrance to the efficient adoption of sustainable agricultural practices.

	Average cost (INR)	Delta change
Cost of irrigation pre-project intervention	1,957	975 (50%)
Cost of irrigation post-project intervention	2,932	

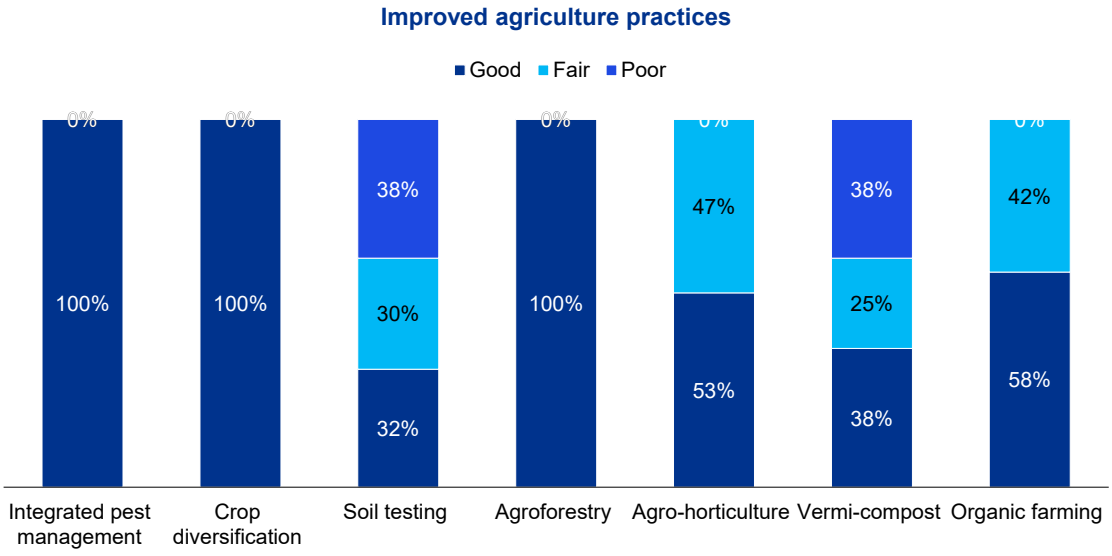
3.3.4 Micro irrigation



The above chart indicates the proportion of project beneficiaries who reported practicing efficient use of water for irrigation through micro-irrigation techniques. The results show that 57% of the participants have reported practicing efficient water usage, whereas 43% have not, but have expressed the willingness to initiate the practice and asked implementation partner for further support.

The responses suggest that nearly half of the respondents require further assistance in the effective adoption of micro-irrigation techniques. The project interventions may have already led to some positive outcomes in promoting sustainable water resource management practices, but there is a need for continued support in ensuring the widespread adoption of efficient irrigation practices.

3.3.5 Understanding on improved agriculture practices



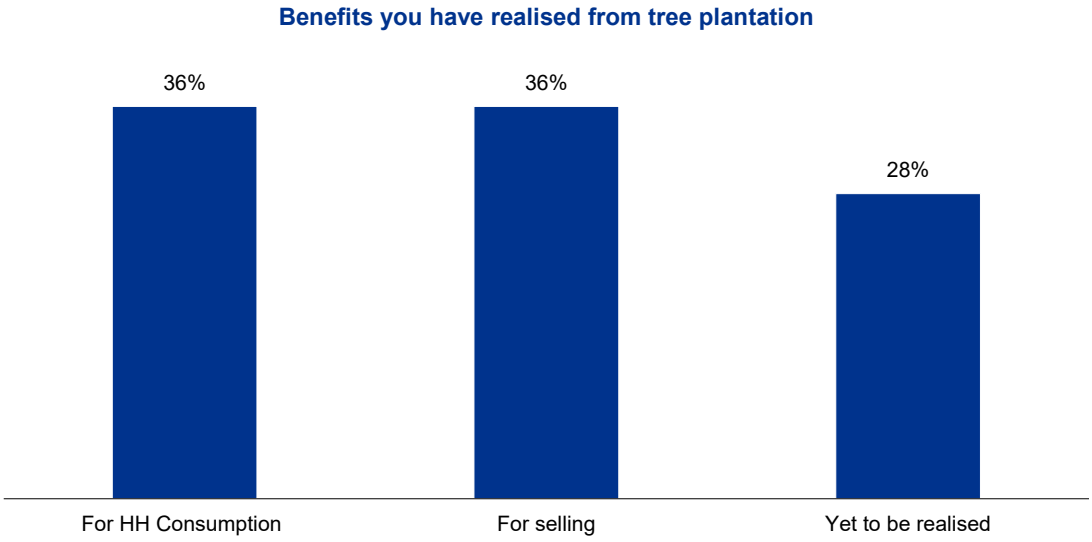
The graph indicates the rating given by project beneficiaries for their understanding of various improved agricultural practices, including integrated pest management, crop diversification, soil testing, agroforestry, agro-horticulture, vermicompost, and organic farming. The majority of the respondents rated their understanding of integrated pest management, crop diversification, and agroforestry as good, indicating that these practices have been well-received and understood by the beneficiaries.

The rating for soil testing was somewhat mixed, with approximately one-third of the respondents rating their understanding as good, and the remainder rating it as fair or poor. The relatively low rating for soil testing suggests that further educational efforts and awareness building may be necessary to promote the adoption of soil testing as a measure of improving the quality and fertility of the soil.

Moreover, the rating for vermi-compost and organic farming practices indicates the need for greater awareness building and knowledge dissemination to promote and encourage the widespread adoption of these practices. While it is encouraging to note that some of the respondents considered their understanding good for organic farming, a significant proportion rated their understanding as fair or poor.

3.3.6 Tree plantation

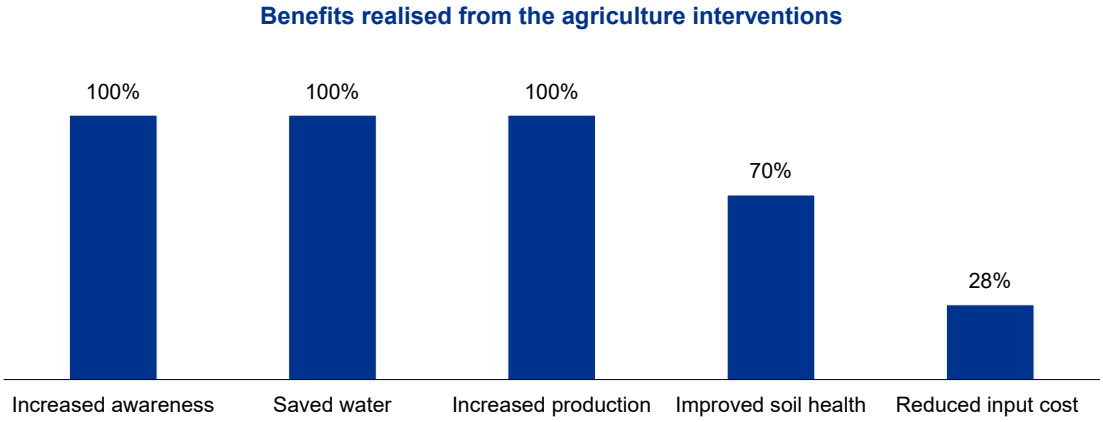
47% of the respondents shared that they participated in tree plantation intervention implemented through project. Under this intervention, implementation partner distributed the seeds and sapling for varieties of trees and vegetable among the beneficiaries. This included fruits mango, lemon, Chiku and Guava. The objective of these activity was to enhance the income levels of the farmers and improve food security.



The graph indicates the percentage of project beneficiaries who have chosen to implement the improved agriculture practices for household consumption, selling, or are yet to realize their benefits. The results indicate that an equal proportion of respondents (36%) have reported implementing the improved agriculture practices for household consumption and selling, while 28% have yet to realize the benefits of the interventions.

In conclusion, the results of the chart show that the project interventions have had a positive impact in promoting sustainable agricultural practices among the beneficiaries.

3.3.7 Benefit realized from agriculture intervention



The above graph represents the benefits realized from the agriculture interventions and the corresponding number of beneficiaries who reported experiencing such benefits. The results indicate that the interventions had a 100% success rate in creating increased awareness, saving water, and increasing production.

Furthermore, more than two-thirds of the respondents (70%) reported experiencing improved soil health, indicating that the project interventions had a positive and sustainable impact on the soil health. Improved soil health is essential for enhancing agricultural productivity, promoting food security, and conserving the environment.

However, only a small proportion of the beneficiaries reported reduced input costs (28%), suggesting that further interventions are necessary to reduce the costs of agricultural inputs and improve the affordability of resources. Nevertheless, the high success rate of other benefits highlights the incredible potential of promoting sustainable agriculture practices in the region.

In conclusion, the project interventions have enabled communities to experience several benefits, which have significantly improved their socio-economic wellbeing.

3.3.8 Impact on cost and produce from agriculture practice

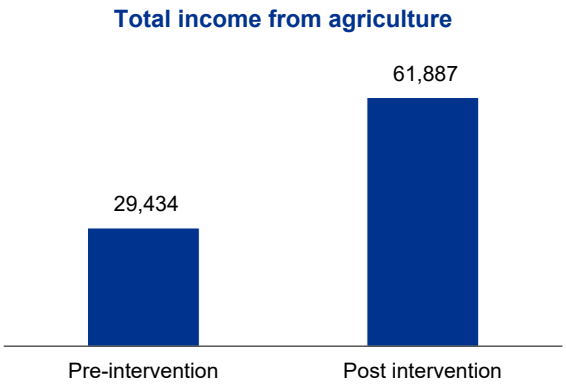
Through discussion with project beneficiaries, it was reported that, 28% of the respondents have been able to reduce their input costs, while the vast majority (72%) have not.

Reducing the input cost is essential for improving the efficiency and sustainability of agriculture practices while increasing the profitability of the beneficiaries. The low percentage of respondents who have been able to reduce their input cost may indicate potential barriers such as dependencies on chemical pesticides.

The results also indicate the need for further interventions that promote the use of cost-effective and sustainable agricultural practices. By adopting such measures, beneficiaries can reduce their input costs, increase their yields, and improve their financial wellbeing.

3.3.8.1 Agriculture income

The graph represents the total income from agriculture, the average income and the delta change before and after the interventions. The data indicates that the total income from agriculture has almost doubled (110%) post-intervention from 29,434 to 61,887.



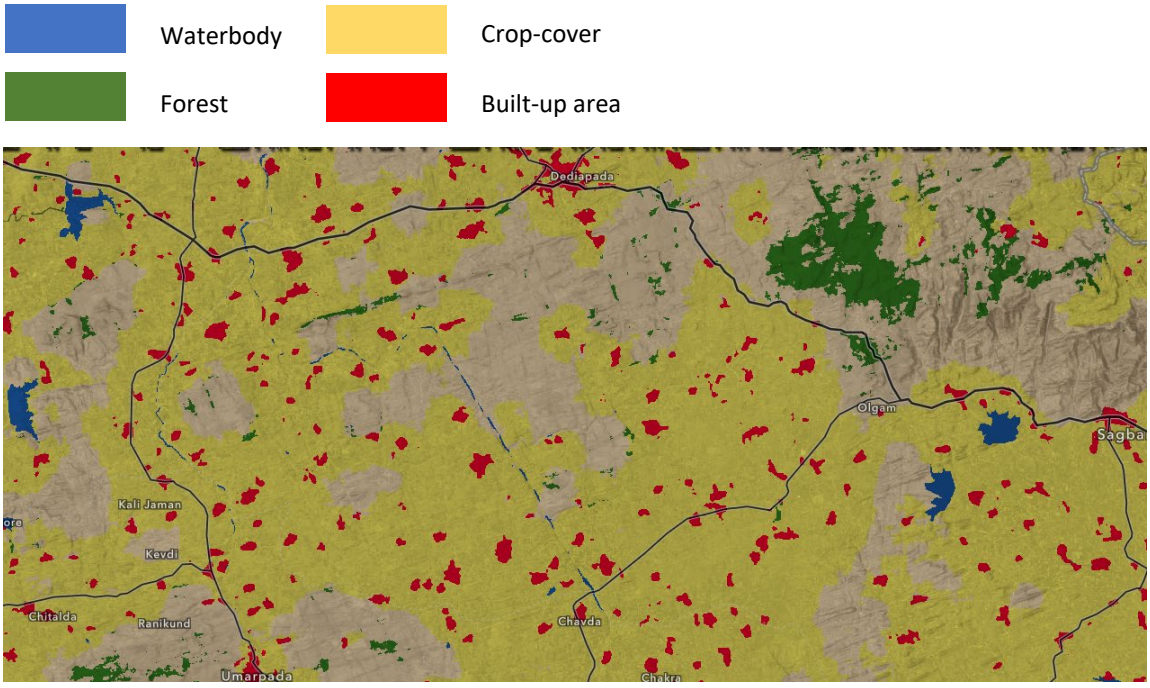
This considerable increase in income underscores the tremendous impact of the agriculture interventions on the beneficiaries' financial wellbeing. The interventions have significantly enhanced productivity and yield, leading to more significant economic returns. In conclusion, the considerable increase in the total income of the beneficiaries after the project interventions reflects the success of the agriculture interventions in increasing productivity and yield.

3.4 Impact on Environment

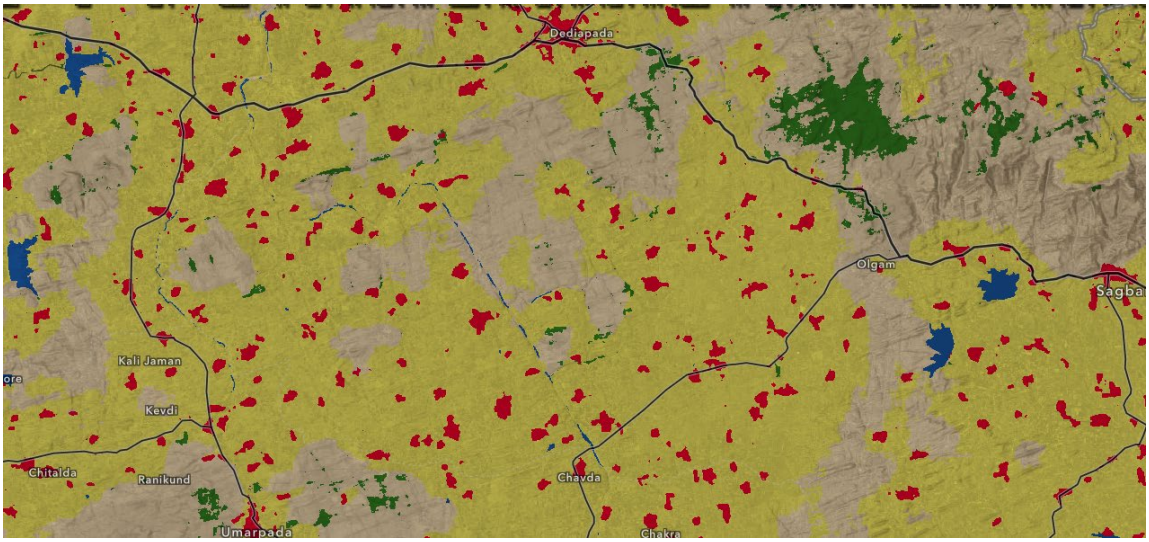
The implementation of the water harvesting project has had a tremendous impact on the environment. With the help of water harvesting techniques, the project contributed to the recharge of the groundwater tables, which has resulted in an increase in the water level of nearby streams and rivers. Additionally, the project has led to a significant reduction in soil erosion, along with the formation of new vegetative cover, which has contributed to the overall conservation of the environment. Moreover, the initiative's positive impact on the environment has been reinforced by concurrent government-run projects, resulting in a compounded positive effect.

3.4.1 Land-use and land-cover

Water harvesting techniques can have a positive impact on land use and land cover by stabilizing and improving soil quality, increasing vegetation cover, and promoting the restoration of degraded land. By capturing and utilizing rainwater, water harvesting improves soil moisture, leading to an increase in vegetation growth and carbon sequestration.

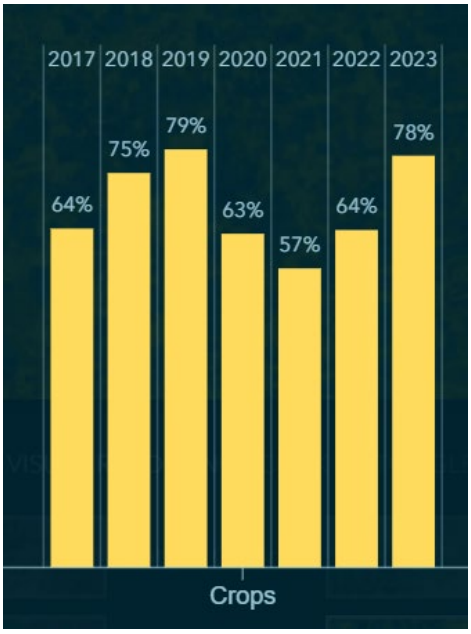


Year 2020: Land-use and land cover of project intervention area



Year 2023: Land-use and land cover of project intervention area

The two images of the project intervention area, taken at different time intervals, illustrate a significant increase in crop cover. The increase in crop cover indicates a positive impact on land use and agricultural productivity, leading to increased yield. The improved crop cover corresponds to an overall improvement in land cover, indicating a healthy and resilient ecosystem. The project's interventions support the restoration and conservation of land, resulting in a landscape that facilitates sustainable land management practices.



The chart presented is sourced from the ArcGIS Living Atlas website, which is an eminent collection of geo-spatial data from various regions around the globe.

The chart presents the percent of land coverage for crop cover from a project intervention area for the years 2017 through 2023. the data for 2022 shows a slight increase in land coverage to 64%, and it is expected to continue increasing up to 78% in 2023. This suggests that the project's interventions have been successful in contributing to increased crop cover in the intervention area.

3.4.2 Impact on soil quality

During the visit to the project intervention area, soil samples were collected from three locations, namely Anjanvai, Moskut, and Kanbudi. These samples were randomly obtained and tested at the KVK Bharuch branch. The results of the soil analysis revealed the presence of organic carbon (OC), which is a critical component in determining soil health and fertility.

Organic carbon is known to improve soil structure, increase water-holding capacity, enhance nutrient availability, and promote microbial activity. According to the test reports, the values of organic carbon were found to lie within the medium range, i.e., between 0.50 to 0.75. This suggests

that there exists potential for increasing the organic carbon content of the soil through project intervention. Studies have shown that for every 1% increase in soil organic carbon, the soil can hold an additional 20,000 gallons (75.7 Cubic meter) of water per acre1. This is because organic matter improves soil structure, increasing its porosity and ability to retain water (Hida R. Manns, 2014) [1]. Reports are attached in annexure.

Kanbudi

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.58		Normal
2	EC	0.10	dS/m	Low
3	Organic Carbon (OC)	0.59	%	Medium
4	Available Nitrogen (N)	266.56	kg/ha	Medium
5	Available Phosphorus (P)	57.27	kg/ha	High
6	Available Potassium (K)	38.04	kg/ha	Low
7	Available Iron (Fe)	12.42	ppm	High
8	Available Mangenese (Mn)	7.93	ppm	Medium
9	Available Zinc (Zn)	0.46	ppm	Low
10	Available Copper (Cu)	1.02	ppm	High

Moskut

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.52		Normal
2	EC	0.10	dS/m	Low
3	Organic Carbon (OC)	0.68	%	Medium
4	Available Nitrogen (N)	316.74	kg/ha	Medium
5	Available Phosphorus (P)	61.12	kg/ha	High
6	Available Potassium (K)	135.21	kg/ha	Low
7	Available Iron (Fe)	13.94	ppm	High
8	Available Mangenese (Mn)	10.38	ppm	High
9	Available Zinc (Zn)	0.89	ppm	Medium
10	Available Copper (Cu)	1.15	ppm	High

Anjanvadi

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.71		Normal
2	EC	0.13	dS/m	Low
3	Organic Carbon (OC)	0.43	%	Low
4	Available Nitrogen (N)	279.94	kg/ha	Medium
5	Available Phosphorus (P)	58.65	kg/ha	High
6	Available Potassium (K)	98.25	kg/ha	Low
7	Available Iron (Fe)	11.82	ppm	High
8	Available Mangenese (Mn)	8.86	ppm	Medium
9	Available Zinc (Zn)	0.31	ppm	Low
10	Available Copper (Cu)	0.57	ppm	High

3.4.3 Impact on water quality

On visit to the project intervention area, water samples were obtained from three locations, Anjanvai, Moskut, and Kanbudi, and were analyzed at the BAIF-KVK Bharuch center. The water analysis report indicates the presence of Total Dissolved Salts (TDS) within the medium range, which is between 300 to 1,000 parts per million (ppm). High-turbidity levels, which are often linked to high TDS levels, can have adverse effects on household drinking water by making it unappealing and less safe for consumption.

[1] Importance of soil organic carbon on surface soil water content variability among agricultural fields

To address these issues, appropriate water treatment and management techniques such as desalination, reverse osmosis, and chemical treatment processes should be implemented. Reports are attached in the annexure.

Summary:

Good
Medium
Harmful

Indicators	Anjanvadi	Moskut	Kanbudi
pH	7.07	6.96	7.05
EC (Ds/m)	0.81	0.51	1.04
Total Dissolved Salts - TDS ppm	518	327	665
Chloride (meq./lit)	3.44	2.8	5.66
Calcium (meq./lit)	3.8	2.62	3.17
Magnesium (meq./lit)	2.51	2.6	5.59
Sodium (mg/lit)	1.84	0.98	2.29

3.5 Case Study

Once a farmer named Ganesh Bhai lived in the Kanbudi village of Gujarat, India with his family. He had seven acres of agricultural land, but it was rain-fed, which made it difficult for him to cultivate throughout the year. During the cultivation seasons, he and his family had to migrate to other villages for work as they barely managed to sustain their livelihood on the farm.

Ganesh bhai faced several challenges while trying to run his farm. The hilly terrain caused soil erosion, which reduced soil productivity. The lack of irrigation made it challenging, and the family had to rely on moneylenders and traders to make ends meet. In addition, the family faced water scarcity during summers, which only added to their hardships.

One day, Ganesh bhai came to know about the 'Water for Livelihood' project implemented by AKRSP with support from Asian Paints, which aimed to address the challenges faced by small and marginal farmers. The project promised to provide irrigation support and improve soil fertility.

Ganesh bhai became a beneficiary of the project, and he received training on sustainable and organic farming practices. The project team provided support for water for irrigation through check dams, silt application, farm border plantation, and promoted paddy cultivation through SRI.

After implementing the interventions for some time, Ganesh bhai saw a significant improvement in his farm. He was able to practice agriculture throughout the year, which not only contributed to his self-efficient but helped improve his soil quality as well. He earned a stable income from the farm, which allowed him to add two more livestock - cow and buffalo to the farm and start a small milk business.

Over time, Ganesh bhai moved his family to the farm since it was more convenient for him. He continued to practice sustainable and organic farming for household consumption. While he acknowledged the importance of organic farming, he understands the lack of a marketplace in

tribal regions. However, he is determined to find suitable solutions and shifting towards the organic farming at full scale.

Ganesh bhai was grateful for the 'Water for Livelihood' project and the support that helped transform his farm and his life. He thanked the project team for the handholding support and for making a positive impact on his life.

04

Conclusion and Recommendations

4 OECD-DAC

4.1 Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 83 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 32 percent of the respondents were only dependent on rainfed agriculture. Around 35 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 201320F

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water

- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil,

air and water [including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].

- (x) rural development projects

4.2 Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation	**Target 6.1** By 2030, achieve universal and equitable	The project activities included constructing/repairing water

	access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land 	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements. **Target 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	Project activities included promotion of agro-forestry and prevention of forest among the community members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[xv] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[xvi] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[xvii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on water for livelihood aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

4.3 Evaluation Criteria- Effectiveness

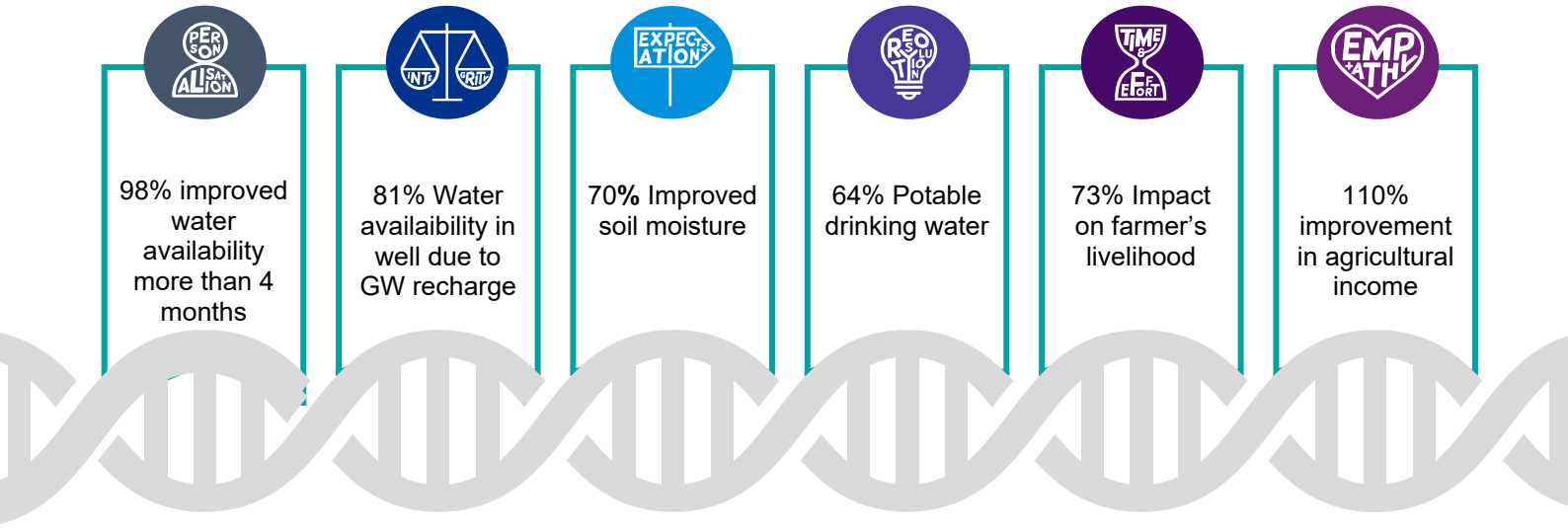
Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and

discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Water for Livelihood project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health, reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

4.4 Evaluation Criteria- Efficiency

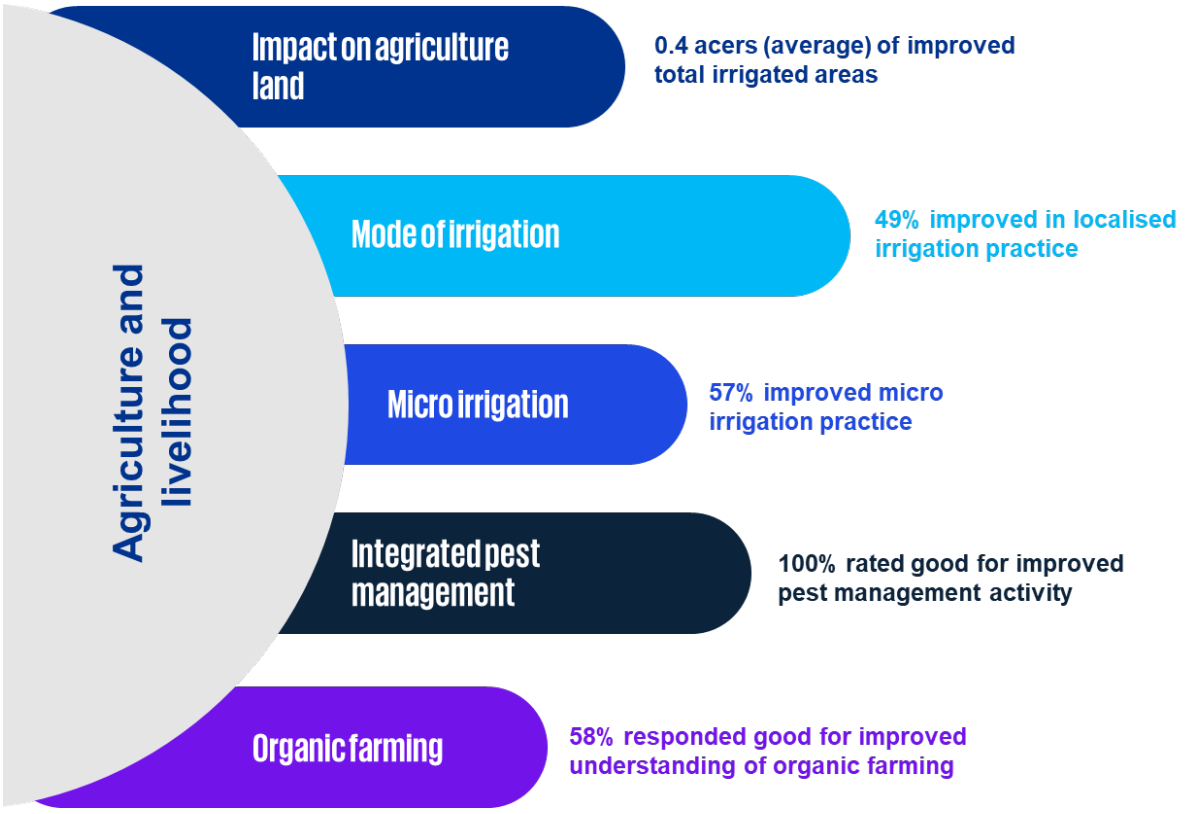
The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

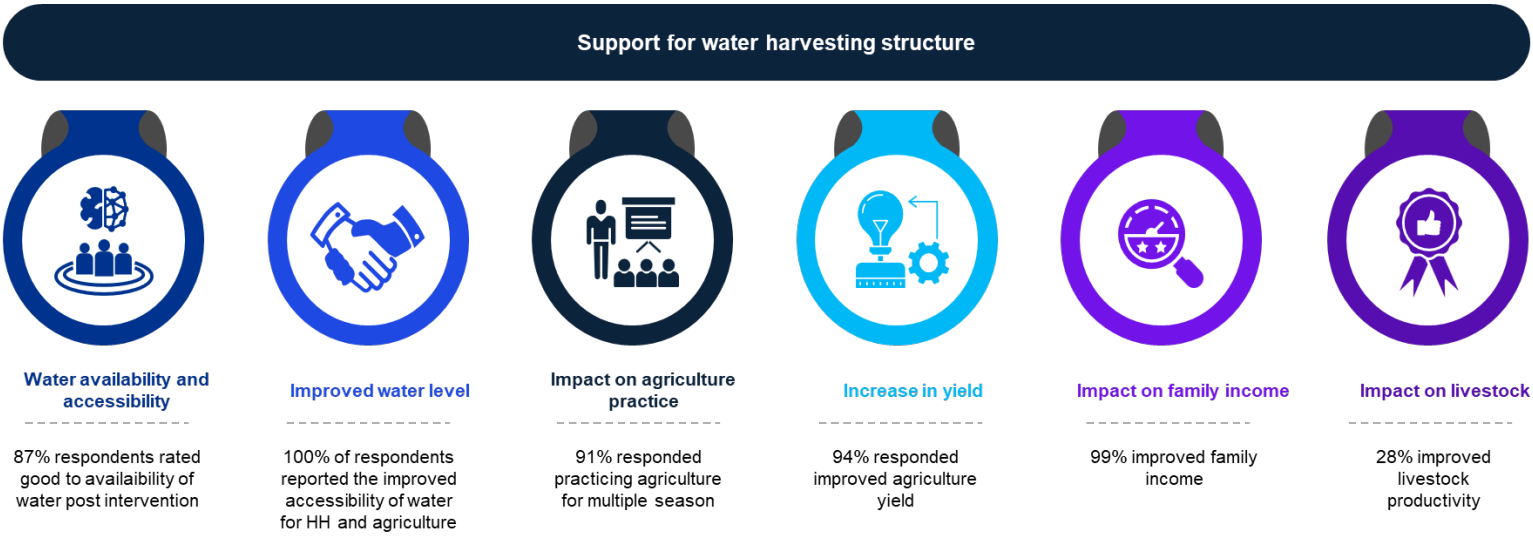
Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency.

However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

4.5 Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.





1. Increased vegetation around the water bodies
2. Observed new or reemergence of new species around the water bodies due to the increased availability of water
3. Observed increased citing of birds/wild animals around the water bodies due to the increased availability of water
4. Increase in availability of fuelwood due to the intervention

4.6 Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

4.6.1 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and

community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

All respondents stated that the Water User Association (WUA) has been formed in their village. During discussions, it was understood that all respondents (100 percent) were aware of the formation and role played by WUAs. WHS beneficiaries reported that they or their family members are part of WUAs, indicating awareness of governance structure for WHS. Respondents from shared that a separate fund for O&M of the WHS has been set up and water tax of INR 200 to 500 annually depending on the land holding is being levied.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

5 Recommendations

Project Design	
Key Issues	**Recommendations**
During our visit, it was found that women's participation in the project cycle is limited to labour work in agricultural activities. Men are responsible for decision-making and financial management.	To enhance women's role, targeted training, capacity-building programs, and gender mainstreaming in decision-making processes should be initiated. Women should be involved at all stages of the project for sustainability and to promote gender equality.
Farmers have acknowledged the positive impact of the improved irrigation cycle for all three seasons. It has contributed to a significant increase in agricultural output. However, the flip side of this progress is that there has been a concurrent rise in the cost of cultivation. The increasing cost of cultivation can be attributed to the greater dependency on chemical fertilisers and pesticides.	In view of this situation, it is essential to explore viable options to reduce the cost of cultivation while maintaining the current levels of productivity. Innovative and sustainable approaches such as natural fertilisers, crop rotations, and integrated pest management could be explored to reduce the reliance on costly chemical inputs.
Our observations indicate that there has not been a system for effective tracking of the progress of initiatives in the project cycle, particularly those related to agriculture and non-pesticide management training. This has resulted in farmers not being able to follow up on the project's interventions or only partially adapting them, even though they are intended for self-consumption.	It is recommended to establish a robust system for the effective tracking and promotion of agriculture and non-pesticide management training interventions. This can be achieved through the use of appropriate software tools and regular communication with farmers. Improved tracking will facilitate early identification of bottlenecks in the implementation process and enable timely corrective actions, ensuring the success of the project and the benefit to the farmers.
During our field visit, we noted that despite the formation of water user associates (WUAs) for the Water Harvesting Structures (WHS) beneficiaries, they were mostly inactive. The responsibilities and roles of the WUAs were not clearly communicated, resulting in a lack of active participation by their members towards water stewardship.	To ensure the long-term sustainability of the WHS and promote efficient management of water resources, it is imperative to encourage the active participation of all WUA members. In this regard, it is recommended to introduce and practice water budgeting and crop planning at the community level, which can provide farmers with the necessary information to better assess their irrigation needs and water requirements.
Farmers have acknowledged the effectiveness of the structures in mitigating these issues. However, the run-even levelling of farmland has prevented the accumulation of water to the desired level. Consequently, performing land levelling activities has become an essential prerequisite for enhancing the effectiveness of the WHS. Regrettably, this valuable activity can be relatively expensive, and many beneficiary farmers are unable to afford it.	To address this challenge, we recommend incorporating land levelling activities into the project activities. The project can collaborate with local stakeholders and government initiatives such as MGNREGA to provide low-cost land levelling equipment to farmers, and extensive capacity-building programs could orient farmers towards the importance of land levelling in enhancing the effectiveness of WHS.

Project Scale-up

Tailored strategies for outreach

Tailored strategies for outreach for women and youth members of the communities must be implemented to ensure that they benefit from the Water for Livelihood project. Utilizing design tools like empathy maps might be useful for understanding the varied needs, experiences, and aspirations, and designing tailored mobilization strategy as well as follow-up support. Key farmer personas can be identified such as tenant farmers, women, youth, elderly farmers, etc.

Promotion of organic farming

The project can be upscaled by promoting organic farming practices that will enhance soil quality, reduce input costs, and ensure food safety. Farmers should be encouraged to adopt organic inputs and natural fertilisers, which can help minimize dependence on chemical pesticides and enhance the quality of produce. The use of organic certification can also be promoted to increase the market value of the produce.

Collectivisation

The formation of strong farmer groups can strengthen the bargaining power of farmers and enable them to take advantage of shared inputs, resources, and knowledge. Farmer producer organisations can be established, which will enable farmers to pool resources and market their produce collectively. This can help reduce transaction costs and provide a platform for capacity-building and technical training.

Market linkages

To scale up the project, an efficient market linkage system that provides better prices and transparency for farmers must be developed. This can be achieved by creating e-commerce platforms for the farmers to sell their produce or by initiating agreements with neighbouring towns and cities to purchase the farmers' crops. Additionally, integrated value chains that create new jobs and markets can be promoted.

05

Measuring the Social Return

6 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

6.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change

Outcomes	Indicators and Sources	Quantity (scale)
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	43.00
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	42.14
Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	43.00
	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	40.42
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	21.93
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	46.17
Reduced cost of cultivation due to SRI techniques	Reduced cost of cultivation for paddy farmers using SRI techniques https://www.ceicdata.com/en/india/cost-of-cultivation-foodgrains-cereals-paddy-gujarat/cost-of-cultivation-paddy-gujarat-operating-cost	72.00
Reduced cost of cultivation due to multching		30.00
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	696.75
Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	929.00
	Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	794.19
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	260.12
Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	43.00

Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	43
Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	43
Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	557.40
	Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	575.50
Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	323748.51
Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	929
Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	929
Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	929

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.
- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

6.2 Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

Attribution**:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

Displacement**:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

Drop-off and Duration**:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.
- *Water Resources Development @20 percent***:** Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.

For a detailed view, refer table for SROI calculation.

Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total input value (INR)
Financial inputs	CSR Funding from APL	*1,81,98,944*
Time input	Time input from beneficiaries (1782 hours)	*52,569*
Total		***1,82,51,513***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	0.00%	0.00%	0.00%	20%	94,011.94
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Gujarat government (per hactare)	314.00	3.00%	0.00%	16.00%	20%	35,754.65
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/- by Vadodara	330.00	3.00%	0.00%	16.00%	20%	45,323.09

			Municipal Corporation.						
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Narmada district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Gujarat- 2203/Q	22602.78	3.00%	0.00%	16.00%	20%	45,61,459.44
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Gujarat- 2203/Q	2203.00	3.00%	0.00%	16.00%	20%	11,75,376.06
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	0.00	3.00%	0.00%	16.00%	20%	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	0	3.00%	0.00%	16.00%	20%	0.00

SRI Cultivation	Reduced cost of cultivation due to SRI techniques	Reduced cost of cultivation for paddy farmers using SRI techniques https://www.ceicdata.com/en/india/cost-of-cultivation-foodgrains-cereals-paddy-gujarat/cost-of-cultivation-paddy-gujarat-operating-cost	Average reduction in cost of cultivation per hectare due to SRI (24%)	1775.04	3.00%	0.00%	16.00%	20%	1,04,133.79
Multiching support	Reduced cost of cultivation due to multching		Government assistance of 4000/hectare for promotion of multching	4000	3.00%	0.00%	10.00%	33%	1,04,760.00
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Cost of training on improved agriculture practices	300.00	3.00%	0.00%	10.00%	33%	14,59,830.60

Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75	3.00%	0.00%	16.00%	20%	3,32,111.46
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661	3.00%	0.00%	16.00%	20%	4,27,737.07
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Gujarat	52.00	3.00%	0.00%	16.00%	20%	1,43,275.34

Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00	3.00%	0.00%	50.00%	20%	1,17,121.68
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00	3.00%	0.00%	50.00%	20%	0.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00	3.00%	0.00%	29.00%	20%	1,48,070.50

	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00	3.00%	0.00%	29.00%	20%	6,23,672.95
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.	11246.61	3.00%	0.00%	70.00%	20%	18,24,238.17

		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36	3.00%	0.00%	70.00%	20%	3,46,221.81
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58	3.00%	0.00%	70.00%	20%	54,642.27
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00	3.00%	0.00%	70.00%	20%	11,75,163.63

	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00	3.00%	0.00%	70.00%	20%	1,89,237.30
	Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00	3.00%	0.00%	70.00%	20%	5,406.78

6.3 SROI results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:

Net present value of social value created	SRoI value
3,93,59,993	2.16
Net present value of total Investment	**SRoI Ratio**
1,81,98,944	1:2.16

For every INR 1 invested, the programme has generated social impact of INR 2.16

***Sensitivity Analysis**:* Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between INR 1.74 and INR 2.35.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters	Test case SRoI	Observation
1	Deadweight	2.16	Deadweight is 0%	2.22	No significant change
			Deadweight is 8%	2.04	
2	Displacement	2.16	Displacement is 0%	2.16	No significant change
			Displacement is 5%	2.05	
3	Attribution	2.16	Attribution is 11%	2.35	No significant change
			Attribution is 75%	1.96	

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters	Test case SRoI	Observation
4	Drop-off	2.16	Drop-off is (3 years)	2.19	Significant change
			Drop-off is (5 years)	1.74	

6.4 Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

7 ANNEXURES

Financial Proxies

Summary of activity	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Gujarat government (per hectare)	314.00
		Increased availability of water in wells/borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a month gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/- by Vadodara Municipal Corporation.	330.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Narmada district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Gujarat-2203/Q	22602.78
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Gujarat-2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	0
SRI Cultivation	Reduced cost of cultivation due to SRI techniques	Reduced cost of cultivation for paddy farmers using SRI techniques https://www.ceicdata.com/en/india/cost-of-cultivation-foodgrains-cereals-paddy-gujarat/cost-of-cultivation-paddy-gujarat-operating-cost	Average reduction in cost of cultivation per hectare due to SRI (24%)	1775.04
Multiching support	Reduced cost of cultivation due to multching		Government assistance of 4000/hectare for promotion of multching	4000

Summary of activity	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Cost of training on improved agriculture practices	300.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Gujarat	52.00
Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00

Summary of activity	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.	11246.61
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00
	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00
	Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00

Soil test reports

SOIL HEALTH CARD

FARMER'S DETAILS

Name	
State	Gujarat
District	Bharuch
Taluka	Dedaipada
Village	Anjnvai
Aadhar No.	
Mo.No.	

Soil Sample Details

Sample No.	1
Sample Date.	27/11/2024
Survey No.	
Report Date	02/12/2024

Name of Laboratory	Krishi Vigyan Kendra(KVK) Soil Testing Lab,Chaswad,Bharuch

Soil Test Results

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.71		Normal
2	EC	0.13	dS/m	Low
3	Organic Carbon (OC)	0.43	%	Low
4	Available Nitrogen (N)	279.94	kg/ha	Medium
5	Available Phosphorus (P)	58.65	kg/ha	High
6	Available Potassium (K)	98.25	kg/ha	Low
7	Available Iron (Fe)	11.82	ppm	High
8	Available Mangenese (Mn)	8.86	ppm	Medium
9	Available Zinc (Zn)	0.31	ppm	Low
10	Available Copper (Cu)	0.57	ppm	High

Secondary & Micro Nutrient Recommendation

Sr.No.	Parameter	Fertilizer Recommendation for Refrence Yield (With Organic Manure)
1	Iron	0 kg FeSo4/Acre
2	Mangenese	8 kg MgSo4/Acre
3	Zinc	10 kg ZnSo4/Acre
4	Copper	0 kg CuSo4/Acre

General Recommendation

1	Lime/Gypsum			
Sr.No.	Parameter	Low	Medium	High
1	pH	<6.5	6.5-8.2	>8.21
2	EC	<1.0	1.0-2.0	>2.10
3	Organic Carbon	<0.50	0.50-0.75	>0.76
4	Available Nitrogen	<250	251-500	>501
5	Available Phosphorus	<28	28-56	>57.1
6	Available Potassium	<140	140-280	>281
7	Available Iron	<5.0	5.00-10.00	>10.00
8	Available Mangenese	<5.0	5.00-10.00	>10.00
9	Available Zinc	<0.50	0.51-1.0	>1.1
10	Available Copper	<0.20	0.20-0.40	>0.41

Crop	Refrence Yield (For the first harvest)	Organic Fertilizer & Quantity	Fertlizer Combination -1	Fertlizer Combination -2
Mango	15-20 kg/tree	20 kg/pit	163 g Urea/tree	150 g Urea/tree
			80 g SSP/tree	26 g DAP/tree
			163 g MOP/tree	163 g MOP/tree
Sapota	10-15 kg/tree	20 kg/pit	217 g Urea/tree	175 g Urea/tree
			250 g SSP/tree	83 g DAP/tree
			108 g MOP/tree	108 g MOP/tree
Guava	5-10 kg/tree	20 kg/pit	217 g Urea/tree	219 g Urea/tree
			250 g SSP/tree	83 g DAP/tree
			0 g MOP/tree	108 g MOP/tree
Custardapple	5-10 kg/tree	20 kg/pit	435 g Urea/tree	392 g Urea/tree
			250 g SSP/tree	83 g DAP/tree
			108 g MOP/tree	108 g MOP/tree
Lime	5 kg/tree	20 kg/pit	163 g Urea/tree	142 g Urea/tree
			125 g SSP/tree	40 g DAP/tree
			108 g MOP/tree	108 g MOP/tree
Papaya	20-30 t/Acre	6 MT/Acre	435 g Urea/tree	265 g Urea/tree
			1000 g SSP/tree	326 g DAP/tree
			539 g MOP/tree	539 g MOP/tree

SOIL HEALTH CARD

FARMER'S DETAILS

Name	
State	Gujarat
District	Bharuch
Taluka	Dedaipada
Village	Moskut
Aadhar No.	
Mo.No.	

Soil Sample Details

Sample No.	2
Sample Date.	27/11/2024
Survey No.	
Report Date	02/12/2024

Name of Laboratory	Krishi Vigyan Kendra(KVK) Soil Testing Lab,Chaswad,Bharuch

Soil Test Results

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.52		Normal
2	EC	0.10	dS/m	Low
3	Organic Carbon (OC)	0.68	%	Medium
4	Available Nitrogen (N)	316.74	kg/ha	Medium
5	Available Phosphorus (P)	61.12	kg/ha	High
6	Available Potassium (K)	135.21	kg/ha	Low
7	Available Iron (Fe)	13.94	ppm	High
8	Available Mangenese (Mn)	10.38	ppm	High
9	Available Zinc (Zn)	0.89	ppm	Medium
10	Available Copper (Cu)	1.15	ppm	High

Secondary & Micro Nutrient Recommendation

Sr.No.	Parameter	Fertilizer Recommendation for Refrence Yield (With Organic Manure)
1	Iron	0 kg FeSo4/Acre
2	Mangenese	0 kg MgSo4/Acre
3	Zinc	5 kg ZnSo4/Acre
4	Copper	0 kg CuSo4/Acre

General Recommendation

1	Lime/Gypsum			
Sr.No.	Parameter	Low	Medium	High
1	pH	<6.5	6.5-8.2	>8.21
2	EC	<1.0	1.0-2.0	>2.10
3	Organic Carbon	<0.50	0.50-0.75	>0.76
4	Available Nitrogen	<250	251-500	>501
5	Available Phosphorus	<28	28-56	>57.1
6	Available Potassium	<140	140-280	>281
7	Available Iron	<5.0	5.00-10.00	>10.00
8	Available Mangenese	<5.0	5.00-10.00	>10.00
9	Available Zinc	<0.50	0.51-1.0	>1.1
10	Available Copper	<0.20	0.20-0.40	>0.41

Crop	Refrence Yield (For the first harvest)	Organic Fertilizer & Quantity	Fertlizer Combination -1	Fertlizer Combination -2
Mango	15-20 kg/tree	20 kg/pit	163 g Urea/tree	150 g Urea/tree
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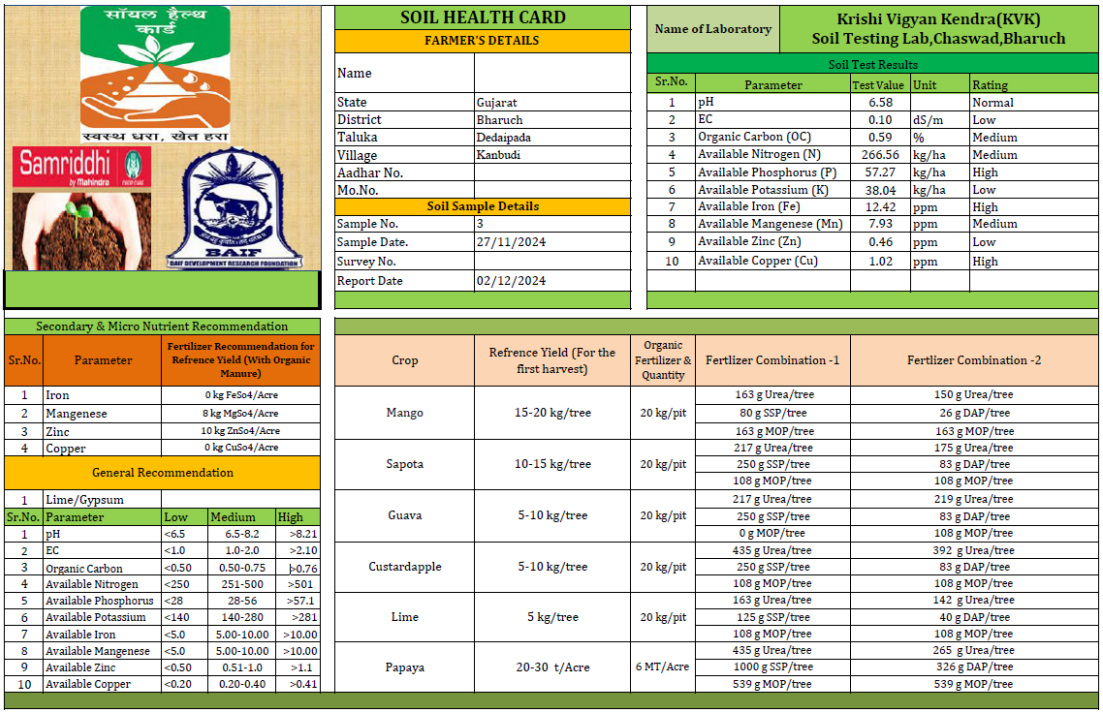
			1000 g SSP/tree	326 g DAP/tree
			539 g MOP/tree	539 g MOP/tree



SOIL HEALTH CARD

FARMER'S DETAILS

Name	
State	Gujarat
District	Bharuch
Taluka	Dedaipada
Village	Kanbudi
Aadhar No.	
Mo.No.	

Soil Sample Details

Sample No.	3
Sample Date.	27/11/2024
Survey No.	
Report Date	02/12/2024

Name of Laboratory	Krishi Vigyan Kendra(KVK) Soil Testing Lab,Chaswad,Bharuch

Soil Test Results

Sr.No.	Parameter	Test Value	Unit	Rating
1	pH	6.58		Normal
2	EC	0.10	dS/m	Low
3	Organic Carbon (OC)	0.59	%	Medium
4	Available Nitrogen (N)	266.56	kg/ha	Medium
5	Available Phosphorus (P)	57.27	kg/ha	High
6	Available Potassium (K)	38.04	kg/ha	Low
7	Available Iron (Fe)	12.42	ppm	High
8	Available Mangenese (Mn)	7.93	ppm	Medium
9	Available Zinc (Zn)	0.46	ppm	Low
10	Available Copper (Cu)	1.02	ppm	High

Secondary & Micro Nutrient Recommendation

Sr.No.	Parameter	Fertilizer Recommendation for Refrence Yield (With Organic Manure)
1	Iron	0 kg FeSo4/Acre
2	Mangenese	8 kg MgSo4/Acre
3	Zinc	10 kg ZnSo4/Acre
4	Copper	0 kg CuSo4/Acre

General Recommendation

Sr.No.	Parameter	Low	Medium	High
1	Lime/Gypsum			
1	pH	<6.5	6.5-8.2	>8.21
2	EC	<1.0	1.0-2.0	>2.10
3	Organic Carbon	<0.50	0.50-0.75	þ0.76
4	Available Nitrogen	<250	251-500	>501
5	Available Phosphorus	<28	28-56	>57.1
6	Available Potassium	<140	140-280	>281
7	Available Iron	<5.0	5.00-10.00	>10.00
8	Available Mangenese	<5.0	5.00-10.00	>10.00
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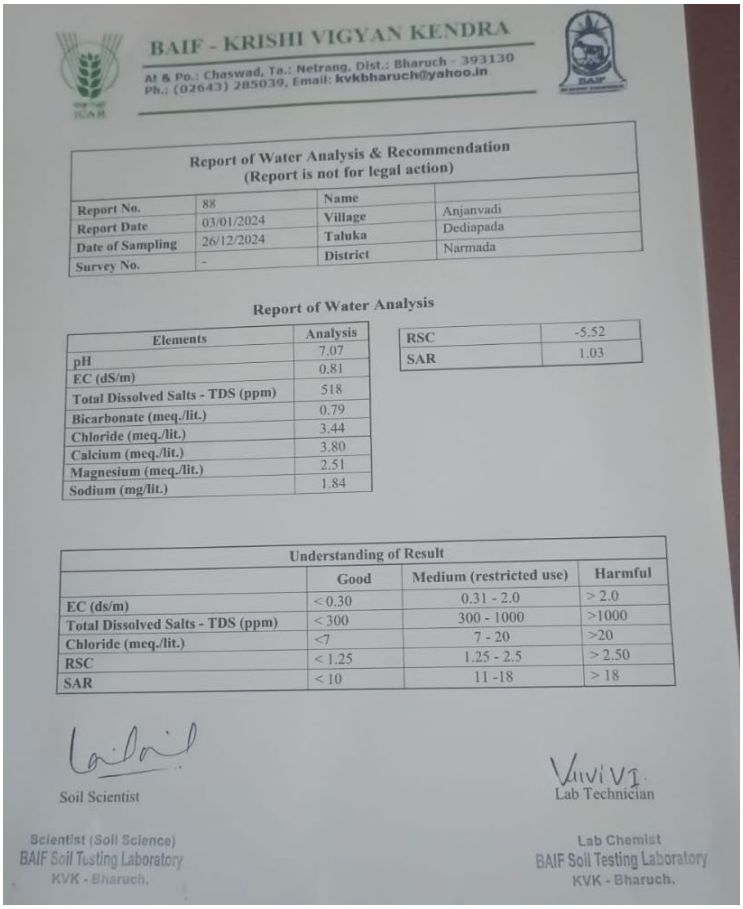
			1000 g SSP/tree	326 g DAP/tree
			539 g MOP/tree	539 g MOP/tree

Water quality report



BAIF - KRISHI VIGYAN KENDRA

At & Po.: Chaswad, Ta.: Netrang, Dist.: Bharuch - 393130
Ph.: (02643) 285039, Email: kvkbharuch@yahoo.in

Report of Water Analysis & Recommendation
(Report is not for legal action)

Report No.	88	Name	
Report Date	03/01/2024	Village	Anjanvadi
Date of Sampling	26/12/2024	Taluka	Dediapada
Survey No.	-	District	Narmada

Report of Water Analysis

Elements	Analysis
pH	7.07
EC (dS/m)	0.81
Total Dissolved Salts - TDS (ppm)	518
Bicarbonate (meq./lit.)	0.79
Chloride (meq./lit.)	3.44
Calcium (meq./lit.)	3.80
Magnesium (meq./lit.)	2.51
Sodium (mg/lit.)	1.84

RSC	-5.52
SAR	1.03

Understanding of Result

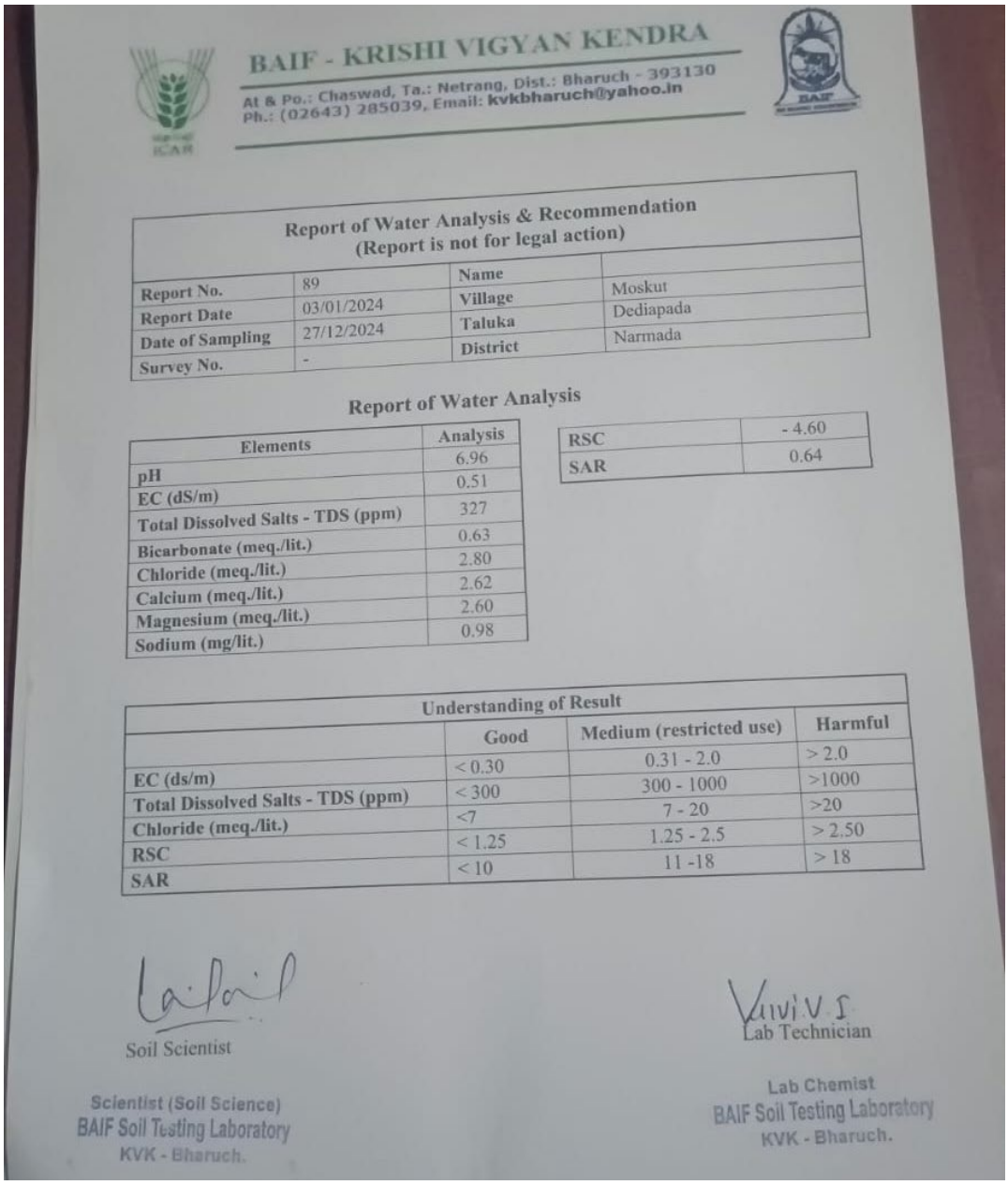
	Good	Medium (restricted use)	Harmful
EC (ds/m)	< 0.30	0.31 - 2.0	> 2.0
Total Dissolved Salts - TDS (ppm)	< 300	300 - 1000	>1000
Chloride (meq./lit.)	<7	7 - 20	>20
RSC	< 1.25	1.25 - 2.5	> 2.50
SAR	< 10	11 -18	> 18

Soil Scientist

Scientist (Soil Science)
BAIF Soil Testing Laboratory
KVK - Bharuch.

Lab Technician

Lab Chemist
BAIF Soil Testing Laboratory
KVK - Bharuch.



BAIF - KRISHI VIGYAN KENDRA

At & Po.: Chaswad, Ta.: Netrang, Dist.: Bharuch - 393130
Ph.: (02643) 285039, Email: kvkbharuch@yahoo.in

Report of Water Analysis & Recommendation
(Report is not for legal action)

Report No.	89	Name	
Report Date	03/01/2024	Village	Moskut
Date of Sampling	27/12/2024	Taluka	Dediapada
Survey No.	-	District	Narmada

Report of Water Analysis

Elements	Analysis
pH	6.96
EC (dS/m)	0.51
Total Dissolved Salts - TDS (ppm)	327
Bicarbonate (meq./lit.)	0.63
Chloride (meq./lit.)	2.80
Calcium (meq./lit.)	2.62
Magnesium (meq./lit.)	2.60
Sodium (mg/lit.)	0.98

RSC	- 4.60
SAR	0.64

Understanding of Result			
	Good	Medium (restricted use)	Harmful
EC (ds/m)	< 0.30	0.31 - 2.0	> 2.0
Total Dissolved Salts - TDS (ppm)	< 300	300 - 1000	>1000
Chloride (meq./lit.)	<7	7 - 20	>20
RSC	< 1.25	1.25 - 2.5	> 2.50
SAR	< 10	11 -18	> 18

Soil Scientist

Scientist (Soil Science)
BAIF Soil Testing Laboratory
KVK - Bharuch.

Lab Technician

Lab Chemist
BAIF Soil Testing Laboratory
KVK - Bharuch.

BAIF - KRISHI VIGYAN KENDRA

At & Po.: Chaswad, Ta.: Netrang, Dist.: Bharuch - 393130
Ph.: (02643) 285039, Email: kvkbharuch@yahoo.in

Report of Water Analysis & Recommendation (Report is not for legal action)			
Report No.	90	Name	
Report Date	03/01/2024	Village	Kanbudi
Date of Sampling	26/12/2024	Taluka	Dediapada
Survey No.	-	District	Narmada

Report of Water Analysis

Elements	Analysis
pH	7.05
EC (dS/m)	1.04
Total Dissolved Salts - TDS (ppm)	665
Bicarbonate (meq./lit.)	1.21
Chloride (meq./lit.)	5.66
Calcium (meq./lit.)	3.17
Magnesium (meq./lit.)	5.59
Sodium (mg/lit.)	2.29

RSC	-7.55
SAR	1.09

Understanding of Result			
	Good	Medium (restricted use)	Harmful
EC (ds/m)	< 0.30	0.31 - 2.0	> 2.0
Total Dissolved Salts - TDS (ppm)	< 300	300 - 1000	>1000
Chloride (meq./lit.)	<7	7 - 20	>20
RSC	< 1.25	1.25 - 2.5	> 2.50
SAR	< 10	11 -18	> 18

Soil Scientist

Scientist (Soil Science)
BAIF Soil Testing Laboratory
KVK - Bharuch.

Lab Technician

Lab Chemist
BAIF Soil Testing Laboratory
KVK - Bharuch.

Contact:

Jignesh Thakkar

Partner (ESG -Social Advisory)

Email: jigneshthakkar@kpmg.com

home.kpmg/in

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Document Classification: KPMG Public

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Impact Assessment of Participatory Water Resource Management Project - Vizag, Andhra Pradesh

Asian Paint Limited

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Internet: www.kpmg.com/in
Email:indiawebsite@kpmg.com

Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

67B595C3ADEC43E...

Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

TABLE OF CONTENT

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- This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions are not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.
- While performing the work, we have assumed the authenticity of all documents or information referred to or provided. We have not independently verified the correctness or authenticity of the same.
- We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.
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01

Executive Summary

EXECUTIVE SUMMARY

The philosophy of transformation has been in DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering relationship of trusts with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45% of total irrigation and 80% of domestic water needs are met by groundwater. the unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such challenging landscape, water harvesting and conservation under the umbrella of watershed management became need of the hour. Asian Paints engaged in holistic approach through their program "Participatory Water Resource Management" in Vizag, Andhra Pradesh, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country.

The main objectives of the impact study are to assess the impact of water stewardship activities with focus on the access and availability of surface and ground water, potable water, farmer`s livelihood, land and agriculture practices, and governance. The study covered mix-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of SROI framework and OECD-DAC framework. A total of 100 respondents from nine villages were interacted for data collection in Vizag, Andhra Pradesh including farmers, community members, and PRI members.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by the Participatory Water Resource Management programme, INR 4.71 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

1 Relevance

- 87% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- All beneficiaries rated the availability of water as poor before the project implementation.

2 Effectiveness

- 94% of beneficiaries shared the improved water availability more than four months post-monsoon.
- 95% shared improved water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- 70% rated improved water availability and accessibility as good.
- 56% respondents shared improved soil moisture level due to water related intervention.
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[1]. According to FAO's Aqua-stat reports[2] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007) [3]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[4].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on

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watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

1.2 Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 About the study

To understand the impact created by its interventions implemented in FY 2022-23, Asian Paints Ltd. empanelled KPMG to facilitate the impact assessment of its Participatory Water Resource Management project. The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility, availability & livelihood of the farmers

Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

1.4 About the project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

The Water Project in Vizag focused on combating water scarcity and enhancing water quality in the villages of Achutapuram and Rambilli Mandal, Andhra Pradesh. This initiative aimed to boost water storage and recharge capabilities by rejuvenating traditional water bodies and constructing new ones. This effort was designed to increase the availability of water for both irrigation and drinking purposes. Key activities included the de-siltation and repair of ponds, the establishment of check dams, and the installation of RO plants to ensure access to potable drinking water. In addition, the project facilitated the provision of safe drinking water in schools through RO plants and rainwater harvesting systems, positively impacting thousands of students. Water literacy initiatives were rolled out across dozens of villages, raising awareness among thousands of people about water conservation and management practices.

02

Approach & Methodology

2 Approach and Methodology

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 Our Approach

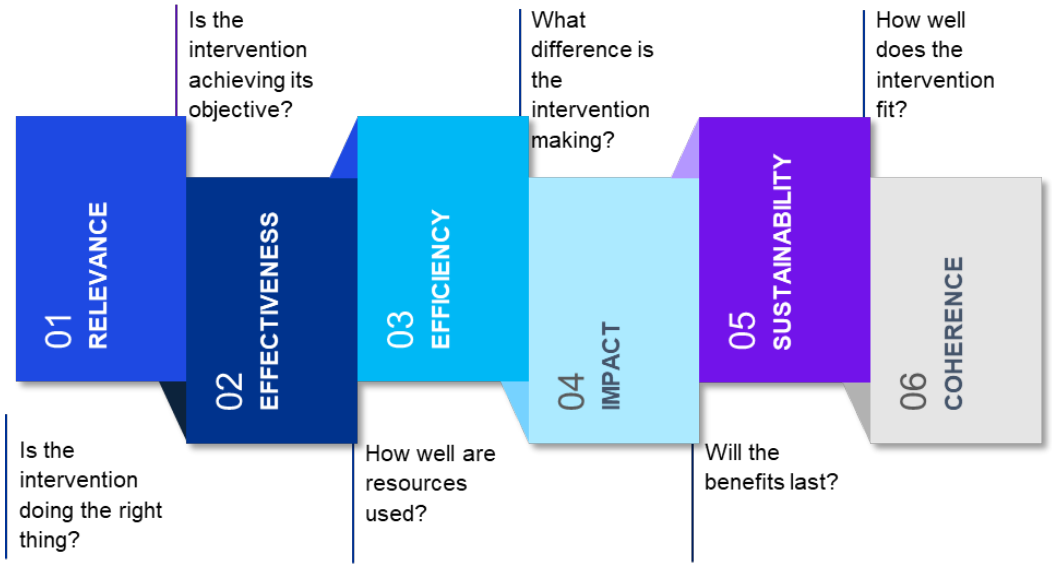
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

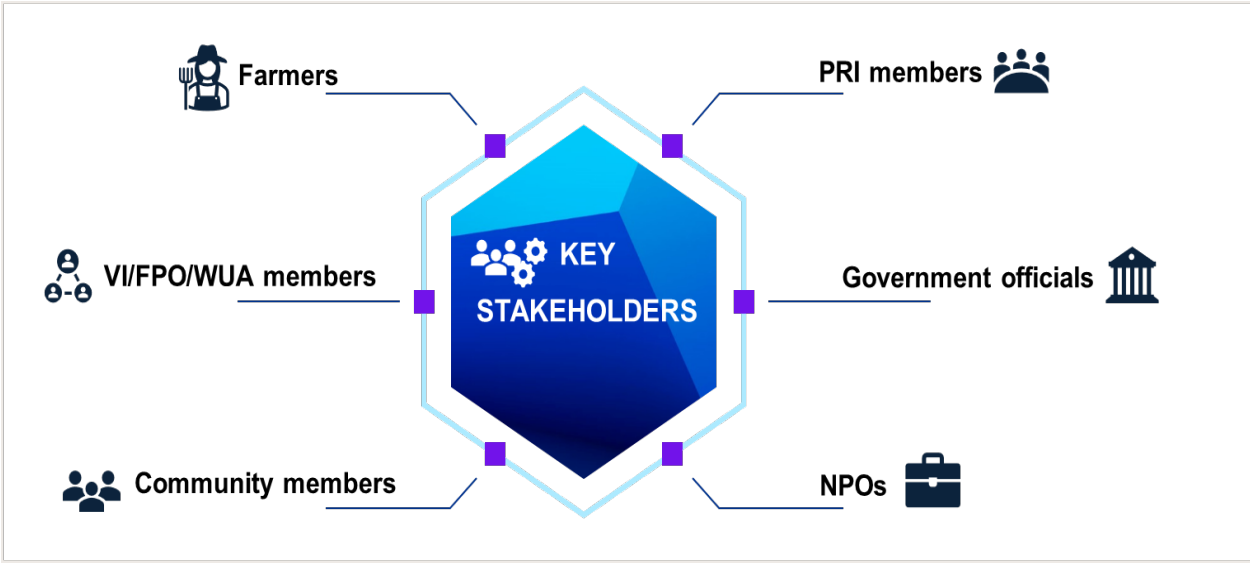
Impact map for the Participatory Water Resource Management Project: *Refer to the next page*

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment.	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices

	To organize and strengthen the village institutions around water harvesting and related livelihoods		No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area, Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. Considering the overall outreach of the project as nearly 1151 beneficiaries, the statistically significant sampling has been derived using the method of 95 percent confidence level and five percent margin of error. Additionally, we have taken extra sample stakeholder in order to derive accurate social return on investment ratio. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to water intervention	5056	100	100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which

constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI

framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

Analysis and Findings

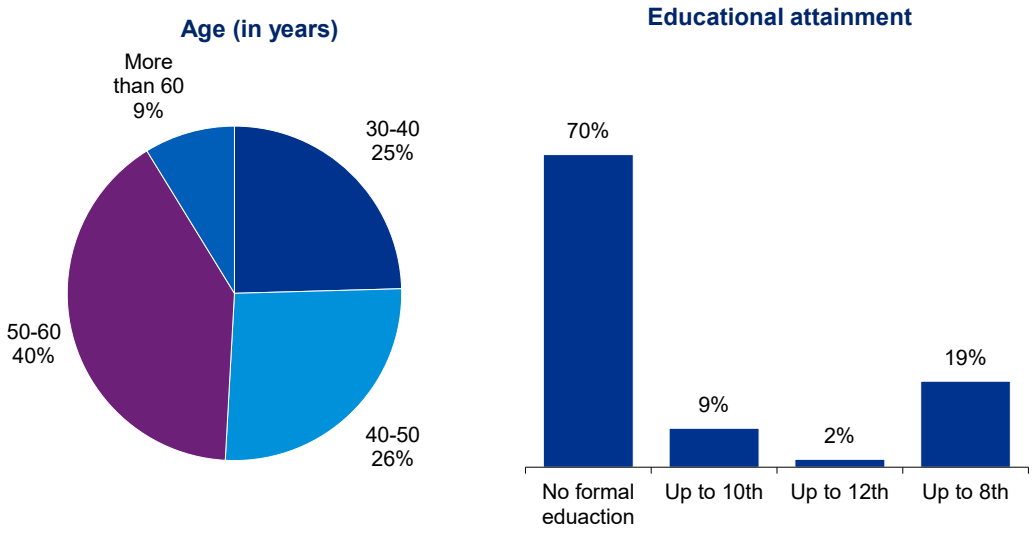
3 Analysis and Findings

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Participatory Water Resource Management program supported by Asian Paints Limited across two villages; Duppituru and Nunnaparthy in Visakhapatnam district of Andhra Pradesh.

3.1 3.1 Demography of respondent

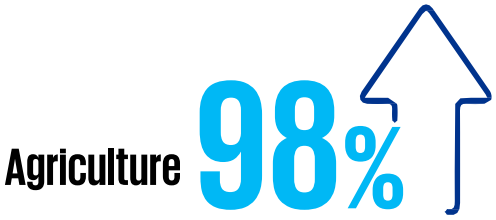
3.1.1 Age and educational attainment

The majority of respondents (40%) fall within the age group of 50-60 years; followed by respondents from the 40-50 age bracket, accounting for 26% of the total respondents. The 30-40 age group constitutes 25% of the respondents, while those above 60 years constitute a smaller portion, at 9%. The respondents' education attainment presents a picture of limited formal education. A total of 70% of the respondents have no formal education, highlighting a significant gap in educational access and opportunity. While 19% of respondents completed up to 8th grade and 9% up to 10th grade, only 2% achieved higher education, up to 12th standard.



3.1.2 Source of income and income range

An analysis of the income source of the respondent beneficiaries reveals a major reliance on agriculture as their primary source of income, with a small group deriving income from non-salaried work.



A significant 98% of respondents identified agriculture while only 2% of them identified non-salaried work as their primary source of income. This underscores the agricultural economy's importance in the community, with a vast majority of households relying on farming or related activities for their livelihoods.

In contrast to their primary income, only 9% of respondents reported non-salaried work as their secondary source of income. This suggests that while some may have additional income streams, the vast majority (91%) do not have a secondary source of income. This could indicate a lack of economic diversification, leaving households vulnerable to economic shocks or downturns in agriculture.

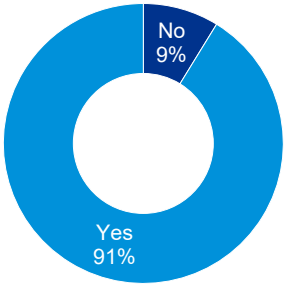
Annual income distribution among the respondent beneficiaries highlights a predominantly lower-income demographic. Below table details out the income ranges reported:

Annual Income range (in INR)	% of respondent beneficiaries
Less than 50,000	37%
50,000 - 1,00,000	26%
1,00,000 - 1,50,000	28%
More than 1,50,000	9%

A significant 37% of beneficiaries fall within the annual income range of below fifty thousand while 26% of respondents reported earning between fifty thousand to one lakh per annum. About 28% of beneficiaries indicated their annual earnings fall within one lakh to a lakh and half annual income range. This segment represents a moderate-income level, but they may still experience economic vulnerability as lower income group, particularly in times of need or crop failure. Only 9% of respondents reported earning above one and half lakhs annually. This low percentage suggests that very few beneficiaries achieve a higher income level, highlighting the economic challenges faced by the majority of the community.

3.1.3 Land size, crop pattern and irrigation

Land ownership



An analysis of the land ownership status among farmers shows a prevalence of cultivable land among the majority of respondents. 91% of respondents have cultivable land which indicates that most farmers in the community are involved in agriculture and have the resources to cultivate crops or raise livestock. Remaining 9% of respondents do not own any land, highlighting a small segment of the farming population that may rely on alternative sources of income (non-salaried work) or the land owned by others.

Land size

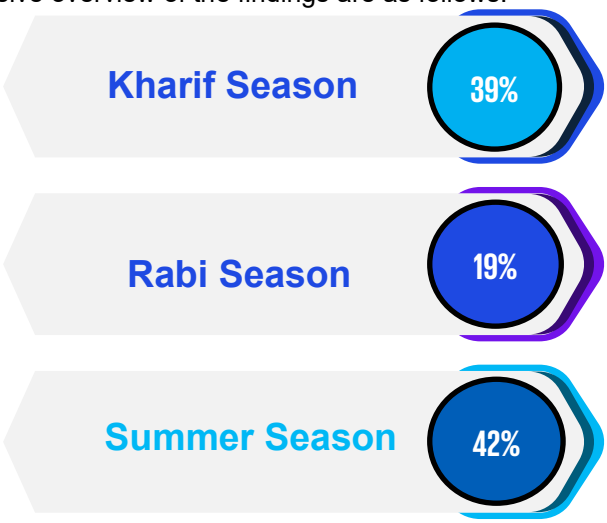
52% of farmers own less than 2 acres of cultivable land, which is a significant portion and suggests that many farmers operate on a small scale, which may limit their productivity and income potential. While 44% of farmers possess between 2 to 5 acres of land; representing a more moderate landholding size, potentially allowing for better agricultural output compared to those with less than 2 acres of land. Only 4% of farmers own more than 5 acres of cultivable land. This indicates that large-scale farming is relatively rare within this community, suggesting that the majority of farmers operate on a small to medium scale.

Crop pattern

Crop season patterns among farmers highlights their cultivation choices across different seasons- Kharif, Rabi, and Summer seasons. A comprehensive overview of the findings are as follows:

39% of farmers grow crops during this season, which typically spans from June to September, relying on the monsoon rains.

19% of farmers engage in crop cultivation in the Rabi season, which occurs from October to March with reliance on irrigation. 42% of farmers cultivate crops in the Summer season, which typically occurs from March to June and often depends on irrigation.



The analysis highlights distinctive cropping patterns across varying seasons, illustrating the dynamic nature of agricultural practices and choices made by farmers to optimize crop yield. During the Kharif season, a significant 67% of farmers opt for cultivating pulses, making it the most preferred crop during this period. Grains and vegetables, although part of the cultivation schedule, attracts 26% and 44% farmers respectively.

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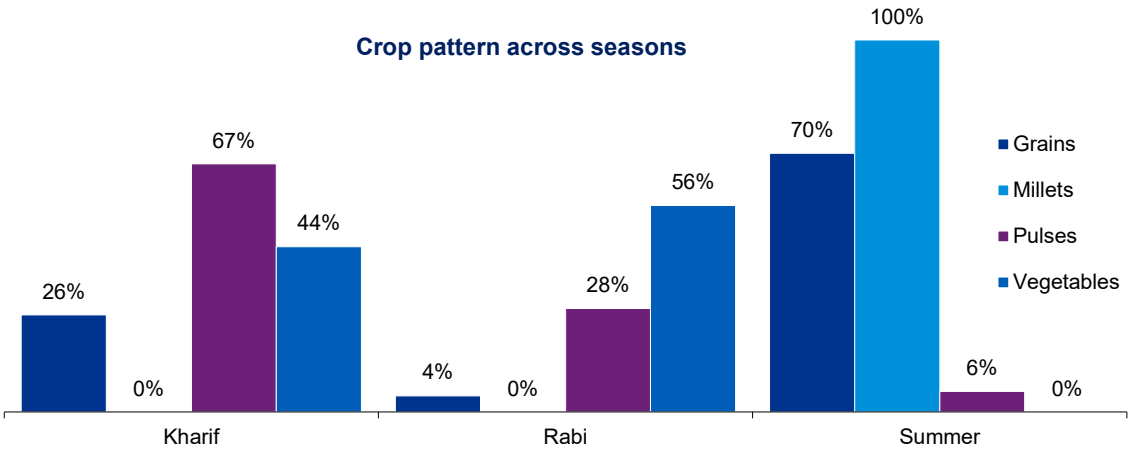
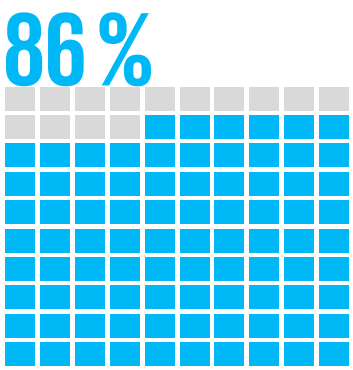


Rabi season sees a significant pivot towards vegetable farming, with 56% of farmers opting for vegetable cultivation, making them a principal crop of the season. 28% of the farmers cultivate pulses, while grains are notably less favored (cultivated by only 4% of farmers). This shift indicates adaptation to the Rabi season's climatic conditions, favoring vegetables over other crops in this season.

The Summer season marks a distinctive preference for grain production, seen in the choices of 70% of farmers, with a significant 100% of farmers cultivating millets. This indicates a strong propensity for grain crops, particularly millets, suited to the summer's warmer conditions. On the other hand, only 6% of farmers cultivate pulses in this season.

These findings highlight the adaptability of farmers to seasonal variations, enabling them to make informed decisions on crop selection based on climatic suitability, potential yield, and sustainability considerations.

Irrigation facility



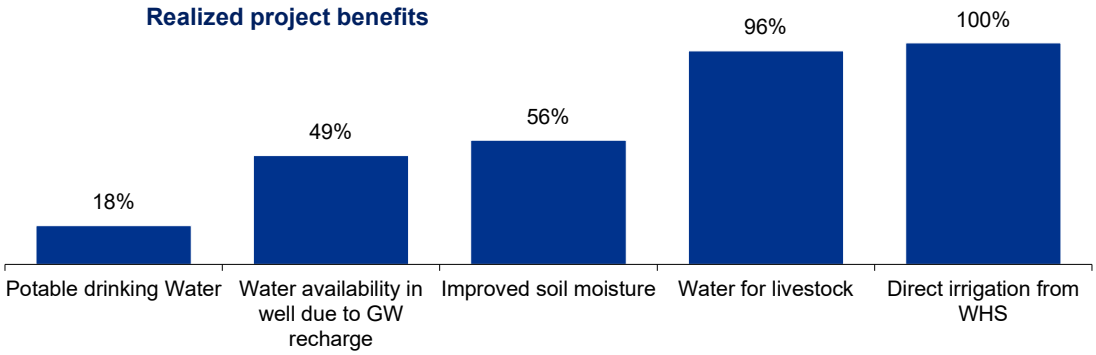
A significant 86% of farmers have irrigation facilities at their farms, utilizing wells or borewells to ensure a reliable water supply for their crops.

In contrast, 14% of farmers remain dependent on rain-fed agriculture, relying on seasonal rainfall or WHS through the project to water their crops.

3.2 Project awareness and benefits

3.2.1 Project awareness and realized benefits

All surveyed respondent beneficiaries demonstrated awareness of the Participatory Water Resource Managements project, supported by APL. This universal awareness among the beneficiaries underscores the effective outreach and engagement strategies employed in the



project.

The evaluation of the realized benefits from the project highlights significant improvements in water accessibility and management among respondent beneficiaries. Below is a detailed overview of the findings:

Potable drinking water

- 18% of beneficiaries reported access to potable drinking water as a direct benefit of the project. This indicates a modest impact on improving the health and quality of life of a segment of the community.

Water availability in well due to ground water recharge

- 49% of respondents stated that the availability of water in wells has increased due to groundwater recharge. This improvement can lead to more sustainable water resources for agricultural and domestic use.

Improved soil moisture

- 56% of beneficiaries acknowledged enhanced soil moisture levels attributed to the project, which boosts the crop yields.

Water availability for livestock

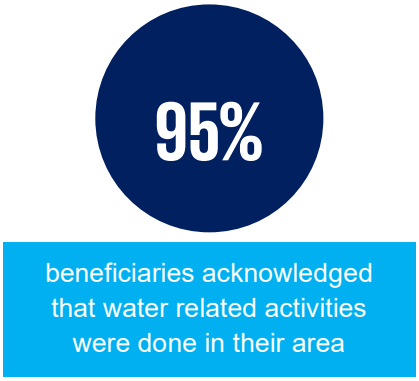
- 96% of respondents noted improvements in water availability for livestock, which is crucial for livestock health and productivity.

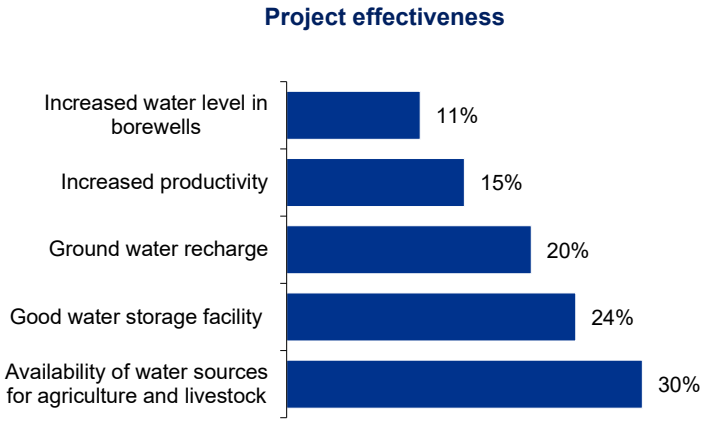
Direct irrigation from WHS

- A significant 100% of beneficiaries reported that they are now able to irrigate their farms directly from the WHS due to the project; which likely led to increased agricultural productivity and efficiency.

All respondent beneficiaries indicated that the project was accessible to various social groups, ensuring that individuals from all castes, races, and religions had the opportunity to benefit from the project initiatives. The project explicitly catered to differently-abled individuals and elderly people, ensuring all group of population could benefit from the resources provided.

3.2.2 Project Effectiveness



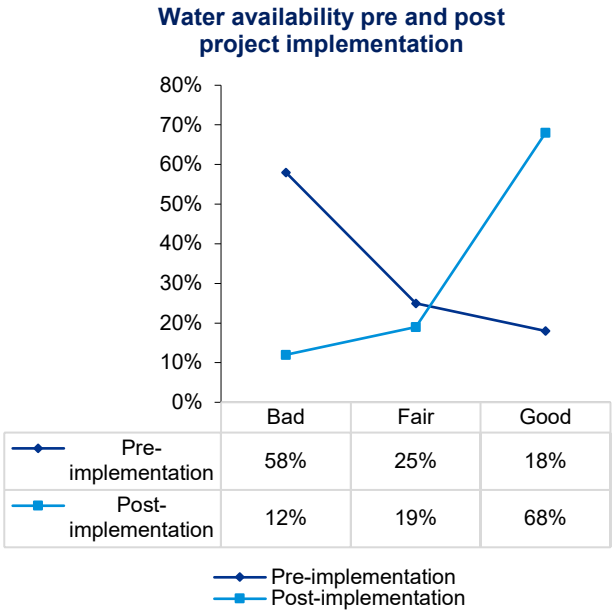


The study highlight a significant awareness among respondent beneficiaries regarding the water-related activities implemented in their area. Below analysis reflect the perceived impacts of the project on water availability and productivity –

Among the 95% beneficiaries who recognized the water-related activities:

- ✓ 11% reported that the project led to an increase in water levels in borewells. This improvement is crucial as it can enhance the availability of water for various uses, including irrigation and drinking.
- ✓ 15% noted an increase in agricultural productivity due to project interventions. This improvement may stem from enhanced irrigation practices, better soil moisture retention, or improved crop management strategies.
- ✓ 20% highlighted that groundwater recharge occurred as a result of the project. Groundwater recharge is vital for ensuring long-term water sustainability and mitigating the impacts of seasonal droughts.
- ✓ 24% experienced good water storage, which suggests that the project has facilitated better management of water resources. Effective water storage can help manage water during dry periods and improve overall agricultural resilience.

✓ 30% reported benefiting from increased availability of water sources for agriculture and livestock. This increase is particularly important for farming and livestock management, as it supports food security and the livelihoods of farmers.



	Bad	Fair	Good
Pre-implementation	58%	25%	18%
Post-implementation	12%	19%	68%

The analysis of water availability perceptions before and after project implementation highlights significant improvements, with a marked increase in those rating water availability as good.

The drop from 58% to 12% of respondents rating water availability as bad reflects a substantial improvement in the project's effectiveness in addressing water-related issues.

The increase from 18% to 68% in the proportion of respondents who rated water availability as good highlights the successful impact of the project's interventions.

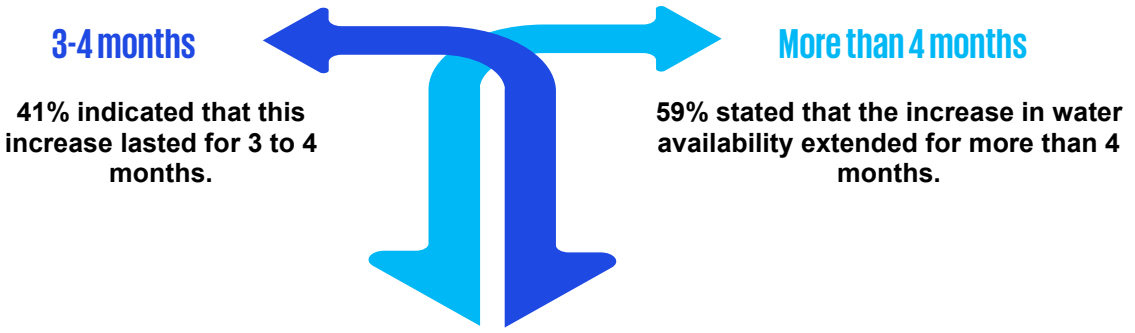
These positive changes reflect the project's effectiveness in enhancing water access (which was also acknowledged by 98% of beneficiaries), thus contributing to increased water availability and agricultural productivity.

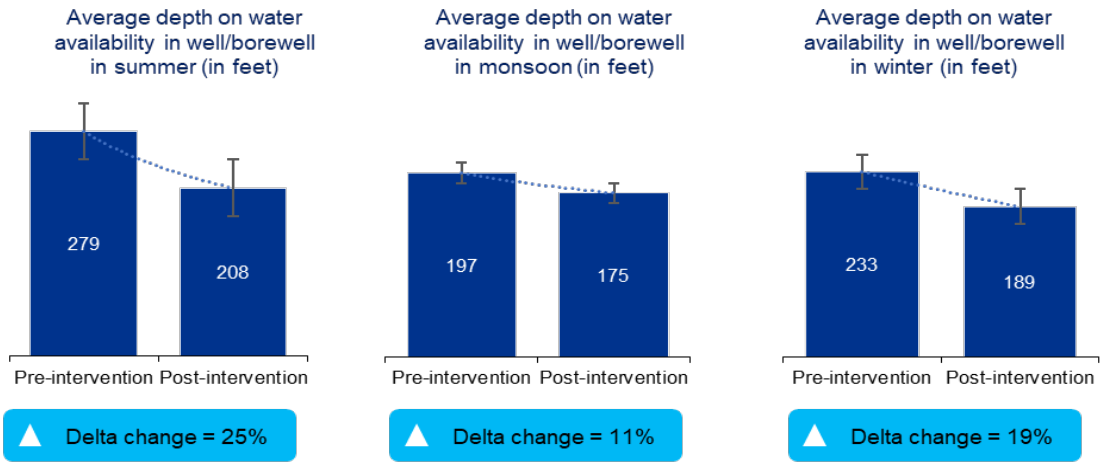
3.2.3 Water availability in borewell

The study also indicates a significant positive impact of the project interventions on water availability in borewells, as perceived by the respondents.

94% of respondent beneficiaries reported experiencing increased water availability in borewells due to the project interventions.

Among those who experienced increased water availability:





The analysis of average water depths in wells and borewells across different seasons demonstrates significant improvements in water availability following project interventions. The most notable gain llwas observed in the summer, indicating that the project successfully addressed challenges related to water scarcity during peak demand times.

In the summer season, the average depth of water decreased by 71 feet, marking a 25% improvement. This substantial reduction indicates that the project significantly improved water availability during the typically dry season when demand is high.

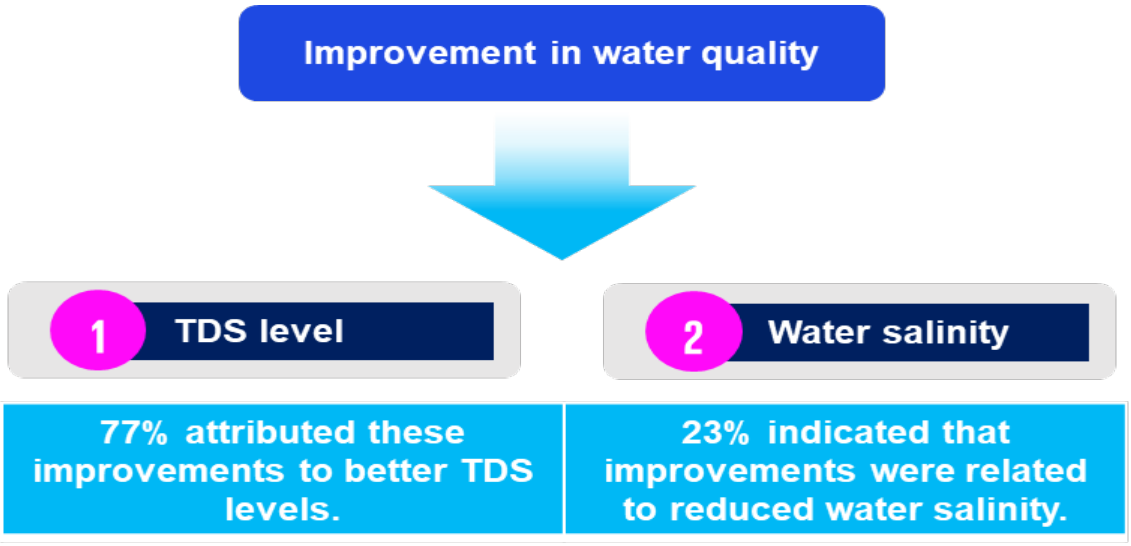
Although the average depth in the monsoon season decreased by 22 feet (11% improvement), it's important to note that monsoons generally replenish water levels due to rainfall. The decrease in average depth reflects a potentially stabilized water table as a result of the project, despite typical seasonal fluctuations.

The winter season exhibited a 19% improvement with a decrease of 44 feet in average depth. This indicates that even during colder months, there are significant gains in water availability, which can be attributed to successful project interventions.

The evaluation of water quality improvements in borewells or wells utilized for irrigation provides valuable insights into the effectiveness of project interventions.

71% of respondents who had irrigation facilities reported an improvement in water quality in their borewell or well due to project interventions. This finding indicates a positive impact of the project on water quality, essential for agricultural productivity and overall ecosystem health.

Among those respondents who noticed improvements in water quality:

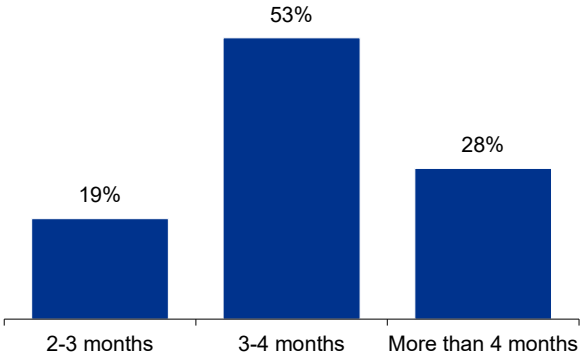


3.2.4 Surface water availability in water harvesting structure

The analysis of surface water availability in water harvesting structures (WHS) following project interventions provides important insights into the effectiveness of the project initiatives.

93% of total respondents reported that the project intervention resulted in increased surface water availability in WHS, which reflects a significant positive outcomes from the intervention.

Duration of increased surface water availability in WHS

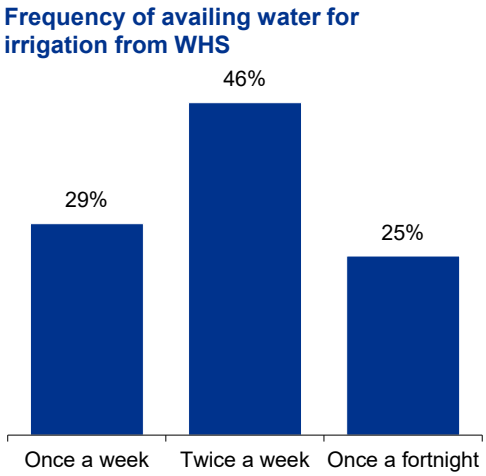


Among the respondents who noted increased surface water availability:

- ✓ 19% indicated that the duration of this increase was 2 to 3 months.
- ✓ 53% reported a duration of 3 to 4 months.
- ✓ 28% stated that the duration lasted for more than 4 months.

3.3 Water for irrigation

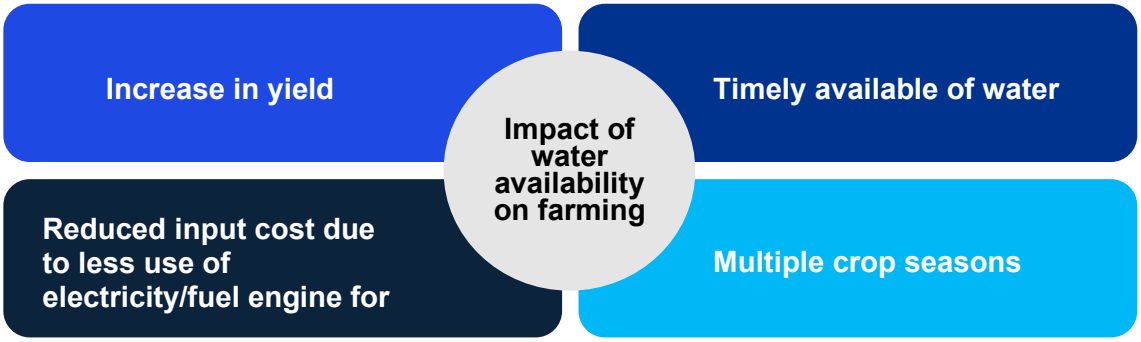
3.3.1 Availing water for irrigation from WHS



The analysis highlights a significant reliance on water harvesting structures for irrigation among beneficiaries, with a notable frequency of water availability that supports agricultural practices.

While all of the beneficiaries reported that they avail water for irrigation directly from the WHS, 30% of beneficiaries avail water once a week, 46% of beneficiaries avail water twice a week, 25% of beneficiaries avail water once in a fortnight for irrigation purposes. The predominant usage of water underscores the effectiveness of WHS in meeting irrigation needs.

3.3.2 Impact of water availability on farming practice

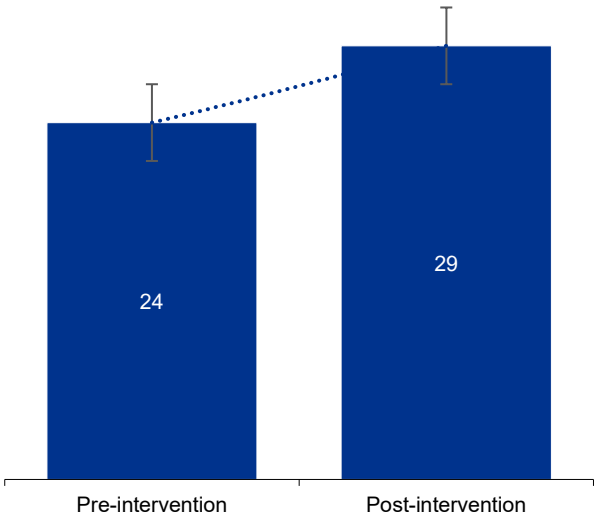


The improved water availability and access through the project has led to positive changes in agricultural practices among beneficiaries. This study highlights the various benefits experienced by farmers as a direct result of improved water management in in WHS.

- 54% of beneficiaries reported experiencing increase in crop yield due to improved water access.
- 16% of beneficiaries noted a reduction in input costs, attributing this to the decreased reliance on electricity or fuel for irrigation.
- 18% of respondents highlighted that the project has ensured timely availability of water, which is crucial for effective farming practices.
- 12% of beneficiaries stated that they are now able to grow multiple crop seasons due to improved water availability.

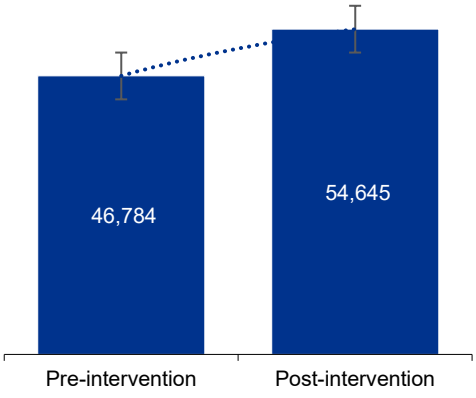
The improvements in water availability and access have significantly influenced farming practices among beneficiaries in a positive manner, resulting in increased yields, reduced input costs, and timely access to water. Additionally, the ability to grow multiple crop seasons reflects broader agricultural productivity and resilience. These findings underscore the importance of ongoing support for effective water management practices, which can lead to sustainable farming development and enhanced economic stability for the community.

Average increase in yield (quintal/acre); pre-post intervention



The analysis of average yield pre and post-intervention highlights a significant increase in agricultural productivity due to improved water access and management. Increase of 5 quintals per acre, approximately 22%, presents the effectiveness of the interventions and highlights the vital role of water harvesting structures in enhancing farming practices.

Impact of increased yield on family's average annual income (in INR); pre-post intervention



The correlation between increased agricultural yield and the average annual income of families provides valuable insights into the economic benefits derived from improvements in water availability and farming practices. The average annual income before and after the intervention highlights a significant increase in financial well-being for families. An increase of ₹7,861, or approximately 17%, underscores the positive effects of improved water management and increased agricultural yields.

3.3.3 Impact of water availability on livestock

The availability of water significantly influences livestock management, productivity, and the economic benefits associated with animal husbandry. The following analysis evaluates how improved water availability has affected livestock among farmers, including changes in herd size and productivity.

Category	% of respondents	Description
Added new livestock	12%	Farmers who have recently acquired livestock.
Added additional livestock	5%	Farmers increased the number of cattle they own.
Improved productivity	65%	Enhanced milk production per animal.
Have no livestock	18%	These households do not own any livestock.

The analysis of the impact of water availability on livestock reveals several key outcomes: Most notably, 65% of farmers experienced improved productivity, translating into an average increase of 4 liters of milk per day per animal. Additionally, a small percentage of farmers are expanding their livestock herds. Overall, enhanced water availability not only supports livestock health and productivity but also opens new avenues for economic benefits for farming households.

The comparative analysis of pre and post-intervention income ranges from livestock demonstrates a notable shift towards higher income categories, indicating enhanced economic stability for many families involved in livestock activities.

The reduction in households in the lower income brackets suggests that families are experiencing increased economic resilience due to improved livestock productivity and management practices

Income range from livestock (INR/annum)	Pre-intervention	Post-intervention
Less than 5,000	16%	11%
5,000 - 10,000	51%	41%
10,000 - 15,000	24%	30%
More than 15,000	8%	19%

3.3.4 Potable drinking water

The availability of potable drinking water has been associated not only with improved health outcomes but also with economic benefits for the beneficiary population. As per the stakeholder interaction, a significant portion of respondents has reported various health-related benefits.

Key Findings:

1). Overall Health Benefits:

- 74% of beneficiaries reported health benefits due to the availability of potable drinking water.

2). Specific Health Benefits:

Out of the 74% who reported health benefits:

- 26% noted a decrease in TDS level.

- 74% remarked on a reduced prevalence of waterborne diseases.

3). Economic Impact:

Among those who reported health benefits:

- 67% mentioned reduced health-related expenditures, which would have been incurred anyways

- 44% reported savings on expenditures for purchasing portable water.

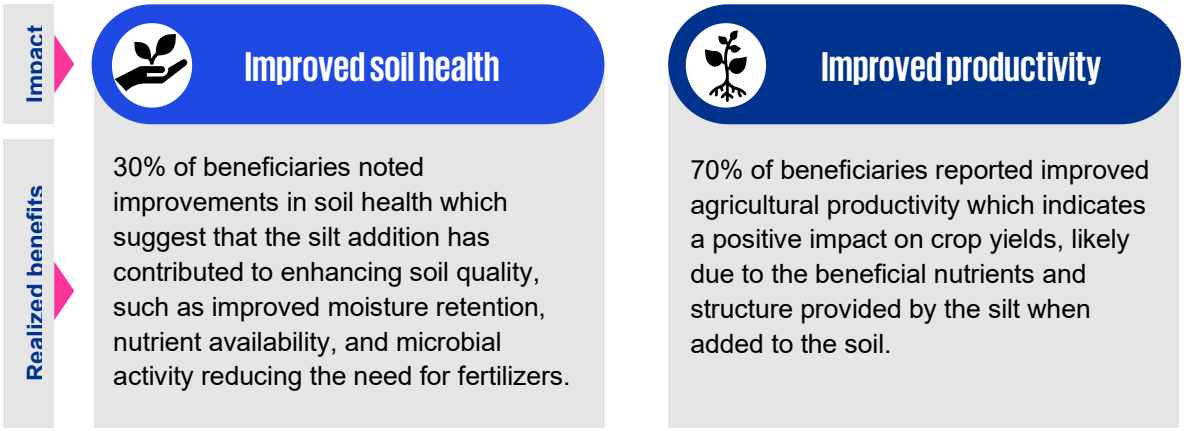
- 49% stated that the quality of drinking water has significantly improved.

The findings illustrate a strong correlation between the availability of potable drinking water and both measurable health and economic benefits. With 74% of beneficiaries experiencing health improvements, including reduced TDS and diminished waterborne diseases, the initiative has not only enhanced community health but also reduced the financial burden associated with health care and water procurement.

3.3.5 Silt application to agricultural farm

The application of silt removed from water harvesting structures has been reported by a significant portion of beneficiaries, highlighting its beneficial effects on agricultural productivity and soil health.

- ✓ 53% of the beneficiaries reported that they applied silt removed from water harvesting structures to their farms.
- ✓ **Benefits of silt application –**



The application of silt derived from water harvesting structures has shown significant benefits among beneficiaries, with more than half utilizing this resource effectively. Notably, 70% reported enhanced agricultural productivity, while 30% experienced improved soil health, leading to decreased fertilizer needs. These findings underscore the positive impact of sustainable practices on agricultural productivity and soil quality, suggesting that continued promotion of silt application could yield further benefits for farmers and the environment in the future.

04

Conclusion and Recommendations

4 OECD-DAC

4.1 Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and determines whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 87 percent of respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially when 40 percent of the respondents were only dependent on rainfed agriculture. Around 39 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 2013

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water

- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water

- (x) rural development projects

4.2 Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of	Project activities included promotion of agro-forestry and prevention of forest among the community

terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

Target 15.2

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[i] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[ii] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[iii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on Participatory Water Resource Management aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

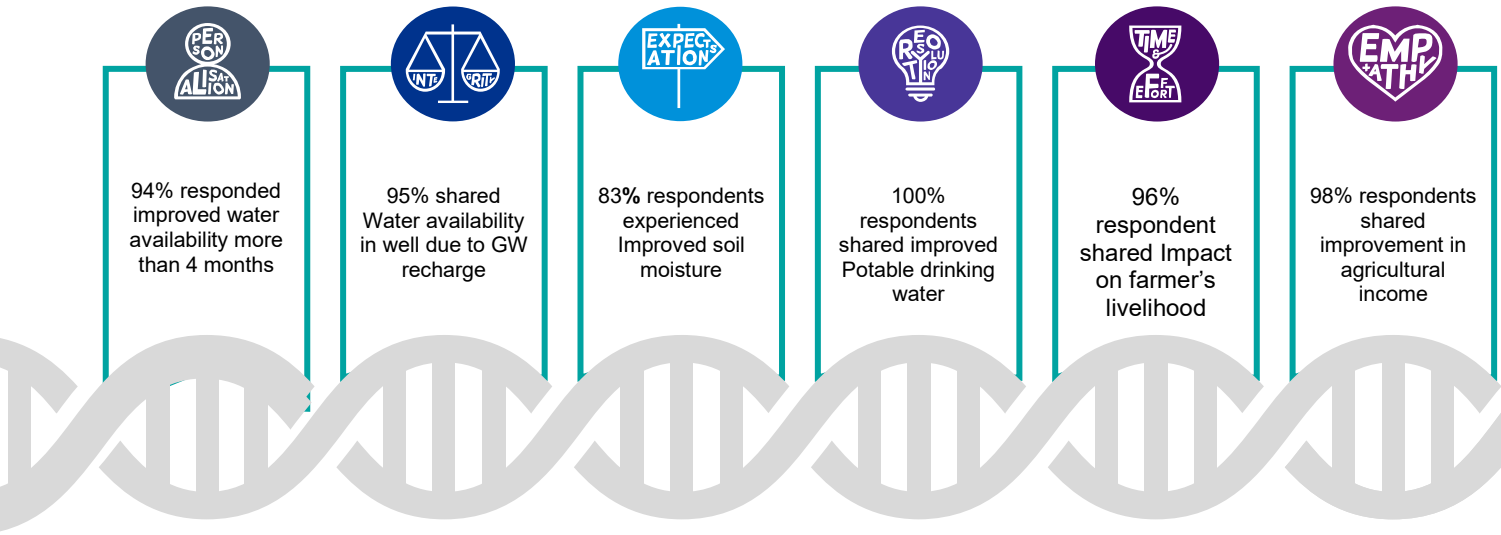
4.3 Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Participatory Water Resource Management project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the projipect locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health, reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

4.4 Evaluation Criteria- Efficiency

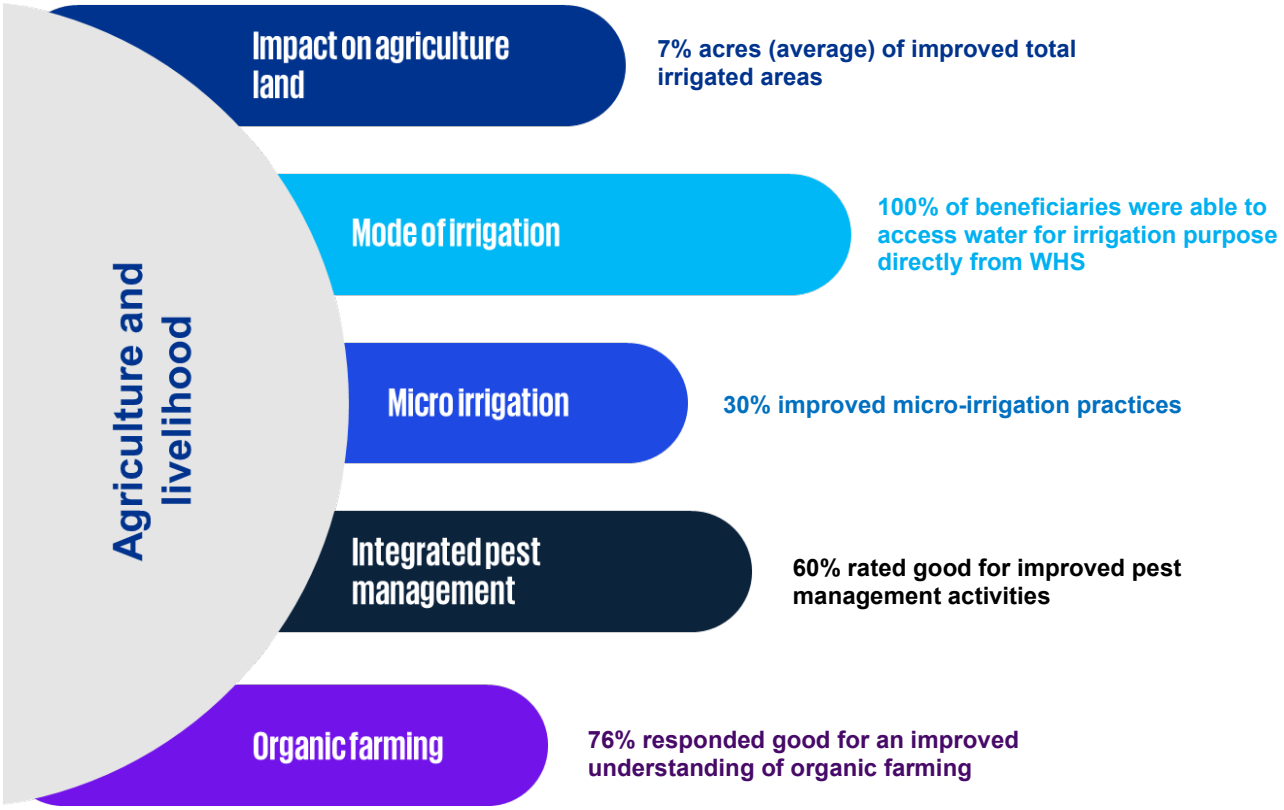
The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

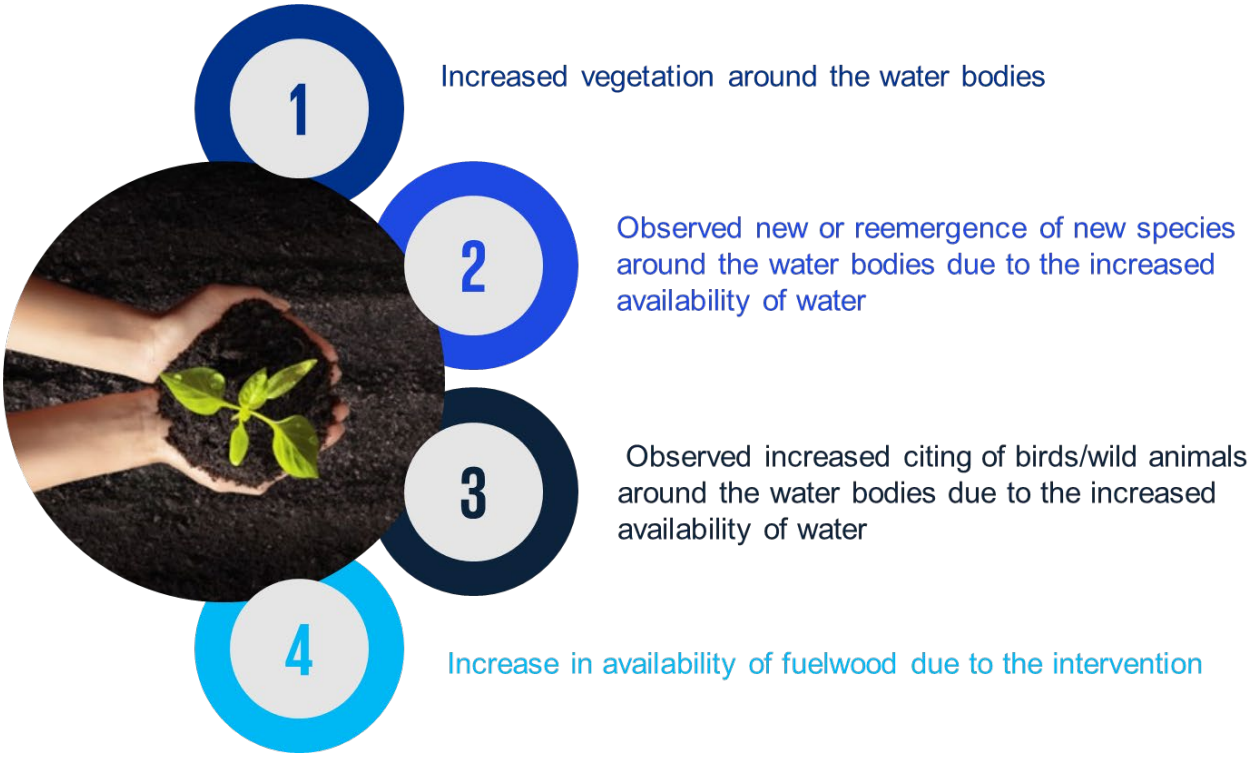
Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

4.5 Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or

indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.





4.6 Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

4.6.1 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

All respondents stated that the Water User Association (WUA) has been formed in their village. During discussions, it was understood that all respondents (100 percent) were aware of the formation and role played by WUAs. WHS beneficiaries reported that they or their family members are part of WUAs, indicating awareness of governance structure for WHS. Respondents from shared that a separate fund for O&M of the WHS has been set up and water tax of INR 200 to 500 annually depending on the land holding is being levied.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

05

Measuring the Social Return

5 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

5.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change

Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1470.00
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	1470.00
Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	1043.70
	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	1470.00
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	1470.00
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	999.60
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	1470.00
Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	1470.00
	Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	29.40
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	588.00
Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	
Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	
Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	

Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	882.00
	Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	735.00
Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	
Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	
Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	
Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with pleasant environment	

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.
- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

5.2 Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organizations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In

case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.

For a detailed view, refer table for SROI calculation.

Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total input value(INR)
Financial inputs	CSR Funding from APL	*23,000,000*
Total		***23,000,000***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	0.00%	0.00%	0.00%	20%	255,360	255,360.00	204,288.00	163,430.40	130,744.32	104,595.46	0.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Gujarat government (per hactare)	314.00	3.00%	0.00%	30.00%	20%	767,514	767,514.31	614,011.45	491,209.16	392,967.33	314,373.86	0.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/- by Vadodara Municipal Corporation.	330.00	3.00%	0.00%	30.00%	20%	4,531,592	4,531,591.68	3,625,273.34	2,900,218.68	2,320,174.94	1,856,139.95	0.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Narmada district in Fy 2021-22 = 1026 kg/ha MSP of Paddy	1057.44	3.00%	0.00%	30.00%	20%	1,550,829	1,550,828.66	1,240,662.93	992,530.34	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			in Gujarat-2203/Q												
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy - 2203/Q	2203.00	10.00%	0.00%	44.00%	33%	29,053,898	29,053,898.29	19,378,950.16	12,925,759.75	0.00	0.00	0.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	8285.71	3.00%	0.00%	30.00%	20%	8,533,517	8,533,516.80	6,826,813.44	5,461,450.75	0.00	0.00	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	12500	10.00%	10.00%	30.00%	33%	26,159,112	26,159,112.00	17,448,127.70	11,637,901.18	0.00	0.00	0.00
Trainings/ Workshops/ Demonstrations / Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Andhra Pradesh-2203/Q	2203.00	10.00%	0.00%	30.00%	100 %	25,174,104	25,174,103.98	0.00	0.00	0.00	0.00	0.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75	3.00%	0.00%	30.00%	20%	1,506,239	1,506,239.28	1,204,991.42	963,993.14	0.00	0.00	0.00
		Reduction in water borne diseases (number of households x % respondents indicating	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments	661	3.00%	10.00%	30.00%	20%	1,409,191	1,409,191.12	1,127,352.90	901,882.32	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		improvement in health)	across all service providers												
	Reduced expenditute on RO water	Reduced expenditure on quality potable water for domestic consumption	Cost of perchasing 20Liters RO water for a household	7300	3.00%	10.00%	50.00%	33%	4,027,673	4,027,672.80	2,686,457.76	1,791,867.32	0.00	0.00	0.00
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy i	52.00	3.00%	0.00%	30.00%	33%	599,818	599,817.95	401,878.03	269,258.28	0.00	0.00	0.00
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.	11246.61	10.00%	0.00%	70.00%	33%	9,211,782	9,211,782.28	6,171,894.13	4,135,169.06	0.00	0.00	0.00
		Improved sensitization towards child`s education (Number of respondents reporting increased spend	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost	2067.36	10.00%	0.00%	70.00%	33%	1,411,097	1,411,097.24	945,435.15	633,441.55	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		on child`s education)	(using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.												
					3.00%	0.00%			0	0.00	0.00	0.00	0.00	0.00	0.00

5.3 SROI results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:

Net present value of social value created	SRoI value
10,82,85,913	4.71
Net present value of total Investment	**SRoI Ratio**
8,52,85,913	1:4.71

For every INR 1 invested, the programme has generated social impact of IN 4.71

5.4 Sensitivity Analysis

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between INR 8.49 and INR 10.4.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	9.49	Deadweight is 0%	8.67	No significant change
			Deadweight is 8%	9.62	
1	Displacement		Displacement 0%	9.59	No significant change
			Displacement is 15%	9.3	

3	Attribution		Attribution is 0%	9.81	No significant change
			Attribution is 75%	9.17	
4	Drop-off		Drop-off is (3 years)	9.29	No significant change
			Drop-off is (5 years)	11.27	

5.5 Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

6 ANNEXURES

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by government (per hactare)	314.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Sangareddy district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Telangana- 2203/Q	22602.78
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	3270.83
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	400
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Telangana	52.00
Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-.	11246.61

			For a family of 4 members, the yearly expenditure has been considered for calculation.	
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00
	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00
	Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00

04

Way Forward

7 Way Forward

Project Design	
Key Issues	**Recommendations**
During our visit, it was found that women's participation in the project cycle is limited to labour work in agricultural activities. Men are responsible for decision-making and financial management.	To enhance women's role, targeted training, capacity-building programs, and gender mainstreaming in decision-making processes should be initiated. Women should be involved at all stages of the project for sustainability and to promote gender equality.
Farmers have acknowledged the positive impact of the improved irrigation cycle for all three seasons. It has contributed to a significant increase in agricultural output. However, the flip side of this progress is that there has been a concurrent rise in the cost of cultivation. The increasing cost of cultivation can be attributed to the greater dependency on chemical fertilisers and pesticides.	In view of this situation, it is essential to explore viable options to reduce the cost of cultivation while maintaining the current levels of productivity. Innovative and sustainable approaches such as natural fertilisers, crop rotations, and integrated pest management could be explored to reduce the reliance on costly chemical inputs.
Our observations indicate that there has not been a system for effective tracking of the progress of initiatives in the project cycle, particularly those related to agriculture and non-pesticide management training. This has resulted in farmers not being able to follow up on the project's interventions or only partially adapting them, even though they are intended for self-consumption.	It is recommended to establish a robust system for the effective tracking and promotion of agriculture and non-pesticide management training interventions. This can be achieved through the use of appropriate software tools and regular communication with farmers. Improved tracking will facilitate early identification of bottlenecks in the implementation process and enable timely corrective actions, ensuring the success of the project and the benefit to the farmers.
During our field visit, we noted that despite the formation of water user associates (WUAs) for the Water Harvesting Structures (WHS) beneficiaries, they were mostly inactive. The responsibilities and roles of the WUAs were not clearly communicated, resulting in a lack of active participation by their members towards water stewardship.	To ensure the long-term sustainability of the WHS and promote efficient management of water resources, it is imperative to encourage the active participation of all WUA members. In this regard, it is recommended to introduce and practice water budgeting and crop planning at the community level, which can provide farmers with the necessary information to better assess their irrigation needs and water requirements.
Farmers have acknowledged the effectiveness of the structures in mitigating these issues. However, the run-even levelling of farmland has prevented the accumulation of water to the desired level. Consequently, performing land levelling activities has become an essential prerequisite for enhancing the effectiveness of the WHS. Regrettably, this valuable activity can be relatively expensive, and many beneficiary farmers are unable to afford it.	To address this challenge, we recommend incorporating land levelling activities into the project activities. The project can collaborate with local stakeholders and government initiatives such as MGNREGA to provide low-cost land levelling equipment to farmers, and extensive capacity-building programs could orient farmers towards the importance of land levelling in enhancing the effectiveness of WHS.

Project Scale-up

Tailored strategies for outreach

Tailored strategies for outreach for women and youth members of the communities must be implemented to ensure that they benefit from the Participatory Water Resource Management project. Utilizing design tools like empathy maps might be useful for understanding the varied needs, experiences, and aspirations, and designing tailored mobilization strategy as well as follow-up support. Key farmer personas can be identified such as tenant farmers, women, youth, elderly farmers, etc.

Promotion of organic farming

The project can be upscaled by promoting organic farming practices that will enhance soil quality, reduce input costs, and ensure food safety. Farmers should be encouraged to adopt organic inputs and natural fertilisers, which can help minimize dependence on chemical pesticides and enhance the quality of produce. The use of organic certification can also be promoted to increase the market value of the produce.

Collectivisation

The formation of strong farmer groups can strengthen the bargaining power of farmers and enable them to take advantage of shared inputs, resources, and knowledge. Farmer producer organisations can be established, which will enable farmers to pool resources and market their produce collectively. This can help reduce transaction costs and provide a platform for capacity-building and technical training.

Market linkages

To scale up the project, an efficient market linkage system that provides better prices and transparency for farmers must be developed. This can be achieved by creating e-commerce platforms for the farmers to sell their produce or by initiating agreements with neighbouring towns and cities to purchase the farmers' crops. Additionally, integrated value chains that create new jobs and markets can be promoted.

8 References

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[iii] pib.gov.in/PressReleaseIframePage.aspx?PRID=1705798#:~:text=Ministry of Jal Shakti is taking up a,areas of all the districts in the country.

Impact Assessment of Sarada River Project

Asian Paints Limited

January 2025

Strictly Private and Confidential

V. Ravi

General Manager

Asian Paints Limited

Mumbai, Maharashtra– 400055

India

07 March 2025

Subject: Final report for Impact assessment of CSR Projects

Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

67B595C3ADEC43E...

Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

Table of Content

About the Project

About the Project

Aim of the Project

- The aim of the project was to mitigate the social and economic impacts caused by flooding in 11 villages and to prevent the overflow of the downstream river and reduce the damage to public property, standing crops, and nearby habitations.
- Additionally, the project intended to increase water potential by addressing the siltation of the riverbed and mitigating the effects of low water storage in the check dam. Ultimately, the project sought to improve the water availability for irrigation sources and prevent water scarcity for standing crops in the affected villages.

Location

Ganaparthi Village in Munagapaka Mandal of Vizag district

₹2.98 crores

Spent in the year FY 2022-23

APL's Support

- The intervention focused on five key activities: Desilting of 25,000 cubic meters of the riverbed, construction of a 230-meter-long, two-step protection wall, earth filling and stone pitching work for the embankment, the construction of a sluice with an iron gate, and the construction of a Groyne, which is a structure made of stone filling and wire mesh binding. The support provided for each of these activities is crucial for the overall success of the project, helping to strengthen and better protect the 11 villages from the effects of floods, such as water damage and socio-economic loss.

Benefits of the project:

The Sarada River project has identified both direct and indirect beneficiaries in the 11 villages. The direct beneficiaries of the project include 16,030 farmers who cultivate around 8,500 acres of agriculture land, and who have over 32,000 cattle in the flood-prone area.

The program aims to help farmers avoid high crop losses of around Rs 35-40 cr per annum, which are caused by flooding in the area. These benefits are critical to the farmers and their families' livelihoods and will help them avoid significant lost income and resources.

In addition, there are several indirect beneficiaries of the project, including the 42,600 members of the 11 villages' population. The flood control program will help to save fertile soil and protect the biodiversity of these areas, benefiting all those who rely on the ecosystem services provided by the region. Approximately 4,900 agricultural laborers and other workers benefitted indirectly from the program.

Impact Assessment Framework

Evaluation Framework (1/2)

The performance of the BGSW *'Resilient Health Care Infrastructure Towards Health Equity at Coimbatore Medical College'* Program was assessed based on **OECD DAC** Criteria.

The key criteria under OECD DAC are-

- ✓ Relevance
- ✓ Coherence
- ✓ Effectiveness
- ✓ Efficiency
- ✓ Impact
- ✓ Sustainability

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Relevance

The study analyses the programme's relative importance vis-à-vis the needs of the target group

Coherence

The study also looks at macro level triangulations of compatibility of the intervention with the government policies and its alignment with the SDGs

Effectiveness

The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups

Impact

The study measured the significant positive, or negatives changes produced by the program directly or indirectly, intended or unintended or externally or internally

Efficiency

The study also focussed on the extent to which signifies that the program uses the least costly resources possible to achieve the results

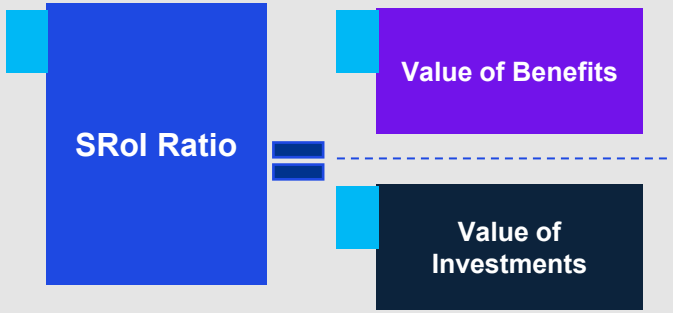
Sustainability

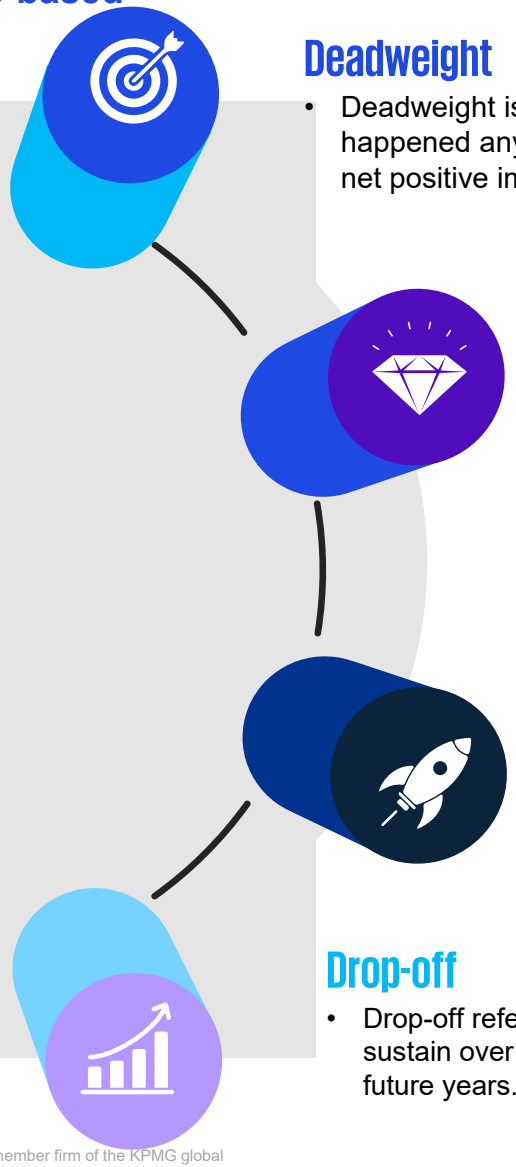
The study also included sustainable angles and tried to understand whether the benefits of the program are likely to continue after the exist

Evaluation Framework (2/2)

Social Return on Investment (SRoI) is a principles-based method used to measure extra-financial values

The process of calculation of SRoI largely focuses on deadweight, displacement, attribution and drop-off in association with the outcomes achieved under the MHU program, to present the accurate value of social impact.





Deadweight

- Deadweight is the extent to which the outcomes would have happened anyway. To understand if your initiative is creating net positive impact

Displacement

- Displacement refers to negative effects taking place elsewhere as a result of the outcomes, and which offsets the outcomes. To understand if your initiative are creating unintended negative impact

Attribution

- Attribution refers to the contribution of other factors to the outcomes. To understand who else could have contributed to the outcomes and how much did you contribute.

Drop-off

- Drop-off refers to the outcomes that are initially observed but do not sustain over the years. To understand if your outcome is worth same in future years.

Project Outcomes Basis OECD-DAC Framework

Assessment Result (1/3)

This section of the report discusses the OECD-DAC criteria and presents the status of sarada river project support provided by APL.

Relevance

- APL has undertaken a comprehensive flood mitigation project along the Sarada River, which includes widening the river by 100 meters and constructing a protective retaining wall on its left side. These measures aim to safeguard 11 villages from socio-economic losses caused by floods. Additionally, the project features the construction of a sluice with an iron gate, enabling farmers to access water from the river as needed for their agricultural activities.
- During discussions with beneficiaries from Ganaparthy, Chuchukonda, Joagaraopeta, Yadagiripalem, and Melupaka, it was noted that the construction of the wall had significantly benefited them. However, the wall was destroyed due to natural causes. The beneficiaries emphasized the need for continued support through the refurbishment of the wall to ensure their protection from unsafe increases in water levels.

Coherance

- Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.
- Alignment of the programme with National Priorities and Sustainable Development Goals:
  Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

Assessment Result (2/3)

This section of the report discusses the OECD-DAC criteria and presents the status of Sarada river project support provided by APL.

Efficiency

- The project showed demonstrated exceptional efficiency in managing water capacity during foods, significantly reducing the typical damage caused by such events. By effectively holding and controlling the floodwaters the initiative minimized the adverse impacts surrounding communities and livelihood.
- 60% respondents stated that the impact of programme will last for 1-3 years and after that they require maintenance of the project.
- 78% of the respondents stated that the cost of irrigation has been reduced after the implementation of the project.
- Approximately 8,500 acres of agricultural land have benefited from this project. The construction of the sluice has provided water for erosion-free irrigation, while the construction of the groyne has effectively controlled and diverted the flood flow from the left bank of the river to the other side.

Effectiveness

- The project has proven effective in constructing the retention wall, which now protects people, farmlands and livestock from floods, the protection wall which was previously unavailable. The project successfully achieved its goal of enhancing safety and resilience in the affected villages.
- 100% of the beneficiaries reported that after construction of sluice the availability of water for irrigation has increased.
- Regrettably, the retaining wall constructed on the left side of the Sarada River was compromised due to loosen soil and a sudden surge of water when the dam gates were opened simultaneously. This combination led to the collapse of the retaining wall. Despite this setback, the structure has been temporarily reinforced with sandbags, and the sluice remains operational, allowing farmers to continue accessing water from the river for irrigation.

Assessment Result (3/3)

This section of the report discusses the OECD-DAC criteria and presents status of sarada river project support provided by APL.

Impact

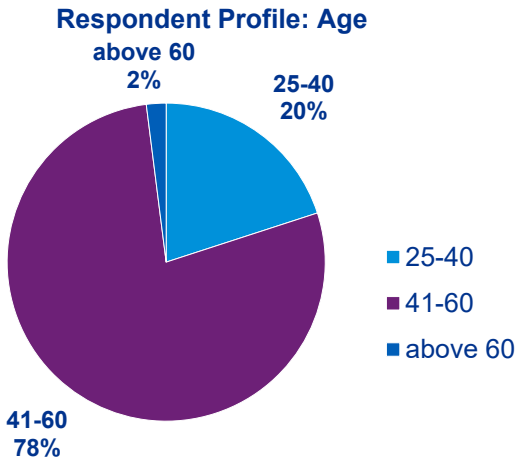
- 100% of the respondents stated the project has significantly benefited them in several ways. It has increased the availability of both surface and groundwater, positively impacting agricultural land and practices.
- The project has improved farmers' livelihoods by making water more accessible, thereby enhancing their ability to sustain and expand their farming activities.
- 78% of the respondents indicated that the project's intervention has significantly improved their financial condition. By increasing the availability of water for irrigation, the project has enabled farmers to cultivate their lands more effectively and consistently.

Sustainability

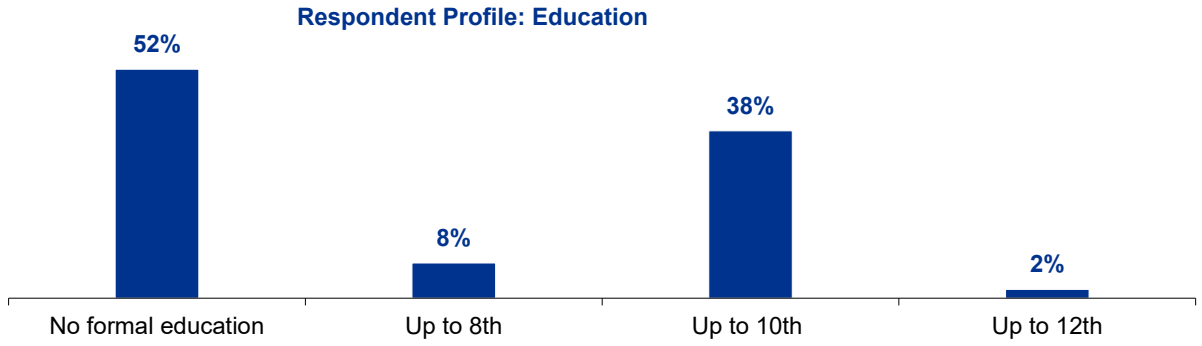
- The temporary reinforcement of the retaining wall with sandbags demonstrates adaptability and resilience. However, for long-term sustainability, it is crucial to refurbish and strengthen the wall to withstand future natural events.
- The beneficiaries emphasized that widening the river by an additional 40 meters would significantly enhance water flow. They also suggested the removal of gates in the Rolugadda Canal, which would help prevent the overflow of water into the villages during heavy rains. This measure is expected to mitigate flooding and protect the local communities from water-related damages.

Detailed Findings & Analysis

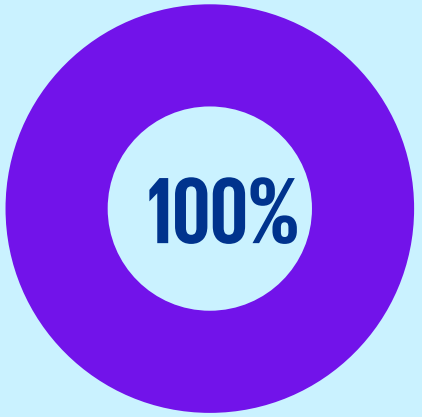
Demography of the respondents (1/2)



- The respondents interviewed were largely **(70 percent)** from the age group of **41 to 60 years**, followed by 20 percent from 25 to 40 years age group and two percent whose age is more than 60 years.
- In terms of education levels, majority (52 percent) of respondents had no formal education whereas 38% completed their education up to 10th standard



Accessibility for all social groups



This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions representing the project's commitment to social equity and inclusion.

Demography of the respondents (2/2)

Source of income

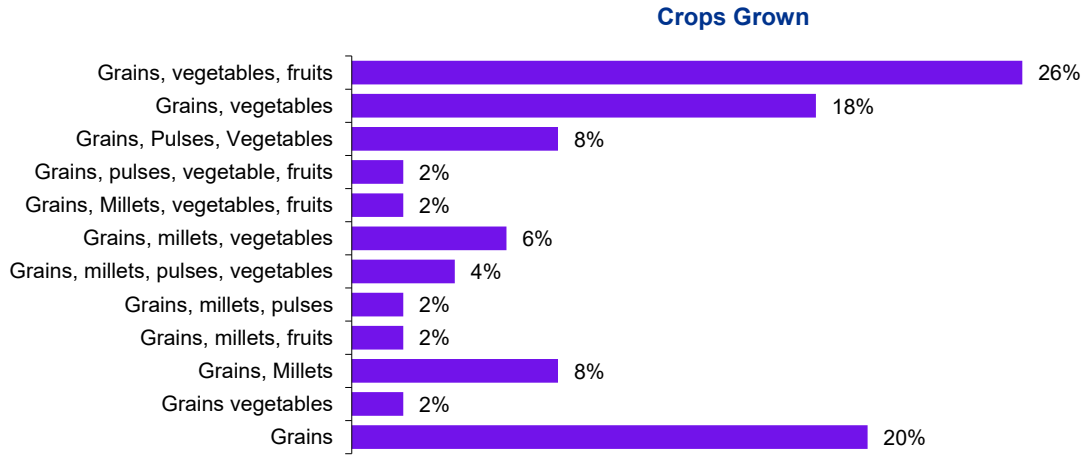
100% of respondents shared that their primary source of income is agriculture

Land Type

100% of the respondents grow their crops on their own land as well as have their own irrigation facilities

Land holding size

46% of respondents reported land size less than 2 acres, 36% ranging from 2 to 5 acres whereas 18% of the respondents have land size of more than 5 acres

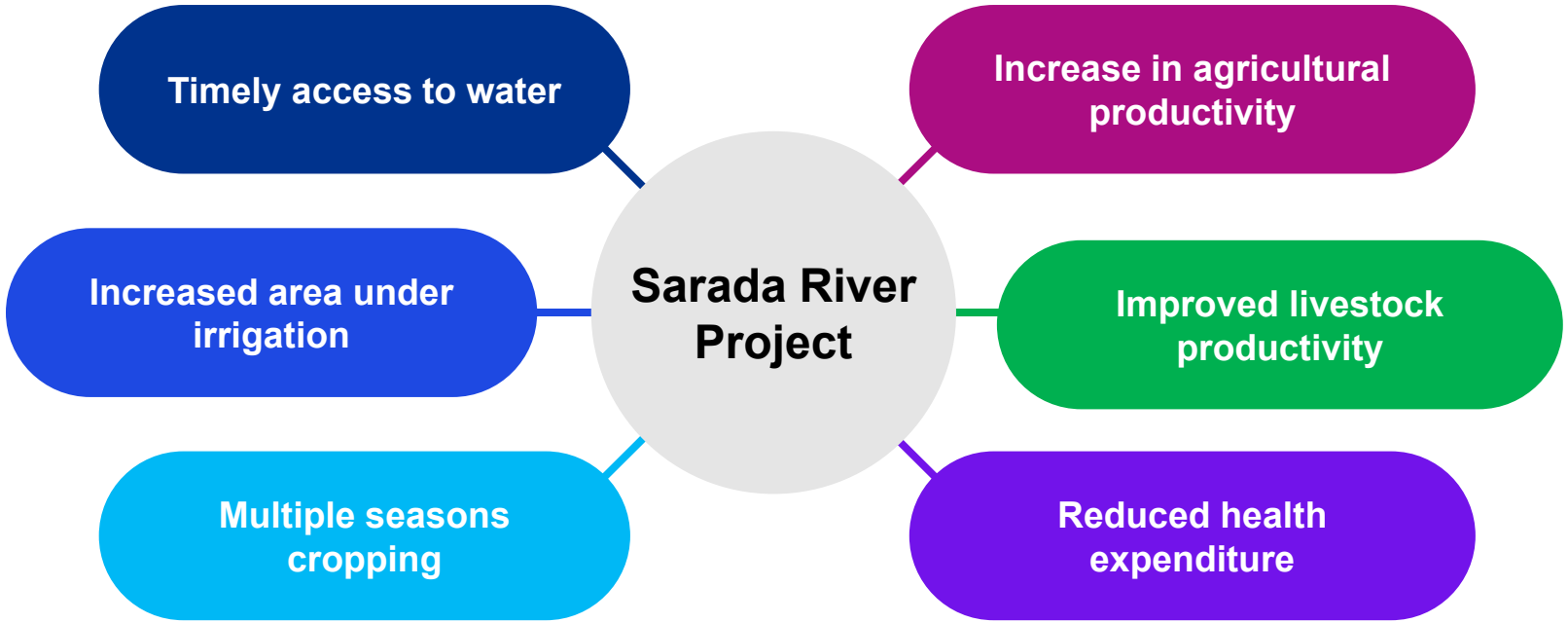


Season of cultivation:

Village	Kharif	Rabi
Chuchukonda	100%	100%
Ganaparthy	100%	100%
Joagaraopeta	100%	100%
Melupaka	100%	100%
Yadagiripalem	100%	100%

- The table reveals the percentage of farmers practicing farming in Kharif and Rabi seasons in different villages. 100% of farmers in all the villages practice farming in both the seasons.
- The crops grown in the villages includes various Grains, Pulses, Vegetables, Fruits and Millets. 26% of the farmers grow only Grains, vegetables and fruits whereas 20% of the farmers are into cultivating only different types of grains.

Impact of Sarada RiverProject



100% respondents reported -

The project has helped all the community members by providing benefits like :

- Direct irrigation from WHS
- Water availability in well due to GW recharge
- Improved soil moisture

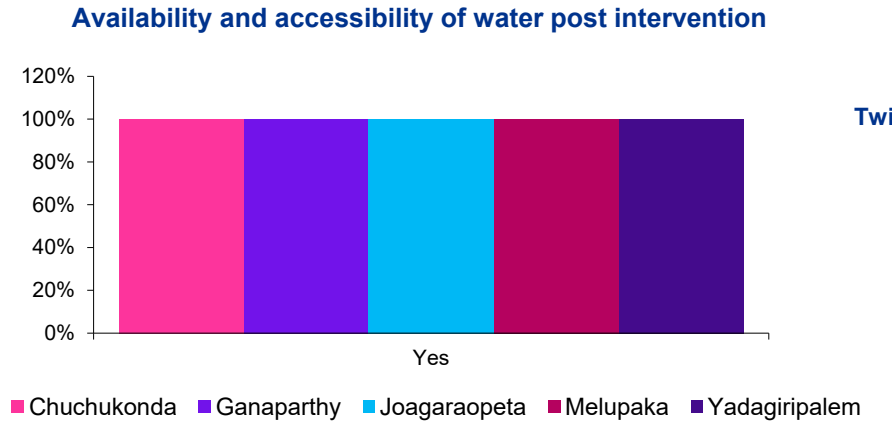
- **The figure indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural & livestock productivity. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS.**
- **Further analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity, reduced input costs, and timely access to water resources.**
- **These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.**

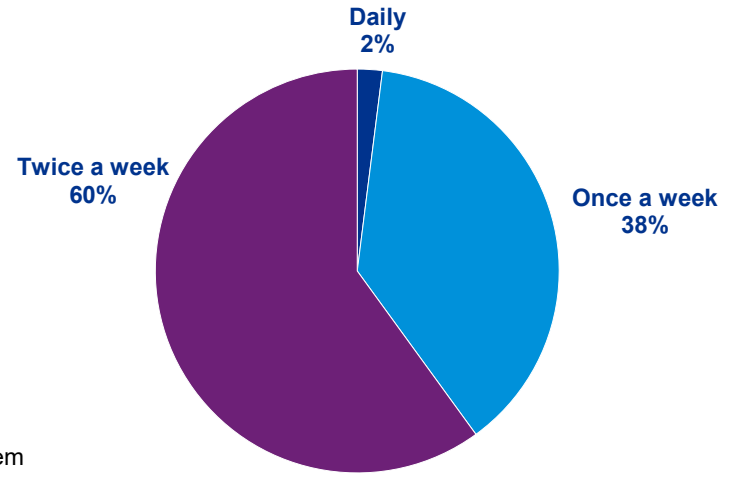
Support for Water Harvesting Structures

100%

of the respondents believe that the water management activities done in their area has effect on the irrigation process resulting in-

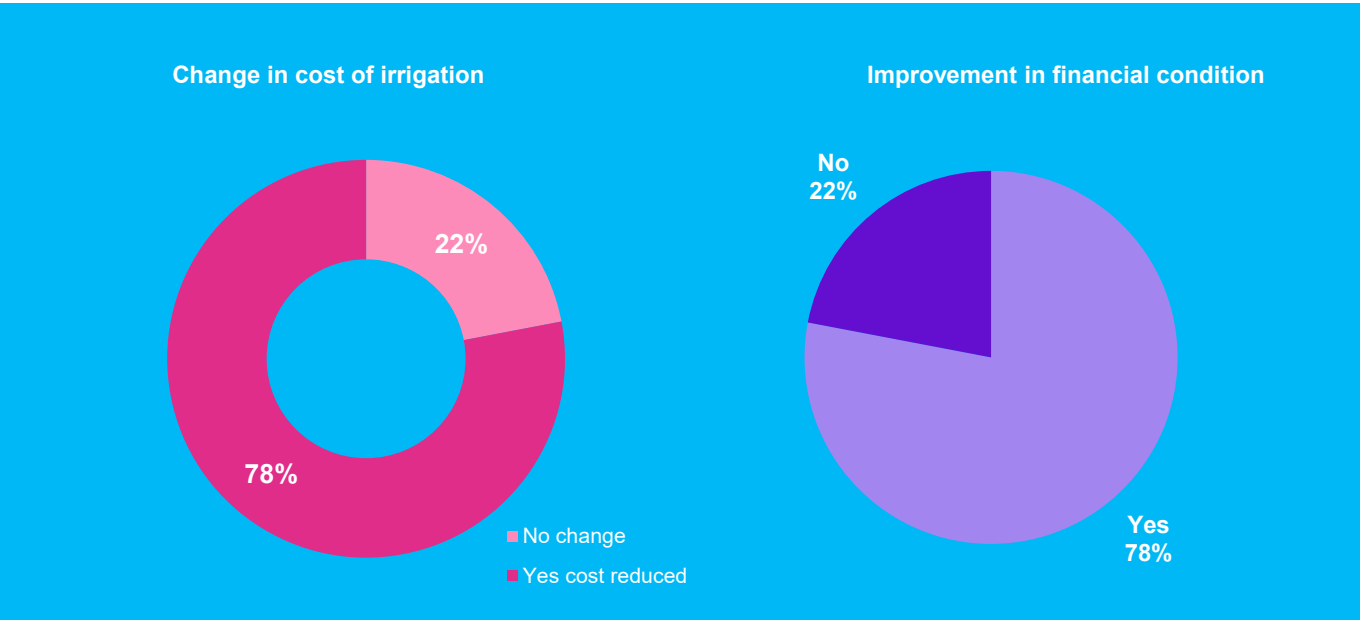
- Less Flooding
- Increased Ground Water level
- Direct irrigation

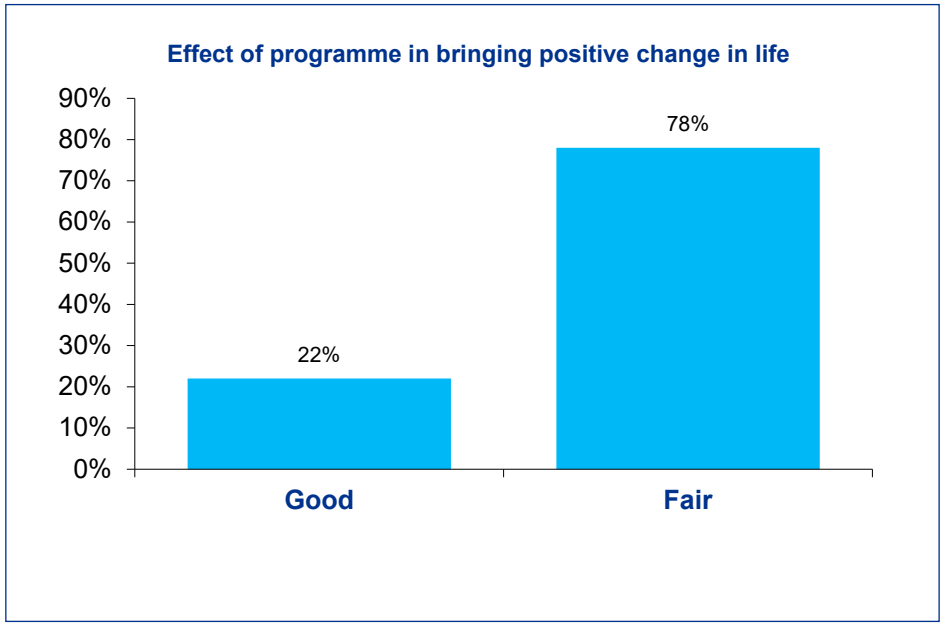




- The results indicate that all respondents reported no challenges with previous water quality. The respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.
- The data shows the impact of project interventions on water depth in wells/borewells during different seasons. The data demonstrate positive outcomes, with improved water availability observed across all seasons, leading to enhanced groundwater table levels and better agricultural productivity.
- The data indicates that all the respondents (60%) avail water twice a week. 38% of the respondents access water from WHS once a week. The results demonstrate that WHS has been effective in providing beneficiaries with a reliable and stable supply of water for their daily needs. Overall, the outcomes of the analysis showcase the positive impact of the project interventions in improving water access.

Post Intervention Outcomes





- Basis the discussions with the project beneficiaries, 78% of the beneficiaries reported that the cost of irrigation is reduced after the intervention.
- Majority (78%) of the respondents said that their financial condition improved post- intervention. This considerable increase in income underscores the tremendous impact of the agriculture interventions on the beneficiaries' financial wellbeing. The interventions have significantly enhanced productivity and yield, leading to more significant economic returns. In conclusion, the considerable increase in the total income of the beneficiaries after the project interventions reflects the success of the agriculture interventions in increasing productivity and yield.
- The project intervention has delivered several positive outcomes that significantly impact personal life. The responses from the beneficiaries suggest that the WHS has led to timesaving and a considerable reduction in physical effort. The data also indicates improved health outcomes, with 100% of the respondents highlighting the positive impact on their health & physical well-being. The outcomes demonstrate that the WHS has eased the burden of water collection and enabled beneficiaries to focus on their personal lives.

Thank You

Impact Assessment of Namma Jal Bhadrate Project- Mysore Karnataka

Asian Paint Limited

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

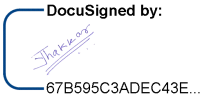
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

TABLE OF CONTENT

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- This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions are not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.
- While performing the work, we have assumed the authenticity of all documents or information referred to or provided. We have not independently verified the correctness or authenticity of the same.
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- The performance of our work was based on information and explanations given to us by the staff of Paani Foundation. Neither KPMG nor any of its partners, directors or employees undertake responsibility in any way whatsoever to any person in respect of errors in this report, arising from incorrect information provided by Paani Foundation.
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01

Executive Summary

EXECUTIVE SUMMARY

The philosophy of transformation has been in DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering relationship of trusts with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45% of total irrigation and 80% of domestic water needs are met by groundwater. the unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such challenging landscape, water harvesting and conservation under the umbrella of watershed management became need of the hour. Asian Paints engaged in holistic approach through their program "Water resource development" in Mysore block of Karnataka, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country.

The main objectives of the impact study are to assess the impact of water stewardship activities with focus on the access and availability of surface and ground water, potable water, farmer`s livelihood, land and agriculture practices, and governance. The study covered mix-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of SROI framework and OECD-DAC frameworks. A total of 100 respondents were interacted for data collection in Mysuru blocks of Karnataka including farmers, community members, and PRI members.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by the water for livelihood programme, INR 2.72 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

1 Relevance

- 71% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- All beneficiaries rated the availability of water as poor before the project implementation.

2 Effectiveness

- 100% of beneficiaries shared the improved water availability for two to three months post-monsoon.
- 98% shared improved water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- 98% rated improved water availability and accessibility as good.
- 97% respondents shared improved soil moisture level due to water related intervention.
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007)[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

1.2 Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong

emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 About the study

To understand the impact created by its interventions implemented in FY 2022-23, Asian Paints Ltd. empanelled KPMG to facilitate the impact assessment of its Namma Jal Bhadrate project. The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility, availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of

	fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

1.4 About the project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

The project, Namma Jala Bhadrate (NJB) and Integrated Watershed Management (IWSM), was implemented in Mysuru District by Asian Paints Ltd. The objective of the project was to rejuvenate water bodies and feeder channels in the region. The project achieved a significant milestone by rejuvenating 45 tanks in Mysuru and Nanjanagudu blocks through efficient silt removal processes. The method involved careful evaluation of the silt demand from farmers and was executed with due diligence to ensure optimal results.

The de-silting process included the removal of fine silt and sediment that had accumulated in the tanks. The process aimed to restore the natural capacity of the tanks without widening or deepening the river. The impact of the de-silting process was a significant increase in the storage capacity of water within the tanks as well as facilitating significant groundwater recharge.

The project also facilitated the rehabilitation of the relationship between farmers and water bodies, enabling them to capture, store, and percolate water effectively. The project team cleared the feeder channel (inlet and outlet) routes to enable adequate rainwater inflow from nearby areas into the tanks. A total of 45 tanks from 38 villages in 18 Gram Panchayaths were rejuvenated through the removal of 1,49,290 tractor loads of silt, which converted to 4,47,871 cubic meters of silt.

The rejuvenation of these tanks resulted in the storage capacity of water increasing to 44,78,71,000 liters in the 2022-23 financial year, benefiting over 200,000 individuals. Tanks and feeder channels that had been dry for over 40 years were fully restored, helping farmers grow multiple crops such as sugarcane, vegetables, paddy, and more. The increased yield doubled the farmers' income and helped make the project a resounding success.

1.5 About implementing partner

CREDIT-I is a non-profit organization established in 2007 and located in Mysuru, Karnataka. The organization is committed to empowering women and youth through educational and economic development programs in the region. CREDIT-I is registered under the Indian Trust Act of 1882 and has catered to over 1,25,000+ individuals across Karnataka.

The organization's primary focus is capacity building and engaging women and youth, considering their unique needs. CREDIT-I has initiated various developmental programs such as Watershed Development Programs, Rejuvenation of Water Bodies, Formation of Women SHGs (CBOs) of Economically weaker section, Sponsorship for Education and Health, Family, Business and Career Counseling, Shelter for Urban Homeless, and more. APL has partnered with Credit-I, to implement its CSR projects in the Mysore district, Karnataka. The partnership between APL and Credit-I focuses on promoting improving the water resources. Credit-I was responsible for carrying out the activities, ensuring that they are completed on time, within budget, and meet the expected outcomes whereas APL provides technical and financial support to achieve these objectives and create a sustainable and inclusive development model that benefits marginalised communities.

02

Approach & Methodology

2 Approach and Methodology

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 Our Approach

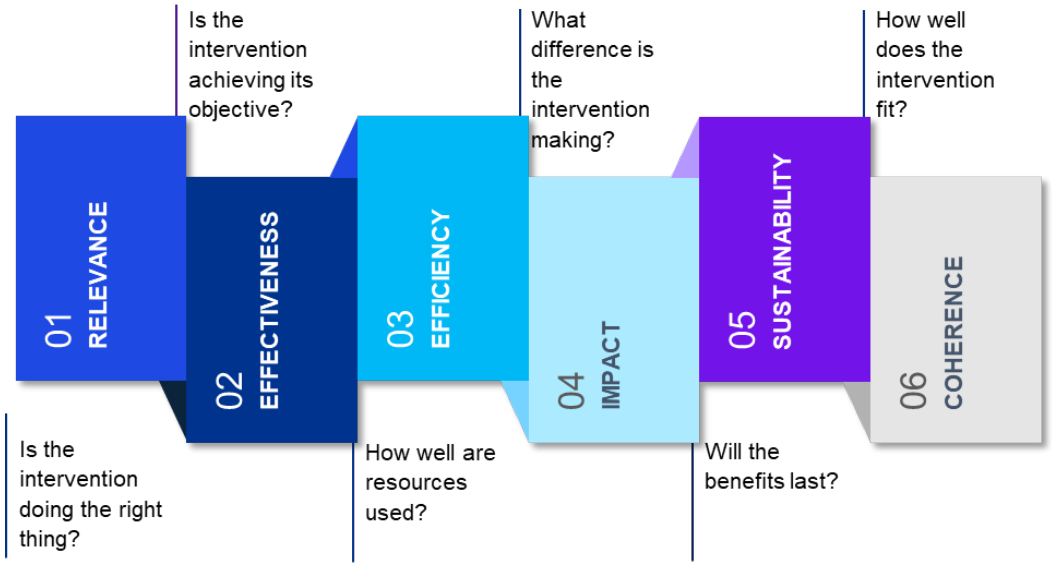
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	**Phase II: Research Design**	**Phase III: Data Collection**	**Phase IV: Analysis and Reporting**
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	**Illustrative Evaluation Questions**	**Cross-cutting Objectives**
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.	*Achieved cross-cutting objectives during project implementation*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope

Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.

Mapping Outcomes

Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes

Evidencing Outcomes

Collecting and analysing outcome data and establishing how long the outcome will last

Establishing Impacts

Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact

Calculating SROI

Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

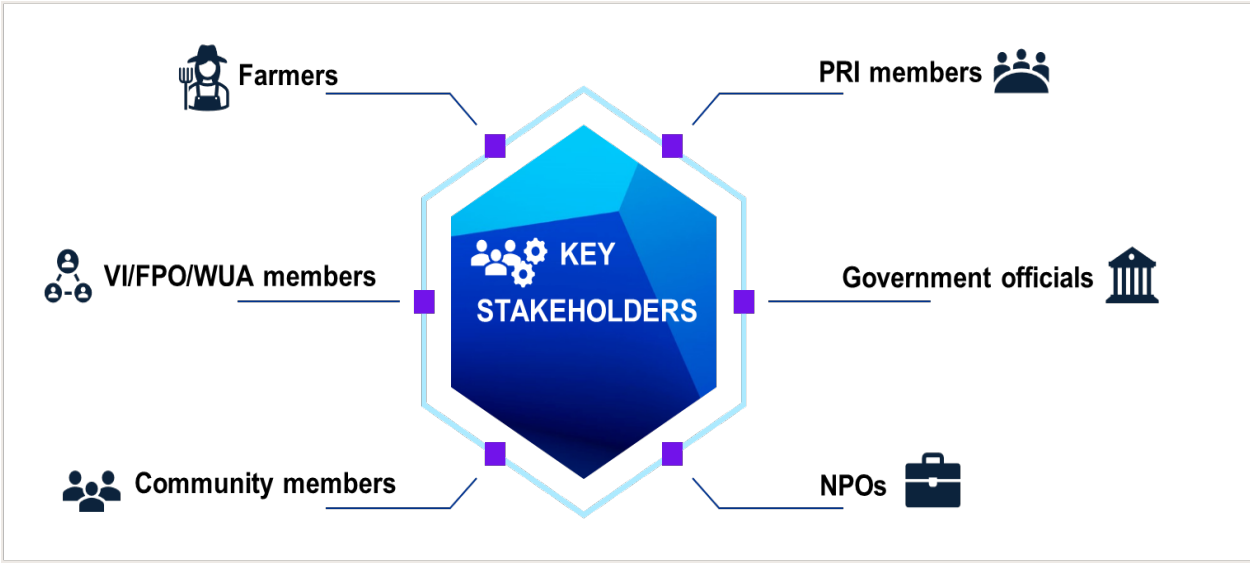
Impact Map:

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment. To organize and strengthen the village institutions around water harvesting and related livelihoods	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices
			No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area,

					Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. Considering the overall outreach of the project as nearly 1151 beneficiaries, the statistically significant sampling has been derived using the method of 95 percent confidence level and five percent margin of error. Additionally, we have taken extra sample stakeholder in order to derive accurate social return on investment ratio. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to water intervention & Benefitted due to agriculture intervention	518	100	100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which

constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- Credit I. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI

framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

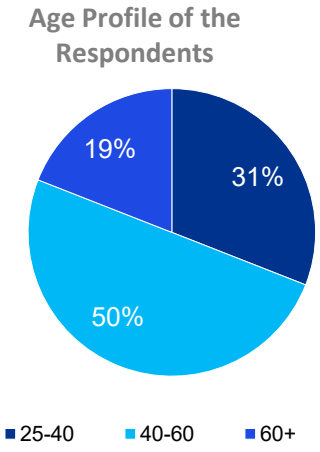
Analysis and Findings

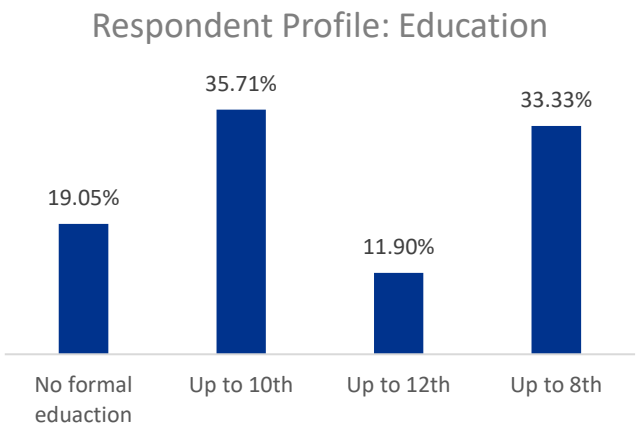
3 Analysis and Findings

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Namma Jal Bhadrate program supported by Asian Paints Limited. across three villages of Bagur, Gopalpura and Sinduvalli villages in Mysore district of Karnataka.

3.1 Demography of respondents

The respondents interviewed were largely (21 percent) from the age group of 25 to 40 years, followed by 13 percent from 40 to 60 years age group and eight percent whose age is more than 60 years. In terms of education levels, (19 percent) of respondents had no formal education whereas 35% completed their education up to 10th standard.





Support received through project intervention:

WHS	Agriculture intervention	Training and awareness program
59%	25%	15%

The analysis of the table presented indicates that the beneficiaries of the project have received support through multiple interventions, indicating a strong emphasis on inclusivity in sample coverage. In addition to water resource management activities, the project promotes sustainable agriculture practices to enhance farm productivity through the provision of quality inputs, direct extension services, mechanization, and integration of agriculture with livestock.

The project adopts a holistic approach to ensure the sustainability of agriculture practices while improving productivity. This approach focuses on enhancing the efficient use of water resources, promoting sustainable practices, and improving the livelihoods of smallholder farmers. By addressing these key areas, the project is well-positioned to deliver meaningful impact and drive positive outcomes for the communities it serves.

Overall, the inclusive approach adopted by the project to support beneficiaries through multiple interventions represents a significant step forward in promoting sustainable agricultural development and improved livelihoods for smallholder farmers. The continued implementation of these interventions will be crucial for long-term success and progress towards sustainable development goals.

Season of cultivation:

Source of income

100% of respondents shared that their primary source of income is agriculture, followed by 99% and 1% rely on labour work and livestock respectively.

HH income

Annual HH income of majority of (77%) of respondents ranges between INR 50,000 to INR 1,00,000.

Land holding size

53% of respondents reported land size ranging from 2 to 5 acres.

Village Name	Kharif	Rabi	Summer
Bagur	50%	21%	29%
Gopalpura	33%	13%	53%
Sinduvalli	38%	15%	46%

The table reveals the percentage of farmers practicing farming in Kharif, Rabi, and Summer seasons in different villages. Bagur has the highest percentage of farmers practicing agriculture in all seasons while Gopalpura and Sinduvalli has a consistent percentage of farmers practicing farming in all seasons.

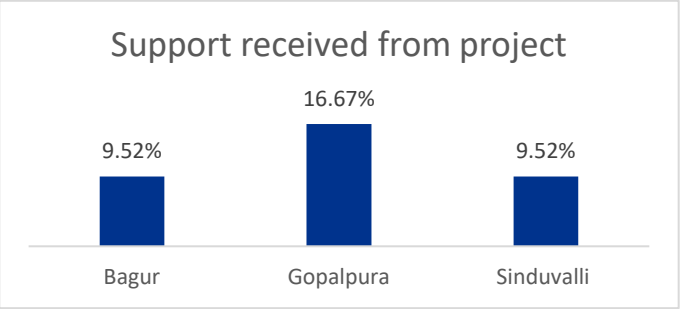
About Irrigation facility:

Village Name	Yes	No, only dependent on rains
Bagur	100%	0%
Gopalpura	100%	0%
Sinduvalli	100%	0%

The table shows the percentage of villages with access to irrigation facilities and those dependent only on rainfall for farming. Bagur, Sinduvalli and Gopalpura have a high percentage of farmers

with access to irrigation facilities. Bagur, Sinduvalli and Gopalpura have 100% access to irrigation facilities and no dependency on rains. The data highlights the importance of irrigation facilities for agricultural activities and the need for more resources to improve infrastructure in the region for better crop yields and economic growth.

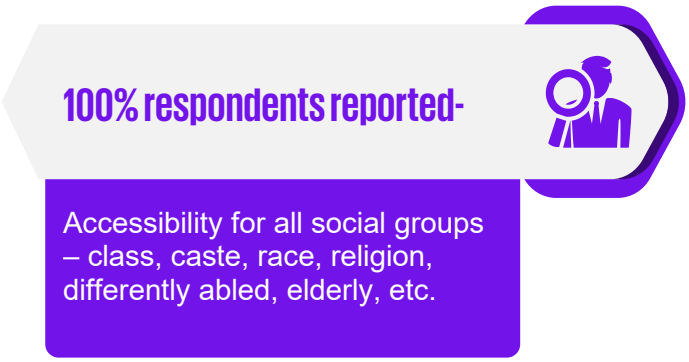
Support received from project:



The table presented indicates the percentage of beneficiaries who received support through different interventions of the project.

WHS activity was implemented Gopalpura and Sinduvalli. Agriculture intervention were conducted in Bagur, Gopalpura and Sinduvalli villages. Whereas Other awareness programs were conducted in Bagur, Gopalpura and Sinduvalli.

About Accessibility of the project across all community groups:



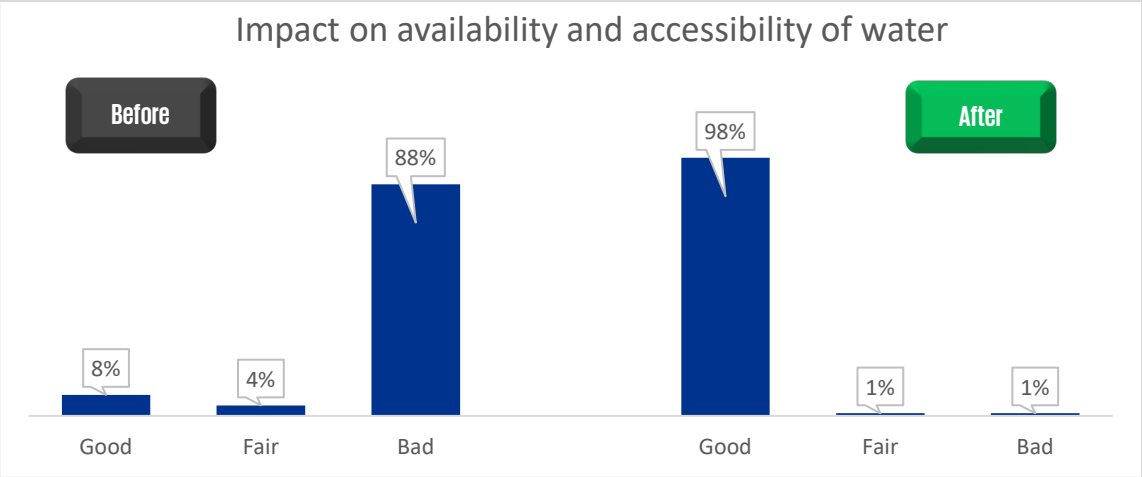
Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrate the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

3.2 Support for Water Harvesting Structures.

As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that 100% of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents stated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial in ensuring the successful implementation and sustainability of the project.

3.2.1 Impact on availability and accessibility of water



The graph presented indicates the respondents' rating of the availability of water pre- and post-implementation of the project. The ratings are segmented into three categories: Good, Fair, and Bad. From the analysis, it is evident that the implementation of project activities has significantly improved water availability in the region.

Before the project's implementation, very less respondent rated the availability of water as 'good.' In contrast, the majority of the respondents rated the availability of water as 'bad' at 88%, while only 8% rated it as 'good.' This indicates disparities in the availability of water pre-project implementation, with many beneficiaries facing challenges related to water scarcity.

However, after the implementation of the project interventions, the ratings have significantly improved, with 98% of the respondents rating the availability of water as 'good.' Only 1% rated water availability as 'fair,' and 1% rated it as 'bad.' These results demonstrate the positive impact of the project on water availability, leading to improved access to water resources, better irrigation, and enhanced agricultural productivity.

Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

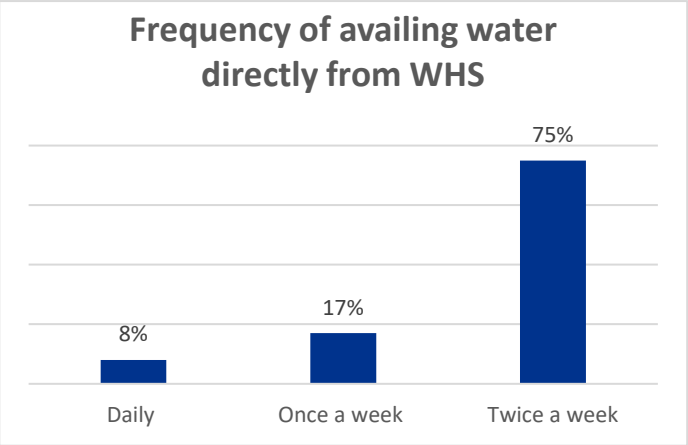
100%

Of respondents having well/ borewell reported that intervention resulted in increased water availability in your well/borewell

100%

Of respondents reported that the duration of improved water availability is for two to three months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income generation. Above responses show the effectiveness of the project in improving water resource management in the region.



The data indicates that the majority of respondents (75%) avail water twice a week. 8% of the respondents access water from WHS once daily and weekly each, respectively. The results demonstrate that WHS has been effective in providing beneficiaries with a reliable and stable supply of water for their daily needs. Overall, the outcomes of the analysis showcase the positive impact of the project interventions in improving water access.

3.2.2 Improved water level:

Season	Intervention	Depth of water in well/ borewell (Ft)	Delta Change (Ft)
Monsoon	Pre intervention	240	50
	Post intervention	190	
Winter	Pre intervention	241	51
	Post intervention	190	
Summer	Pre intervention	272	58
	Post intervention	214	

The table shows the impact of project interventions on water depth in wells/borewells during different seasons. The data demonstrate positive outcomes, with improved water availability observed across all seasons, leading to enhanced groundwater table levels and better agricultural productivity. The efficacy of the interventions is evident from the significant delta change observed in the summer season at 58 feet, followed by the winter season with a delta change of 51 feet, and the monsoon season at 50 feet. Overall, the results highlight the importance of sustainable water management practices implemented through the project, leading to better access to water resources.

During the project evaluation, the beneficiaries reported positive outcomes resulting from pond rejuvenation activities as part of improving surface water availability. The data indicate that 100% of the respondents experienced an improvement in surface water availability, with 98% confirming surface water availability during summer. Improved surface water access indicates significant benefits in increased crop yields, enhanced soil health, livestock and domestic use, leading to positive socio-economic outcomes.

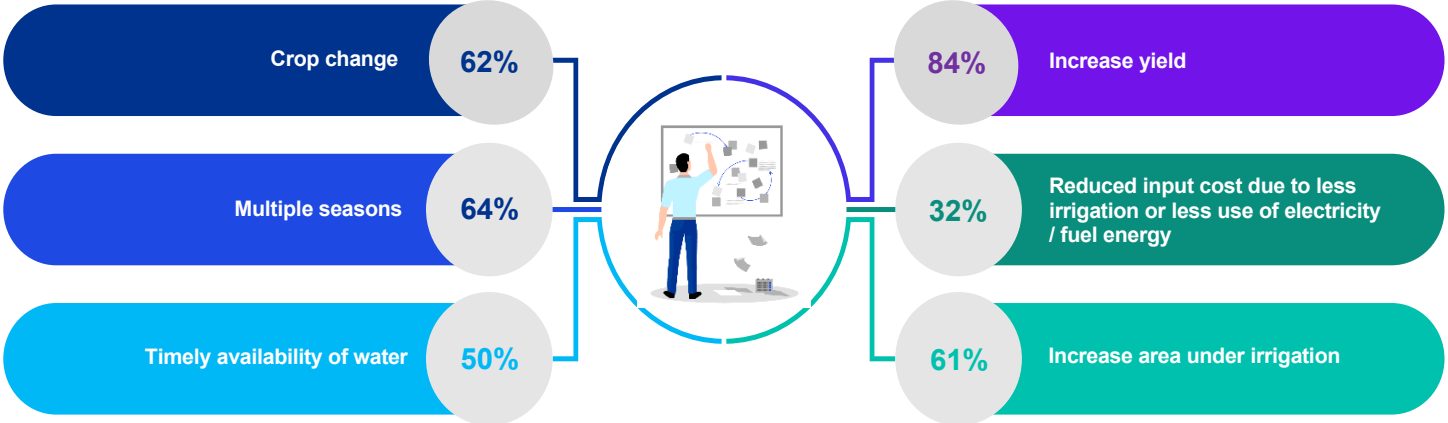
Since the rejuvenation of the pond the villagers have experienced remarkable benefits. They have consistent and reliable source of water for crops leading to increase in agriculture yields. In turn there is increase in the income and quality of life

- Farmer beneficiary from Sinduvali village

3.2.3 Impact on water quality:

As part of the project evaluation, discussions were held with beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality standards. During the focus group discussions, respondents further confirmed having no issues or challenges related to waterborne diseases. They also indicated that most of them have access to RO drinking water, so they rarely use pond water for drinking purposes. This indicates safe access to water for all community members across all villages in the project intervention area.

3.2.4 Impact on agriculture practices:

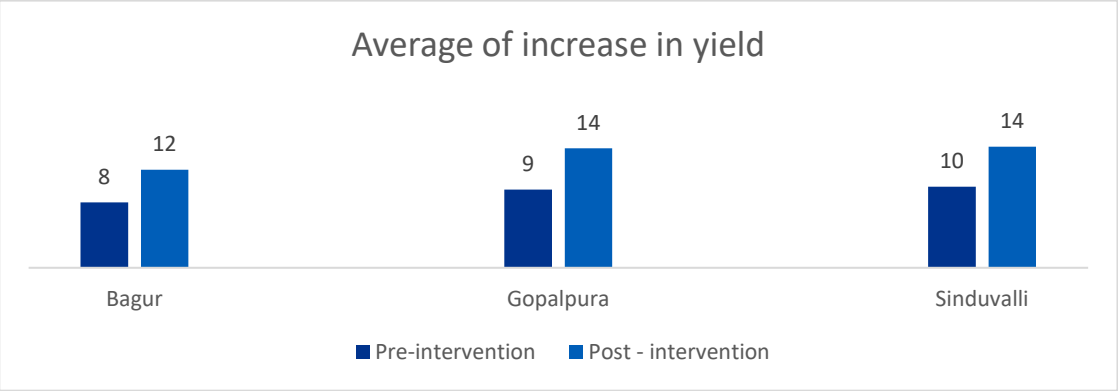


Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates

that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity, reduced input costs, and timely access to water resources. These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.By ensuring reliable access to water, the project has improved farming practices in the community.

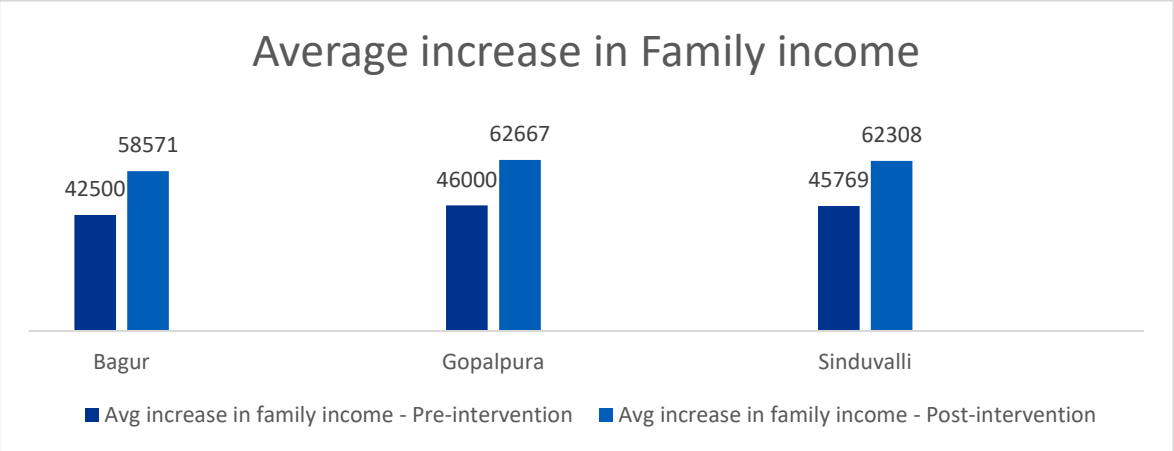
3.2.5 Increase in yield



The graph provided shows the impact of water availability and improved access on farming practices in the specified villages.

The data depicts a significant improvement in crop productivity after the interventions, with all villages showing an average increase in yield. The delta change highlights a considerable difference between the pre- and post-intervention period. The analysis reveals that all villages experienced an increase in yield, with the most significant difference observed in Gopalpura with 5 quintal/acre increase. Bagur, Gopalpura and Sinduvalli also showed an increase in yield, ranging between 4-5 quintal/acre.

3.2.6 Impact family income



The graph focuses on the impact of the project interventions on the family income of the intervention villages. The data shows a significant increase in the average family income indicating the overall positive impact of the project's targeted interventions.

The analysis of the data highlights that all villages experienced an increase in family income post-interventions. Gopalpura village observed the highest delta change in family income, with an increase around Rs 16,667 per year. Bagur village also experienced a notable increase, with a family income increase of Rs 16,071 per year. Overall analysis shows an average 37% improvement in family income.

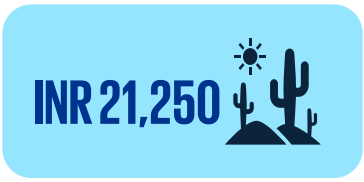
3.2.7 Impact on livestock

Improved productivity

Due to improved water availability through out the year has resulted into the improved crop productivity.

Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.



Improved family income

The ome generated through livestock business resulted in an average increment of INR 21,250 in the beneficiaries' annual family income.

The data presented suggests that the WHS has positively impacted livestock management practices. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS. The qualitative survey responses showing the quantifiable impact on family income indicate that the WHS has provided a reliable and stable supply of water, enabling efficient livestock management practices, leading to enhanced livelihoods and socio-economic outcomes for the beneficiaries.

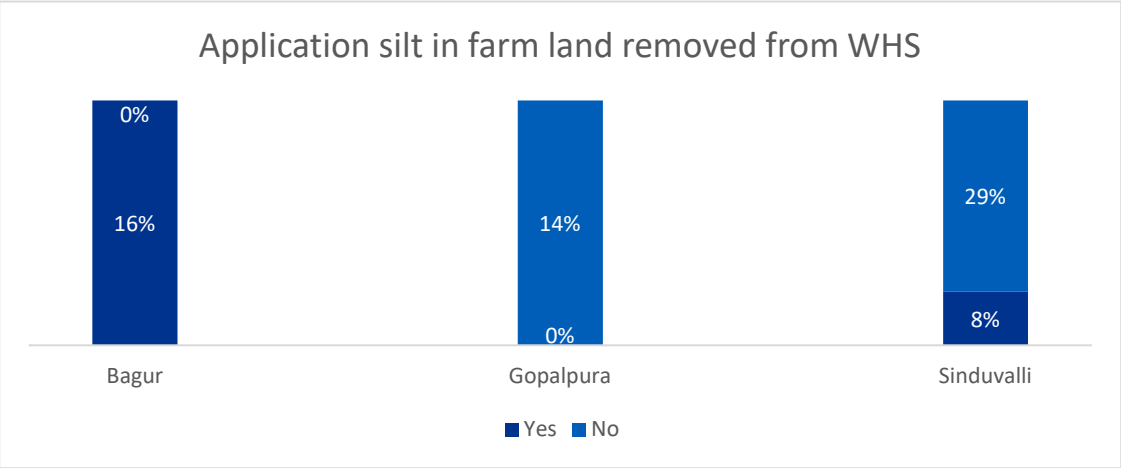
3.2.8 Impact on personal life

The project intervention has delivered several positive outcomes that significantly impact personal life. The responses from the beneficiaries suggest that the WHS has led to timesaving and a considerable reduction in physical effort. The data also indicates improved health outcomes, with 62% of the respondents highlighting the impact on their physical well-being. The outcomes demonstrate that the WHS has eased the burden of water collection and enabled beneficiaries to focus on their personal lives. The efficient and reliable access to water has reduced physical exertion, improved personal health, and enhanced overall quality of life. Thus, the project interventions have contributed to better socio-economic outcomes and improved the overall well-being of the beneficiaries.

3.2.9 Silt application on agriculture land

The application of silt on agricultural land has several benefits in promoting sustainable agriculture and improving soil fertility. Silt, which is a natural byproduct of water management activities like the WHS system, is rich in nutrients and minerals that enrich the soil quality. The use of silt in

agriculture improves soil texture, water retention, and soil fertility, promoting better plant growth and crop yields.

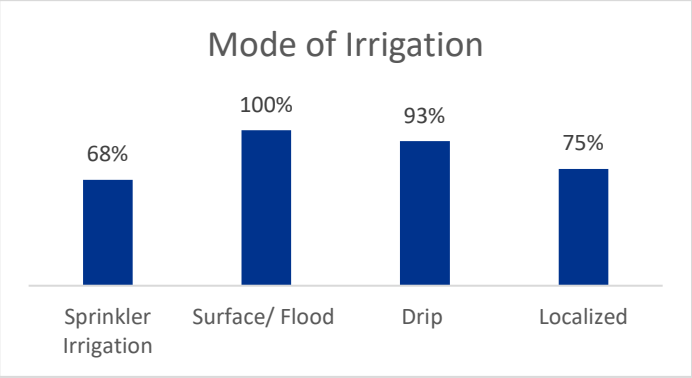


In discussions held with beneficiaries from three villages 16% of the respondents of Bagur villages reported applying the silt generated from the WHS structure to their agricultural land with support from the implementation agency. The beneficiaries observed positive outcomes, including improved soil quality and enhanced soil productivity, leading to better crop yields and increased water retention capacity. The feedback underscores the significance of promoting sustainable agricultural practices and encouraging the utilization of significant resources like silt generated from the WHS structure to support sustainable development in the region and long term agricultural productivity.

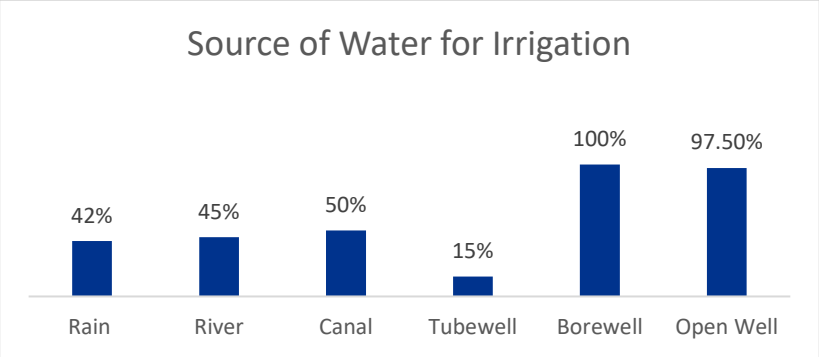
All respondents (100%) reported improvements in soil health, with a subsequent reduction in the need for fertilizers. The response data also indicated 100% achievement in improving productivity and reducing irrigation cycles across all beneficiaries. The outcomes demonstrate that utilizing silt in agriculture practices has resulted in the provision of essential nutrients to the soil, promoting eco-friendly practices, and leading to an overall reduction in the use of chemical fertilizers.

3.3 Agriculture and Livelihood

3.3.1 Mode of irrigation

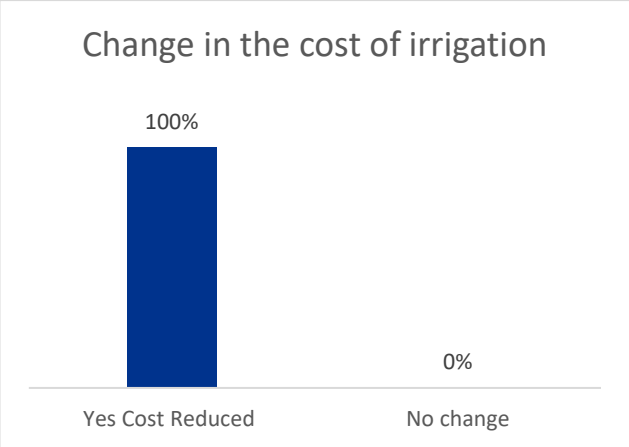


The distribution of irrigation practices in the project area indicates that the adoption of Surface irrigation is the most prevalent at 100%, followed by drip irrigation at 93%, localized irrigation at 68%, and other methods. The data highlights the shift towards localized and drip irrigation, which are more efficient and eco-friendlier compared to conventional irrigation methods like surface/flood irrigation. The results suggest that the agricultural interventions have yielded positive impacts on irrigation practices in the project area, encouraging beneficiaries to adopt sustainable and efficient irrigation methods.



The chart highlights the different sources of water for irrigation practices in the project area, indicating that the majority of respondents rely on borewells (100%) and open wells (97.5%) for irrigation purposes. Canals account for 50% of the water sources, followed by rivers at 45%. Rainwater is utilized by 42% of respondents, while tube wells are the least relied upon, accounting for only 15% of the sources. These results emphasize the significance of proper management of water resources, particularly in arid and semi-arid regions such as the project area. Effective water resource management is crucial to ensure sustainable agricultural practices and improve the livelihoods of the community.

3.3.2 Cost of irrigation

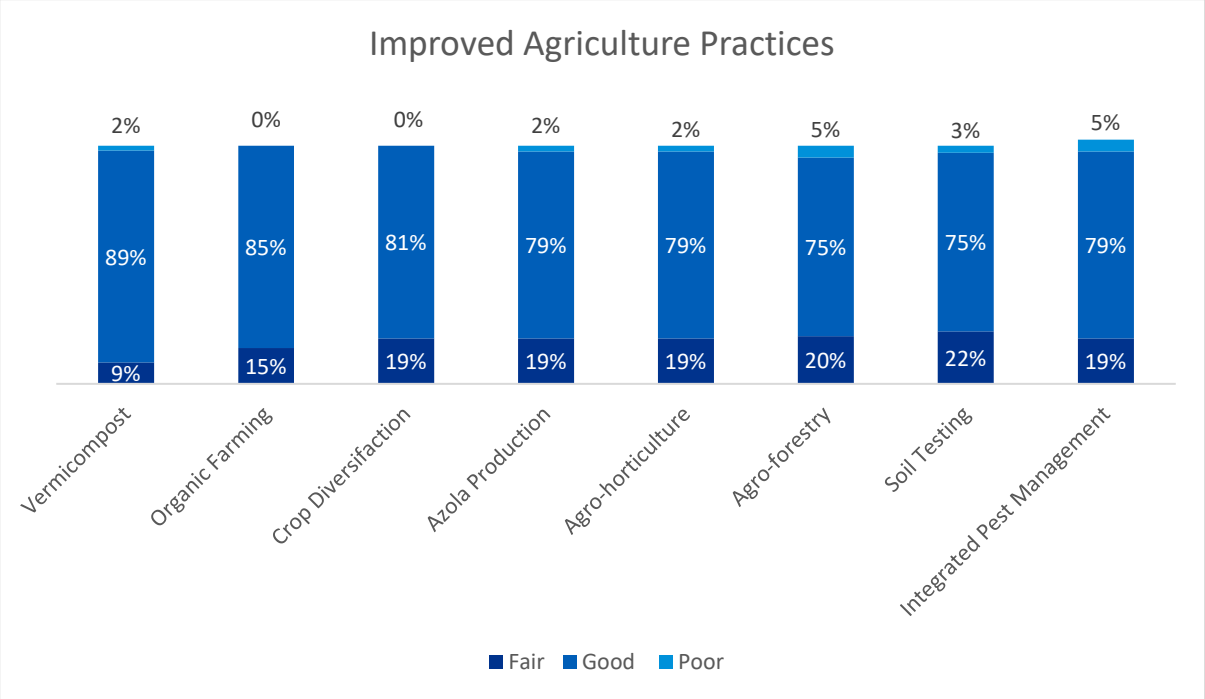


According to the discussions 100% of respondents, this reduction is due to the use of silt and the high availability of water. Additionally, farmers have reduced their reliance on chemical fertilizers and pesticides, opting instead for sustainable farming practices. These changes have not only lowered their expenses but also promoted a more environmentally friendly approach to agriculture.

The beneficiaries shared that the yield through organic farming is less in comparison to chemical usage. Moreover, there is no demand for organic produce in nearby marketplaces. The reluctance to switch to organic farming entirely serves as a hindrance to the efficient adoption of sustainable agricultural practices.

	Average cost (INR)	**Delta change**
Cost of irrigation pre-project intervention	6608	3400 (50%)
Cost of irrigation pre-project intervention	3208	

3.3.3 Understanding on improved agriculture practices

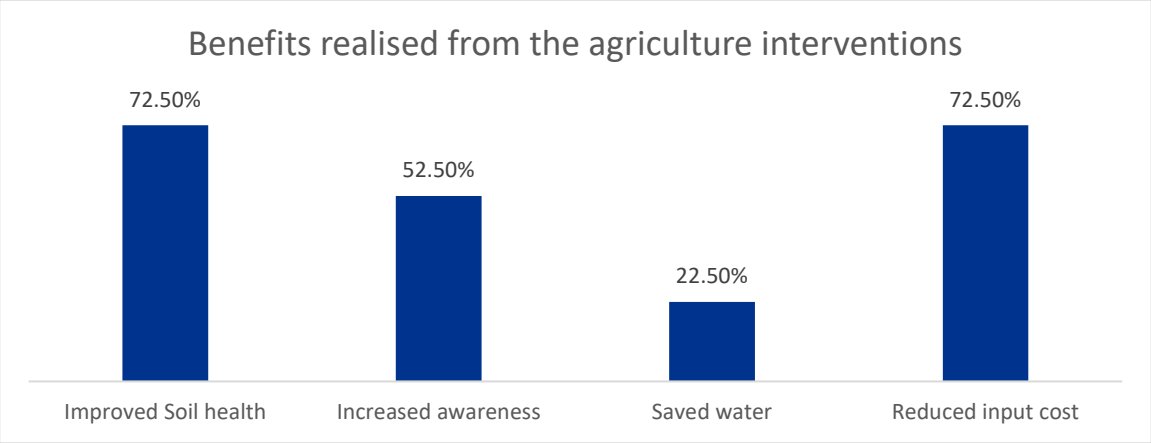


The graph indicates the rating given by project beneficiaries for their understanding of various improved agricultural practices, including integrated pest management, crop diversification, soil testing, agroforestry, agro-horticulture, vermicompost, organic farming, etc.. The majority of the respondents rated their understanding of vermi-composting, organic farming and crop as good, indicating that these practices have been well-received and understood by the beneficiaries.

The rating for azola production and agro-horticulture was somewhat mixed, with approximately one-third of the respondents rating their understanding as good, and the remainder rating it as fair or poor. The relatively low rating for soil testing suggests that further educational efforts and awareness building may be necessary to promote the adoption of soil testing as a measure of improving the quality and fertility of the soil.

Moreover, the rating for agro-forestry and integrated pest management practices indicates the need for greater awareness building and knowledge dissemination to promote and encourage the widespread adoption of these practices. While it is encouraging to note that some of the respondents considered their understanding good for organic farming, a significant proportion rated their understanding as fair or poor.

3.3.4 Benefit realized from agriculture intervention



The above graph represents the benefits realized from the agriculture interventions and the corresponding number of beneficiaries who reported experiencing such benefits. The results indicate that the interventions had a significant impact, with 72.5% of respondents reporting improved soil health. This highlights the positive and sustainable impact of the project on soil health, which is essential for enhancing agricultural productivity, promoting food security, and conserving the environment.

Additionally, 52.5% of respondents reported increased awareness, demonstrating the project's success in educating the community about sustainable farming practices. However, only 22.5% of beneficiaries reported saving water, suggesting that further efforts are needed to enhance water conservation techniques.

Interestingly, 72.5% of respondents also reported reduced input costs, indicating that the interventions have helped lower the expenses associated with agricultural inputs for a significant portion of the beneficiaries. This reduction in costs can improve the affordability of resources and support the economic wellbeing of the farming community.

In conclusion, the project interventions have enabled communities to experience several benefits, significantly improving their socio-economic wellbeing. The high success rates in improved soil health, increased awareness, and reduced input costs highlight the incredible potential of promoting sustainable agriculture practices in the region.

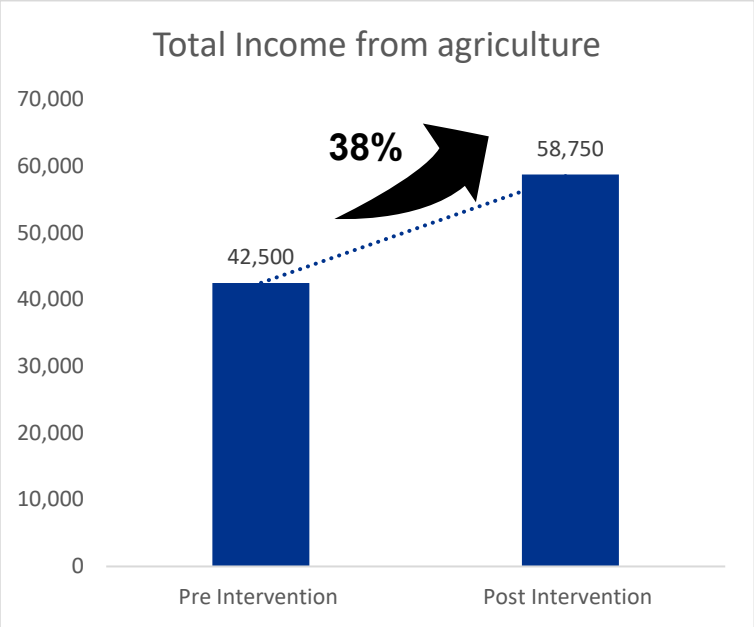
3.3.5 Impact on cost and produce from agriculture practice

Through discussion with project beneficiaries, it was reported that, 75% of the respondents have been able to reduce their input costs.

Reducing the input cost is essential for improving the efficiency and sustainability of agriculture practices while increasing the profitability of the beneficiaries. The low percentage of respondents who have been able to reduce their input cost may indicate potential barriers such as dependencies on chemical pesticides.

The results also indicate the need for further interventions that promote the use of cost-effective and sustainable agricultural practices. By adopting such measures, beneficiaries can reduce their input costs, increase their yields, and improve their financial wellbeing.

3.3.5.1 Agriculture income



The graph represents the total income from agriculture, the average income and the delta change before and after the interventions. The data indicates that the total income from agriculture has increased from Rs. 42,500 to Rs. 58,750.

This increase in income underscores the tremendous impact of the agriculture interventions on the beneficiaries' financial wellbeing. The interventions have significantly enhanced productivity and yield, leading to more significant economic returns. In conclusion, the considerable increase in the total income of the beneficiaries after the project interventions reflects the success of the agriculture interventions in increasing productivity and yield.

04

Measuring the Social Return

4 OECD-DAC

4.1 Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 83 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 32 percent of the respondents were only dependent on rainfed agriculture. Around 35 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 2013

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water
- (x) rural development projects

4.2 Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of	Project activities included promotion of agro-forestry and prevention of forest among the community

terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

Target 15.2

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[v] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[vi] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[vii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on water for livelihood aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

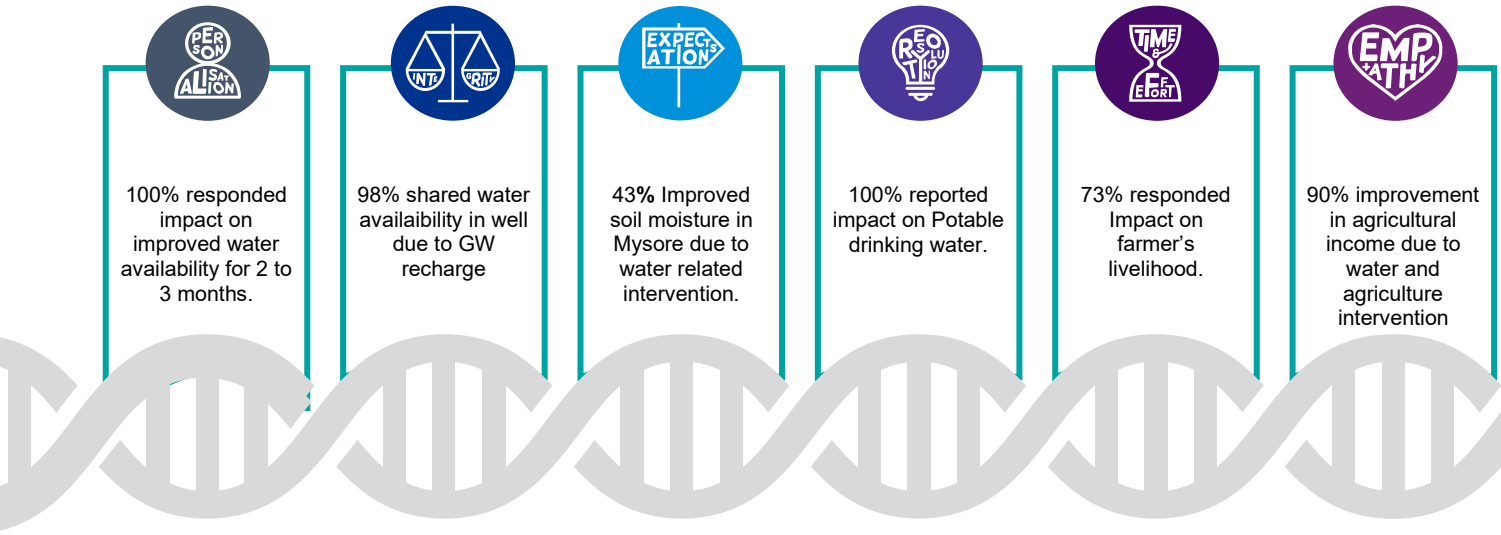
4.3 Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Water for Livelihood project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health, reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

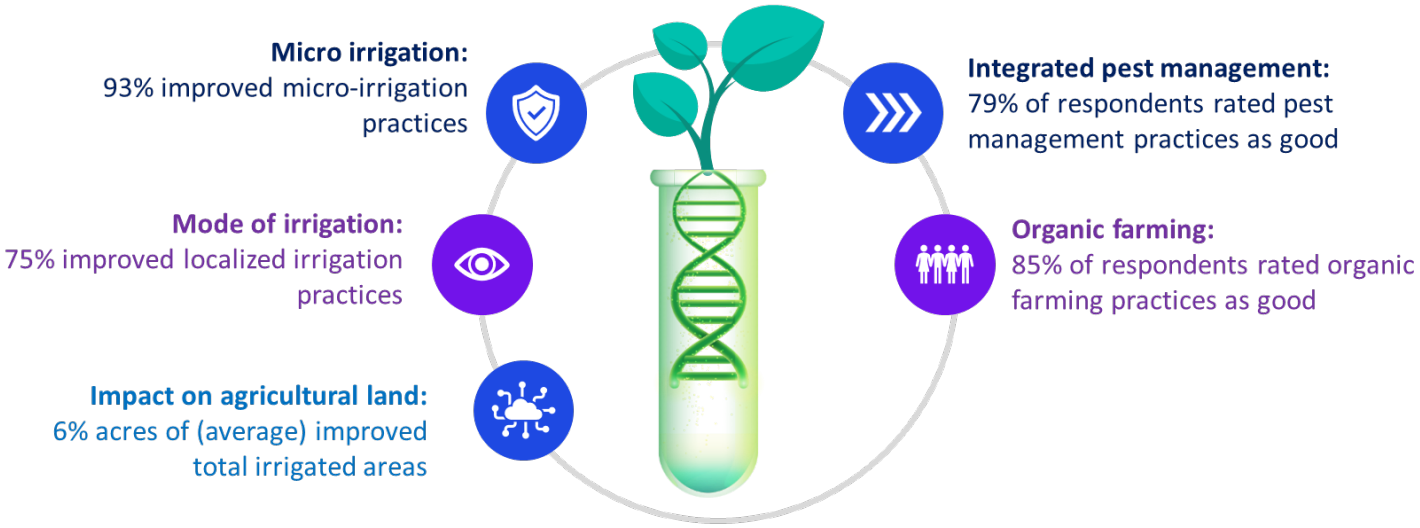
4.4 Evaluation Criteria- Efficiency

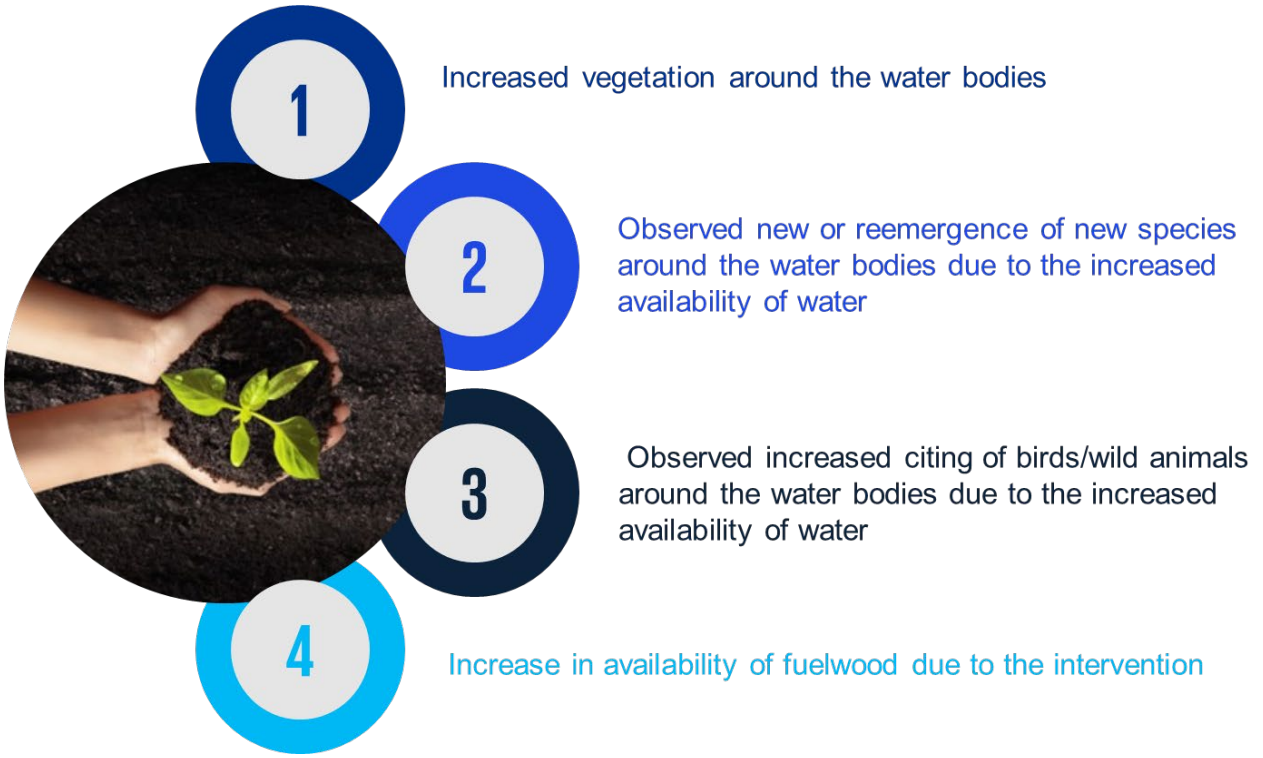
The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

4.5 Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.





4.6 Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

4.6.1 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

05

Measuring the Social Return

6 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

6.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change

Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1470.00
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	1470.00
Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	1043.70
	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	1470.00
	Reduction in (Number of farmers x Avg reduction in cost annually)	1470.00
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	999.60
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	1470.00
Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	1470.00
	Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	29.40
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	588.00
Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	
Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	
Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	

Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	882.00
	Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	735.00
Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	
Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	
Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	
Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with pleasant environment	

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.
- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

6.2 Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organizations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In

case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.

For a detailed view, refer table for SROI calculation.

Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total input value(INR)
Financial inputs	CSR Funding from APL	*12,800,518*
Total		***12,800,518***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Construction and refurbishment of canal lining	Creation of sustainable water supply through increment in availability and accessibility of water	Reduction in the annual utilisation of ground water due to channel lining Saving in ground water overdraft	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	10.00%	0.00%	20.00 %	20 %	399,103	399,103.20	319,282.56	255,426.05	204,340.84	163,472.67	0.00
		Increased availability of water for irrigation - surface water from canal (Number of farmers x Avg	;	197.00	10.00%	0.00%	50.00 %	20 %	42,247	42,247.04	33,797.64	27,038.11	21,630.49	17,304.39	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		increase in Irrigated land)													
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity)	330	30%	0%	40%	20%	287,179	287,179	229,743	183,795	147,036	117,629	0

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			- INR 200/-												
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents 0.2 acres Avg Yield of Wheat in Fy 2021-22 = 15 Q/acres MSP of Wheat in Haryana- Rs. 2125/Q	6375.00	10.00%	0.00%	30.00%	33%	1,350,191	1,350,190.96	900,172.31	600,144.88	0.00	0.00	0.00
		Increase in agriculture produce (Number of farmers x	Average increase in agriculture	19125.00	10.00%	0.00%	30.00%	33%	8,425,691	8,425,690.88	5,617,408.11	3,745,125.98	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description									Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		Avg increase in yield in the year)	production is 4 Q/ acres Total area = 60 acres MSP of Paddy in Haryana- Rs. 2203/Q												
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (12,000 INR)	12000	10.00%	10.00%	30.00 %	33 %	3,524,472	3,524,472.00	2,349,765.48	1,566,588.65	0.00	0.00	0.00
		Reduction in labour/efforts	Times saved due to reduced efforts (2 mandays	4727.64	10.00%	20.00%	30.00 %	33 %	1,234,254	1,234,254.43	822,837.43	548,612.38	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			per irrigation cycle) Minimum wage* # of days												
Improved awareness and growth of fodder	Increased fodder for livestock	Increased productivity of livestocks due to fodder and water availability	Haryana VITA milk cost per liter = 54 Rs/L	54	10.00%	0.00%	50.00 %	33 %	11,328,660	11,328,660.00	7,552,817.62	5,035,463.51	0.00	0.00	0.00
Trainings/ Workshops/ Demonstrations/ Soil Health testing	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Assisstance provided for Farmer`s training under NMOOP scheme, wherein INR 400/- per farmer per day are given	800.00	10.00%	0.00%	30.00 %	33 %	120,093	120,093.12	80,066.08	53,380.06	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			for providing training to farmer. Assuming a total of two days, INR 800/- per farmer is assisstance provided under the scheme.												
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x	Average O&M charges collected is 300 Rs/ beneficiary (by Respondents)	300.00	10.00%	0.00%	70.00 %	33 %	0	0.00	0.00	0.00	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		Cost of manager)													
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of milk and vegetables)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices	11246.61	10.00%	0.00%	30.00%	33%	734,044	734,043.66	489,386.91	326,274.25	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.												
		Improved sensitization towards child`s education (Number of respondents reporting	Basis NSS 68th Round (2011-12), MPCE in Rural	2067.36	10.00%	0.00%	30.00%	33%	134,932	134,932.45	89,959.47	59,975.98	0.00	0.00	0.00

Outputs	Outcomes	Indicators and Sources			Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description		Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
		increased spend on child`s education)	areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for												

Outputs	Outcomes				Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return					
	Outcome description	Indicators and Sources	Valuation approach (monetary)	Monetary valuation						Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
			calculation.												
									0	0.00	0.00	0.00	0.00	0.00	0.00

6.3 SROI results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:

Net present value of social value created	SRoI value
3,47,85,695	2.72
Net present value of total Investment	**SRoI Ratio**
1,28,00,518	1:4.481:2.72

For every INR 1 invested, the programme has generated social impact of IN 2.72

6.4 Sensitivity Analysis

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between INR 2.43 and INR 3.52.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters	Test case SRoI
1	Displacement is 0% & 20%	2.72	Displacement is 0%	2.84
2	Attribution is 80% & 50%	2.72	Attribution is 90%	3.52
3	Attribution is 80% & 50%	2.72	Attribution is 70%	2.74
6	Deadweight is 10% & 30%	2.72	Deadweight is 10%	2.74

7	Deadweight is 10% & 30%	2.72	Deadweight is 20%	2.43
8	Drop off is 3 to 5 years	2.72	Drop off is 3 years	3.10
9	Drop off is 3 to 5 years	2.72	Drop off is 5 years	2.68

6.5 Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

7 ANNEXURES

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by government (per hactare)	314.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Sangareddy district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Telangana- 2203/Q	22602.78
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	3270.83
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	400
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Telangana	52.00
Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-.	11246.61

			For a family of 4 members, the yearly expenditure has been considered for calculation.	
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00
	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00
	Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00

04

Way Forward

8 Way Forward

Key Issues	Recommendations
During our visit, it was found that women's participation in the project cycle is limited to labour work in agricultural activities. Men are responsible for decision-making and financial management.	To enhance women's role, targeted training, capacity-building programs, and gender mainstreaming in decision-making processes should be initiated. Women should be involved at all stages of the project for sustainability and to promote gender equality.
Farmers have acknowledged the positive impact of the improved irrigation cycle for all three seasons. It has contributed to a significant increase in agricultural output. However, the flip side of this progress is that there has been a concurrent rise in the cost of cultivation. The increasing cost of cultivation can be attributed to the greater dependency on chemical fertilisers and pesticides.	In view of this situation, it is essential to explore viable options to reduce the cost of cultivation while maintaining the current levels of productivity. Innovative and sustainable approaches such as natural fertilisers, crop rotations, and integrated pest management could be explored to reduce the reliance on costly chemical inputs.
Our observations indicate that there has not been a system for effective tracking of the progress of initiatives in the project cycle, particularly those related to agriculture and non-pesticide management training. This has resulted in farmers not being able to follow up on the project's interventions or only partially adapting them, even though they are intended for self-consumption.	It is recommended to establish a robust system for the effective tracking and promotion of agriculture and non-pesticide management training interventions. This can be achieved through the use of appropriate software tools and regular communication with farmers. Improved tracking will facilitate early identification of bottlenecks in the implementation process and enable timely corrective actions, ensuring the success of the project and the benefit to the farmers.
During our field visit, we noted that despite the formation of water user associates (WUAs) for the Water Harvesting Structures (WHS) beneficiaries, they were mostly inactive. The responsibilities and roles of the WUAs were not clearly communicated, resulting in a lack of active participation by their members towards water stewardship.	To ensure the long-term sustainability of the WHS and promote efficient management of water resources, it is imperative to encourage the active participation of all WUA members. In this regard, it is recommended to introduce and practice water budgeting and crop planning at the community level, which can provide farmers with the necessary information to better assess their irrigation needs and water requirements.
Farmers have acknowledged the effectiveness of the structures in mitigating these issues. However, the run-even levelling of farmland has prevented the accumulation of water to the desired level. Consequently, performing land levelling activities has become an essential prerequisite for enhancing the effectiveness of the WHS. Regrettably, this valuable activity can be relatively expensive, and many beneficiary farmers are unable to afford it.	To address this challenge, we recommend incorporating land levelling activities into the project activities. The project can collaborate with local stakeholders and government initiatives such as MGNREGA to provide low-cost land levelling equipment to farmers, and extensive capacity-building programs could orient farmers towards the importance of land levelling in enhancing the effectiveness of WHS.

Tailored strategies for outreach

Tailored strategies for outreach for women and youth members of the communities must be implemented to ensure that they benefit from the Namma Jal Bhadrate project. Utilizing design tools like empathy maps might be useful for understanding the varied needs, experiences, and aspirations, and designing tailored mobilization strategy as well as follow-up support. Key farmer personas can be identified such as tenant farmers, women, youth, elderly farmers, etc.

Promotion of organic farming

The project can be upscaled by promoting organic farming practices that will enhance soil quality, reduce input costs, and ensure food safety. Farmers should be encouraged to adopt organic inputs and natural fertilisers, which can help minimize dependence on chemical pesticides and enhance the quality of produce. The use of organic certification can also be promoted to increase the market value of the produce.

Collectivisation

The formation of strong farmer groups can strengthen the bargaining power of farmers and enable them to take advantage of shared inputs, resources, and knowledge. Farmer producer organisations can be established, which will enable farmers to pool resources and market their produce collectively. This can help reduce transaction costs and provide a platform for capacity-building and technical training.

Market linkages

To scale up the project, an efficient market linkage system that provides better prices and transparency for farmers must be developed. This can be achieved by creating e-commerce platforms for the farmers to sell their produce or by initiating agreements with neighbouring towns and cities to purchase the farmers' crops. Additionally, integrated value chains that create new jobs and markets can be promoted.

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Impact Assessment of Water Resource Development Project- Patancheru, Telangana

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
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India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

67B595C3ADEC43E...

Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

CONTENT

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While performing the work, we have assumed the authenticity of all documents or information referred to or provided. We have not independently verified the correctness or authenticity of the same.

We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.

In accordance with its policy, KPMG advises that neither it nor any partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Paani Foundation in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.

In connection with our report or any part thereof, KPMG does not owe a duty of care (whether in contract or tort or under statute or otherwise) to any person or party to whom the report is circulated and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, or expenses incurred by such third party arising out of or in connection with the report or any part thereof.

While the information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. We assume no responsibility for such information.

The performance of our work was based on information and explanations given to us by the staff of Paani Foundation. Neither KPMG nor any of its partners, directors or employees undertake responsibility in any way whatsoever to any person in respect of errors in this report, arising from incorrect information provided by Paani Foundation.

Our report may refer to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data.

ABBRIVATIONS

ANMs	Auxiliary Nurse Midwives
APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

01

Executive Summary

EXECUTIVE SUMMARY

The "Impact Assessment of Water Resource Development Project" in Telangana, particularly in the Patancheru area of Sangareddy district, highlights significant improvements in water availability, agricultural productivity, and socio-economic conditions. The project, supported by Asian Paints Limited, addresses water challenges exacerbated by rapid industrialization and population growth, focusing on sustainable water management and agricultural practices.The demographic analysis of respondents shows that 81% are aged between 40 to 60 years, with a majority having no formal education. The project has provided various forms of support, including water harvesting structures (WHS), agricultural interventions, and training programs. The project has also positively impacted water levels in wells and borewells across different seasons. The data shows a significant increase in water levels, with a delta change of 64 feet in the summer, 64 feet in the winter, and 82 feet in the monsoon season. Additionally, 88% of respondents reported increased water availability in their wells/borewells, and 69% noted that this improved availability lasted for more than four months.

The assessment reveals that the project has positively impacted the environment by improving soil health, increasing green cover, and enhancing biodiversity. The use of organic fertilizers and sustainable farming practices has reduced soil pollution and improved agricultural outcomes. Additionally, the project has fostered social inclusivity, ensuring that all community groups have equal access to the benefits of the interventions. The project has also enhanced livestock management practices, with 52% of respondents reporting improved productivity and 7% adding new livestock. The income generated from livestock has resulted in an average increment of INR 1,67,000 in annual family income. Furthermore, the project has positively impacted personal lives, with 62% of respondents noting improved health outcomes due to reduced physical exertion in water collection.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used. We estimate that for every INR 1 spent by the Water Resource Development programme, INR 4.43 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

Overall, the "Water Resource Development" project in Telangana has successfully addressed water scarcity and pollution issues, leading to significant socio-economic and environmental benefits. The project's comprehensive approach, including community involvement and sustainable practices, has improved the quality of life for residents in Patancheru and surrounding areas. Continued implementation and scaling up of these interventions are crucial for achieving long-term sustainability and development goals.

1 Relevance

- 75% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- All beneficiaries rated the availability of water as poor before the project implementation.

2 Effectiveness

- 90% of beneficiaries shared the improved water availability more than four months post-monsoon.
- 90% shared improved water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- 93% rated improved water availability and accessibility as good.
- Impact on agriculture- 97% improved pest management
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050.. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007) [iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India.. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujrat, Karnataka, Uttar Pradesh, Telangana, Andhra Pradesh and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent

and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

1.2 Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 About the study

To understand the impact created by its interventions implemented in FY 2022-23, Asian Paints Ltd. empanelled KPMG to facilitate the impact assessment of its Water Resource Development project. The objective of this study was to assess the impact of these water stewardship activities

on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility, availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

1.4 About the project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

Water Resource Development project was initiated by Asian Paints in 2015-16 with an aim to improve the quality of life in the Tribal community by implementing Integrated Development across 5,500 households and 11,000 hectares in the Patanucheru block of Medak. It also emphasises establishing institutional infrastructure for sustained development, covering three villages in the Patanucheru block. During the study period, the project has completed tasks such as constructing two check dams, repairing three check dams and deepening two ponds.

Objective of the project:

- To organise and strengthen village institutions. (UG, FIG, FPO)
- To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and Increasing water storage and availability.
- To improve and stabilize surface soil from converting it from Unirrigated to irrigated.
- To encourage enhanced farming practices in order to increase household income of tribal farming communities, along with benefiting the environment.

1.5 About Implementing Partner

The National Agro Foundation (NAF), established in 2000 by Mr. C. Subramaniam, a prominent figure in India's Green Revolution and recipient of the Bharat Ratna Award, is a Public Charitable Trust with a vision to catalyse a rural revolution focused on agriculture and small and marginal farmers. Anchored in the principles of inclusive growth, NAF operates with a "Soil to Market" approach, building on Mr. Subramaniam's pioneering "Seed to Grain" philosophy from the Green Revolution era. Over the years, NAF has transitioned from modest beginnings to a dynamic and professional organization, delivering cutting-edge services that have made a substantial impact on rural communities. Collaborating with the government, corporate entities, and other stakeholders, NAF has implemented core programs addressing local and global challenges in agriculture and rural development. Its approach includes tailored training programs, capacity development initiatives, and the integration of new modalities and technologies. With dedicated research and development efforts, NAF has reached over 220,000 farmers in 830+ villages across 15 states in India, demonstrating a commitment to positive change and sustainable development in the agricultural sector. NAF's collaborative efforts extend to partnerships with various government and non-government organizations, educational and research institutes, financial institutions, and corporate entities.

In collaboration with APL, NAF is actively engaged in the implementation of CSR projects centred around water resource development in the states of Telangana, Uttar Pradesh, Karnataka, and Tamil Nadu. This strategic partnership underscores a shared commitment to fostering the rejuvenation of water bodies, amplifying livelihood opportunities for farmers, and effectively managing natural resources. Within this collaborative framework, NAF assumes the responsibility of executing the specified activities, ensuring their timely completion, adherence to budgetary

constraints, and achievement of anticipated outcomes. Simultaneously, APL extends crucial technical and financial support to NAF, facilitating the realization of project objectives and the establishment of a sustainable and inclusive development model. This cooperative effort aims to deliver tangible benefits to marginalized communities while addressing critical issues related to water resources and rural livelihoods.

1.6 Project geography

Telangana faces significant water challenges, particularly in the Patancheru area, which is part of the Sangareddy district. Patancheru, known for its rapid industrialization, has seen its water resources strained due to both industrial and population growth. The district experiences issues with groundwater contamination, primarily from untreated industrial effluents. This has led to severe water pollution, affecting both agricultural lands and drinking water supplies in nearby villages.

Patancheru is located in the northwestern part of Hyderabad and is bounded by the districts of Medak and Rangareddy. According to the 2011 Census, Patancheru has a population of approximately 153,000, with a significant portion of the population engaged in industrial and agricultural activities. The district's economy is heavily influenced by its industrial sector, which includes pharmaceuticals, chemicals, and other manufacturing industries.

The region's water management initiatives include the de-silting of tanks under the state's Mission Kakatiya, which aims to restore water bodies and improve groundwater levels. The Pedda Cheruvu tank, a crucial water source in the area, was de-silted to enhance its capacity and support agricultural activities. Despite these efforts, challenges remain, with ongoing pollution and the need for more sustainable water management practices.

Patancheru consists of several villages and industrial areas, with ongoing efforts to address water pollution and improve water quality for its residents. The district's water issues highlight the need for comprehensive water management strategies to balance industrial growth with environmental sustainability.

02

Approach & Methodology

2 APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 Our Approach

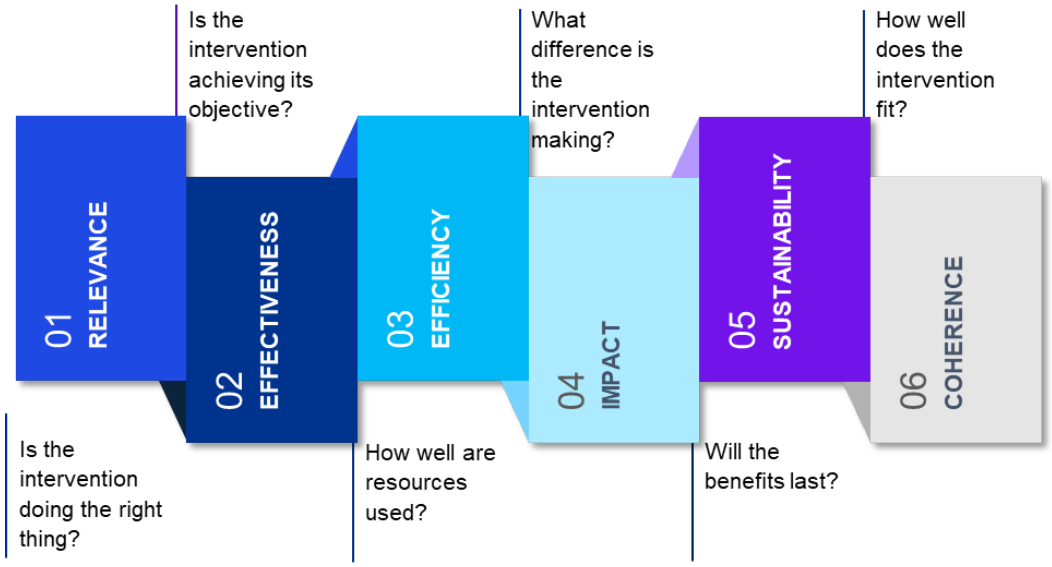
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project?	*Likelihood that project achievements will continue after project*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	▪ What can be some of the innovative ways to make the project sustainable in the long run?	
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

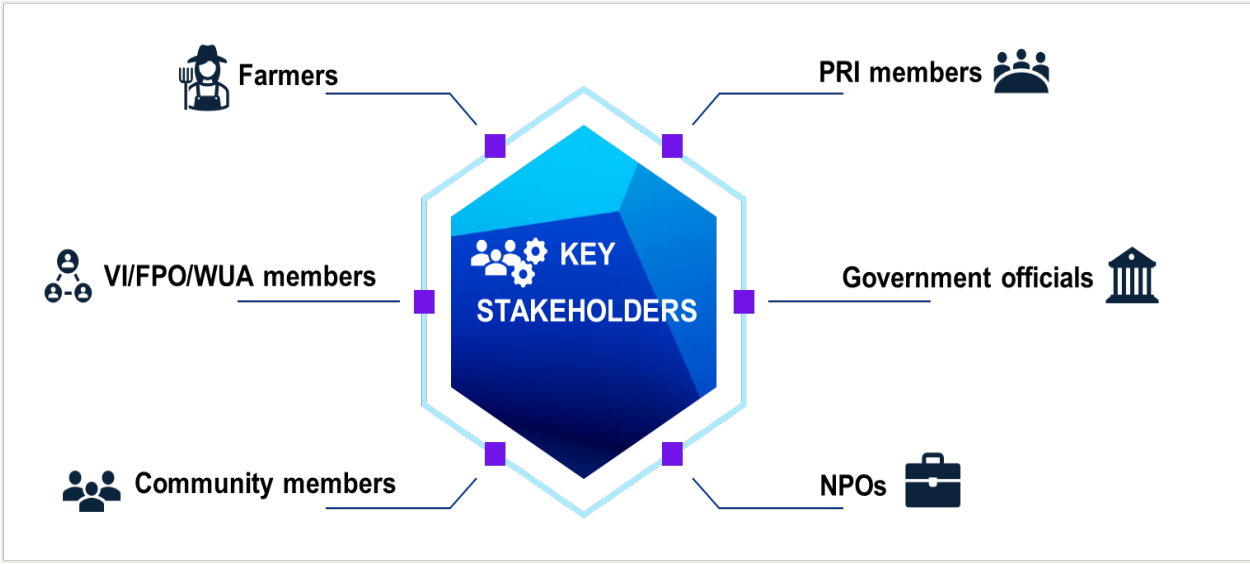
Impact map for Water Resource Development

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment.	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices

	To organize and strengthen the village institutions around water harvesting and related livelihoods		No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area, Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. Considering the overall outreach of the project as nearly 1470 beneficiaries, the statistically significant sampling has been derived using the method of 95 percent confidence level and five percent margin of error. Additionally, we have taken extra sample stakeholder in order to derive accurate social return on investment ratio. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to water intervention Benefitted due to agriculture intervention	1470	100	100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which

constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has falitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively

communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

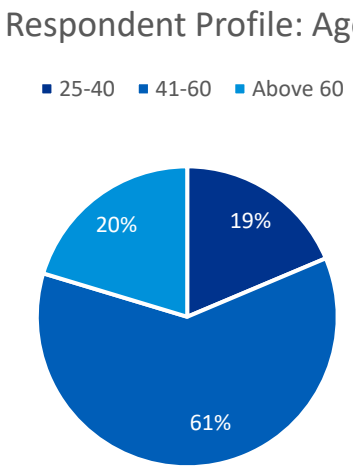
Analysis and Findings

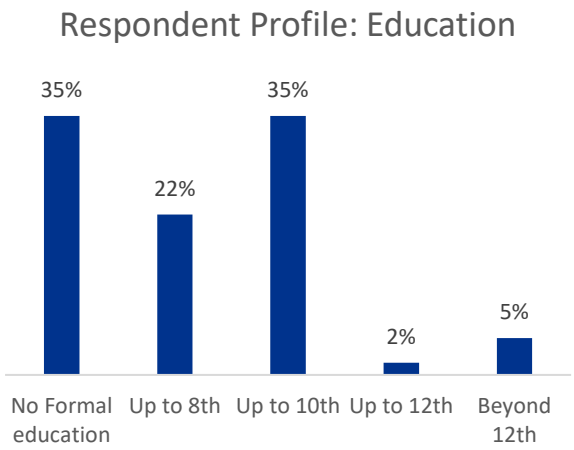
3 ANALYSIS AND FINDINGS

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water Resource Development program supported by Asian Paints Limited. across three villages Choudari gudem, Lakshmipathi gudem, Vavilala in Sangareddy district of Telangana.

3.1 Demography of respondents

The respondents interviewed were largely (81 percent) from the age group of 40 to 60 years, followed by 17 percent from 25 to 40 years age group and two percent whose age is more than 60 years. In terms of education levels, majority (40 percent) of respondents had no formal education whereas 17% completed their education up to 10th standard.





Support received through project intervention:

WHS	Agriculture intervention	Training awareness program	Others
36%	38%	57%	42%

The analysis of the data shows that the project's beneficiaries have received support through various measures, highlighting efforts towards inclusive sample representation. Besides managing water resources, the initiative promotes sustainable farming practices to boost farm productivity by providing high-quality inputs, direct extension services, mechanization, and integrating agriculture with livestock sectors.

The project adopts a comprehensive strategy to ensure the long-term sustainability of agricultural practices while improving productivity. This approach focuses on optimizing water resource use, adopting sustainable methods, and enhancing the livelihoods of smallholder farmers. By

addressing these key areas, the project is well-positioned to make significant impacts and drive positive changes in the communities it serves.

Overall, the project's integrated approach in supporting beneficiaries through diverse interventions represents a significant step forward in promoting sustainable agricultural development and improving the living standards of smallholder farmers. The continued implementation of these interventions is crucial for achieving sustainable development goals.

Source of income

100% of respondents shared that their primary source of income is agriculture, followed by 64% work as non-salaried work such as labor, electrician, carpenter.

HH income

Annual HH income of majority of (77%) of respondents ranges between INR 50,000 to INR 1,00,000.

Land holding size

44% of respondents reported land size ranging from 2 to 5 acres.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Choudari gudem	100%	87%	73%
Lakshmipathi gudem	98%	81%	68%
Vavilala	100%	84%	57%

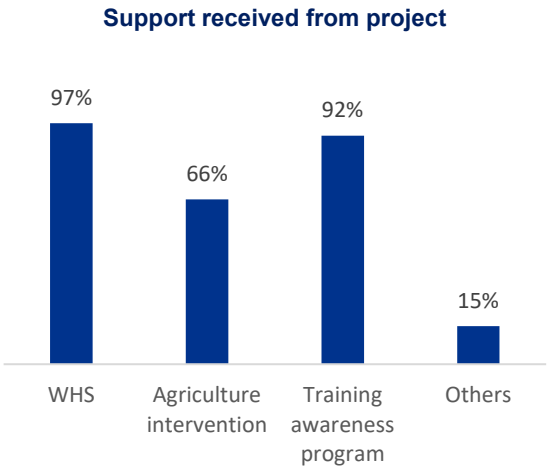
The table reveals the percentage of farmers practicing farming in Kharif, Rabi, and Zaid seasons in different villages. Choudari gudem has the highest percentage of farmers practicing agriculture in all seasons, while Vavilala has the lowest percentage with only 57% respondents reporting of practicing cultivation activities in Zaid season. Lakshmipathi gudem has a consistent percentage of farmers practicing farming in all seasons, while Choudari gudem and Vavilala have 100% of farmers practicing farming in Kharif seasons.

About Irrigation facility:

Village Name	Yes	No, only dependent on rains
Choudari gudem	83%	19%
Lakshmipathi gudem	90%	10%
Vavilala	71%	29%

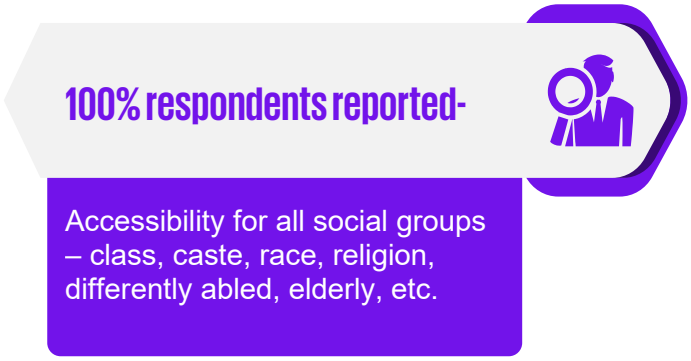
The table shows the percentage of villages with access to irrigation facilities and those dependent only on rainfall for farming. Lakshmipathi gudem and Choudari gudem have a high percentage of farmers with access to irrigation facilities, while Vavilala has the lowest farmers with access to irrigation facilities i.e., 71%. The data highlights the importance of irrigation facilities for agricultural activities and the need for more resources to improve infrastructure in some of the regions for better crop yields and economic growth.

Support received from project:



The table presented indicates the percentage of beneficiaries who received support through different interventions of the project. It was observed that 97% of the respondents reported to have got support of WHS from the intervention, whereas 92% reported that they have received Training on various awareness programs as well. 15% respondents reported that they have received other training support from the intervention such as semi-organic farming.

About Accessibility of the project across all community groups:



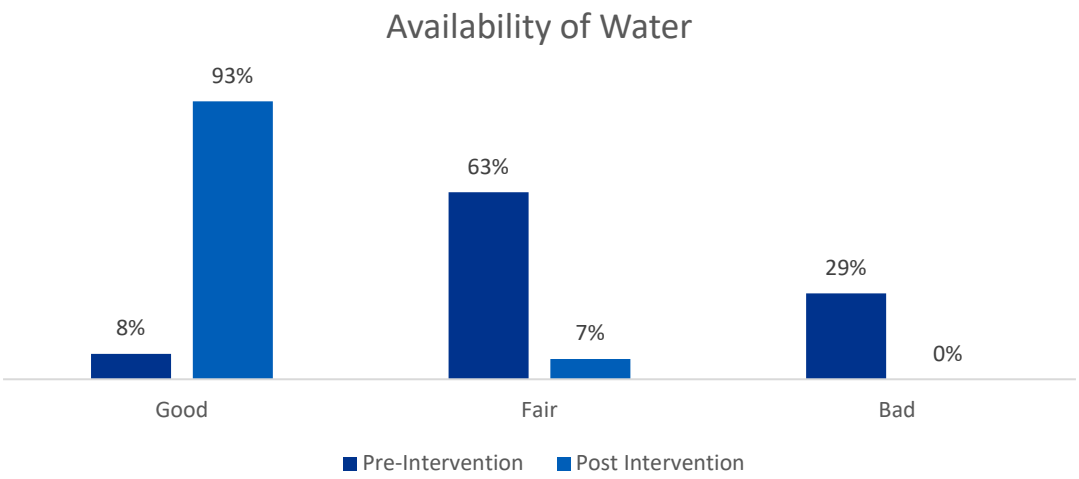
Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This

demonstrates the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

3.2 Support for Water Harvesting Structures.

As part of the project evaluation, discussions were conducted with the beneficiaries to collect their feedback. It was found that all respondents reported a positive impact from the water-related activities in the project area, indicating high satisfaction with the interventions. Additionally, the respondents mentioned that they were involved in the planning and implementation stages, and their input was considered, highlighting the project's participatory approach. This method of community engagement is essential for the project's successful implementation and sustainability.

3.2.1 Impact on availability and accessibility of water



The graph presented indicates the respondents' rating of the availability of water pre- and post-implementation of the project. The ratings are segmented into three categories: Good, Fair, and Bad. From the analysis, it is evident that the implementation of project activities has significantly improved water availability in the region.

Before the project's implementation, only 8% respondent rated the availability of water as 'good.' In contrast, the majority of the respondents rated the availability of water as 'fair' at 63%, while only 29% rated it as 'bad.' This indicates disparities in the availability of water pre-project implementation, with many beneficiaries facing challenges related to water scarcity.

However, after the implementation of the project interventions, the ratings have significantly improved, with 93% of the respondents rating the availability of water as 'good.' Only 7% rated water availability as 'fair,' and none rated it as 'bad.' These results demonstrate the positive impact of the project on water availability, leading to improved access to water resources, better irrigation, and enhanced agricultural productivity.

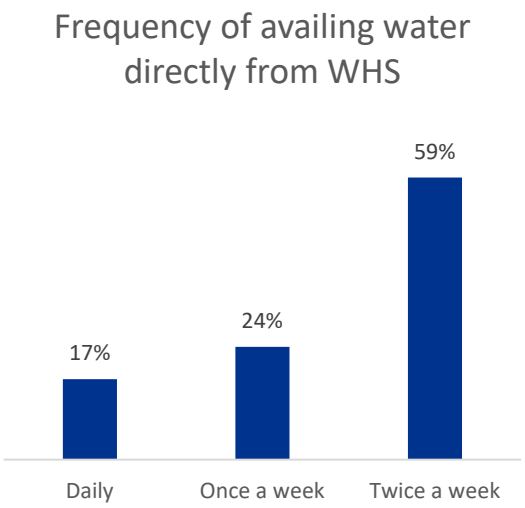
100%

Of respondents reported the improved accessibility of water for HH and agriculture need. High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

90% Of respondents reported that intervention resulted in increased water availability in your well/borewell

90% Of respondents reported that the duration of improved water availability is more than four months

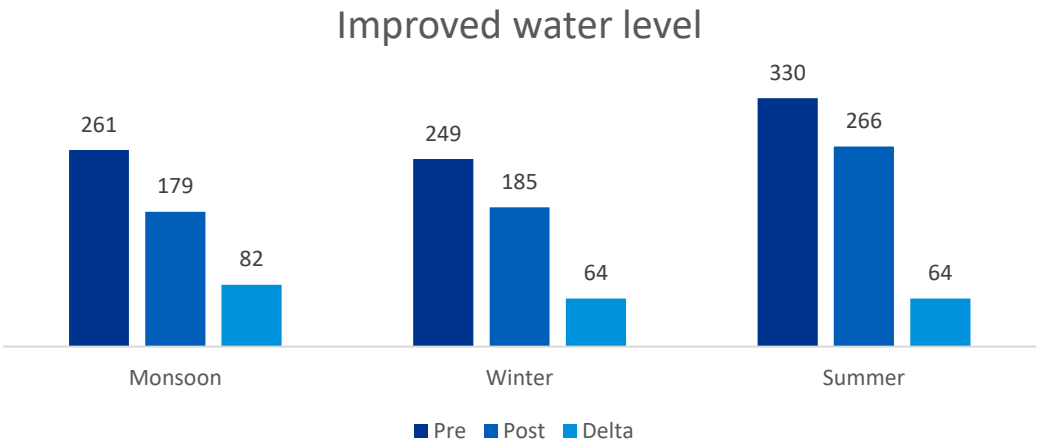
This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income generation. Above responses show the effectiveness of the project in improving water resource management in the region.



The data shows that most respondents (59%) obtain water twice a week. Additionally, 24% of respondents access water from WHS either once daily or weekly. These findings indicate that WHS has successfully provided beneficiaries with a consistent and dependable water supply for their daily requirements. Overall, the analysis highlights the positive effects of the project interventions on enhancing water access.

3.2.2 Improved water level

The analysis reveals the impact of project interventions on water depth in wells and borewells



across different seasons. The data show positive results, with improved water availability in all seasons, enhancing groundwater table levels and agricultural productivity. The effectiveness of the interventions is highlighted by the significant delta change in the summer season at 64 feet, followed by the winter season with a delta change of 64 feet, and the monsoon season at 82 feet. Overall, the findings emphasize the importance of sustainable water management practices implemented through the project, resulting in better access to water resources.

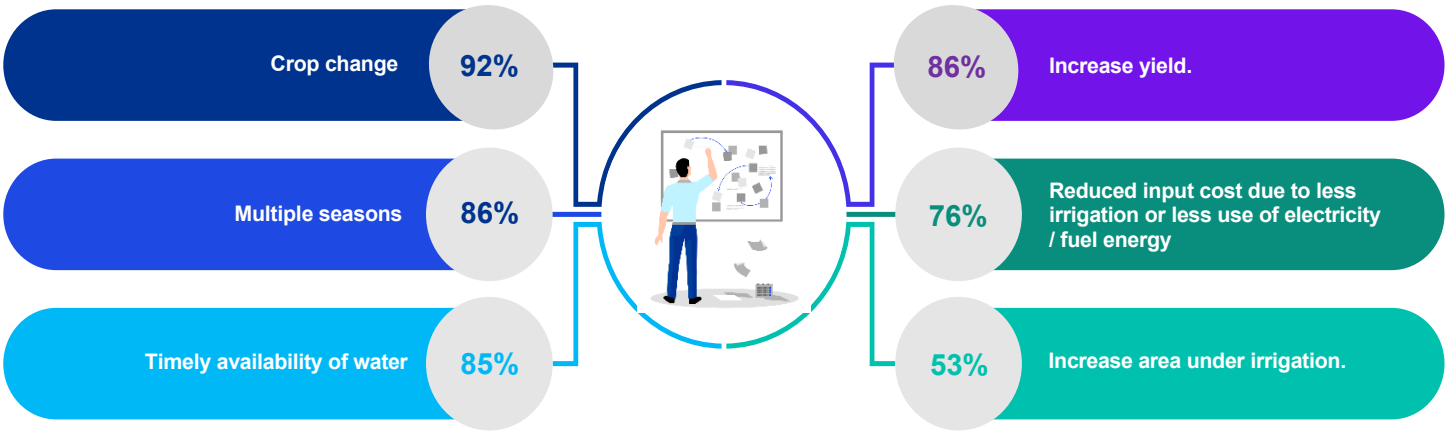
During the project evaluation, beneficiaries reported positive outcomes from pond rejuvenation activities aimed at improving surface water availability. The data show that 100% of respondents experienced better surface water availability, with 69% confirming availability for more than 4 months. Improved surface water access has significant benefits for livestock and domestic use, leading to positive socio-economic outcomes.

> **The village women faced challenges in fetching water before the project interventions. The severity increased during water scarcity, making it difficult for livestock. After pond rejuvenation activities, the community experienced access to clean water, significantly improving the quality of life for villagers and their livestock.**
>
> ***- Farmer beneficiary from Vavilala village***

3.2.3 Impact on water quality

During the project evaluation, a conversation with the beneficiaries was conducted to evaluate the water quality situation. The findings show that all participants reported improved water quality before project intervention. In the focused group discussions, participants further confirmed having no problems or challenges related to waterborne diseases. This demonstrates safe water access for all community members across all villages in the project intervention area.

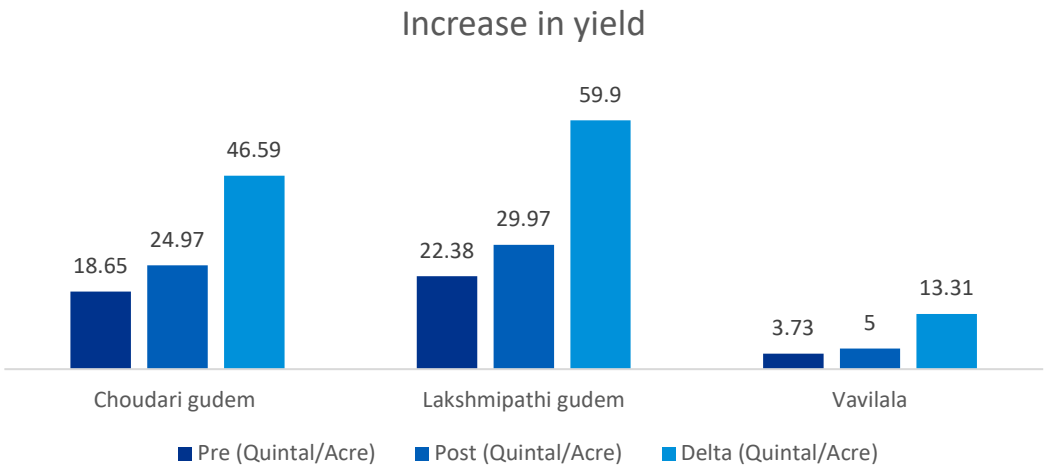
3.2.4 Impact on agriculture practices



The above figure illustrates responses gathered during the project evaluation, showing the effects of water availability and improved access on farming practices. The table data reveals that the project interventions have produced various positive results, enhancing farming practices and boosting agricultural productivity. Analyzing the data indicates that the project's targeted interventions have positively influenced farming practices, resulting in better agricultural productivity, lower input costs, and timely water access. These results highlight the significance of promoting sustainable water resource management practices to improve agricultural productivity and livelihoods in the project area."

3.2.5 Increase in yield.

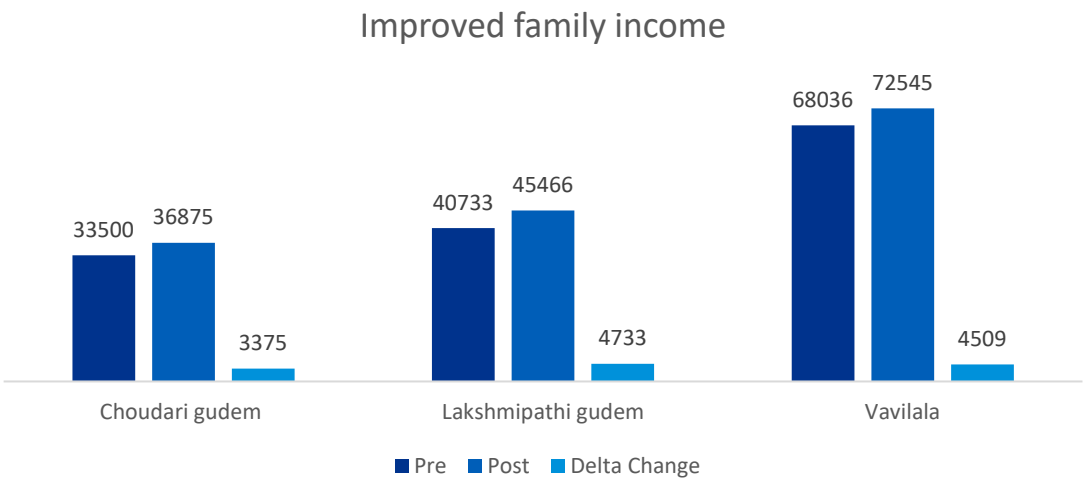
The graph provided shows the impact of water availability and improved access on farming practices in the specified villages.



The data shows a notable improvement in crop productivity following the interventions, with all villages experiencing an increase in yield. The delta change emphasizes a significant difference between the pre- and post-intervention periods. The analysis indicates that all villages saw an increase in yield, with the most substantial differences observed in Lakshmipath Gudem and

Choudhuri Gudem villages, showing a delta change of 59.9 and 46.59 quintal/acre, respectively. Vavilala village also demonstrated an increase in yield, amounting to 13.31 quintal/acre. The overall analysis shows around 40% increase in yield across the sampled villages.

3.2.6 Impact family income

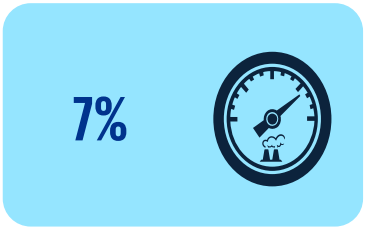


The graph highlights the impact of the project interventions on family income in the intervention villages. The data indicates a moderate increase in average family income of about 9%, rising from Rs 48,952 per year to Rs 53,233 per year post-interventions across all villages, reflecting the overall positive effect of the project's targeted interventions. The data analysis shows that all villages saw an increase in family income post-interventions. Lakshmipathi Gudem village recorded the highest delta change in family income, with an increase of around Rs 4,783 per year. Vavilala village also experienced an increase in family income of Rs 4,509 per year. The overall analysis shows an average INR 4,205 (around 9%) increase in family income across the sampled villages.

3.2.7 Impact on livestock

Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.



Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

Improved family income

The income generated through livestock business resulted in an average increment of INR 1,67,00 (33%) in the beneficiaries' annual family income.

The data presented suggests that the WHS has positively impacted livestock management practices. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS. The qualitative survey responses showing the quantifiable impact on family income indicate that the WHS has provided a reliable and stable supply of water, enabling efficient livestock management practices, leading to enhanced livelihoods and socio-economic outcomes for the beneficiaries.

3.2.8 Impact on personal life

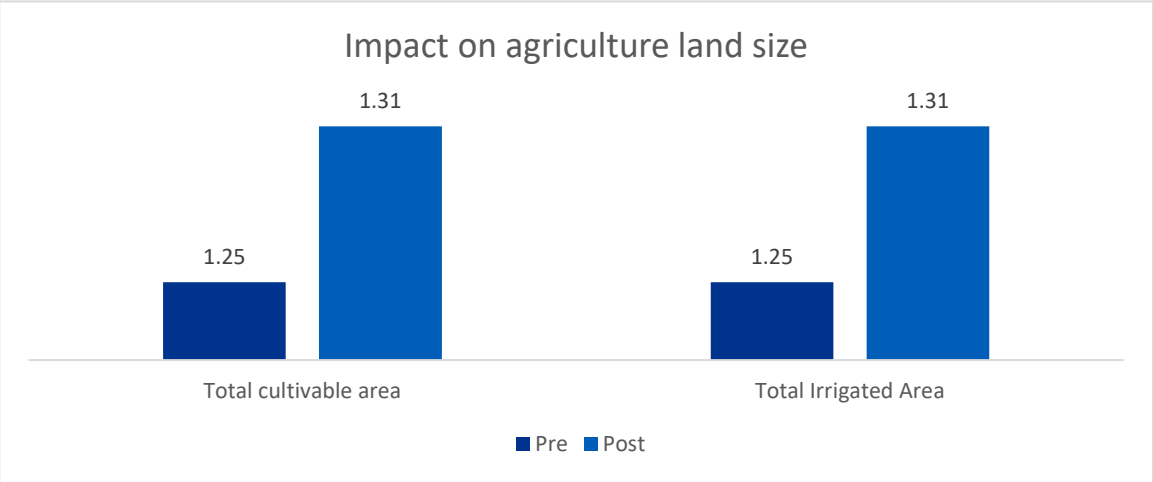
The project intervention has yielded numerous positive results that greatly affect personal life. Feedback from beneficiaries indicates that the WHS has saved time and significantly reduced physical effort. Data also shows improved health outcomes, with 62% of respondents noting the impact on their physical well-being. The results illustrate that the WHS has lessened the burden of water collection, allowing beneficiaries to concentrate on their personal lives. Reliable and efficient water access has decreased physical exertion, enhanced personal health, and improved overall quality of life. Consequently, the project interventions have led to better socio-economic outcomes and enhanced the overall well-being of the beneficiaries..

3.3 Agriculture and Livelihood

3.3.1 Impact on agriculture land

Through discussion with respondents, it was reported that the increase in average total net sown area from 1 hectare to 1.31 hectare post-intervention. This suggests that the project interventions have yielded positive outcomes on agriculture and water resource management practices. The increase in net sown area reaffirms the efficiency of the WHS interventions in promoting

sustainable water management practices and enhancing agricultural productivity in the project area. This can be explained further through below graph-



The increase in the total cultivable and irrigated area from 1.25 hectares to 1.31 hectares (around 5% increase) post-intervention indicates a positive impact of the project interventions on agricultural productivity. The results suggest that the interventions have contributed to enhancing the agricultural potential of the project area through improved water resource management and sustainable practices.

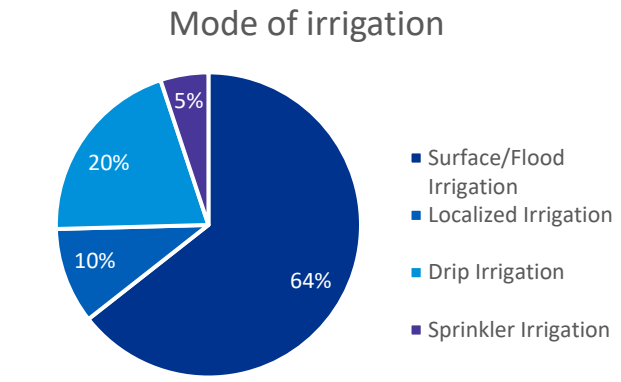
The village wise details-

	Total cultivable area (in hectare)		**Total Irrigated Area (in hectare)**	
Village name	**Pre-intervention**	**Post-intervention**	**Pre-intervention**	**Post-intervention**
Choudari gudem	0.75	0.83	0.75	0.83
Lakshmipathi gudem	0.99	1.05	0.99	1.05
Vavilala	1.86	1.91	1.86	1.91
Grand Total	**3.6**	**3.79**	**3.6**	**3.79**

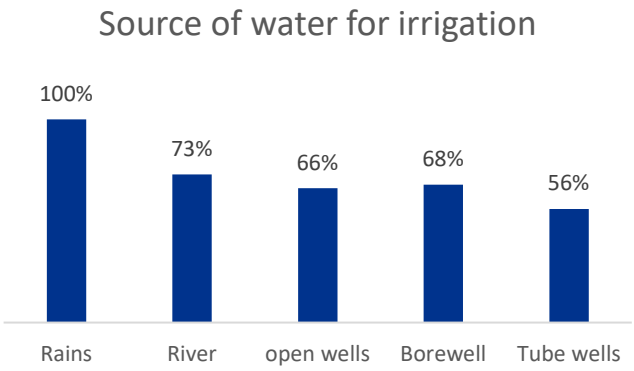
The village-level analysis indicates variable outcomes across villages. Choudarigudem, Lakshmipathigudem and Vavilala report an increase in both total cultivable area and total irrigated area with respect to pre and post intervention. It has been observed that respondents from Vavilala

has reported a miniscule increase of 0.05 hectare whereas Choudarigudem has reported an increase of 0.08 hectares.

3.3.2 Mode of irrigation

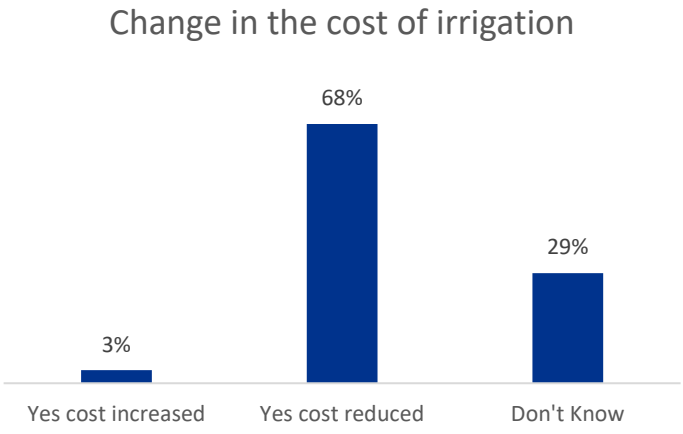


The distribution of irrigation practices in the project area shows that surfaced/flood irrigation is the most commonly adopted method, followed by drip irrigation, local irrigation, and other techniques. These results imply that the agricultural interventions have had a positive effect on irrigation practices in the project area, motivating beneficiaries to embrace sustainable and efficient irrigation methods.



The chart illustrates the various water sources used for irrigation in the project area, showing that all respondents depend on rainfall for irrigation (100%). Borewells and open wells contribute to 68% and 66% respectively of the irrigation water sources, whereas river water constitutes just 73% of the sources.

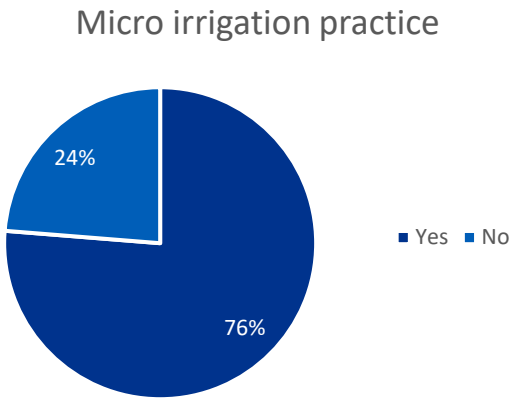
3.3.3 Cost of irrigation



Based on discussions with project beneficiaries, there has been a notable decrease in irrigation costs. Beneficiaries attribute this reduction to the support provided through the intervention. 68% of respondents reported experiencing a decrease in irrigation costs, while only 3% noted an increase due to expanded cultivation areas and higher fertilizer usage.

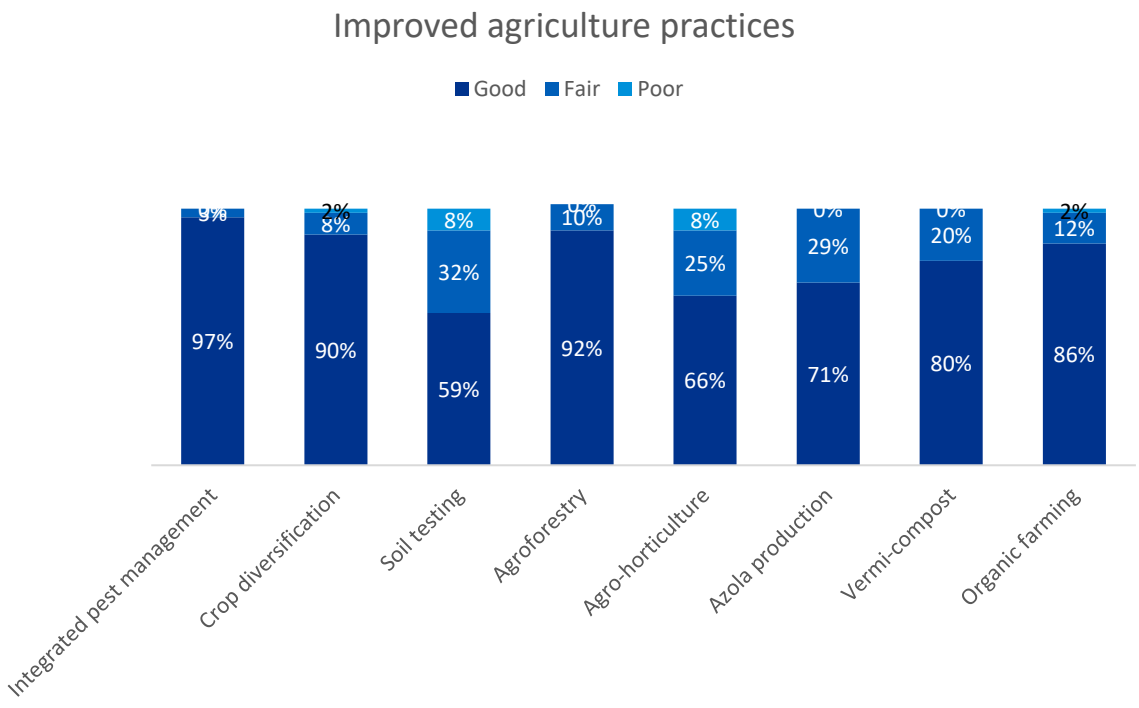
The project interventions included training on non-pesticide management (NPM) techniques and demonstration sessions on organic farming. Despite this, respondents indicated that they only apply organic and NPM techniques to the land intended for personal consumption, while continuing to use chemical fertilizers on the remaining land. Beneficiaries mentioned that yields from organic farming are lower compared to chemical farming. Additionally, there is no demand for organic produce in nearby markets. This reluctance to fully transition to organic farming hinders the effective adoption of sustainable agricultural practices.

3.3.4 Micro irrigation



The chart above illustrates the percentage of project beneficiaries who reported using micro-irrigation techniques for efficient water use in irrigation. The data reveals that 76% of participants have adopted efficient water usage practices, while 24% have not yet done so but have shown a willingness to start and have requested additional support from the implementation partner.

These responses indicate that nearly a quarter of the respondents need further assistance to effectively adopt micro-irrigation techniques. Although the project interventions have already achieved some positive outcomes in promoting sustainable water resource management, ongoing support is necessary to ensure the broad adoption of efficient irrigation practices.



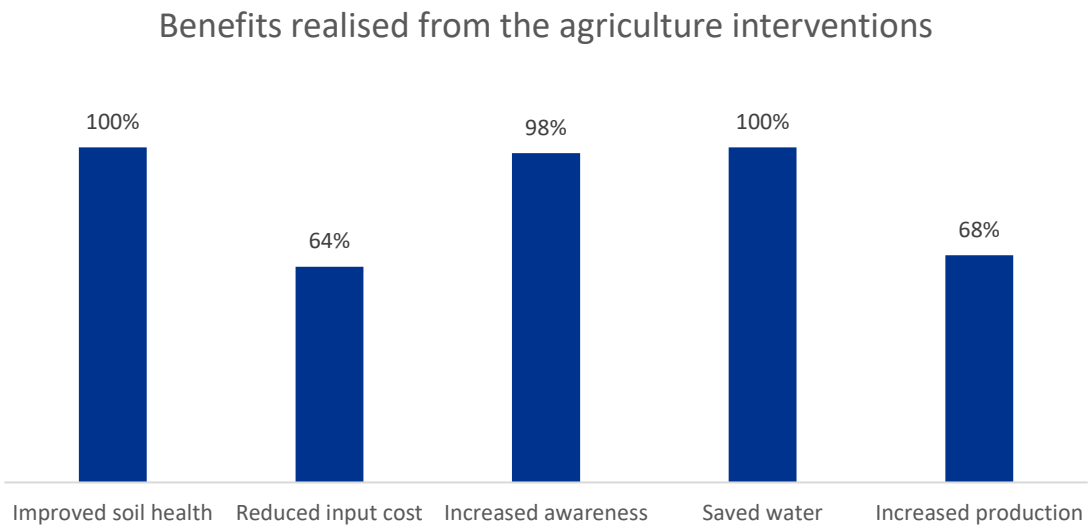
3.3.5 Understanding on improved agriculture practices

The graph illustrates the ratings given by project beneficiaries regarding their understanding of various enhanced agricultural practices, such as integrated pest management, crop diversification, soil testing, agroforestry, agro-horticulture, vermicompost, and organic farming. Most respondents rated their understanding of integrated pest management, crop diversification, and agroforestry as good, indicating these practices are well-received and comprehended by the beneficiaries.

The ratings for soil testing were somewhat mixed, with slightly more than half of the respondents rating their understanding as good, while the rest rated it as fair or poor. The relatively low rating for soil testing suggests that additional educational efforts and awareness-building are needed to encourage the adoption of soil testing to improve soil quality and fertility.

Furthermore, the ratings for agro-horticulture practices highlight the need for increased awareness and knowledge dissemination to promote and encourage the widespread adoption of these practices. Although it is encouraging that more than three-quarters of the respondents rated their understanding of organic farming as good, a significant portion rated their understanding as fair or poor.

3.3.6 Benefit realized from agriculture intervention.



The graph above depicts the benefits derived from the agricultural interventions and the number of beneficiaries who reported these benefits. The findings show that the interventions achieved a 100% success rate in water conservation and soil health improvement, indicating a positive and sustainable impact on soil health. Enhanced soil health is crucial for boosting agricultural productivity, ensuring food security, and protecting the environment. Additionally, approximately two-thirds of respondents (68%) reported increased production.

However, a significant proportion of beneficiaries (64%) reported reduced input costs, suggesting that further interventions are needed to lower agricultural input costs and enhance resource

affordability. Despite this, the high success rate of other benefits underscores the tremendous potential of promoting sustainable agricultural practices in the region. In summary, the project interventions have allowed communities to experience numerous benefits, significantly enhancing their socio-economic well-being.

3.3.7 Impact on cost and produce from agriculture practice.

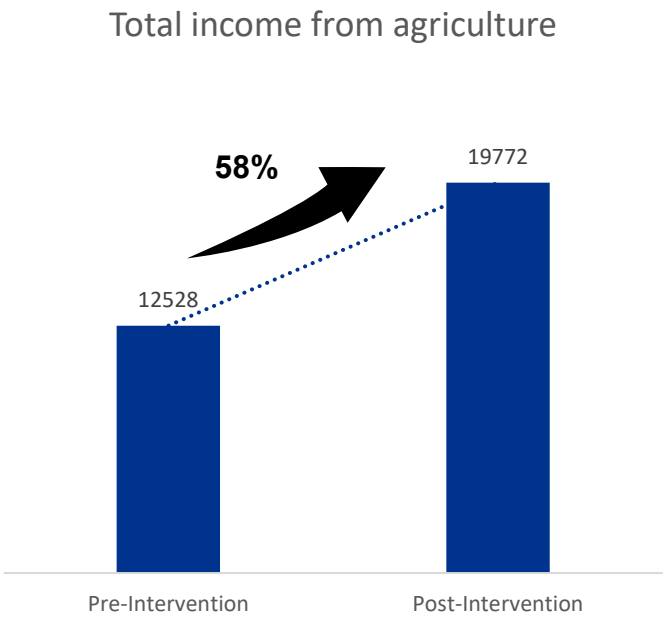
Through discussion with project beneficiaries, it was reported that, 100% of the respondents have been able to reduce their input costs wherein the average input cost incurred prior to the intervention is Rs 75,172 whereas post intervention the input cost has been reduced to Rs 52,725.

Reducing the input cost is essential for improving the efficiency and sustainability of agriculture practices while increasing the profitability of the beneficiaries. The low percentage of respondents who have been able to reduce their input cost may indicate potential barriers such as dependencies on chemical pesticides.

The results also indicate the need for further interventions that promote the use of cost-effective and sustainable agricultural practices. By adopting such measures, beneficiaries can reduce their input costs, increase their yields, and improve their financial wellbeing.

3.3.7.1 Agriculture income

The graph represents the total income from agriculture, the average income and the delta change before and after the interventions. The data indicates that the total income from agriculture has almost increased by (58%) post-intervention from Rs 12,528 to Rs 19,772.



This considerable increase in income underscores the tremendous impact of the agriculture interventions on the beneficiaries' financial well-being. The interventions have significantly enhanced productivity and yield, leading to more significant economic returns. In conclusion, the considerable increase in the total income of the beneficiaries after the project interventions reflects the success of the agriculture interventions in increasing productivity and yield.

04

Conclusion and Recommendations

4 OECD-DAC

4.1 Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 83 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 32 percent of the respondents were only dependent on rainfed agriculture. Around 35 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 201320F

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water

- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water [including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].

- (x) rural development projects

4.2 Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.

GOAL 6: Clean Water and Sanitation  	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land  	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements. **Target 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	Project activities included promotion of agro-forestry and prevention of forest among the community members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[v] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[vi] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[vii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on Water Resource Development aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

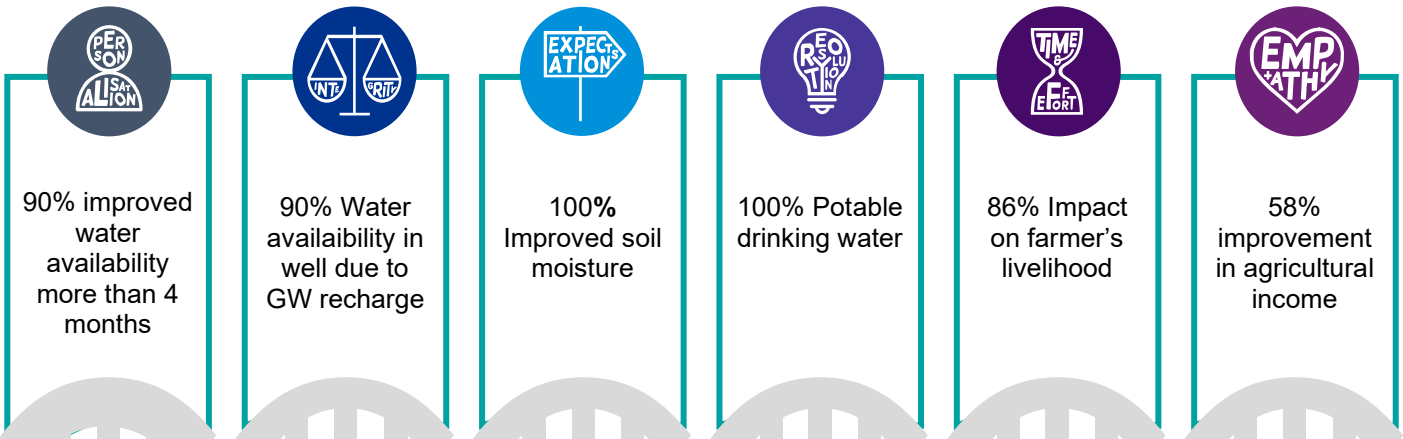
4.3 Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program's activities were carried out as well as the effectiveness with which the program's systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Water Resource Development project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health,

reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

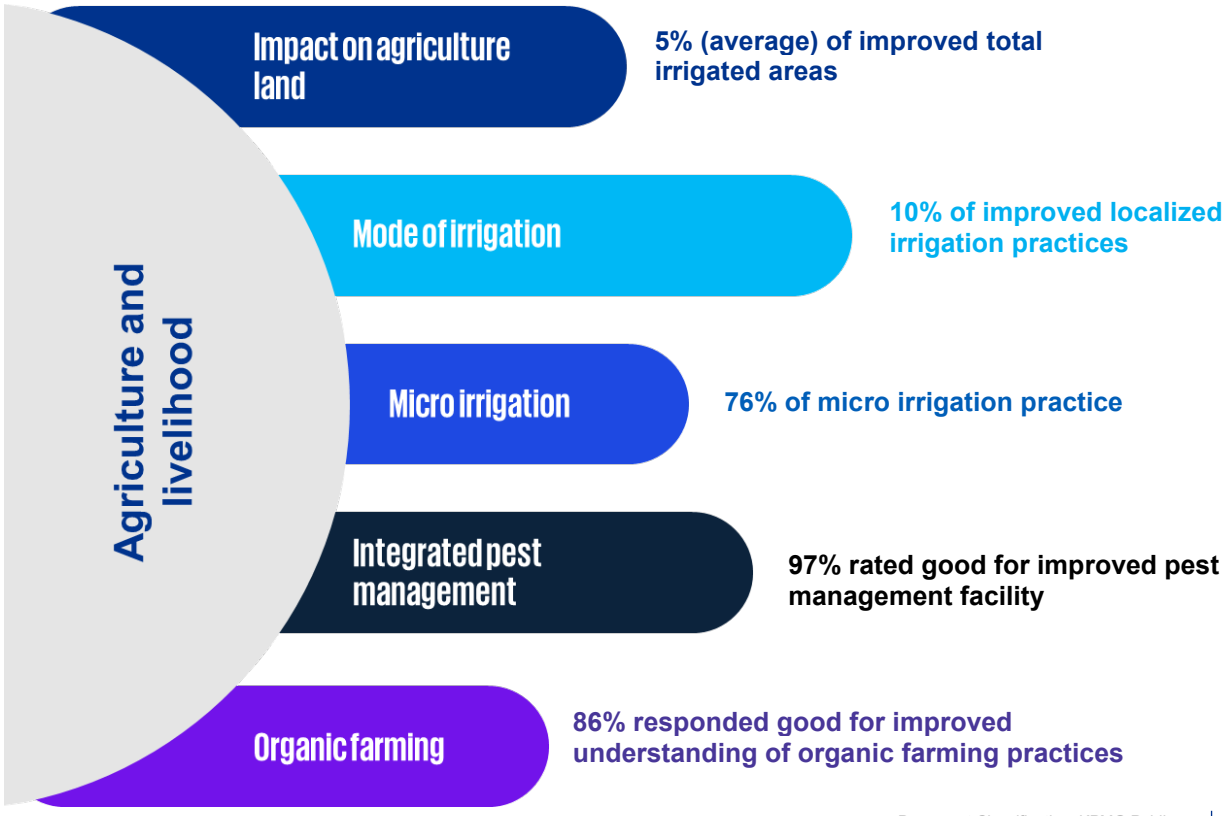
4.4 Evaluation Criteria- Efficiency

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

4.5 Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.



Support for water harvesting structure

Water availability and accessibility

87% respondents rated good to availaibility of water post intervention

Improved water level

100% of respondents reported the improved accessibility of water for HH and agriculture need

Impact on agriculture practice

91% responded practicing agriculture for multiple season

Increase in yield

94% responded improved agriculture yield

Impact on family income

99% improved family income

Impact on livestock

28% improved livestock productivity

4.6 Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

Increased vegetation around the water bodies

Observed new or reemergence of new species around the water bodies due to the increased availability of water

Observed increased citing of birds/wild animals around the water bodies due to the increased availability of water

Increase in availability of fuelwood due to the intervention

4.6.1 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

All respondents stated that the Water User Association (WUA) has been formed in their village. During discussions, it was understood that all respondents (100 percent) were aware of the formation and role played by WUAs. WHS beneficiaries reported that they or their family members are part of WUAs, indicating awareness of governance structure for WHS. Respondents from shared that a separate fund for O&M of the WHS has been set up and water tax of INR 200 to 500 annually depending on the land holding is being levied.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

05

Measuring the Social Return

6 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

6.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change

Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1470.00
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	1470.00
Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	1043.70
	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	1470.00
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	1470.00
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	999.60
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	1470.00
Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	1470.00
	Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	29.40
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	588.00
Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	
Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	
Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	

Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	882.00
	Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	735.00
Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	
Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	
Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	
Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with pleasant environment	

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.
- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be

traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

6.2 Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.
For a detailed view, refer table for SROI calculation.
Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various

inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total input value (INR)
Financial inputs	CSR Funding from APL	*1,50,08,667*

***Net Present Value**:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	0.00%	0.00%	0.00%	20.00%	97570.00	97,570.00	78,056.00	62,444.80	49,955.84	39,964.67	0.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by government (per hactare)	314.00	3.00%	0.00%	23.00%	20.00%	251670.49	2,51,670.49	2,01,336.40	1,61,069.12	1,28,855.29	1,03,084.23	0.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00	3.00%	0.00%	23.00%	20.00%	1449284.76	14,49,284.76	11,59,427.81	9,27,542.25	7,42,033.80	5,93,627.04	0.00

	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Sangareddy district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Telangana 2203/Q	22602.78	3.00%	0.00%	23.00%	20.00%	1057185.63	10,57,185.63	8,45,748.50	6,76,598.80	5,41,279.04	4,33,023.23	0.00
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana-2203/Q	2203.00	3.00%	0.00%	23.00%	20.00%	15963871.63	1,59,63,871.63	1,27,71,097.31	1,02,16,877.84	81,73,502.28	65,38,801.82	0.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	3270.83	3.00%	0.00%	23.00%	20.00%	3591184.90	35,91,184.90	28,72,947.92	22,98,358.34	18,38,686.67	14,70,949.34	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	400	3.00%	0.00%	23.00%	20.00%	298640.50	2,98,640.50	2,38,912.40	1,91,129.92	1,52,903.93	1,22,323.15	0.00
Trainings/ Workshops/ Demonstrations/ Non-pesticide	Increased agriculture production due to	Adoption of improved agriculture practices (% of members indicating	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy	2203.00	3.00%	0.00%	44.00%	33.34%	4608853.30	46,08,853.30	30,72,261.61	20,47,969.59	0.00	0.00	0.00

managem ent/ Mulching	enhance d agricultu re practice	adoption of improved agriculture practices)	in Telangana-2203/Q												
Availabilit y of potable water for househol d consumpti on due to increased Ground water level and WHS	Increase d quality an accessib ility to potable water leading to improve d health of commun ity member s	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75	3.00%	0.00%	23.00%	20.00%	481722.49	4,81,722.49	3,85,377.99	3,08,302.39	2,46,641.92	1,97,313.53	0.00
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661	3.00%	0.00%	23.00%	20.00%	14514.81	14,514.81	11,611.85	9,289.48	7,431.58	5,945.26	0.00
	Increase d access to water for animal husband ry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Telangana	52.00	3.00%	0.00%	23.00%	20.00%	206676.79	2,06,676.79	1,65,341.43	1,32,273.15	1,05,818.52	84,654.81	0.00
Creation of employm ent opportunit ies	Availabil ity of increase d labour opportu niities locally (own or	Reduction in migration (seasonal for labour work) (number of members reporting	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work	234.00	3.00%	0.00%	50.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	nearby villages) due to reduced migration	instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	Minimum wage paid under MGNREGA in FY 2021-22												
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00	3.00%	0.00%	50.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00	3.00%	0.00%	29.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00	3.00%	0.00%	29.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.	11246.61	3.00%	0.00%	70.00%	20.00%	2886577.08	28,86,577.08	23,09,261.66	18,47,409.33	14,77,927.47	11,82,341.97	0.00
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36	3.00%	0.00%	70.00%	20.00%	442177.29	4,42,177.29	3,53,741.83	2,82,993.47	2,26,394.77	1,81,115.82	0.00
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ through	Increased green cover canal/ river due to WHS construction for extended period/ throughout	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58	3.00%	0.00%	70.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

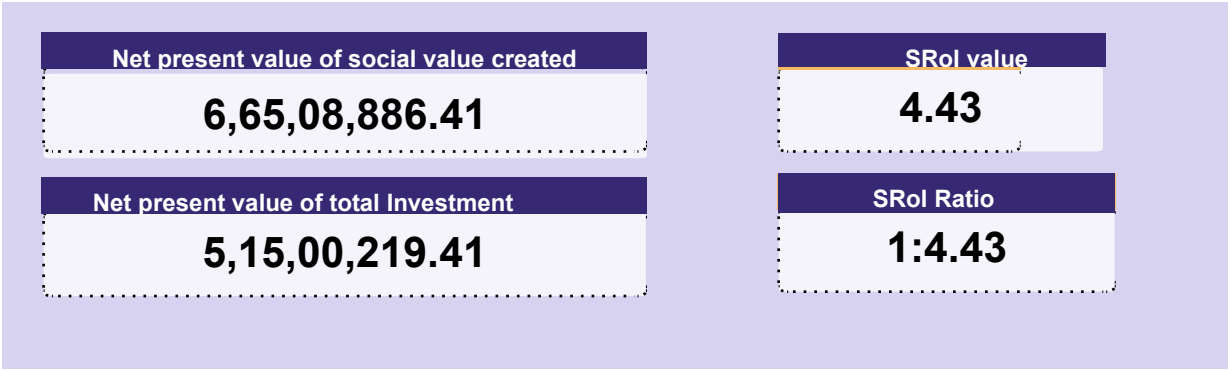
	out the year due to WHS	the year (in Metres)													
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00	3.00%	0.00%	70.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00	3.00%	0.00%	70.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Improved bio-diversity due to availability of water for extended period / through out the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00	3.00%	0.00%	70.00%	20.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
							Total	31349929.67		31349929.67	24465122.71	19162258.47	13691431.11	10953144.88	0.00

							Present value of each year			31349929.67	23524156.45	17716585.12	12171632.4	9362794.15	0.00
							Total Present Value (PV)								941250 97.80
							Net Present Value (PV minus the investment)								791164 30.80
							Social Return (Value per amount invested)								**6.27**

6.3 SROI results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:



For every INR 1 invested, the programme has generated social impact of IN 4.43

6.4 Sensitivity Analysis

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between INR 7.02 and INR 8.56.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI
1	Deadweight	4.43	Deadweight is 0%	4.67
			Deadweight is 8%	4.02

1	Displacement		Displacement 0%	4.43
			Displacement is 5%	4.04
3	Attribution		Attribution is 0%	4.92
			Attribution is 75%	3.93
4	Drop-off		Drop-off is 28.3%	5.16
			Drop-off is 15%	7.15

6.5 Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

7 ANNEXURES

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by government (per hactare)	314.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Sangareddy district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Telangana- 2203/Q	22602.78
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	3270.83
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	400
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Telangana- 2203/Q	2203.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75
		Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	Mean OOPE (Out of Pocket Expenses) in Rrual areas for all WASH related ailments across all service providers	661
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from Amul Dairy in Telangana	52.00
Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00
	Increased income due to fisheries due to increase in fish count in the river	Royalty paid to village by contractor	Annual income from fishary (Revenue per village- assuming 3 villages)	50000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00
	Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	Assuming one manager is required for management in each village, cost of daily wage paid in MGNREGA for 3 months of Rabi season (when the water harvested is actually utilized by the communities) has been taken as proxy	21060.00
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-.	11246.61

			For a family of 4 members, the yearly expenditure has been considered for calculation.	
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58
	Improved soil health due to use of organic fertilizers and pesticides	Farmers spending less on chemical fertilisers and pesticides	Savings due to usage of homemade organic fertilisers/ Reduced expenses of chemical ferlisers = Average Csot of Fertilisers In India per acre	4347.00
	Reduced soil pollution due to reduced chemical usage	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00
	Improved bio-diversity due to availability of water for extended period / throughout the year... (birds/animals from nearby area using the water during summer)	Community members enjoying view of more birds and animals with plesant environment	Cost of visiting animal zoo/ bird zoo	20.00

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Document Classification: KPMG Public

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Impact Assessment of Water Resource Development Project- Sriperumbudur and Cuddalore, Tamil Nadu

Asian Paint Limited

February 2025

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

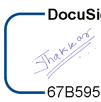
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

CONTENT

DISCLAIMER AND NOTICE TO READERS

- This report has been prepared exclusively for the Asian Paint Limited ("Client") following the terms of the Engagement letter/agreement dated 6th November 2024 between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is it to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent, as per terms of business agreed under the Contract.
- Our report shall be prepared solely for APL. KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our Client, to the extent agreed in the Agreement.
- Impact assessment is limited to the projects allocated by APL
- OECD-DAC and SROI frameworks have been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.
- Procedures, analysis and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.
- Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.
- Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.
- We shall not perform an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.
- Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with [Client] team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.
- In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

ABBRIVATIONS

ANMs	Auxiliary Nurse Midwives
APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

01

Executive Summary

EXECUTIVE SUMMARY

The philosophy of transformation has been in DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering relationship of trusts with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45% of total irrigation and 80% of domestic water needs are met by groundwater. the unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such challenging landscape, water harvesting and conservation under the umbrella of watershed management became need of the hour. Asian Paints engaged in holistic approach through their program "Water resource development" in Sriperumbudur and Cuddalore blocks of Tamil Nadu, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country.

The main objectives of the impact study are to assess the impact of water stewardship activities with focus on the access and availability of surface and ground water, potable water, farmer`s livelihood, land and agriculture practices, and governance. The study covered mix-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of SROI framework and OECD-DAC framework. A total of 200 respondents from nine villages were interacted for data collection in Sriperumbudur and Cuddalore blocks of Tamil Nadu including farmers, community members, and PRI members.

More than half of the respondents were between 41-60 age group and have formal education till class tenth. The sample covered respondents from economically weaker background (income ranging from 25 to 27 thousand), small to marginal farmers and primary source of income being agriculture. This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2021-22. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by APL for the water resource development programme, INR 4.82 and INR 2.82 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries in Sriperumbudur and Cuddalore, respectively.

1 Relevance

- 80% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- 24% of beneficiary shared that they did not have adequate access to water for agriculture before the intervention

2 Effectiveness

- Sriperumbudur with 100% and Cuddlore 72% improved water availability more than four months post monsoon
- Sriperumbudur 95% and Cuddlore 96% water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- Impact on water- Sriperumbudur 76% and Cuddlore 74% rated improved water availability and accessibility
- Impact on agriculture- 100% improved pest management
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007)[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

About the study

To strategize and plan their water stewardship projects, Asian Paints Ltd. empanelled KPMG to facilitate impact assessment of the following project:

Water resource development projects: Water resource development project has been initiated by Asian paints Ltd at Sriperumbudur and Cuddalore (Tamil Nadu). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the below immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility,

	availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

About The Projects

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints

aims to make a positive impact on both its operations and the communities it serves. The following projects under Water Stewardship have been selected for the impact assessment:

WATER RESOURCE DEVELOPMENT

Water resource development projects have been initiated by Asian paints Ltd at Sriperumbudur and Cuddalore (Tamil Nadu). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

Objectives of project:

Rejuvenation of Water Bodies:

- To increase water storage capacity and recharge through revival of traditional water bodies and construction of water harvesting structures so that to enhance irrigation and drinking water availability.
- To promote farm-based livelihood through demonstration of improved agricultural practices like Integrated pest management, crop diversification, soil testing, agroforestry, agro-horticultural, Azola production, Vermi composting, organic farming, and others etc.
- To create awareness, education among the community on judicious utilization of water resources and collective actions.

Implementing Partners

The National Agro Foundation (NAF), established in 2000 by Mr. C. Subramaniam, a prominent figure in India's Green Revolution and recipient of the Bharat Ratna Award, is a Public Charitable Trust with a vision to catalyze a rural revolution focused on agriculture and small and marginal farmers. Anchored in the principles of inclusive growth, NAF operates with a "Soil to Market" approach, building on Mr. Subramaniam's pioneering "Seed to Grain" philosophy from the Green Revolution era. Over the years, NAF has transitioned from modest beginnings to a dynamic and professional organization, delivering cutting-edge services that have made a substantial impact on rural communities. Collaborating with the government, corporate entities, and other stakeholders, NAF has implemented core programs addressing local and global challenges in agriculture and rural development. Its approach includes tailored training programs, capacity development initiatives, and the integration of new modalities and technologies. With dedicated research and development efforts, NAF has reached over 220,000 farmers in 830+ villages across 15 states in India, demonstrating a commitment to positive change and sustainable development in the agricultural sector. NAF's collaborative efforts extend to partnerships with various government and non-government organizations, educational and research institutes, financial institutions, and corporate entities.

In collaboration with APL, NAF is actively engaged in the implementation of CSR projects centered around water resource development in the states of Haryana, Uttar Pradesh, Karnataka, and Tamil Nadu. This strategic partnership underscores a shared commitment to fostering the rejuvenation of water bodies, amplifying livelihood opportunities for farmers, and effectively managing natural

resources. Within this collaborative framework, NAF assumes the responsibility of executing the specified activities, ensuring their timely completion, adherence to budgetary constraints, and achievement of anticipated outcomes. Simultaneously, APL extends crucial technical and financial support to NAF, facilitating the realization of project objectives and the establishment of a sustainable and inclusive development model. This cooperative effort aims to deliver tangible benefits to marginalized communities while addressing critical issues related to water resources and rural livelihoods.

Project Geographies

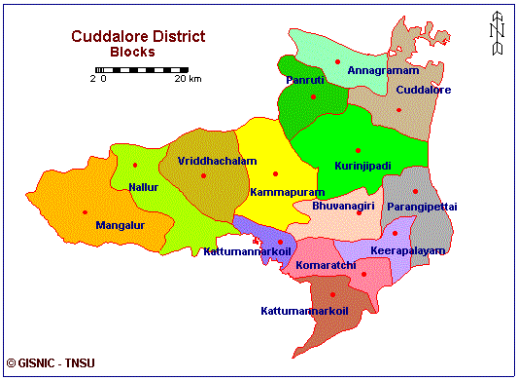
The impact assessment will cover the following states where the projects were implemented: inTamil Nadu.

A brief description of the following project locations has been presented below:

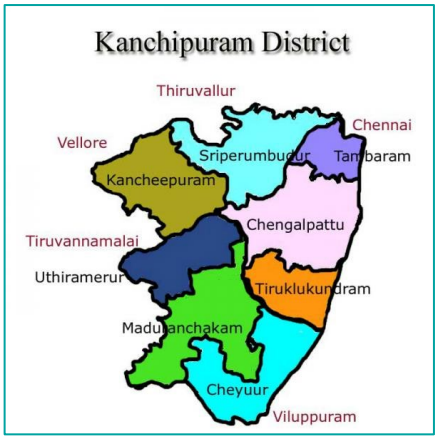
Sriperumbudur and Cuddalore, Tamil Nadu

Tamil Nadu, the eleventh-largest state in India, faces significant water challenges exacerbated by its heavy reliance on monsoons. The state experiences a tropical climate with temperatures ranging from 18°C in winter to 43°C in summer. Its average annual rainfall of 925 mm, sourced from both the northeast and southwest monsoons, falls short of the national average (1,170 mm)[v]. With a population of 72,147,030 and an economy ranking second in India, the state grapples with acute water scarcity and drought due to unpredictable monsoon patterns[vi]. The current water deficit exceeds 11%, expected to worsen in the future[vii]. Covering 4% of India's total area, it houses 7% of the population but possesses only 3% of the country's water resources[viii]. Water scarcity compels Tamil Nadu to seek solutions such as water reuse and seawater desalination. In 2025, the projected water needs for irrigation, domestic use, livestock, and industry are 52.7, 1.5, 1, and 2 billion m³, respectively[ix]. However, available surface water and groundwater are estimated at 24.6 BCM and 23 BCM, highlighting a substantial deficit. Over 90% utilization of surface water necessitates a focus on groundwater resources[x]. Despite challenges, the state ranks sixth in Indian agriculture, irrigating 3.5 MHA[xi]. The net sown area in the state stands at 4908041 ha[xii]. Rice cultivation, consuming over 45% of agricultural water, depends on canals, tanks, and groundwater[xiii]. Previously, water distribution was evenly split, but current usage stands at 30% reservoir water, 20% tank water, and 50% groundwater[xiv]. This shift in water usage can be attributed to the increasing scarcity of reservoir and tank water due to factors such as climate change and

population growth. As a result, farmers have been relying more heavily on groundwater sources to sustain rice cultivation which highlights the need for interventions to build long-term water sustainability and mitigate potential negative impacts on local ecosystems.



Cuddalore, is a district in northeastern Tamil Nadu, India, is situated on the Coromandel Coast of the Bay of Bengal. The district has a rich agricultural heritage, with the total cultivated area being 3,13,223 hectares, out of which about 1,85,925 hectares are irrigated[xv]. Of the entire cultivated land, 59% is irrigated and 41% is rainfed; the total area under cultivation is 247,582 hectares[xvi]. The main crops grown in the district are paddy Cumbu, Maize, Varagu, Blackgram, Greengram, Sugarcane, Groundnut, Gingelly and Cotton[xvii]. The district receives an average rainfall of 1206.7 mm[xviii]. Groundwater is a significant source of irrigation in Cuddalore, with 593 tanks, 270 canals, and one major reservoir serving as the main source for irrigation[xix]. The district faces various water challenges, including groundwater quality issues[xx] indicating the need for sustainable water resource management.



Sriperumbudur, a town in Kanchipuram district, Tamil Nadu, India, is known for its industrial activities, with several multinational companies having set up their manufacturing units in the region. The town and its surroundings are endowed with numerous water bodies such as the Sriperumbudur Lake, Elaneer Kulam and Perumal koil kulam, which serves as a source of water for irrigation and other purposes[xxi]. Kancheepuram district generally encounters warm and moist climatic conditions. The typical annual precipitation across the district ranges from 1105 mm to 1214mm[xxii]. According to the Kancheepuram district handbook, the cultivated land area amounts to 39,481 hectares[xxiii]. The primary crops cultivated in the vicinity include paddy, sugarcane, groundnuts, cereals, and pulses. The district excels in the production of fruits, vegetables, and flowers within the state. The key horticultural crops comprise mango, cashew, and banana. The cultivation is primarily sustained by the tanks and dug wells situated in the region.

Ground Water Resources Data (in ham) (2020) [xxiv]

Details (Value in ham)	Cuddalore District	Kancheepuram District	Sriperumbudur block, Kancheepuram
Annual Domestic and Industrial Draft	8731.22	2041.01	26.101
Annual Irrigation Draft	57970.79	21698.52	169.6
Annual Groundwater Draft (Total)	66702.01	23739.53	195.7

02

Approach & Methodology

2 APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

Our Approach

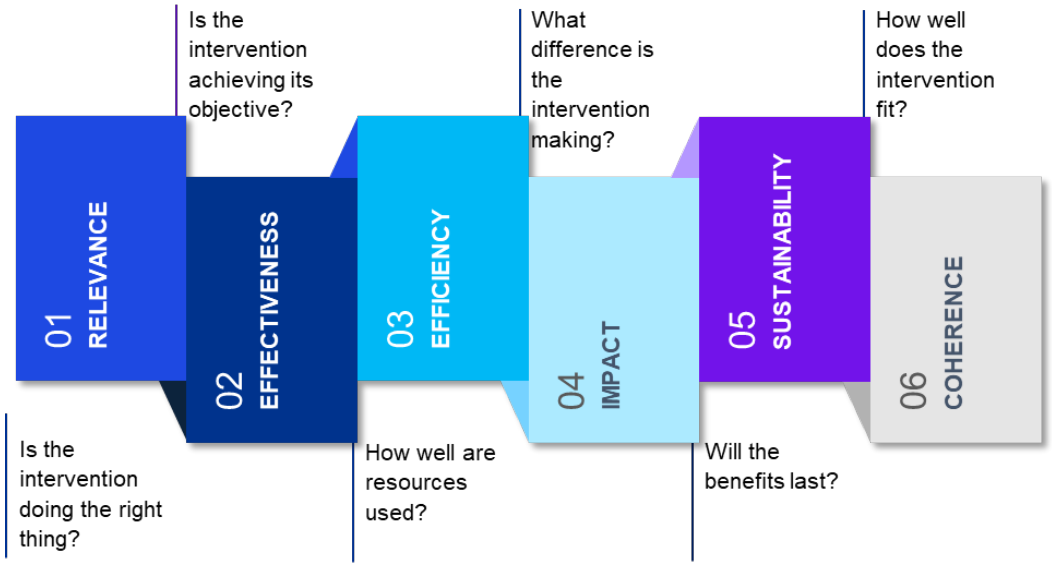
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*

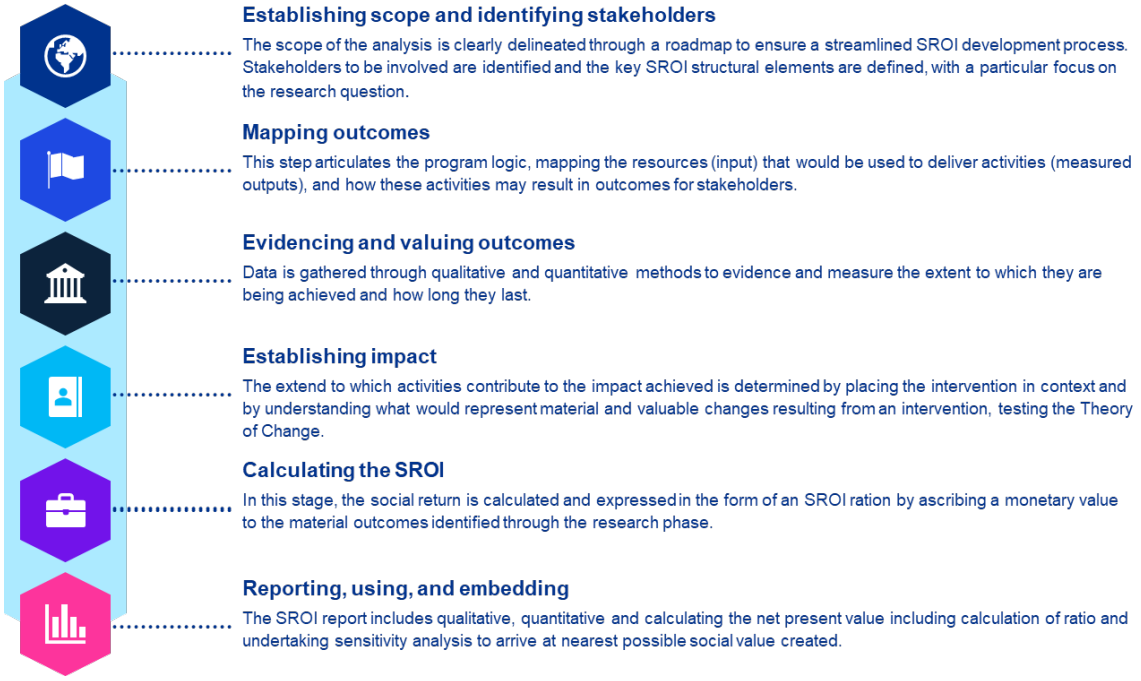
Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to

monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –



Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last

Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

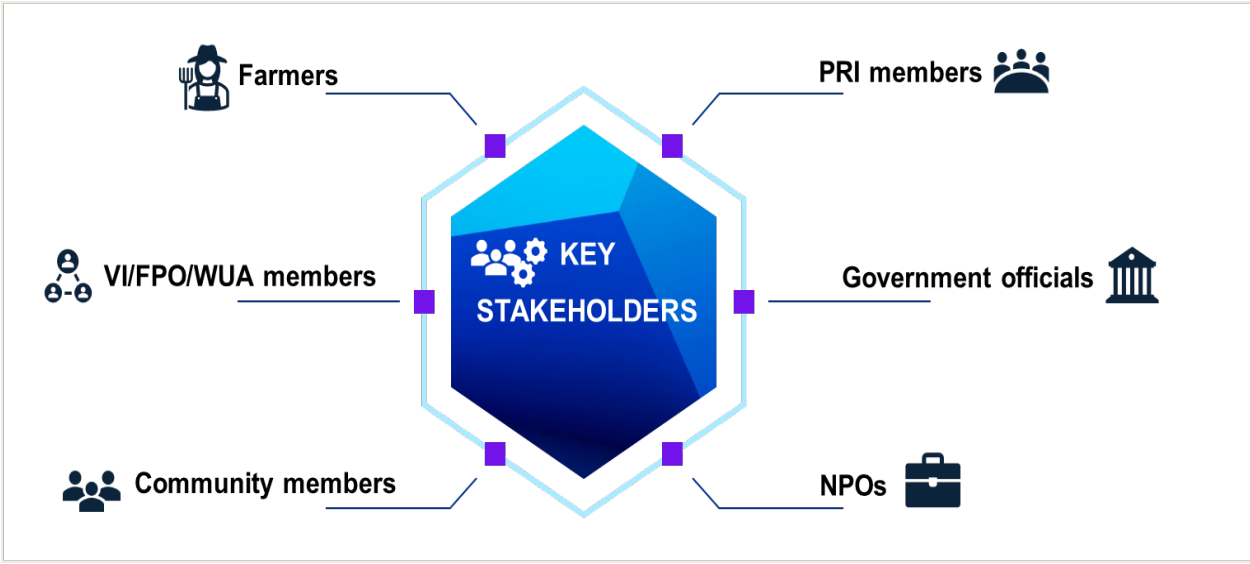
A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

Impact map for the Project:

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions

carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers			
Benefitted due to intervention	Sriperibundur-4057 Cuddalore 1300	100 100	100 100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Impact Map

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment. To organize and strengthen the village institutions around water harvesting and related livelihoods	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices
			No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area,

					Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

Analysis and Findings

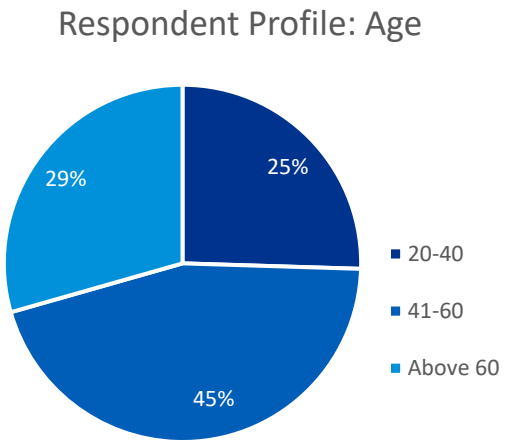
3 ANALYSIS AND FINDINGS

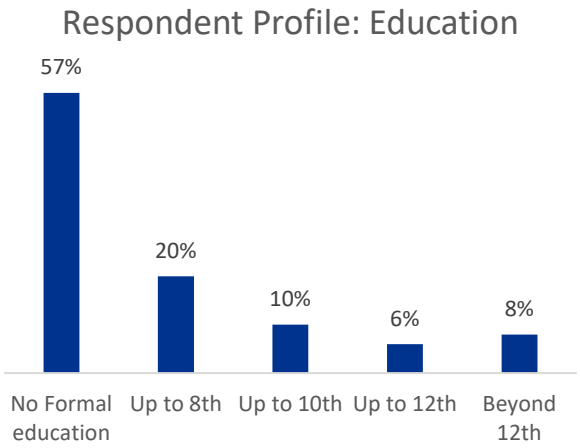
Sriperumbudur block

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water Resource Development program supported by Asian Paints Limited. across two villages Mahadevimangalam, Gunakarambakkam in Sriperumbudur block in Kanchipuram district of Tamil Nadu.

3.1.1 Demography of respondents

The respondents interviewed were largely (81 percent) from the age group of 40 to 60 years, followed by 17 percent from 25 to 40 years age group and two percent whose age is more than 60 years. In terms of education levels, majority (40 percent) of respondents had no formal education whereas 17% completed their education up to 10th standard.





Support received through project intervention:

WHS	47%
Direct irrigation from WHS	25%
water availability in well due to GW recharge	38%
improved soil moisture	29%
potable drinking water	71%
water for livestock	4%
Application of Silt from WHS	4%

Agriculture Interventions	41%
Training/Exposure visits	43%
Demonstrations	33%
Farm plantation/vegetable cultivation	43%
Water efficiency	33%

Other awareness programs	12%
Workshops	100%

The analysis of the table presented indicates that the beneficiaries of the project have received support through multiple interventions, indicating a strong emphasis on inclusivity in sample coverage. In addition to water resource management activities, the project promotes sustainable agriculture practices to enhance farm productivity through the provision of quality inputs, direct extension services, mechanization, and integration of agriculture with livestock.

The project adopts a holistic approach to ensure the sustainability of agriculture practices while improving productivity. This approach focuses on enhancing the efficient use of water resources, promoting sustainable practices, and improving the livelihoods of smallholder farmers. By addressing these key areas, the project is well-positioned to deliver meaningful impact and drive positive outcomes for the communities it serves.

Overall, the inclusive approach adopted by the project to support beneficiaries through multiple interventions represents a significant step forward in promoting sustainable agricultural development and improved livelihoods for smallholder farmers. The continued implementation of these interventions will be crucial for long-term success and progress towards sustainable development goals.

Source of income	61% of respondents shared that their primary source of income is agriculture, followed by 14% and 4% rely on non-salaried and salaried work respectively. Rest 22% respondents reported to have other activities such as labor work as their primary source of income.
HH income	Annual HH income of majority of (52%) of respondents ranges between INR 25,000 to INR 1,00,000 wherein the average annual household income being INR 30,862
Land holding size	33% of respondents reported land size ranging from 2 to 5 acres whereas 65% respondents reported to have landholding of less than 2 acres.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Gunakarambakkam	39%	4%	20%
Mahadevimangalam	27%	8%	2%

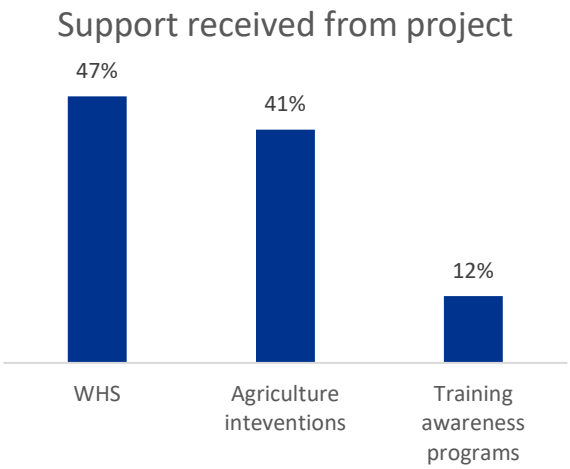
The table reveals the percentage of farmers practicing farming in Kharif, Rabi, and Zaid seasons in different villages. Gunakarambakkam has the highest percentage of farmers practicing agriculture in Kharif season, while Mahadevimangalam has the lowest percentage (2%) with less activities in Zaid season. Gunakarambakkam has lowest activities in Rabi season i.e., (4%) whereas Zaid season has been preferable for 20% respondents for practicing cultivation.

About Irrigation facility:

Village Name	Yes	No, only dependent on rains	Others
Mahadevimangalam	68%	26%	5%
Gunakarambakkam	72%	22%	6%

The table shows the percentage of villages with access to irrigation facilities and those dependent only on rainfall for farming. 72% and 68% respondents from Gunakarambakkam and Mahadevimangalam respectively reported of farmers with access to irrigation facilities, while 26&% respondents from Mahadevimangalam and 22% respondents from Gunakarambakkam has the depend only on rainfall. The data highlights the importance of irrigation facilities for agricultural activities and the need for more resources to improve infrastructure in the region for better crop yields and economic growth.

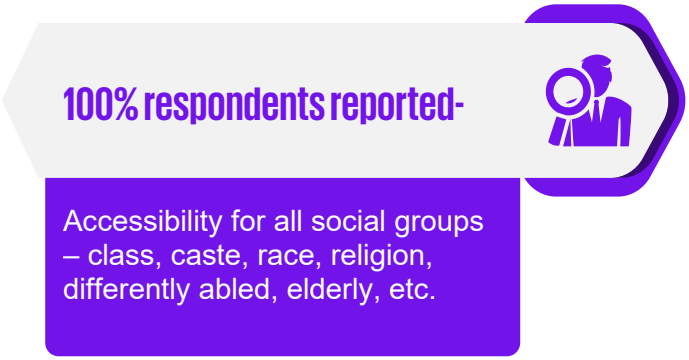
Support received from project:



The table presented indicates the percentage of beneficiaries who received support through different interventions of the project.

In accordance to the analysis 41% respondents reported that agriculture intervention support was provided in Mahadevi Mangalam and Gunakarambakkam villages, whereas 47% respondents reported to get support of WHS activities in both the villages. Whereas 12% respondents reported of receiving training awareness program as a support from the intervention.

About Accessibility of the project across all community groups:



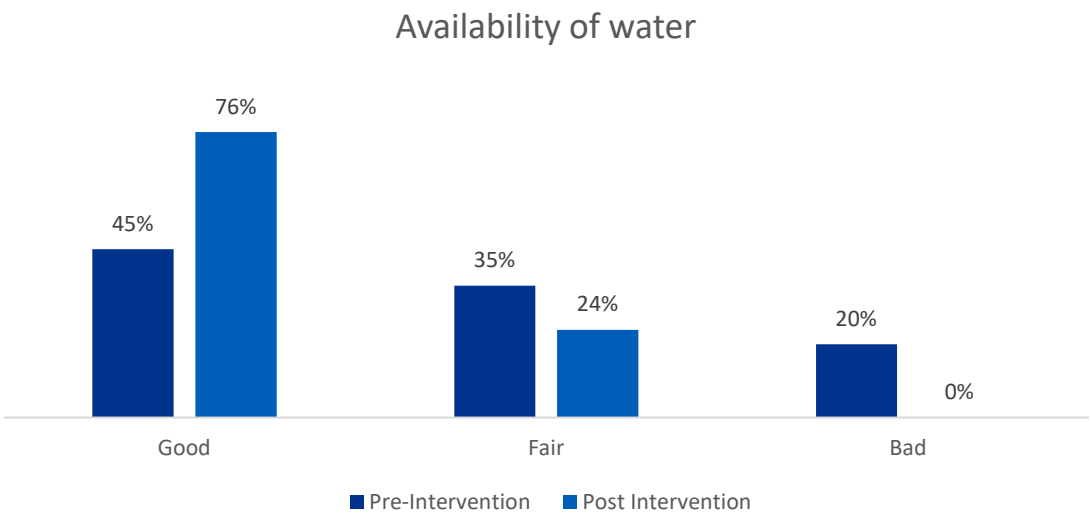
Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrates the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

Support for Water Harvesting Structures.

As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that 100% of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents stated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial in ensuring the successful implementation and sustainability of the project.

3.1.2 Impact on availability and accessibility of water



The graph illustrates respondents' ratings of water availability before and after the project's implementation. The ratings are divided into three categories: Good, Fair, and Bad. The analysis clearly shows that the project has greatly enhanced water availability in the area.

Prior to the project's implementation, only 45% of respondents rated water availability as 'good,' 35% rated it as 'fair,' and 20% rated it as 'bad.' This highlights the disparities in water availability before the project, with many beneficiaries experiencing water scarcity issues.

After the project's interventions, the ratings improved significantly, with 76% of respondents rating water availability as 'good,' 24% rating it as 'fair,' and none rating it as 'bad.' These findings underscore the project's positive impact on water availability, resulting in better access to water resources, improved irrigation, and increased agricultural productivity.

100%

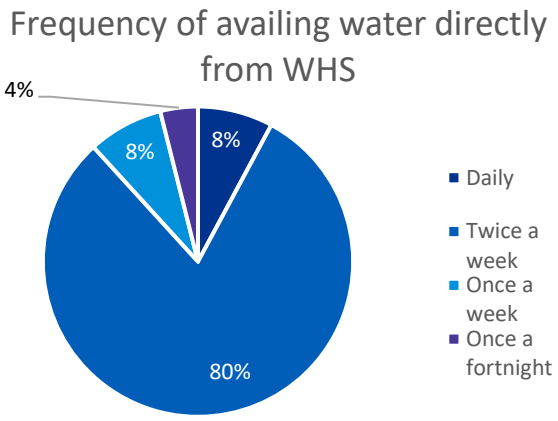
Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

92% Of respondents reported that intervention resulted in increased water availability in your well/borewell

100% Of respondents reported that the duration of improved water availability more than four months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income generation. Above responses show the effectiveness of the project in improving water resource management in the region.



The data indicates that the majority of respondents (47%) avail water twice a week. 26% of the respondents access water from WHS once daily and weekly each, respectively. The results demonstrate that WHS has been effective in providing beneficiaries with a reliable and stable supply of water for their daily needs. Overall, the outcomes of the analysis showcase the positive impact of the project interventions in improving water access.

3.1.3 Improved water level

Season	Intervention	Depth of water in well/ borewell (Ft)	Delta Change (Ft)
Monsoon	Pre intervention	145	85
	Post intervention	60	
Winter	Pre intervention	180	95
	Post intervention	85	
Summer	Pre intervention	197	98
	Post intervention	99	

The chart illustrates the influence of project initiatives on the depth of water in wells and borewells during various seasons. The information indicates beneficial effects, with increases in water availability throughout all seasons, which results in higher levels of the groundwater table and improved agricultural output.

The success of these initiatives is apparent from the notable delta changes, most significantly in the summer season by 98 feet, followed by the winter season at 95 feet, and the monsoon season recording a change of 85 feet. In summary, the findings underscore the significance of adopting sustainable practices for water management through the project, which ensures improved access to water resources. In the course of evaluating the project, the participants noted advantageous impacts arising from the rejuvenation of ponds to boost surface water resources. The statistics reveal that all surveyed participants noted enhanced conditions in surface water availability, with every respondent affirming availability of surface water during the summer. The enhanced access

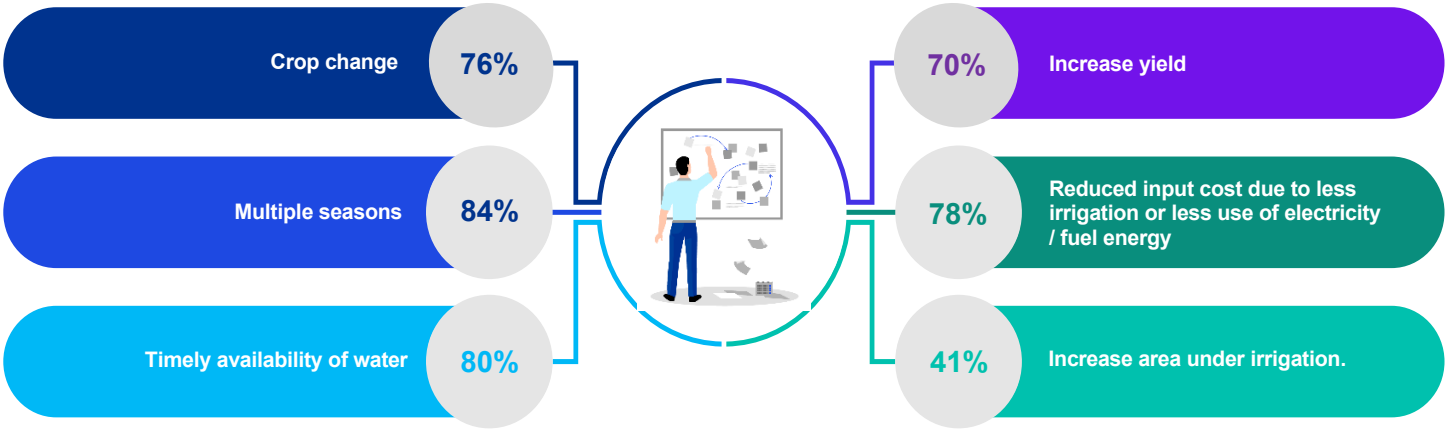
to surface water has been linked to substantial advantages for both livestock and household purposes, resulting in favorable socio-economic impacts.

> **The village women faced challenges in fetching water before the project interventions. The severity increased during water scarcity, making it difficult for livestock. After pond rejuvenation activities, the community experienced access to clean water, significantly improving the quality of life for villagers and their livestock.**
>
> ***- Farmer beneficiary from Chikada village***

3.1.4 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

3.1.5 Impact on agriculture practices

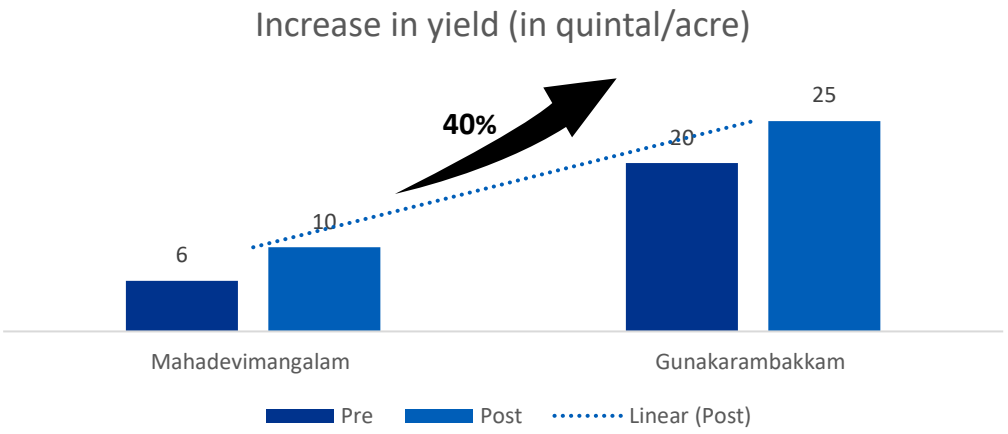


Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity, reduced input costs, and timely access to water resources. These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.

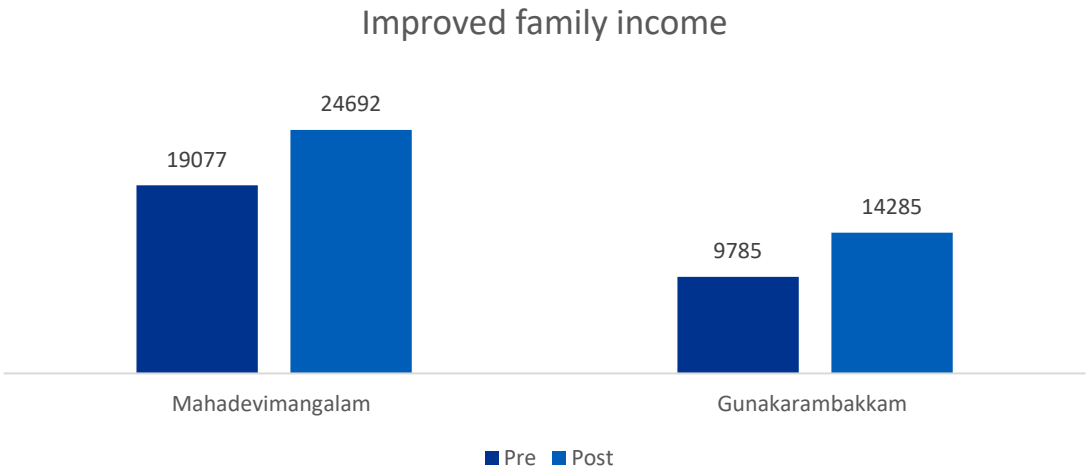
3.1.6 Increase in yield

The graph provided shows the impact of water availability and improved access on farming practices in the specified villages.



The data depicts a significant improvement in crop productivity after the interventions, with all villages showing an increase in yield. The delta change highlights a considerable difference between the pre- and post-intervention period. The analysis reveals that all villages experienced an increase in yield, with the most significant difference observed in both Mahadevimangalam and Gunakarambakkam villages, with a 1667 and 5 quintal/acre delta change, respectively.

3.1.7 Impact family income



The graph illustrates the effect of project interventions on the family income in the intervention villages. The data reveals a substantial rise in the average family income by 35 percent, increasing from Rs 14,259 per year to Rs 19,296 per year after the interventions, showcasing the overall positive impact of the project's targeted measures.

The data analysis indicates that every village saw an increase in family income post-interventions. Mahadevimangalam village recorded the highest change in family income, with an increase of approximately Rs 5,615 per year. Gunakarambakkam village also showed a significant rise, with a family income increase of Rs 4,500 per year.

3.1.8 Impact on livestock

35%

Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.

29%

Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

INR 4,909

Improved family income

The income generated through livestock business resulted in an average increment of INR 4,909 in the beneficiaries' annual family income.

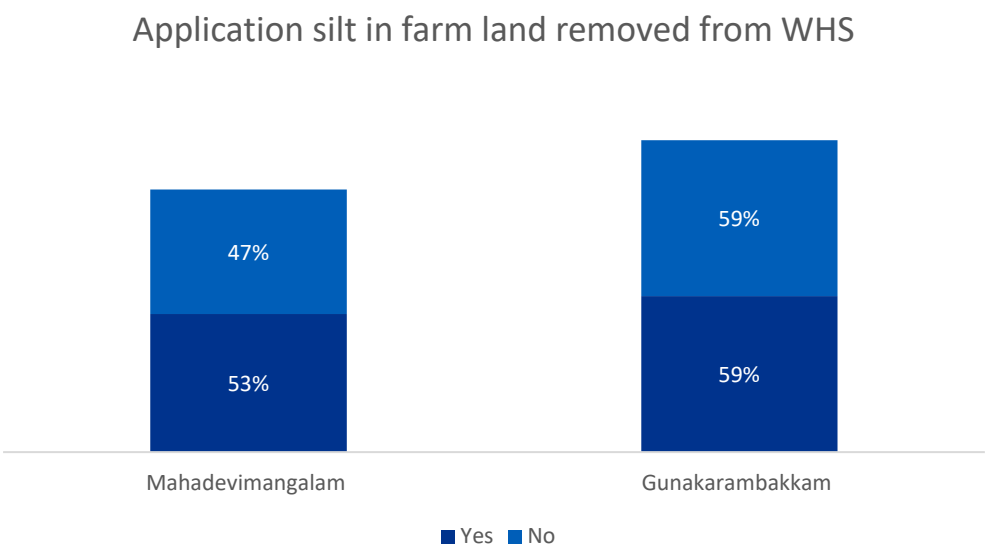
The data presented suggests that the WHS has positively impacted livestock management practices. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS. The qualitative survey responses showing the quantifiable impact on family income indicate that the WHS has provided a reliable and stable supply of water, enabling efficient livestock management practices, leading to enhanced livelihoods and socio-economic outcomes for the beneficiaries.

3.1.9 Impact on personal life

The initiative of the project has yielded numerous favorable effects that have greatly influenced personal living situations. Feedback from those who benefited indicates that the WHS has facilitated time savings and a notable decrease in manual labor. Additionally, the information gathered shows enhanced health results, with 57% of participants emphasizing the effects on their bodily health. These results prove that the WHS has lightened the load of collecting water and has allowed beneficiaries to pay more attention to their personal endeavors. The dependable and quick water access has lessened the need for physical toil, bettered personal health, and heightened the general quality of life. Therefore, the project initiatives have fostered improved socio-economic results and elevated the overall wellness of those affected.

3.1.10 Silt application on agriculture land

The application of silt on agricultural land has several benefits in promoting sustainable agriculture and improving soil fertility. Silt, which is a natural byproduct of water management activities like the WHS system, is rich in nutrients and minerals that enrich the soil quality. The use of silt in agriculture improves soil texture, water retention, and soil fertility, promoting better plant growth and crop yields.



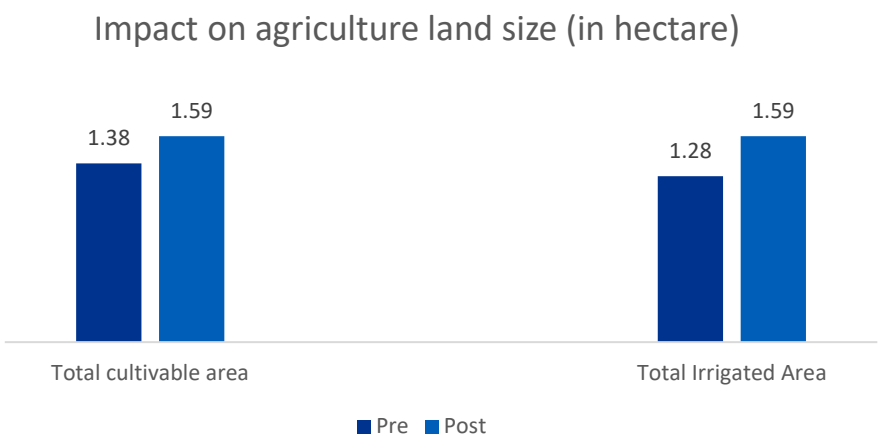
In During conversations with recipients from the two villages, Mahadevimangalam and Gunakarambakkam, 53% and 59% of those surveyed, respectively, shared that they used the silt produced from the WHS structure for their farmlands with assistance from the implementation agency. The beneficiaries noted positive effects such as better soil condition and increased soil output, which led to improved agricultural yields and greater water holding ability. This feedback highlights the importance of fostering sustainable agricultural methods and the promotion of important materials like silt from the WHS structure for sustainable development in that area.

All participants (43%) observed enhancements in soil quality, which led to a decreased reliance on chemical additives. The collected responses additionally reflected (57%) success in boosting productivity and diminishing the frequency of irrigation required by all those involved. The results show that the incorporation of silt into farming methods has supplied vital nutrients to the soil, supported environmentally friendly practices, and consequently reduced the dependency on synthetic fertilizers.

Agriculture and Livelihood

3.1.11 Impact on agriculture land

Through discussion with respondents, it was reported that the increase in average total net sown area from 1.36 hectare to 1.66-hectare post-intervention. This suggests that the project interventions have yielded positive outcomes on agriculture and water resource management practices. The increase in net sown area reaffirms the efficiency of the WHS interventions in promoting sustainable water management practices and enhancing agricultural productivity in the project area. This can be explained further through below graph-



The rise in the total cultivable are from 1.38 hectare to 1.59 hectare (15% of improvement)and the increase in the total irrigated area from 1.28 hectares to 1.59 hectares (24% of improvement) after the intervention demonstrate a positive effect of the project interventions on agricultural productivity. The findings imply that the interventions have helped to boost the agricultural potential of the project area through better water resource management and sustainable practices.

It is crucial to distinguish between cultivable area and irrigated area. Cultivable area refers to the total land suitable for cultivation, while irrigated area denotes the land that receives water through artificial means, such as water pumps, canals, or other irrigation systems. Many beneficiaries were supported for drip irrigation through the project intervention, leading to a potential average increase in the total irrigated area.

The village wise details-

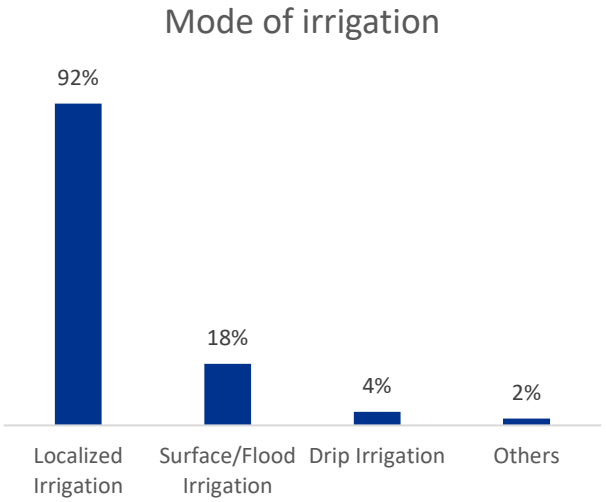
	Total cultivable area		Total Irrigated Area	
Village name	**Pre-intervention**	**Post intervention**	**Pre-intervention**	**Post intervention**
Mahadevimangalam	1.40	1.54	1.32	1.54
Gunakarambakkam	1.36	1.66	1.21	1.66

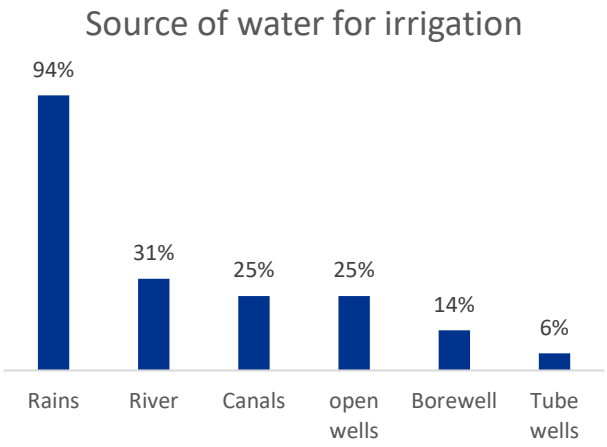
Grand Total	**2.76**	**3.2**	**2.53**	**3.2**

The village-level analysis indicates variable outcomes across villages. Mahadevimangalam and Gunakarambakkam report an increase in both total cultivable area and total irrigated area.

3.1.12 Mode of irrigation

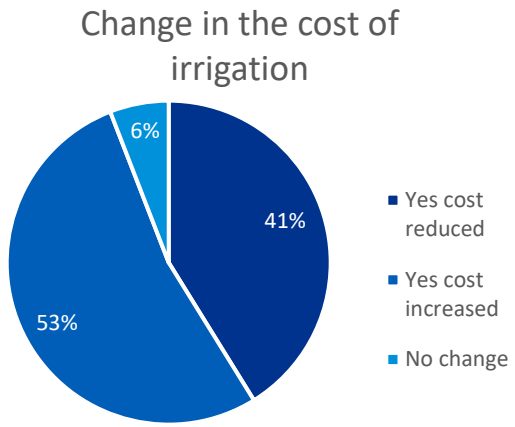
The allocation of irrigation techniques within the project vicinity shows that localized irrigation is the predominant method used, succeeded by drip irrigation, surface/flood irrigation, and additional techniques. The information underscores a transition towards localized and drip irrigation, methods that are more efficient and environmentally sustainable when compared to traditional irrigation approaches such as surface/flood irrigation. The findings indicate that the agricultural initiatives have produced favorable effects on irrigation methods in the project region, motivating recipients to embrace sustainable and effective irrigation strategies.





The chart highlights the different sources of water for irrigation practices in the project area, indicating that the majority of the respondents rely on rivers for irrigation purposes (31%). Borewells and open wells account for 14% and 25% of the sources of water for irrigation respectively, while rainwater accounts for only 94% of the sources. The results emphasize the significance of proper management of water resources, particularly in arid and semi-arid regions such as the project area.

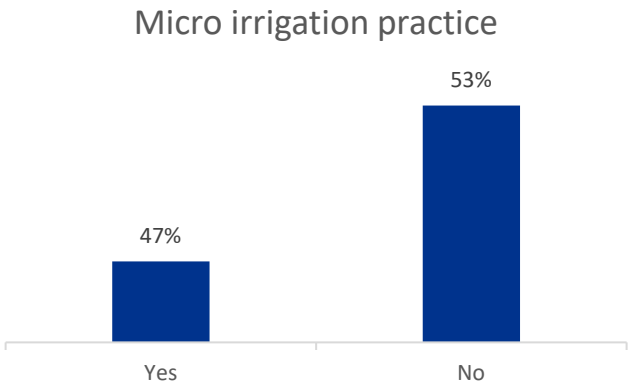
3.1.13 Cost of irrigation



Based on conversations with project beneficiaries, only 52% of respondents indicated an increase in irrigation costs, while 41% reported a decrease. The beneficiaries attributed the rise in costs to higher expenses for chemical fertilizers and pesticides, compounded by increased market rates for these inputs. The project included training on non-pesticide management (NPM) techniques and organic farming demonstrations. Despite this, respondents mentioned that they only use organic and NPM techniques on the land intended for personal consumption, continuing to use chemical fertilizers on the rest. They noted that organic farming yields are lower compared to chemical methods and that there is no demand for organic produce in local markets. This reluctance to fully adopt organic farming hinders the effective implementation of sustainable agricultural practices.

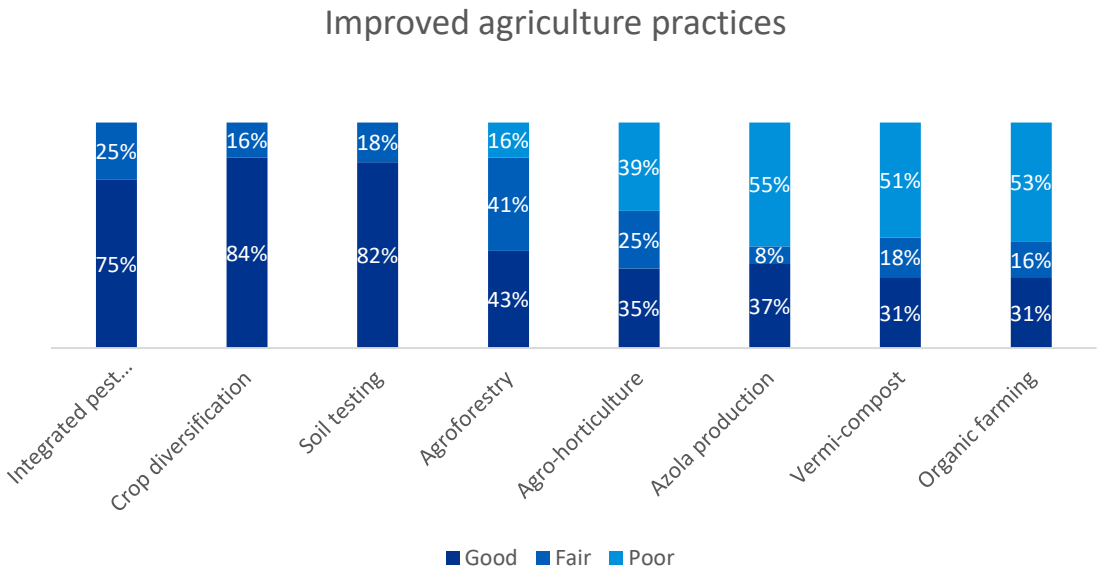
	Average cost (INR)	Delta change
Cost of irrigation pre-project intervention	9,889	4,111 (41%)
Cost of irrigation pre-project intervention	14,000	

3.1.14 Micro irrigation



The chart above illustrates the percentage of project beneficiaries who have adopted efficient water use for irrigation via micro-irrigation techniques. According to the data, 47% of participants are practicing efficient water usage, while 53% are not yet doing so but have shown a willingness to start and have requested additional support from the implementation partner. These responses indicate that nearly half of the respondents need further assistance to effectively adopt micro-irrigation techniques. Although the project interventions may have already achieved some positive outcomes in promoting sustainable water resource management practices, ongoing support is necessary to ensure the broad adoption of efficient irrigation practices.

3.1.15 Understanding on improved agriculture practices



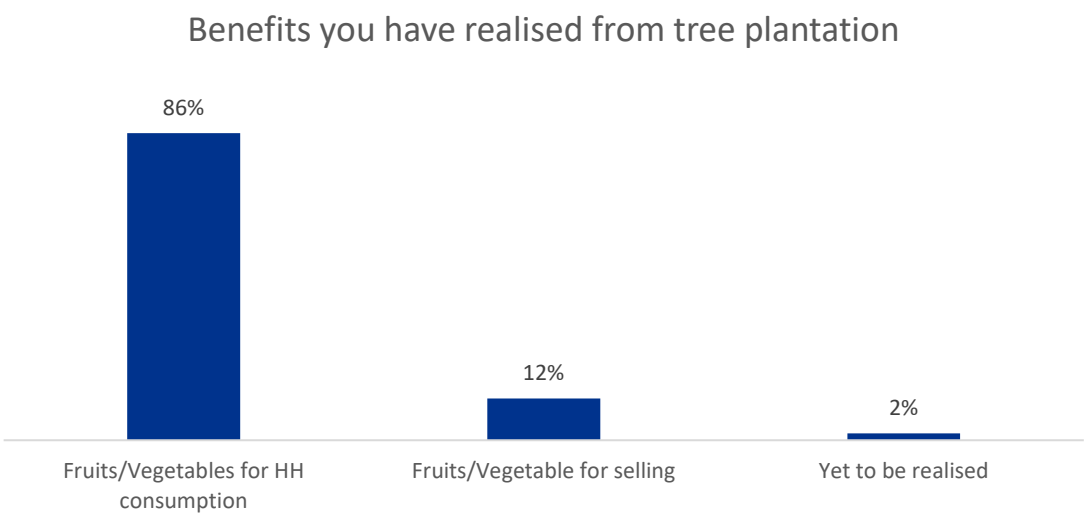
The graph indicates the rating given by project beneficiaries for their understanding of various improved agricultural practices, including integrated pest management, crop diversification, soil testing, agroforestry, Agro-horticulture, vermicompost, and organic farming. The majority of the respondents rated their understanding of integrated pest management, crop diversification, and soil testing as good, indicating that these practices have been well-received and understood by the beneficiaries.

The rating for Agro-forestry was somewhat mixed, with approximately more than of the respondents rating their understanding as good, and the remainder rating it as fair or poor. The relatively low rating for organic-farming suggests that further educational efforts and awareness building may be necessary to promote the adoption of organic-farming as a measure of improving the quality of the produce.

Moreover, the rating for Vermi-compost and Azola production practices indicates the need for greater awareness building and knowledge dissemination to promote and encourage the widespread adoption of these practices. While it is encouraging to note that some of the respondents considered their understanding good for Agro-horticulture, a significant proportion rated their understanding as fair or poor.

3.1.16 Tree plantation

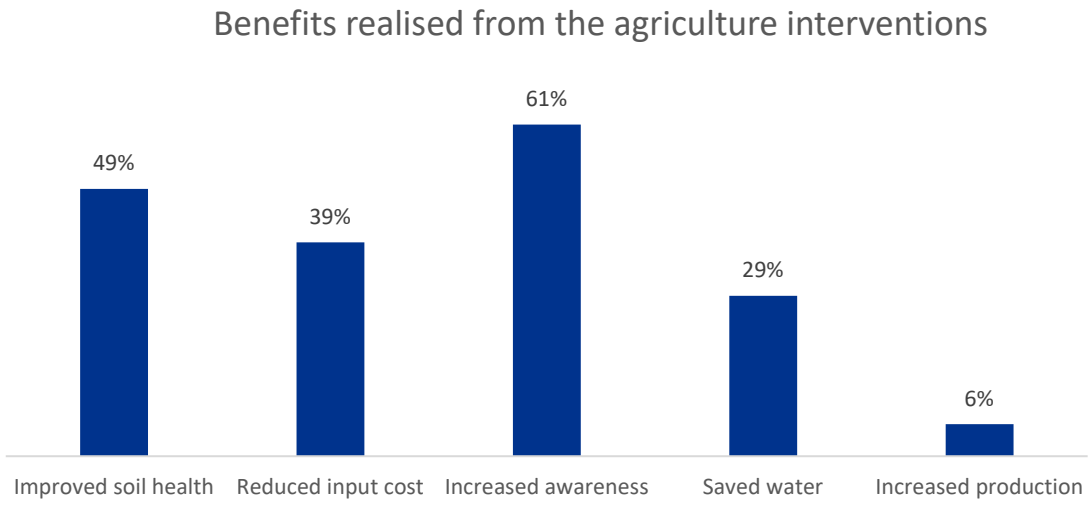
86% of respondents indicated their participation in the tree plantation intervention carried out through the project. This intervention involved the implementation partner distributing seeds and saplings for various trees and vegetables to the beneficiaries, including mango, lemon, chiku, and guava. The aim of this activity was to boost farmers' income levels and enhance food security.



The graph shows the percentage of project beneficiaries who have adopted improved agricultural practices for household consumption, selling, or have yet to see the benefits. The results reveal that 86% of respondents have implemented these practices for household consumption, 12% have been cultivating for selling purposes, and 2% have not yet realized the benefits of the interventions.

In summary, the chart's results demonstrate that the project interventions have positively impacted the promotion of sustainable agricultural practices among the beneficiaries.

3.1.17 Benefit realized from agriculture intervention



The graph above illustrates the benefits derived from the agricultural interventions and the number of beneficiaries who reported these benefits. The findings show that the interventions achieved a

61% success rate in raising awareness, 29% in water conservation, and only 6% in boosting production.

Additionally, nearly half of the respondents (49%) noted improved soil health, suggesting that the project interventions had a positive and lasting impact on soil quality. Enhanced soil health is crucial for increasing agricultural productivity, ensuring food security, and protecting the environment.

However, only a small percentage of beneficiaries (39%) reported reduced input costs, indicating a need for further interventions to lower agricultural input costs and make resources more affordable. Despite this, the high success rate in other areas underscores the significant potential of promoting sustainable agricultural practices in the region.

In summary, the project interventions have allowed communities to experience various benefits, greatly enhancing their socio-economic well-being.

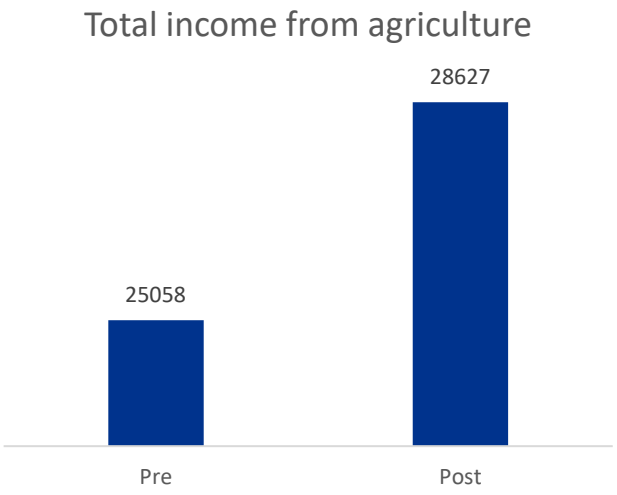
3.1.18 Impact on cost and produce from agriculture practice

Discussions with project beneficiaries revealed that 74% of respondents have successfully reduced their input costs, while the remaining 26% have not. Lowering input costs is crucial for enhancing the efficiency and sustainability of agricultural practices, as well as increasing the beneficiaries' profitability. The relatively low percentage of respondents who have managed to reduce their input costs may suggest obstacles such as reliance on chemical pesticides.

These findings highlight the necessity for additional interventions that encourage the adoption of cost-effective and sustainable agricultural practices. By implementing such measures, beneficiaries can lower their input costs, boost their yields, and improve their financial well-being.

3.1.18.1 Agriculture income

The graph illustrates the total income from agriculture, the average income, and the change before and after the interventions. The data shows that the total income from agriculture has risen by nearly 14% post-intervention, from 25,058 to 28,627.



This substantial increase in income highlights the significant impact of the agricultural interventions on the beneficiaries' financial well-being. The interventions have greatly improved productivity and yield, resulting in higher economic returns. In summary, the rise in total income for the beneficiaries following the project interventions demonstrates the success of these agricultural interventions in boosting productivity and yield.

3.1.19 Case Study: Transforming Lives through the Water Resource Development Project in Kanchipuram, Tamil Nadu

Venkatesh Ramana is a resident of one of the villages in Sriperumbudur block of Kanchipuram district. He had five acres of agricultural land, but it was rain-fed, which made it difficult for him to cultivate throughout the year. During the off-cultivation season, he along with his family had to migrate to nearby towns for work as they barely managed to sustain their livelihood on the farm. During the COVID wave he re-migrated to his hometown due to the lockdown and loss of employment opportunities in the city.

Further he discovered about the 'Water Resource Development' project implemented by Asian Paints Limited. Further he received training on sustainable and organic farming practices. The project team provided support for water for irrigation through the construction of check dams, silt application, farm border plantation, and promoted paddy cultivation through the System of Rice Intensification (SRI).

After implementing the interventions for some time, V. Ramana saw a significant improvement in his farm. He was able to practice agriculture throughout the year, which not only contributed to his self-sufficiency but also helped improve his soil quality. He earned a stable income from the farm, which allowed him to add two more livestock - a cow and a buffalo - to the farm and start a small milk business. He continued to practice sustainable and organic farming for household consumption. While he acknowledged the importance of organic farming, he understood the lack of a marketplace in rural regions. However, he was determined to find suitable solutions and shift towards organic farming at full scale.

V. Ramana is grateful for the 'Water Resource Development' project and the support that helped transform his farm and his life. He thanked the project team for the handholding support and for making a positive impact on his life. The project not only improved his agricultural productivity but also enhanced his overall livelihood, providing a stable and sustainable source of income for his family.

Cuddalore Block

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water Resource Development program supported by Asian Paints Limited. across two villages, Kanarpatai and Kothandaramapuram, in Cuddalore and Kurinjipadi blocks, respectively, in the Cuddalore district of Tamil Nadu.

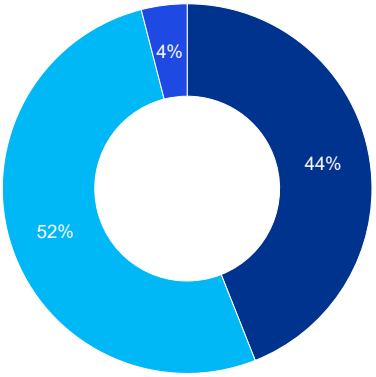
3.1.20 Demography of respondents

As per the responses noted from the respondents, the age distribution of the population in the villages of Kanarpatai and Gunakarambakkam reveals a significant concentration of individuals in the 20-60 years age bracket. Specifically, 44% of the respondents fall within the 20-40 years age group, while 52% are aged between 41-60 years. Only a small fraction, 4%, are above 60 years. This demographic structure suggests a predominantly working-age population, which has implications for labor availability and economic productivity in these villages.

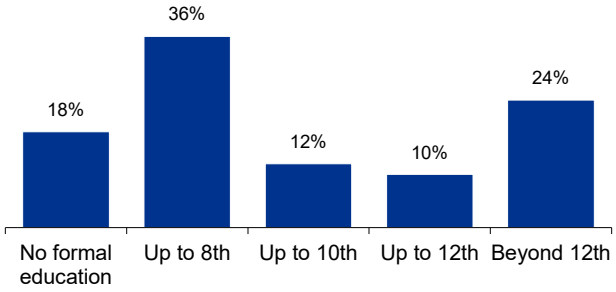
The respondents interviewed provided insights into the education levels in these villages, which vary widely. A notable 18% of the respondents have no formal education, which could impact their employment opportunities and economic mobility. The majority, 36%, have education up to the 8th grade, followed by 12% up to the 10th grade, and 10% up to the 12th grade. Interestingly, 24% of the respondents have education beyond the 12th grade, indicating a significant portion of the

population has pursued higher education, which could positively influence the socioeconomic development of the area.

Age Distribution



Education Levels



Source of income

94% of the respondents, underscoring the agrarian nature of these villages. Only 6% of the respondents rely on other sources of income, such as jobs and pensions. This heavy dependence on agriculture highlights the importance of agricultural policies and support systems to sustain the livelihoods of the majority..

HH income

Household income levels, as reported by the respondents, show that 74% of households earn between 50,000 to 1,00,000 INR annually, while 26% earn between 1,00,000 to 1,50,000 INR.

Land holding size

The land holding sizes among the respondents are relatively small, with 40% owning 1-2 acres, 30% owning 2-5 acres, and another 30% owning more than 5 acres. The distribution of land holdings indicates a mix of small and medium-scale farming operations, which could affect agricultural productivity and income levels.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Kanarpatai	100%	84%	25%
Gunakarambakkam	100%	89%	35%

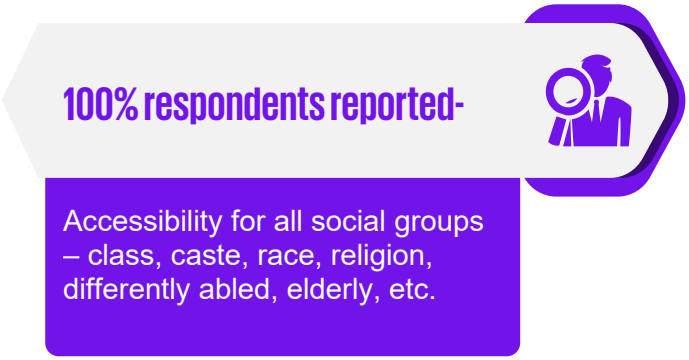
The season of cultivation data shows that both Kanarpatai and Gunakarambakkam have high participation in the Kharif season, with 100% of the population engaged in cultivation during this period. Participation drops slightly in the Rabi season, with 84% in Kanarpatai and 89% in Gunakarambakkam. The Zaid season sees the least participation, with 25% in Kanarpatai and 35% in Gunakarambakkam. This seasonal variation in cultivation activities could be influenced by climatic conditions, water availability, and crop choices.

About the Irrigation facility:

Village Name	Yes	No, only dependent on rains	Others
Kanarpatai	92%	8%	0%
Gunakarambakkam	85%	15%	0%

The dependency on rains for agricultural activities is significant, with 92% of the population in Kanarpatai and 85% in Gunakarambakkam relying on rainfall. Only 8% in Kanarpatai and 15% in Gunakarambakkam do not depend solely on rains, indicating limited access to irrigation facilities. This reliance on rainfall makes the agricultural output vulnerable to weather fluctuations and highlights the need for improved irrigation infrastructure.

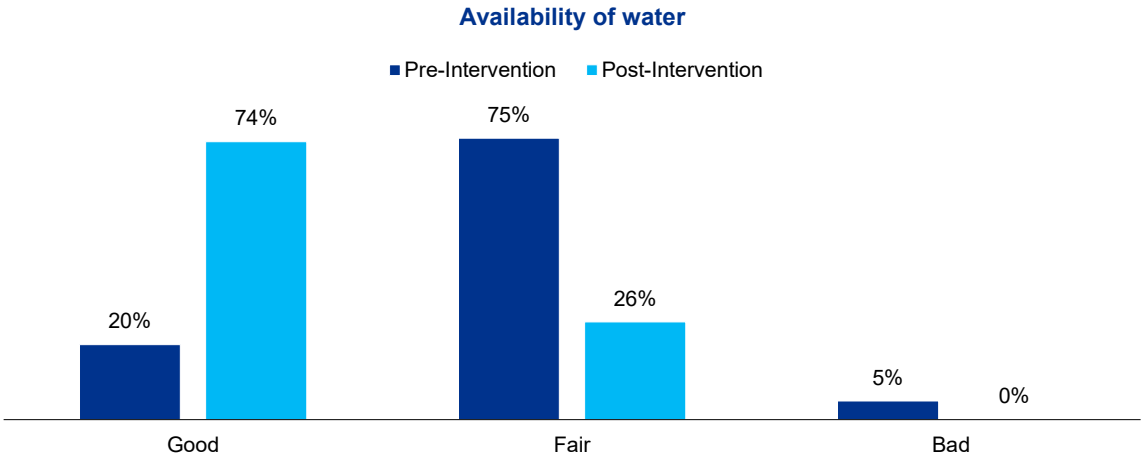
About the Accessibility of the project across all community groups:



Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrates the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

3.1.21 Impact on availability and accessibility of water

The pre-intervention and post-intervention analysis based on the respondents' feedback demonstrates a marked improvement in the quality of life and services in Kanarpatai and Gunakarambakkam. The intervention has successfully elevated the conditions from predominantly fair to good, with no aspects remaining in the bad category. This positive outcome underscores the importance of targeted interventions in enhancing the well-being of rural communities.



100%

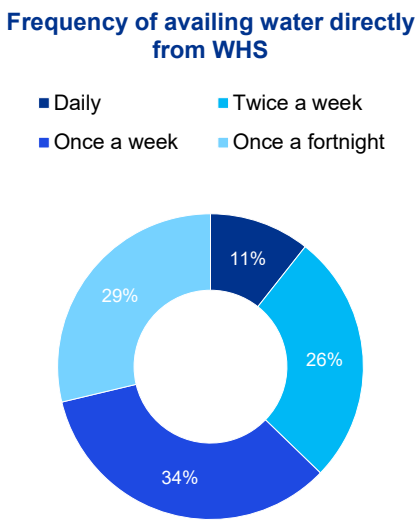
Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

96% Of respondents reported that intervention resulted in increased water availability in your well/borewell

72% Of respondents reported that the duration of improved water availability more than four months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income



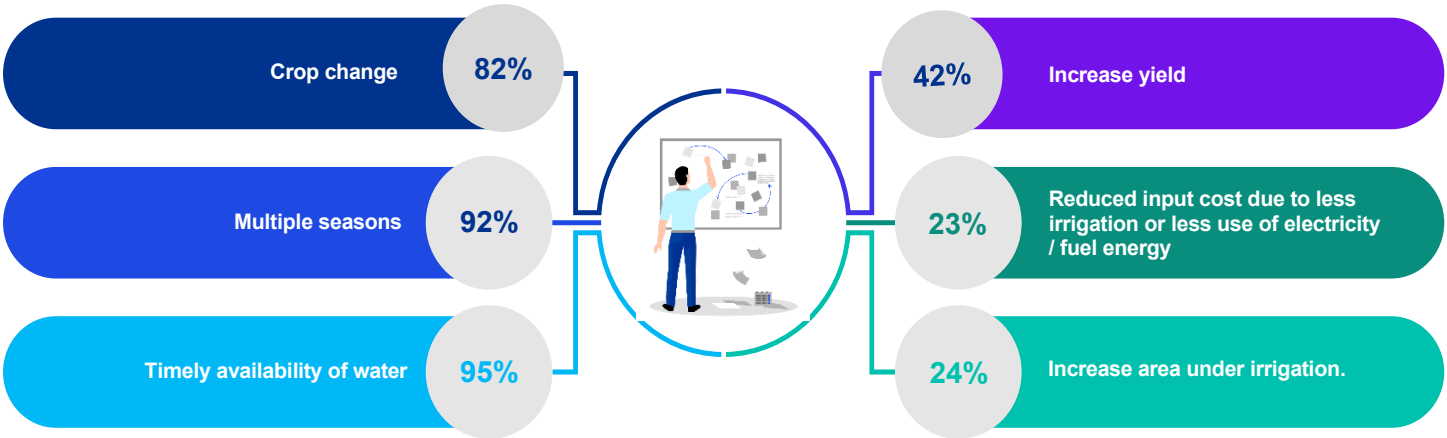
generation. Above responses show the effectiveness of the project in improving water resource management in the region.

The frequency of availing water directly from Water Harvesting Structures varies among the respondents in Kanarpatai and Gunakarambakkam. While a small percentage relies on WHS daily, the majority access it on a weekly or fortnightly basis. Understanding these usage patterns is crucial for managing water resources effectively and ensuring sustainable water supply for the villagers.

3.1.22 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

3.1.23 Impact on agriculture practices



Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

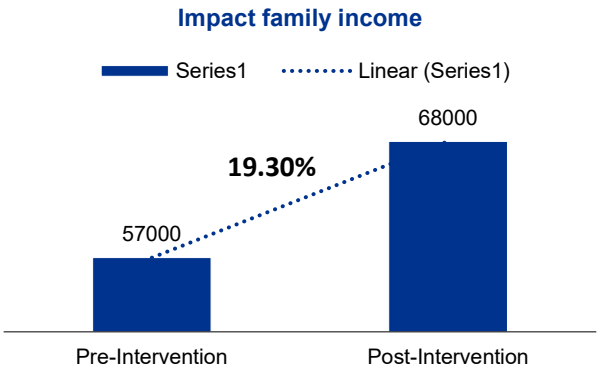
The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity and timely access to water resources.

It was noted that no increase or decrease was found in reduced input cost due less irrigation or less use of electricity/fuel energy

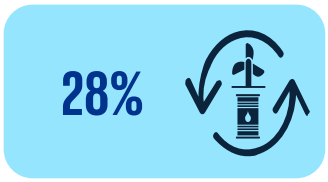
These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.

3.1.24 Impact family income

The comparison of income levels pre-intervention and post-intervention demonstrates a significant economic benefit for the respondents in Kanarpatai and Gunakarambakkam. The intervention has successfully elevated the average income, contributing to the overall economic development and well-being of the villagers. This positive outcome underscores the importance of targeted interventions in enhancing the livelihoods and economic stability of rural communities.

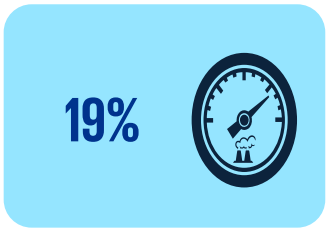


The analysis of income levels before and after the intervention in Kanarpatai and Gunakarambakkam reveals a significant economic improvement for the respondents. The average income increased from 57,000 INR pre-intervention to 68,000 INR post-intervention, representing an approximate 19.30% increase.



Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.



Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

Improved family income

The income generated through livestock business resulted in an average increment of INR 3000 in the beneficiaries' annual family income.

3.1.25 Impact on livestock

The data indicates that the Water Harvesting Structures (WHS) have had a positive effect on livestock management practices. The increase in productivity, along with the addition of more livestock due to improved income generation, highlights the significant impact of the WHS. Qualitative survey responses that quantify the impact on family income suggest that the WHS has provided a reliable and stable water supply. This has enabled efficient livestock management practices, resulting in enhanced livelihoods and better socio-economic outcomes for the beneficiaries.

3.1.26 Impact on personal life

The initiative of the project has yielded numerous favorable effects that have greatly influenced personal living situations. Feedback from those who benefited indicates that the WHS has facilitated time savings and a notable decrease in manual labor. Additionally, the information gathered shows enhanced health results, with 95% of participants emphasizing the effects on their bodily health. These results prove that the WHS has lightened the load of collecting water and has allowed beneficiaries to pay more attention to their personal endeavors. The dependable and quick water access has lessened the need for physical toil, bettered personal health, and heightened the general quality of life. Therefore, the project initiatives have fostered improved socio-economic results and elevated the overall wellness of those affected.

04

Conclusion and Recommendations

4 OECD-DAC

Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 83 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 32 percent of the respondents were only dependent on rainfed agriculture. Around 35 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 2013

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water
- (x) rural development projects

Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.1.3 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of	Project activities included promotion of agro-forestry and prevention of forest

terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

Target 15.2

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

among the community members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[xxv] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[xxvi] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[xxvii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on Water Resource Development aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

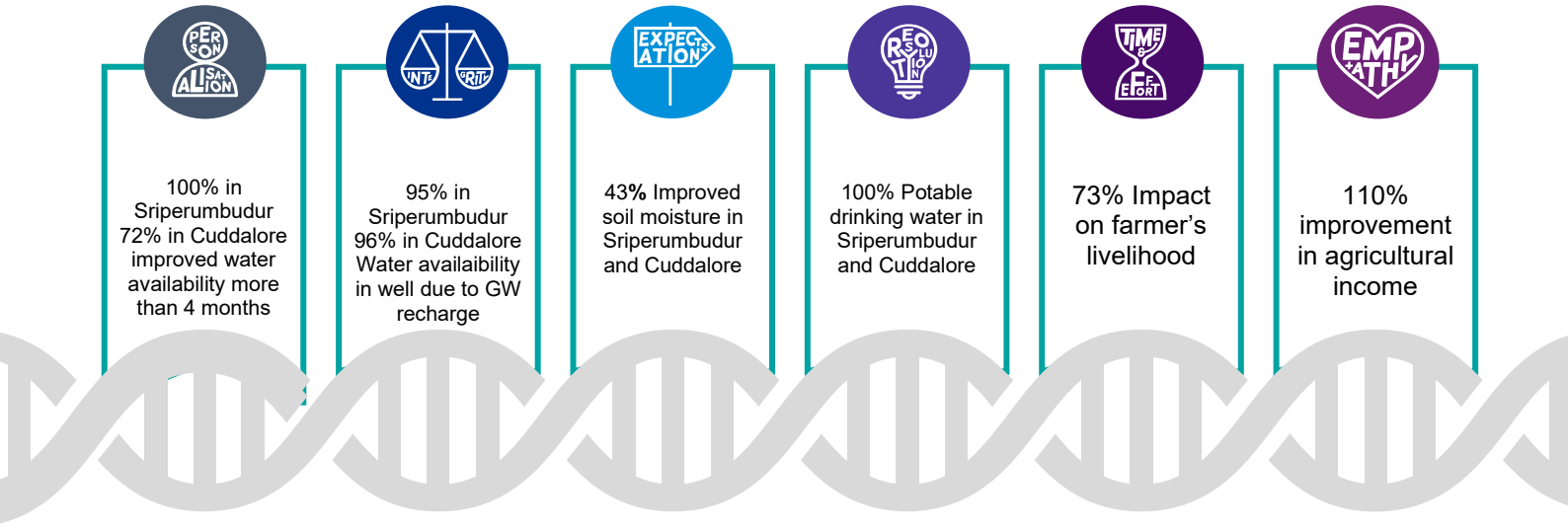
Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Water Resource Development project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health, reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

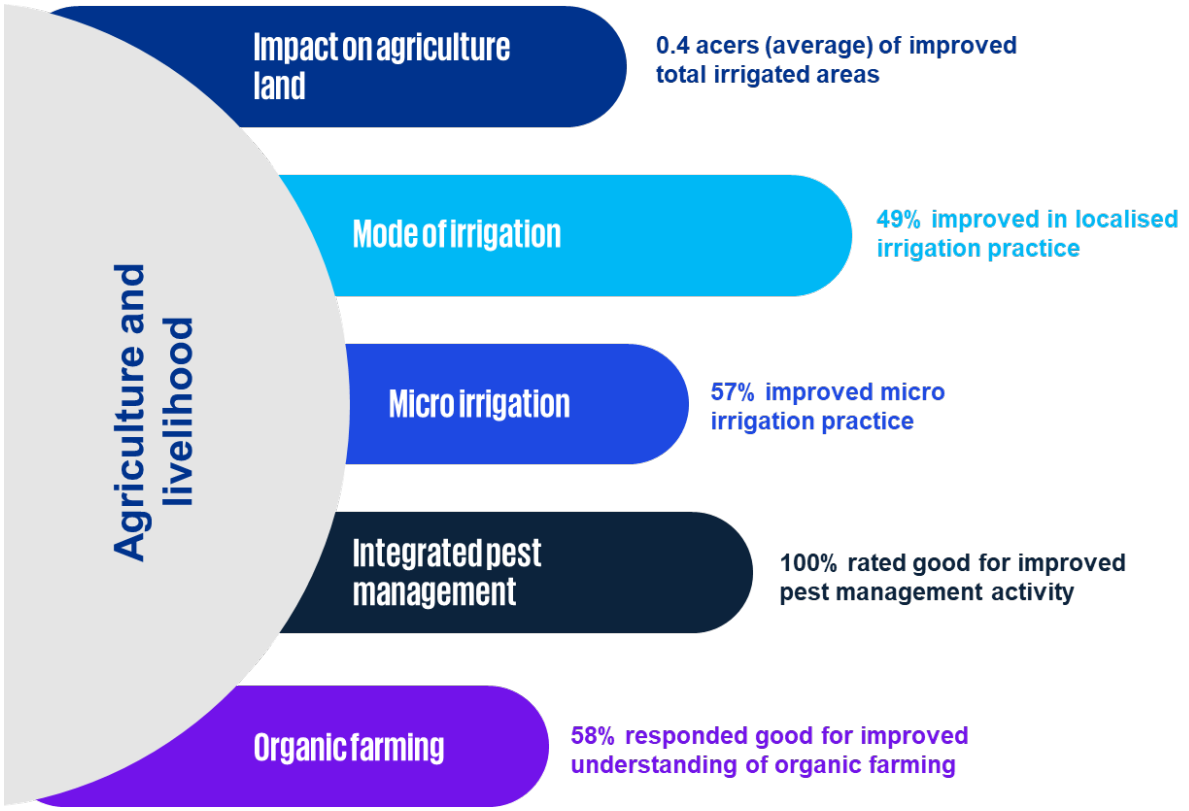
Evaluation Criteria- Efficiency

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.



1. Increased vegetation around the water bodies
2. Observed new or reemergence of new species around the water bodies due to the increased availability of water
3. Observed increased citing of birds/wild animals around the water bodies due to the increased availability of water
4. Increase in availability of fuelwood due to the intervention

Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

Support for water harvesting structure

Water availability and accessibility	Improved water level	Impact on agriculture practice	Increase in yield	Impact on family income	Impact on livestock
87% respondents rated good to availaibility of water post intervention	100% of respondents reported the improved accessibility of water for HH and agriculture need	91% responded practicing agriculture for multiple season	94% responded improved agriculture yield	99% improved family income	28% improved livestock productivity

4.1.4 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

All respondents stated that the Water User Association (WUA) has been formed in their village. During discussions, it was understood that all respondents (100 percent) were aware of the formation and role played by WUAs. WHS beneficiaries reported that they or their family members are part of WUAs, indicating awareness of governance structure for WHS. Respondents from shared that a separate fund for O&M of the WHS has been set up and water tax of INR 200 to 500 annually depending on the land holding is being levied.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

5 Recommendations

Project Design	
Key Issues	**Recommendations**
Lack of a system for effective tracking of the progress of initiatives, particularly those related to agriculture and non-pesticide management training.	Establish a robust tracking system using appropriate software tools and maintain regular communication with farmers to monitor progress and address issues promptly.
Limited women's participation in the project cycle, restricted to labor work in agricultural activities.	Initiate targeted training and capacity-building programs to involve women in decision-making and financial management processes, promoting gender equality.
Increased cost of cultivation due to dependency on chemical fertilizers and pesticides.	Explore and promote sustainable farming practices such as the use of natural fertilizers, crop rotations, and integrated pest management to reduce reliance on chemical inputs
During our field visit, we observed that although water user associations (WUAs) had been established for the beneficiaries of the Water Harvesting Structures (WHS), they were largely inactive. The duties and roles of the WUAs were not effectively communicated, leading to minimal active participation by their members in water stewardship.	To guarantee the enduring sustainability of the Water Harvesting Structures (WHS) and foster effective water resource management, it is crucial to motivate the active involvement of all Water User Association (WUA) members. Therefore, it is advisable to implement and practice water budgeting and crop planning within the community, which can equip farmers with essential information to more accurately evaluate their irrigation needs and water demands.
After the completion of the project, there has been no de-silting of the Water Harvesting Structures (WHS). This lack of maintenance has resulted in the accumulation of silt, which can significantly reduce the efficiency and capacity of these structures over time. Regular de-silting is essential to ensure that the WHS continue to function effectively and provide the intended benefits to the community.	Establish a consistent and systematic schedule for de-silting the Water Harvesting Structures (WHS) to ensure their optimal functionality. Additionally, make use of the removed silt by applying it to agricultural lands, which can enhance soil quality and fertility. This practice not only maintains the efficiency of the WHS but also provides a valuable resource for improving crop yields and supporting sustainable farming practices.

Project Scale-up

Tailored strategies for outreach

- **Women and Youth Engagement:** Develop specific outreach programs targeting women and youth to ensure their active participation in the project. This includes organizing women-only and youth-only training sessions and workshops.
- **Empathy Mapping:** Use empathy maps to understand the unique needs and challenges faced by different community members. This will help in designing customized interventions that address their specific requirements.
- **Follow-Up Support:** Provide continuous follow-up support to ensure that the beneficiaries are able to implement the knowledge and skills gained from the training sessions effectively.

Promotion of organic farming

- **Training on Organic Practices:** Conduct training sessions on organic farming techniques, including the use of compost, vermicompost, and bio-pesticides.
- **Demonstration Plots:** Establish demonstration plots to showcase the benefits of organic farming and encourage adoption among farmers.
- **Organic Certification:** Facilitate the process of obtaining organic certification for farmers to help them access premium markets and fetch better prices for their produce.

Collectivisation

- **Formation of Farmer Groups:** Establish and strengthen farmer groups, such as Farmer Producer Organizations (FPOs), to enable collective action and bargaining power.
- **Shared Resources:** Promote the sharing of resources, such as farm equipment and inputs, among group members to reduce costs and increase efficiency.
- **Capacity Building:** Provide training on group management, financial literacy, and business planning to enhance the capacity of farmer groups.

05

Measuring the Social Return

6 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change-Sriperumbudur

Outcomes	Indicators and Sources	Quantity (scale)
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1388
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	1458
Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	1722
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	1318
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	668
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattle and other animals (Number of households x % increase in milk yield)	527
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	474
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	825.79

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.

- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.
For a detailed view, refer table for SROI calculation.
Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total Input Value (INR)
Sriperumbudur Financial inputs	CSR Funding from APL	***1,69,95,379.00***
Cuddalore Financial input	CSR Funding from APL	***99,96,451***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

For Sriperumbudur refer this table

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	10.00 %	0.00%	25.00 %	20 %	76,262	76261.50	61009.20	48807.36	39045.89	31236.71	0.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78	10.00 %	0.00%	25.00 %	20 %	45,728	45727.52	36582.01	29265.61	23412.49	18729.99	0.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00	10.00 %	0.00%	25.00 %	20 %	2,69,616	269616.00	215692.80	172554.24	138043.39	110434.71	0.00

For Sriperumbudur refer this table

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Tamil Nadu-2203/Q	2203.00	10.00 %	0.00%	25.00 %	20 %	51,20,898	5120897.73	4096718.19	3277374.55	2621899.64	2097519.71	0.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00	10.00 %	10.00 %	25.00 %	20 %	2,07,138	207137.95	165710.36	132568.29	106054.63	84843.70	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639	10.00 %	0.00%	25.00 %	20 %	1,90,29,111	19029111.19	15223288.95	12178631.16	9742904.93	7794323.94	0.00
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00	10.00 %	0.00%	25.00 %	20 %	15,655	15654.87	12523.90	10019.12	8015.29	6412.23	0.00

Total	2,65,06,604.03		26506604.03	20973048.33	16623607.66	12679376.26	10143501.01	0.00
Present value of each year			26506604.03	20166392.62	15369459.74	11271919.32	8670707.17	0.00
Total Present Value (PV)								81985082.90
Net Present Value (PV minus the investment)								64989703.90
Social Return (Value per amount invested)								**4.82**

For Cuddalore refer this table

Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	10.00%	0.00%	25.00%	20%	26,302	26,302.05	21,041.64	16,833.31	13,466.65	10,773.32	0.00
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78	10.00%	0.00%	25.00%	20%	31,692	31,692.31	25,353.84	20,283.08	16,226.46	12,981.17	0.00

	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00	10.00%	0.00%	25.00%	20%	173,050	173,050.02	138,440.02	110,752.01	88,601.61	70,881.29	0.00
Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Gujarat- 2203/Q	2203.00	10.00%	0.00%	25.00%	20%	1,894,470	1,894,469.85	1,515,575.88	1,212,460.70	969,968.56	775,974.85	0.00
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00	10.00%	10.00%	25.00%	20%	153,261	153,260.86	122,608.69	98,086.95	78,469.56	62,775.65	0.00
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639	10.00%	0.00%	25.00%	20%	6,669,281	6,669,280.80	5,335,424.64	4,268,339.71	3,414,671.77	2,731,737.42	0.00
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00	10.00%	0.00%	25.00%	20%	11,583	11,583.00	9,266.40	7,413.12	5,930.50	4,744.40	0.00

Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Training cost-eQuest - Quality Council of India	5000.00	10.00%	0.00%	25.00%	33%	0	0.00	0.00	0.00	0.00	0.00	0.00
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00	10.00%	0.00%	25.00%	33%	0	0.00	0.00	0.00	0.00	0.00	0.00
									0.00	0.00	0.00	0.00	0.00	0.00

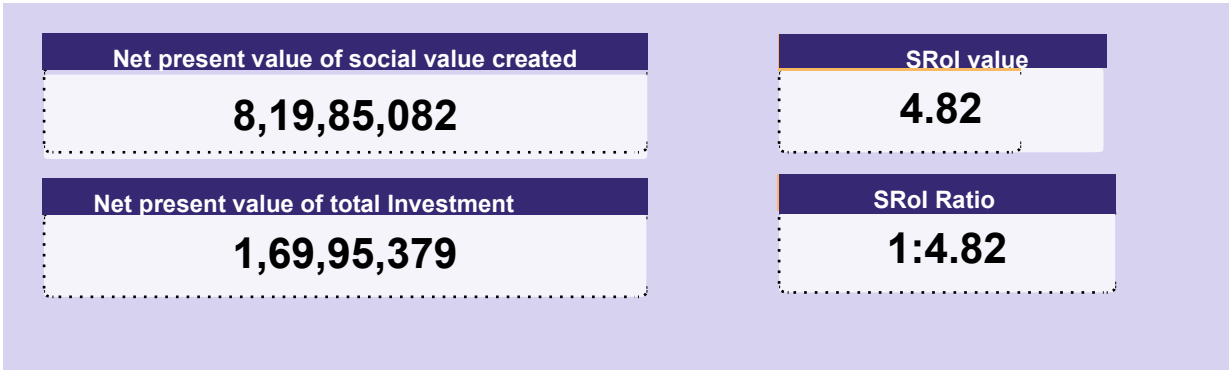
Total	8,959,638.89	7,167,711.11	5,734,168.89	4,587,335.11	3,669,868.09	0.00

Present value of each year	8,959,638.89	6,892,029.91	5,301,561.47	4,078,124.21	3,137,018.62	0.00
Total Present Value (PV)						28,368,373.10
Net Present Value (PV minus the investment)						18,371,922.10
Social Return (Value per amount invested)						2.82

SROI results- Sriperumbudur

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:



For every INR 1 invested, the programme has generated social impact of INR 4.82

***Sensitivity Analysis**:* Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.
Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.
With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between **INR 3.83** and **INR 5.15**.

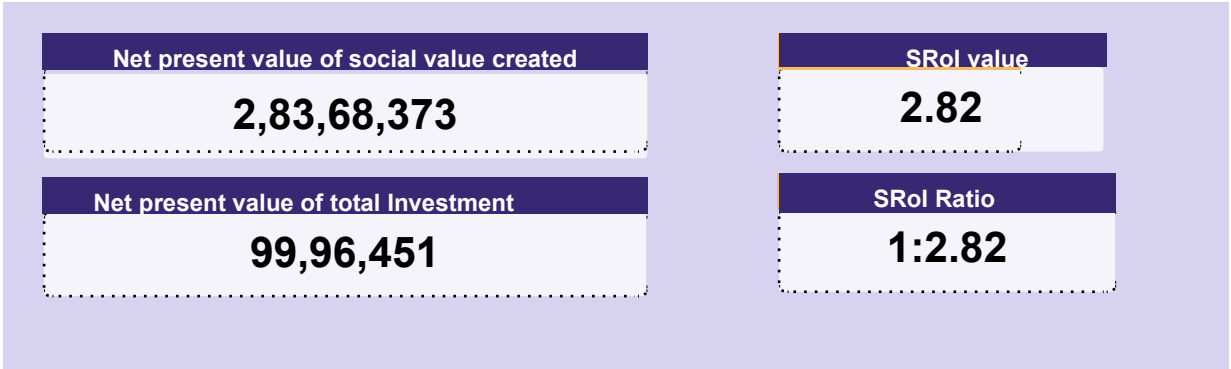
Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	4.82	Deadweight is 5%	5.09	No significant change
			Deadweight is 15%	4.56	
1	Displacement		Displacement 0%	4.83	No significant change
			Displacement is 15%	4.58	

3	Attribution		Attribution is 80%	5.15	No significant change
			Attribution is 70%	4.50	
4	Drop-off		Drop-off is 5 years	4.86	No significant change
			Drop-off is 3 years	3.83	

SROI results- Cuddalore

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:



For every INR 1 invested, the programme has generated social impact of

INR 2.82

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between **INR 2.24** and **INR 3.03**

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	2.82	Deadweight is 5%	3.0	No significant change
			Deadweight is 15%	2.68	
1	Displacement		Displacement 0%	2.84	No significant change
			Displacement is 15%	2.42	
3	Attribution		Attribution is 80%	3.03	No significant change
			Attribution is 70%	2.65	
4	Drop-off		Drop-off is 5 years	2.84	No significant change
			Drop-off is 3 Years	2.24	

Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

7 ANNEXURES

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Tamil Nadu- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Training cost- eQuest - Quality Council of India	5000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00

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Impact Assessment of Water Body Rejuvenation Project

Kasna, Gautam Buddh Nagar District, Uttar Pradesh

Asian Paints Limited

KPMG Assurance and Consulting Services LLP

January 2025

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

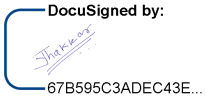
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

Contents

DISCLAIMER AND NOTICE TO READERS

This report has been prepared exclusively for Asian Paints Limited (APL) ("Client") in accordance with the terms of the Engagement letter/agreement between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.

KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our client, to the extent agreed in the Agreement.

Impact assessment is limited to the projects allocated by Asian Paints Limited.

OECD-DAC and SROI frameworks have been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.

Procedures, analysis, and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.

Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.

Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.

We have not performed an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.

While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with Client's team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.

In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.

In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.

In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.

By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

ABBREVIATIONS

APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NAF	National Agro Foundation
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organisation for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOC	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

EXECUTIVE SUMMARY

The philosophy of transformation has been in the DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering a relationship of trust with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to the UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45 Percent of total irrigation and 80 Percent of domestic water needs are met by groundwater. The unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such a challenging landscape, water harvesting and conservation under the umbrella of watershed management became the need of the hour. Asian Paints engaged in a holistic approach through their program "Water Body Rejuvenation Project" in 4 villages of Kasna in Uttar Pradesh, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country. The main objectives of the impact study are to assess the impact of water stewardship activities with a focus on the access and availability of surface and ground water, farmer`s livelihood, land and agriculture practices, and governance. The study covered a mixed-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. Quantitative data analysis was corroborated with anecdotal evidence from qualitative responses and observed through the lens of the SROI framework and OECD-DAC framework. A total of 100 respondents from three villages were interacted for data collection in the intervention villages of Uttar Pradesh, including farmers, community members, PRI members and Water User Association members.

Respondents were between 20-65 age group and mostly had formal education till matriculation. The sample covered respondents from varied economic backgrounds including small to marginal farmers with most of them having the primary source of income being agriculture.

Key findings include:

- **Improved Groundwater Levels:** Significant improvement in groundwater levels post-intervention across different seasons.
- **Increased Water Availability:** Notable increase in water availability post-monsoon, with many respondents reporting more than three months of water availability.
- **Enhanced Water Accessibility for Irrigation:** Improved water accessibility for irrigation, with a shift from "Fair" to "Good" ratings among respondents.
- **Positive Impact on Ecosystem:** Improved pond sanitation and beautification, better biodiversity through surface water availability for wild animals, and effective groundwater recharge.

The study also highlighted reduced health incidents due to better access to potable water and emphasized the importance of community engagement and planning sessions to ensure the sustainability of water conservation structures. A strategic shift in objectives is recommended to address the underutilization of water resources for irrigation and focus on household-level water management and sanitation practices.

The report estimates the social impact of the APL program during FY 2022-23 by calculating the Social Return on Investment (SROI). For every INR 1 spent by the Water Body Rejuvenation Project, INR 1.39 in social value has been generated through socio-economic wellbeing among beneficiaries. This demonstrates the program's significant positive impact on the community and its potential for long-term sustainability.

01

INTRODUCTION

INTRODUCTION

This chapter consists of an overview of the water stress in the Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 BACKGROUND

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050.. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources.[i]. According to FAO's Aqua-stat reports.[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007) .[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources. in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India.. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Uttar Pradesh) necessitating urgent remediation efforts.[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate groundwater management may lead to increased water overdraft, depletion, salinity and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on alternates like surface water. A holistic approach that addresses not only water availability but also accessibility.

1.2 ASIAN PAINTS LIMITED

Asian Paints Limited, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the areas of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 ABOUT THE STUDY

To understand the impact created by its interventions, Asian Paints Limited empanelled KPMG to facilitate the impact assessment of its Water Body Rejuvenation Project in Kasna, Uttar Pradesh. The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well/Borewell water recharge data. • To understand the duration of water availability post-monsoon (in months)

	• To understand the impact of water accessibility, availability & livelihood of the farmers
Other Impact Areas Apart from Water Rejuvenation	• To assess the impact of usage of common spaces • To assess the extended impact on biodiversity

1.4 ABOUT THE PROJECT

Asian Paints' Water Resource Project signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

The existing water bodies in the project area are almost shallow in nature. The actual water holding capacity of the water bodies are much less compared to their original potential. The primary cause for this is due to lack of maintenance. De-silting or deepening of the water bodies was not carried out in since few years. The area of the water bodies was shrinking day by day due to various factors, thereby leading to the minimal storage capacity of water and that too for a short duration only. It was neither augmenting groundwater recharge and drainage of excess water nor supporting the irrigation requirement. The restructuring of the water bodies is essential, and all the major tanks should be de-silted along with deepening.

In order to address the above-mentioned issues and sustain the natural resources, the Water Resource Development Programme was initiated by Asian Paints in 2022-23 to improve groundwater recharge potential through the rejuvenation of existing waterbodies in the various villages of Kasna a suburb of Greater Noida, in the Gautam Budh Nagar District of Uttar Pradesh,

Objective of the project:
To bring integrated efforts at the demand and supply side to effectively manage the water resources while improving the livelihoods of farmers.

1.4.1 About National Agro Foundation (NAF)

The National Agro Foundation (NAF), established in 2000 by Mr. C. Subramaniam, a prominent figure in India's Green Revolution and recipient of the Bharat Ratna Award, is a Public Charitable Trust with a vision to catalyse a rural revolution focused on agriculture and small and marginal farmers. Anchored in the principles of inclusive growth, NAF operates with a "Soil to Market" approach, building on Mr. Subramaniam's pioneering "Seed to Grain" philosophy from the Green Revolution era. Over the years, NAF has transitioned from modest beginnings to a dynamic and professional organization, delivering cutting-edge services that have made a substantial impact on rural communities. Collaborating with the government, corporate entities, and other stakeholders, NAF has implemented core programs addressing local and global challenges in agriculture and rural development. Its approach includes tailored training programs, capacity development initiatives, and the integration of new modalities and technologies. With dedicated research and development efforts, NAF has reached over 220,000 farmers in 830+ villages across 15 states in India, demonstrating a commitment to positive change and sustainable development in the agricultural sector. NAF's collaborative efforts

extend to partnerships with various government and non-government organizations, educational and research institutes, financial institutions, and corporate entities.

In collaboration with APL, NAF is actively engaged in the implementation of CSR projects centred around water resource development in the states of Telangana, Uttar Pradesh, Karnataka, and Tamil Nadu. This strategic partnership underscores a shared commitment to fostering the rejuvenation of water bodies, amplifying livelihood opportunities for farmers, and effectively managing natural resources. Within this collaborative framework, NAF assumes the responsibility of executing the specified activities, ensuring their timely completion, adherence to budgetary constraints, and achievement of anticipated outcomes. Simultaneously, APL extends crucial technical and financial support to NAF, facilitating the realization of project objectives and the establishment of a sustainable and inclusive development model. This cooperative effort aims to deliver tangible benefits to marginalized communities while addressing critical issues related to water resources and rural livelihoods.

1.5 PROJECT GEOGRAPHIES

In Uttar Pradesh, groundwater remains the primary source of irrigation and fulfils most of the water requirements for drinking and other needs. According to "The State of Groundwater in Uttar Pradesh Report (2022)," groundwater supplies approximately 72 percent of the water used for irrigated agriculture in the state. It also meets 92 percent of rural domestic needs, over 78 percent of urban water consumption, and 96 percent of industrial, infrastructural, and commercial demands. Urban areas are under significant stress due to extensive groundwater extraction, especially in regions where about 96 percent of municipal bodies rely on groundwater for drinking water supplies. Most major cities in the state have experienced a widespread decline in groundwater levels, with annual drops ranging from 0.6 to 1.2 meters over the last 15-20 years. Another alarming factor contributing to the groundwater crisis is deficient rainfall. Between 1991-2000, the decline in rainfall was 8 percent, but in the last two decades, the rate of decline has accelerated to more than 22 percent. The state consistently faces below-average rainfall (normal annual rainfall is 947.4 mm), negatively impacting surface storage, soil moisture, and groundwater recharge. The rainfall pattern has become unpredictable, marked by extreme events and fewer rainy days. Thus, large-scale extraction of groundwater in the state underscores the need for effective management and regulation of groundwater resources to ensure long-term water sustainability for the diverse needs of the state's population.[v]

Kasna is a suburb in the Gautam Buddha Nagar district of Uttar Pradesh, India. This district is marked by rapid urbanization and economic development, with a diverse economy encompassing various sectors, including manufacturing, information technology, and services. The burgeoning population, coupled with urban development and industrial activities, has strained local water resources. The water challenges in Gautam Buddha Nagar district are significant and multifaceted. Depleted groundwater levels have adversely affected water availability for agriculture and drinking water supply. The district has also been grappling with flooding alerts during monsoon, particularly due to the rise in water levels of the Hindon and Yamuna rivers, which pose risks to low-lying areas. Moreover, the quality of groundwater in the district has been a cause for concern, with high levels of nitrates, fluoride, sodium, magnesium and uranium found in the groundwater, rendering it unsuitable for drinking purposes. Furthermore, the deterioration of water bodies in the district has been a pressing issue, prompting efforts to restore rural water bodies, including ponds, to address water scarcity and provide additional water holding capacity.[vi]

Ground Water Resources Data (in ham) of Gautam Budhha Nagar district[vii]	
Details	**Value (in ham)**
Annual Irrigation Draft	60634
Annual Domestic and Industrial Draft	1530.81
Annual Groundwater Draft (Total)	62164.81
Annual Replenishable Groundwater Resources (Total)	67159.4
Natural Discharge Non-monsoon season	5924.21

02

APPROACH & METHODOLOGY

APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes a description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 OUR APPROACH

The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is a widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

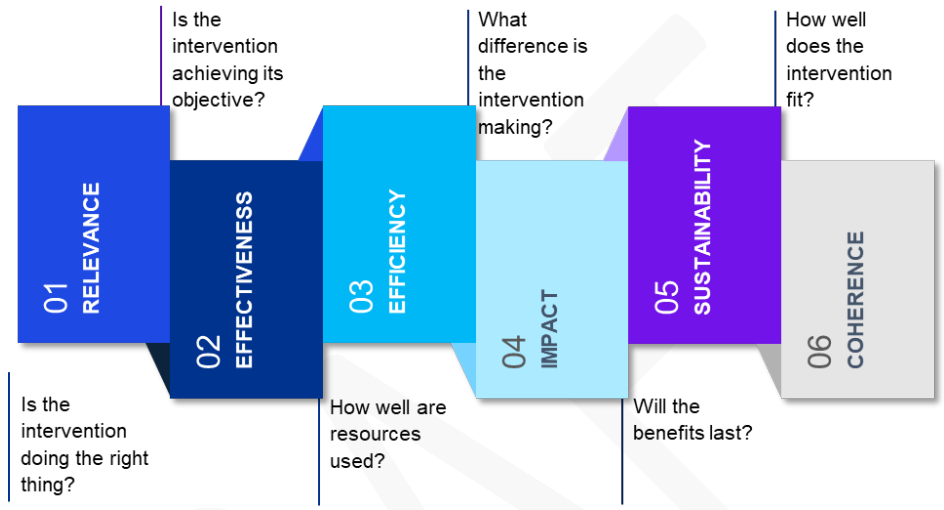
This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using the OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

Stakeholder	Reason for Inclusion	Data collection tool
Farmers/community members who have benefitted from water harvesting and pond rejuvenation-related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture-related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable

2.1.1 OECD-DAC

The Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises a set of criteria that aid in the systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.	*Resources are provided and*

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long- lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 SOCIAL RETURN ON INVESTMENT (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation

of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop-off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

Figure 1 SROI framework

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percents and these percents are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 DETAILED METHODOLOGY

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

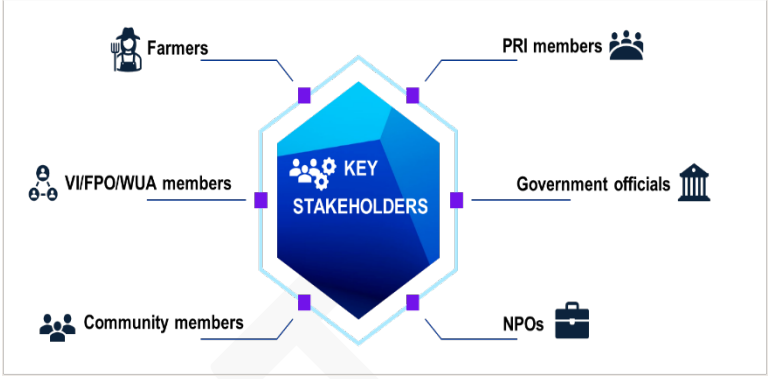
A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions).

Impact map for the Water Resource Development Project:

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members,	To increase water storage capacity and recharge through	Construction and rejuvenation of ponds	Number of water bodies intervened	Increase in agricultural production	✓ Changes in availability of irrigated land ✓ Changes in cropping pattern by farmers

other institutions	the revival of traditional water bodies and construction of water harvesting structures so that to enhance irrigation and drinking water availability. To create awareness and education among the community on judicious utilization of water resources and collective actions.		Number of families reached out / availed benefits from water harvesting structures		✓ Changes in multi-seasonal cropping potential
				Access to secure livelihood	✓ Changes in the input cost required for irrigation of farming lands
				Improved access & availability of surface and groundwater	✓ Changes in dependency on Rainfed agriculture, ✓ Change in depletion rate of groundwater level
				Improved Aesthetic value for the refurbished ponds	✓ Changes in the importance of the refurbished ponds ✓ Change in the investments on multiple avenues around the pond by the community.
				Improved Biodiversity around the refurbished pond	✓ Changes in the availability of surface water for wild animals ✓ Change in the biodiversity and micro-ecosystem around the pond
			Number of community members sensitised for judicious utilisation of water resources	Improved KAP and ownership towards the assets created	✓ Changes in the community's knowledge, attitude and practices ✓ Community led governance of its resources, effective operations and maintenance of water structures

Activity 2: Stakeholder Mapping and Sampling strategy



Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.

Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. Considering the overall outreach of the project as nearly 2258 beneficiaries, the statistically significant sampling has been derived using the method of 95 percent confidence level and five percent margin of error. Additionally, we have taken extra sample stakeholder in order to derive accurate social return on investment ratio. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder name	Project	Sample covered	Research Tools
Farmers Community members PRI Members NAF staff	Water Resource Development	100	Survey, one-on-one interactions, FGDs

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions

- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- NAF. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (wherever needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the SROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

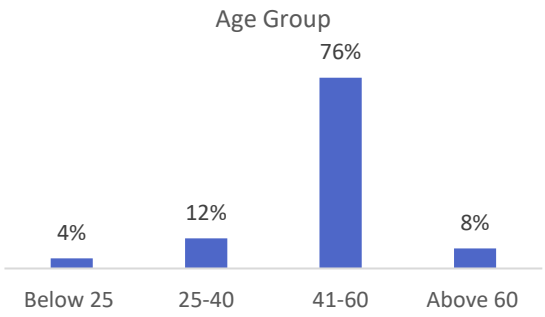
ANALYSIS & FINDINGS

ANALYSIS AND FINDINGS

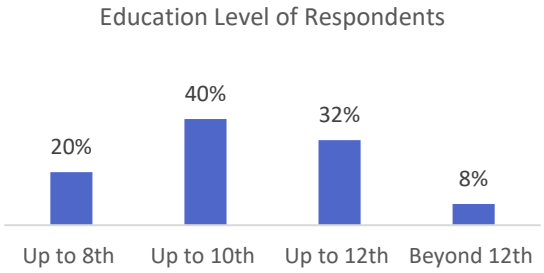
The section below highlights the findings and observations based on the interactions conducted with the sampled beneficiaries of the Water Resource Development programme supported by Asian Paints Ltd. across the four villages – Dulhera, Fatehpur, Nurpur and Masotta in the Sub-urban region Kasna of Gautam Buddha Nagar district of Uttar Pradesh.

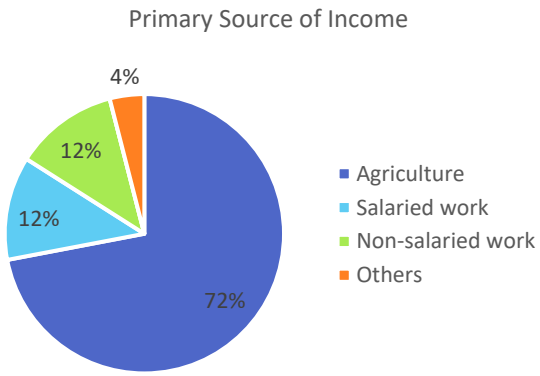
Respondents profile

The study interacted with stakeholders from the age group of 20 to 65 years. 12 Percent of the respondents were from 25–40-year category and 76 Percent belonged to the age group of 41–60-years. Only 4 Percent of the stakeholders belonged to below 25 age group. Respondents have family members ranging from 4 to 12 people. 90 Percent of the respondents shared that they were the only earning member of the family.



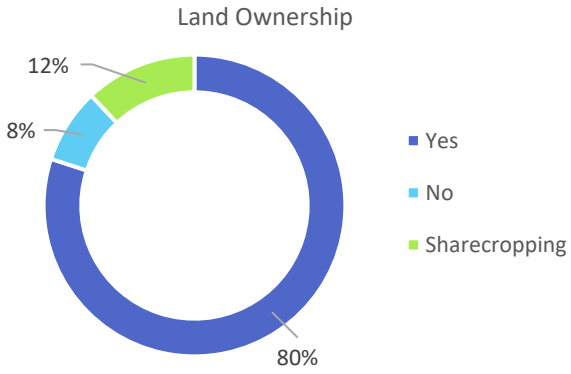
As far as educational background of the respondents is concerned, 40 Percent and 32 Percent respondents have attained schooling up to 10th and 12th respectively. On the other hand, only 8 Percent respondents have studied beyond 12th standard and 20 percent of the respondents have completed their primary schooling,

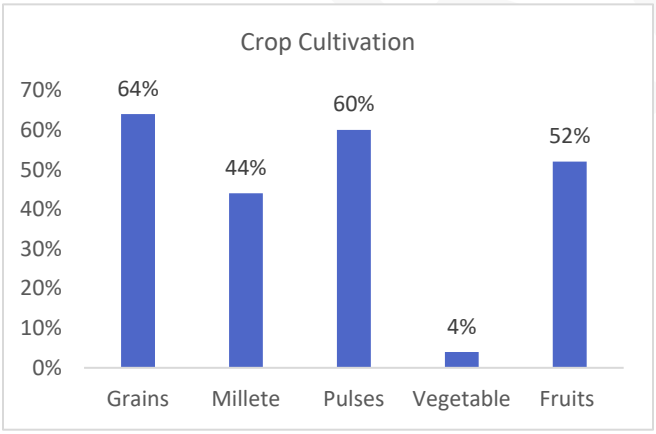




72 percent of the respondents identified agriculture as their primary source of income. In contrast, 24 percent reported that half of them are salaried individuals while the other half work as non-salaried workers. All respondents indicated that agriculture plays a role in their income, whether as a primary or secondary source, and they grow crops during the Kharif, Rabi, and summer seasons.

While conducting stakeholder interactions it was understood that 80 percent of the respondents have their own land for cultivation while 12 percent of the respondents cultivate through sharecropping and the remaining 8 Percent of the respondents do no own any land, however, they cultivate on leased lands. As far as landholding size is concerned 48 percent of the respondents hold more than 5 Acres of land whereas, 40 percent of the respondents have landholding of less than 2 Acres and 12 percent of respondents have a landholding of 2 to 5 Acres.





During interactions with stakeholders, it was observed that the cultivation of grains, pulses, and fruits is the most common agricultural practice. Specifically, 64 percent of respondents reported cultivating grains, while 60 percent indicated that they grow pulses. In contrast, only 4 percent of stakeholders engaged in vegetable cultivation. Furthermore, 52 percent of respondents reported cultivating various fruits, and 44 percent noted their involvement in the cultivation of different types of millets.

3.1 EVALUATION CRITERIA: RELEVANCE

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so if circumstances change.

Relevance assesses how well the programme is connected with the aims and policies of the government in which it is being executed. It also seeks to determine whether the programme is relevant to the needs of the beneficiaries. The program's relevance is understood in this context in terms of community needs as well as connections to existing government operations.

3.1.1 Needs of the Community

During the interviews, respondents were asked about the challenges they faced in their villages before this intervention. The data collected revealed that all respondents identified the decreasing water levels in their tube wells and borewells as a significant challenge. This situation necessitated either deepening existing sources or establishing new submersible pumps to secure sufficient water for irrigation purposes. In group discussions with the beneficiaries, many expressed that unpredictable rainfall in recent years has compounded the difficulties faced by farmers still practising rain-fed agriculture or those tenant farmers who don't have any tubewell/submersible support.

The information gathered from the beneficiaries regarding their water-related challenges prior to the program's implementation highlighted their dependency on the groundwater table to access water across different seasons, emphasizing the necessity for this program in terms of establishing ponds/canals/recharge aquifers to replenish and harvest rainwater.

3.1.2 Alignment to Schedule VII of the Companies Act, 2013[viii]

The programme has been designed to cater to marginalised communities residing in the vicinity of Asian Paints Ltd.'s operational areas in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water [including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].
- (x) rural development projects

3.2 EVALUATION CRITERIA: COHERENCE

Coherence refers to the compatibility of the intervention with other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa

3.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities are targeted to strengthen rural livelihoods through agricultural productivity by improving surface water availability through refurbished community ponds and aiming to improve soil quality and better seasonal resilience.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as ponds in villages to improve access to surface water for the community members for irrigation purposes.
GOAL 15: Life on Land 	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. **Target 15.5**	Project activities included water conservation initiatives and integrated pond rejuvenation infrastructure. This infrastructure is designed to effectively capture rainwater and surface runoff from the surrounding agricultural lands

	Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.	through the established inlet and outlet structures for the ponds. The activities undertaken in this project have yielded several unintended outcomes that are noteworthy. Notably, there has been a strengthening of the mini-ecosystem surrounding the revitalized ponds. These ponds serve as a crucial source of drinking water for wild animals and provide essential nesting sites for various bird species.

Water crisis threatens the health and development of communities across the world. Over the years, the government has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti [ix] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019 [x] with an aim to improve water availability including groundwater conditions in various water-stressed blocks. Following that, the Government launched "Catch the rain campaign" in 2021 [xi] emphasizing on creating rainwater harvesting structures. In this scenario, Asian Paints Limited's Water Body Rejuvenation Project aligns with the national priorities of and the government's efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

100 Percent of respondents rated that the project ensures accessibility for all social groups (caste, class, race, religion, others) and accessibility to all social groups (Differently abled, elderly, others)

3.3 EVALUATION CRITERIA: EFFECTIVENESS

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program's activities were carried out as well as the effectiveness with which the program's systems and processes were implemented.

Asian Paints Limited implemented Water Body Rejuvenation Project in partnership with NAF that have a presence in the field. Under the project, efforts were given in ensuring that they developed a good rapport with the villagers and increased their awareness about the project and its targeted outcome. However, its was understood from the community in these villages that, more inclusion of community members was needed to ensure more effective ownership and maintenance and accountability of the support received. The project was predominantly implemented with support of village heads/ Gram Pradhan in the respective villages and there were limited inclusion of common villagers and prospective beneficiaries who owned agricultural lands in and around the targeted pond for the

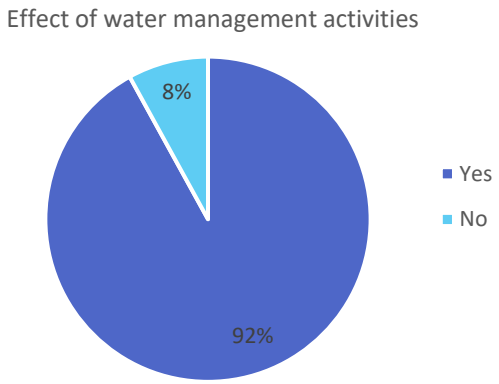
refurbishment/renovation plan. Timelines and milestones for the project were also decided in consultation with village panchayat members only.

It was reported that during the interaction, all beneficiaries (100 Percent) reported that for effective implementation and sustenance of the intended impact more awareness, capacity building, sensitisation and training sessions need to be conducted on various topics such as Soil testing, organic farming, water sensitive crop pattern, farmland water management techniques, Household level water sensitisation sessions and general awareness on depleting water table.

A significant number of beneficiaries appreciated the support provided by the NAF team during the implementation on their farmland. Furthermore, all the respondents were aware of the Asian Paints Limited's CSR programme and its implementing partner through word of mouth, PRI members/community leaders and through Branded Sign Boards established near the refurbished ponds.

3.3.1. Effect of Water Management Activities

As part of its water management initiatives, the project has prioritized the rejuvenation of existing ponds and the strengthening of their outer structure/boundaries along with the provisioning of small inlet and outlet channels for effective management of rainwater runoff and overflooding of the pond during monsoon. The primary objective was met to mitigate runoff and enhance water percolation, thereby contributing to the restoration of depleting groundwater levels.



As per respondents, 92 percent of them have observed a notable shift in community perspectives regarding water management activities. This shift encompasses increased efforts to maintain cleanliness in the vicinity of the ponds, a reduction in the incidence of litter and domestic waste dumping around these areas, and a heightened aspiration for the maintenance, upgrading, and aesthetic enhancement of the refurbished ponds, particularly those located near villages, temples, or cemeteries. Conversely, 8 percent of respondents reported that they have not personally perceived any changes as a result of these interventions.

3.3.2. Availability of Water (Pre & Post Intervention)

Interactions with village communities and stakeholders have indicated that APL's involvement has substantially improved the water supply in the relevant villages. All respondents acknowledged that, while access to water was adequate prior to the intervention, the situation has significantly enhanced since then.

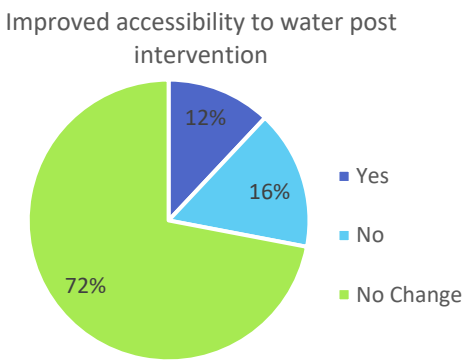
32 percent of respondents reported a marked increase in water availability attributed to improved groundwater levels. Conversely, 68 percent expressed that there has been little change in water availability following the intervention, asserting that the water supply remains at a satisfactory level. They noted that the time taken to draw water for irrigation

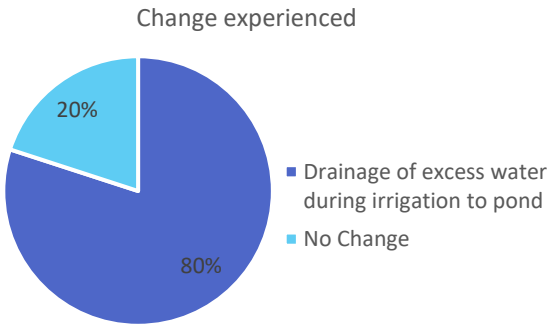
using submersibles has not decreased. Additionally, the government's distribution of free electricity has led to a rise in the frequency of groundwater extraction.

Several respondents pointed out the observable effects of these dynamics, noting that in certain project villages, pond water levels have decreased due to excessive groundwater extraction by adjacent submersibles during the summer cropping season.

3.4 EVALUATION CRITERIA: EFFICIENCY

The efficiency criterion is designed to evaluate whether the project was completed in a cost-effective and timely manner. Its objective is to ascertain whether the resources—namely, funds, expertise, and time—were effectively utilized to attain the desired outcomes of the intervention. This evaluation criterion specifically examines whether the program was completed within the established timeframe and budgetary constraints.





During field observations and discussions with respondents, it was noted that beneficiaries had the opportunity to leverage the "Amrit Saroovar Program," an initiative launched by the Government of India on April 24, 2022. This initiative aims to develop and rejuvenate 75 water bodies in each district across the country as part of the Azadi ka Amrit Mahotsav celebrations.

Moreover, members of the project team revealed that some ponds under APL's CSR project were selected for the rejuvenation program. However, there was a chance to improve and modernize the pond infrastructure beyond the initial goals of APL's CSR program. By securing adequate investment and backing from PRI members, this enhancement could have been accomplished, and it could have been utilized in coordinating efforts to rejuvenate ponds besides those supported by APL. The project villages greatly require an element of institution-building and convergence, as it is vital for maximizing the supplementary advantages linked with this government initiative.

During consultations with stakeholders, it became evident that 72 percent of respondents perceive no significant improvement in water accessibility for irrigation following APL's intervention. This situation arises primarily because the farmlands surrounding the ponds are restricted to a limited number of farmers, all of whom possess land holdings exceeding 2.5 acres. Consequently, this limitation restricts the direct benefits of the intervention to individual farmers. In contrast, only 12 percent of respondents reported an improvement in water access after the intervention, specifically those with farmlands situated within a 500-meter radius of the ponds.

Furthermore, it was observed that stakeholders noted considerable changes as a result of the bund lining work. A striking 80 percent of respondents indicated that this effort acted as a catalyst in reducing soil erosion and silting of the ponds during periods of heavy rainfall. Additionally, it facilitated the drainage of excess water into the pond during irrigation from adjacent farmlands, thereby enhancing the pond's watershed functionality. Conversely, 20 percent of respondents contended that there was no significant change resulting from this intervention.

3.5 EVALUATION CRITERIA: IMPACT

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project.

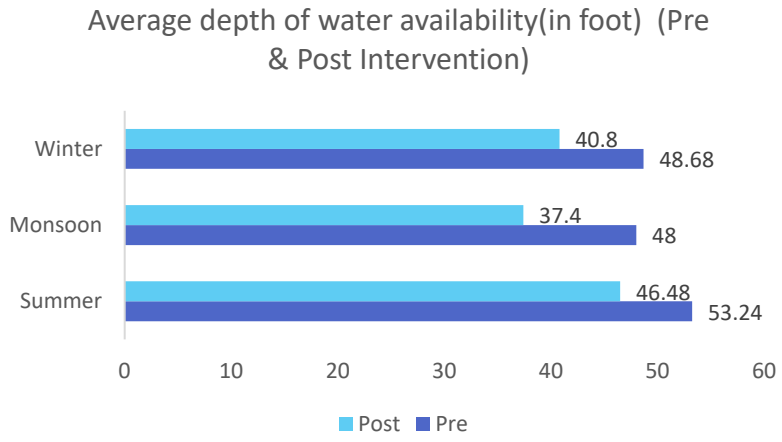
The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favourable or harmful. The program's socioeconomic impacts are discussed in the following paragraphs.

3.5.1 Impact on Access & Availability of Surface & Ground Water

Impact on ground water: APL has supported water improvement in the area by rejuvenating and constructing ponds. Many respondents noted that groundwater recharge has increased due to the ponds, as rainwater runoff is now retained within the villages.

Around 92 percent of respondents reported positive effects from water management activities in their village. They observed improved water level stability and, in some cases, an increase in the water table. Focus group discussions revealed that some old tube wells were drying up, forcing farmers to dig deeper wells. However, in areas with multiple ponds, stakeholders noticed improved water levels. Respondents with farmlands near ponds reported a slight but stable increase in the water table compared to the pre-intervention period.

Average depth of water availability in well/borewell **(in foot)**			
	Summer	**Monsoon**	**Winter**
Pre-Intervention	53	48	49
Post Intervention	46	37	41
Delta Change	8	11	8



About 80 percent of respondents reported increased water availability in their wells for more than 2-3 months post-intervention. The highest average delta change of 11 feet was observed during the monsoon, followed by 8 feet in winter and 7 feet in summer. Before the intervention, water levels reached new lows, especially in summer. Post-intervention, households near the ponds experienced an increase in water levels by 5-7 feet in summer and 8-10 feet in winter.

Reduction in cost of irrigation:

During focused group discussions, participants emphasized that there has been no impact in the cost of irrigation when comparing the pre- and post-implementation phases of the project. With the support of government schemes, farmers now benefit from access to free electricity for agricultural activities, which significantly enhances irrigation capabilities. Most farms have installed their own submersible pumps, and tenant farmers are also able to secure irrigation assistance from adjacent farmlands. Consequently, the effective cost of irrigation remains consistent.

3.5.2 Impact on Farmer's Livelihood

80 percent of respondents reported owning their own farmland, while 12 percent identified as sharecroppers. The remaining 8 percent were classified as landless or engaged in tenant farming. Among the respondents, 72 percent relied on farming as their primary source of livelihood, with many also possessing a secondary source of income.

However, discussions conducted in focused groups revealed a notable shift among farmers in the region away from farming as a primary means of income. A significant number of farming lands have been sold and transformed into commercial complexes, reflecting a new focus on alternative income streams. This transition is largely attributed to the proximity of the International Cargo Airport in Jawar, which is situated within a 35-kilometer radius of the project villages and has substantially increased real estate values in the area.

Consequently, the material impact of APL's project on individual beneficiaries has diverged from its original aim of enhancing farm livelihoods. The evolving material needs of the beneficiaries, who no longer regard farming as their primary source of income, have resulted in a lack of substantial impact within the project location.

3.5.3 Unintended Impact on the community and biodiversity

Interaction with PRI members, community leaders, and farmers has indicated that APL's CSR project has introduced significant enhancements to the nearby ponds, which had previously been neglected and had become breeding grounds for diseases due to extensive littering. Following the intervention of the project, the ponds have been successfully rejuvenated, rendering them devoid of unpleasant odours and litter. This transformation has provided the

villagers with a cleaner environment, a restored water body, and a safe walking path for their morning and evening activities.

Additionally, various ponds rejuvenated near temples, village prime locations and cemeteries have realised aesthetic improvements and have derived substantial benefits from the rejuvenation and beautification outcome from the project intervention. This has resulted in an increase in footfall due to improved access and increased community investment/donation in the development of surrounding areas, supported by both the villagers and the temple trust. Consequently, a positive shift in community investments in diverse avenues around the ponds has been observed.

Furthermore, the project has a favourable impact on the biodiversity surrounding the rejuvenated ponds. Improvements in the availability of surface water for wildlife have been noted, with community members reporting that several migratory birds have established nesting grounds near the ponds in the village. This development has contributed to natural pest management in a limited capacity and has enhanced the aesthetic appeal of the village. Overall, there has been a noticeable improvement in both biodiversity and the micro-ecosystem surrounding the ponds.

3.6 EVALUATION CRITERIA: SUSTAINABILITY

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence.

Sustainability refers to the sustainability of an intervention's positive effects after development or assistance has ended. This evaluation criterion includes significant elements related to the likelihood of ongoing long-term benefits and risk tolerance. Setting up a governance structure, financial model, and operating system is necessary to ensure sustainability.

64 percent of the community members reported a fair positive overall experience with the 'Water Body Rejuvenation' project, particularly regarding its impact on their quality of life. They highlighted the aesthetic improvements associated with the rejuvenated pond, which included a clean environment, a significant reduction in the dumping of household waste nearby, enhanced accessibility around the pond, and greater beautification of the area. These developments fostered a stronger connection with nature and created inviting spaces for walking and recreation.

100 percent of the community members anticipate a decline in the efficacy of water resource conservation projects in the forthcoming years. This perception arises from the limited relevance of local ponds, which function primarily for managing excess water runoff from nearby agricultural fields or for rainwater harvesting aimed at groundwater percolation. Additionally, these ponds hold aesthetic value, such as temple ponds utilized for deity worship and the celebration of village rituals. This shift in perspective is largely attributed to the transition of the resident population away from farming as a primary livelihood, as many individuals are investing in and converting agricultural land into real estate ventures. This change has been driven by the burgeoning opportunities presented by the proximity of the Jewar International Airport, located approximately 30-35 kilometers from the project villages.

The program incorporates a built-in exit strategy that emphasizes sustainability as a central component. The rejuvenated ponds have been transferred to the respective gram panchayats for their operation and maintenance

(O&M). Nevertheless, the community has provided constructive feedback aimed at enhancing the sustainability of the initiative. This feedback highlights the necessity of involving the community in the selection of ponds for rejuvenation and organizing educational sessions to engage villagers in water usage awareness at the household level as part of the Social and Behavioral Change Communication (SBCC) strategy. Additionally, it is imperative to inform the general public about the water wastage resulting from the cleaning of cattle using tap water and pipes.

Water accountability presents a significant challenge to sustaining the program's impact, particularly in relation to strengthening the groundwater table. Community members at the household level have developed a reliance on the over-exploitation of submersible water resources. Furthermore, the Uttar Pradesh government has provided farmers with free electricity for irrigation, which may exacerbate this issue of resource overuse.

WAY FORWARD:

Water is an essential resource vital for all aspects of life. Adequate water availability for agriculture and animal husbandry is crucial for productive yields. As noted in the introductory chapter, the over-exploitation of groundwater has made agriculture, closely tied to this resource, increasingly difficult, contributing to rural distress and migration. The water resource development initiative aims to improve the livelihoods of rural populations. A long-term goal is to revitalize traditional water management institutions, enabling their effectiveness in a water-stressed environment. This

includes governing scarce resources like groundwater. Specific recommendations to achieve this objective are outlined below:

Scalability/ Replicability	• **Biodiversity and Ecosystem Services:** While water resource development initiatives primarily focus on improving livelihoods, water availability, and agriculture-related outcomes, it is crucial to recognize and strengthen the initiative's impact on biodiversity and ecosystem services, which benefit ecological health in the long run. • **Alignment with Government Programs:** It is recommended to align with government programs; for instance, several project villages have renovated and strengthened ponds under the "Amrit Sarovar" national program.
Enablers	• **Training and Orientation:** Improve program delivery by training and orienting PRI members on the larger objectives, intended outcomes, and the process to be followed. • **Community Involvement:** Involve key stakeholders from the community to enhance visibility and influence more people to adopt improved practices. • **Agricultural Demonstrations:** Transform farm-level demonstrations into farmer field schools to enhance outreach and maximize impact.
Community perception	• **Innovative Engagement Methods:** Explore and implement new and innovative methods for engaging communities. This will help share knowledge among community members, making them equal partners in the pursuit of water security. • **Challenging Common Beliefs:** Community-led governance can effectively challenge common beliefs and guide communities towards recognizing and addressing the water crisis. For instance, interactive discussions can help communities understand that groundwater depletion is not solely caused by low rainfall but also by changes in agricultural practices and the excessive use of submersible pumps due to free electricity support for agriculture.

Community-led governance	• **Strengthening Community Institutions:** Strengthen community institutions to make them self-reliant in assessing, documenting, planning, and ensuring effective program implementation.
Influencing change	• **Crop Diversification:** Promote crop diversification and a shift towards less water-intensive cropping through various agri-education initiatives or farmer field schools to further strengthen existing practices and ensure sustainable irrigation.

MEASURING THE SOCIAL RETURNS

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

- Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.
- Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

- Stage 1: Establishing Scope and identifying key stakeholders
- Stage 2: Mapping outcomes
- Stage 3: Evidencing outcomes and giving them a value
- Stage 4: Establishing impact
- Stage 5: Calculating the SRoI
- Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

4.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percent of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Table 1- Quantities of change

Output	Outcome	Indicator	# of beneficiaries	Depth
Rejuvenation of ponds	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in kilolitres)	1	20357
		Increased availability of water in wells/borewells due to groundwater recharge (Number of farmers/community members x Average increase in availability of water in months/days)	2258	100%

Improved agricultural practices	Increased agriculture productivity due to enhanced agriculture practice and increased water availability	Increase in agricultural produce (Number of farmers x Average increase in yield in the year)	2258	0%
		Reduction in Cost of Cultivation (Number of farmers x Average reduction in cost annually)	2258	0%
		Reduction in Cost of Irrigation due to improved irrigation (Number of farmers using Mobile Engines for irrigation x Average hours of irrigation)	2258	4%
Improved recreational usage	Improved usage for recreational, and cultural aspects	Increased number of community members using ponds for recreational and cultural activities	2258	100%
Improved KAP (Knowledge, Attitude and Practices)	Improved aspects of village hygiene and sanitation practices	Increased civic sense in community members in keeping the pond premises clean and reduced littering	2258	80%

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long-lasting effects, especially the rise in ground water and surface water level due to the rejuvenation of existing ponds, and strengthening of pond boundaries. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of social behaviour change component or are related to capacity building, the beneficiaries will need to upgrade their KAP required for their respective subject due to advancements in technology and rapidly evolving market economy and climatic situations.
- Based on nature of interventions and dynamics of the income-generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to the contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer *Table 12- Financial proxies* for outcome wise proxy details.

4.2 Establishing Impacts

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percent against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **10 Percent** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.
In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values.

For a detailed view, refer *Table 11- SROI Calculation*

Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Table 2- Inputs calculation

Input Type	Input description	Total input value (INR)
Financial inputs	**CSR Funding from APL**	**1,82,46,562**

***Net Present Value**:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.
A discount rate of 4 Percent has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Table 3- SROI Calculation

Outputs	Outcomes	Indicators and Sources	Quantity (scale)	Amount of change per stakeholder	Duration of outcomes	Valuation approach (monetary)	Monetary valuation	Deadweight Percent	Displacement Percent	Attribution Percent	Drop off Percent	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4
Rejuvenation of ponds	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in kilolitres)	1	20357	5	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic meters	2	10 percent	0 percent	15 percent	20 percent	31,146	31,146.21	24,916.97	19,933.57	15,946.86	12,757.49
		Increased availability of water in wells / borewells due to ground water recharge (number of farmers/community members x Avg increase in availability of water in months/days)	2258	100%	5	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 liter capacity) - INR 200/	330	10 percent	0 percent	15 percent	20 percent	570,032	570,032.10	456,025.68	364,820.54	291,856.44	233,485.15
		Reduction in Cost of Irrigation due to improved irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	2258	4%	5	Average cost of borewell drilling is 100 Rs/ feet. Assuming 5 feet drilling (https://www.agrifarming.in/borewell-drilling-cost-pump-price-and-pipe-cost)	500	10 percent	0 percent	15 percent	20 percent	34,547	34,547	27,638	22,110	17,688	14,151

Outputs	Outcomes	Indicators and Sources	Quantity (scale)	Amount of change per stakeholder	Duration of outcomes	Valuation approach (monetary)	Monetary valuation	Deadweight Percent	Displacement Percent	Attribution Percent	Drop off Percent	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4
Improved recreational usage	Improved usage for recreational, and cultural aspects	Increased number of community members using ponds for recreational and cultural activities	2258	100%	3	One time entry fee for public park with water bodies	10	10 percent	0 percent	15 percent	33 percent	17,274	17,274	11,516	7,678	0	0
Improved KAP (Knowledge, Attitude and Practices)	Improved aspects of village hygiene and sanitation practices	Increased civic sense in community members in keeping the pond premises clean and reduced littering	2258	80%	3	Socio Behaviour Change Component (SBCC) Training cost	250	10 percent	0 percent	15 percent	33 percent	345,474	345,474	230,328	153,559	0	0

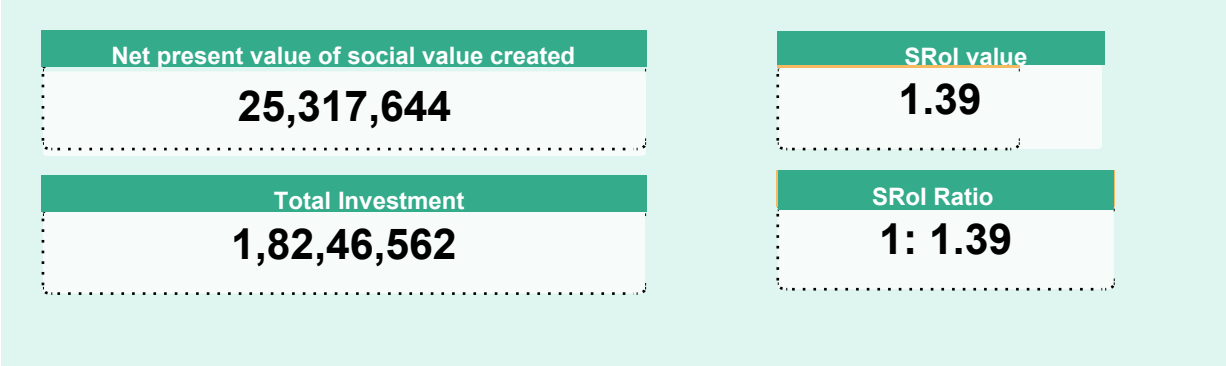
Total 998,473.41	998,473	750,424	568,102	325,492	260,393

Present value of each year	998,473	721,562	525,242	289,361	222,585

4.4 SROI Results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2023 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis: (in INR)



For every INR 1 invested, the programme has generated social impact of INR 1.39

***Sensitivity Analysis**:* Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution and deadweight survey questions. The sensitivity analysis suggests that the social impact value generated would be between 1.29 to 1.49 against every rupee invested.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	1.39	Deadweight is 5%	1.46	No significant change
			Deadweight is 15%	1.31	
1	Displacement		Displacement 0%	1.39	No significant change
			Displacement is 5%	1.32	

3	Attribution		Attribution is 10%	1.47	No significant change
			Attribution is 20%	1.31	
4	Drop-off		Drop-off is 15%	1.49	No significant change
			Drop-off is 38.3%	1.29	

ANNEXURES

Table 4- Financial proxies

Outcomes	Indicators and Sources	Valuation approach (monetary)	Rate
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in kilolitres)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic meters	2
	Increased availability of water in wells/borewells due to groundwater recharge (Number of farmers/community members x Average increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 liter capacity) - INR 200/	330
	Reduction in Cost of Irrigation due to improved irrigation (Number of farmers using Mobile Engines for irrigation x Average hours of irrigation)	Average cost of borewell drilling is 100 Rs/ feet. Assuming 5 feet drilling (https://www.agrifarming.in/borewell-drilling-cost-pump-price-and-pipe-cost)	500
Improved usage for recreational, and cultural aspects	Increased number of community members using ponds for recreational and cultural activities	One time entry fee for public park with water bodies	10
Improved aspects of village hygiene and sanitation practices	Increased civic sense in community members in keeping the pond premises clean and reduced littering	Socio Behaviour Change Component (SBCC) Training cost	250

[i] State of India's Environment 2023 by Centre for Science and Environment and Down To Earth Magazine. Article sourced at: https://www.downtoearth.org.in/news/water/world-water-week-2023-demand-and-pollution-of-the-precious-resource-are-increasing-which-is-not-a-good-sign-91220

[ii] fao.org/aquastat/en/countries-and-basins/country-profiles/country/IND/index.html

[iii] Planning Commission 2007 Report of the Expert Group on Ground Water Management and Ownership, Government of India, New Delhi, September 2007.

[iv] https://www.adriindia.org/adri/india_water_facts

[v] Uttar Pradesh Ground Water Year Book 2022 - 2023

[vi] Ground Water quality in shallow aquifer of Uttar Pradesh (AAP 2023-24)

[vii] India-WRIS (indiawris.gov.in)

[viii] Schedule-VII.pdf (icai.org)

[ix] Ministry of Jal Shakti

[x] Press Information Bureau (pib.gov.in)

[xi] Ministry of Jal Shakti - Catch the Rain Campaign

Impact Assessment of water resource development project-Mysore, Karnataka

Asian Paint Limited

March 2025

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

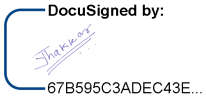
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

CONTENT

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- This report sets forth our views based on the completeness and accuracy of the facts stated to KPMG and any assumptions that were included. If any of the facts and assumptions are not complete or accurate, it is imperative that we be informed accordingly, as the inaccuracy or incompleteness thereof could have a material effect on our conclusions.
- While performing the work, we have assumed the authenticity of all documents or information referred to or provided. We have not independently verified the correctness or authenticity of the same.
- We have not performed an audit and do not express an opinion or any other form of assurance. Further, comments in our report are not intended, nor should they be interpreted to be legal advice or opinion.
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ABBRIVATIONS

APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NAF	National Agro Foundation
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

01

Executive Summary

EXECUTIVE SUMMARY

The philosophy of transformation has been in DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering relationship of trusts with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45% of total irrigation and 80% of domestic water needs are met by groundwater. the unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such challenging landscape, water harvesting and conservation under the umbrella of watershed management became need of the hour. Asian Paints engaged in holistic approach through their program "Water resource development" in Mysore block of Karnataka, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country.

The main objectives of the impact study are to assess the impact of water stewardship activities with focus on the access and availability of surface and ground water, potable water, farmer`s livelihood, land and agriculture practices, and governance. The study covered mix-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of SROI framework and OECD-DAC framework. A total of 100 respondents were interacted for data collection in Mysuru blocks of Karnataka including farmers, community members, and PRI members.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used. We estimate that for every INR 1 spent by the water for livelihood programme, INR 1.79 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

1 Relevance

- 82% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- Most of the beneficiaries rated the availability of water as poor before the project implementation.

2 Effectiveness

- 80% of beneficiaries shared the improved water availability for more than four months post-monsoon.
- 79% shared improved water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- 97% rated improved water availability and accessibility as good.
- 47% respondents shared improved soil moisture level due to water related intervention.
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

01

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

1.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007)[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

1.2 Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-

dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

1.3 About the study

To strategize and plan their water stewardship projects, Asian Paints Ltd. empanelled KPMG to facilitate impact assessment of the following project:

Water resource development project: Water resource development projects have been initiated by Asian paints Ltd at Mysore (Karnataka). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the below immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post monsoon (in months) • To understand the impact of water accessibility, availability &

	livelihood of farmer
Impact on Portable Water	• To assess impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

1.4 About the Project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves. The following projects under Water Stewardship have been selected for the impact assessment:

WATER RESOURCE DEVELOPMENT

Water resource development projects have been initiated by Asian paints Ltd at Mysore (Karnataka). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

Objectives of project:

Rejuvenation of Water Bodies:

- To increase water storage capacity and recharge through revival of traditional water bodies and construction of water harvesting structures so that to enhance irrigation and drinking water availability.
- To promote farm-based livelihood through demonstration of improved agricultural practices like Integrated pest management, crop diversification, soil testing, agroforestry, agro-horticultural, Azola production, Vermi composting, organic farming, and others etc.
- To create awareness, education among the community on judicious utilization of water resources and collective actions.

1.5 About the Implementing PARTNER

The National Agro Foundation (NAF), established in 2000 by Mr. C. Subramaniam, a prominent figure in India's Green Revolution and recipient of the Bharat Ratna Award, is a Public Charitable Trust with a vision to catalyse a rural revolution focused on agriculture and small and marginal farmers. Anchored in the principles of inclusive growth, NAF operates with a "Soil to Market" approach, building on Mr. Subramaniam's pioneering "Seed to Grain" philosophy from the Green Revolution era. Over the years, NAF has transitioned from modest beginnings to a dynamic and professional organization, delivering cutting-edge services that have made a substantial impact on rural communities. Collaborating with the government, corporate entities, and other stakeholders, NAF has implemented core programs addressing local and global challenges in agriculture and rural development. Its approach includes tailored training programs, capacity development initiatives, and the integration of new modalities and technologies. With dedicated research and development efforts, NAF has reached over 220,000 farmers in 830+ villages across 15 states in India, demonstrating a commitment to positive change and sustainable development in the agricultural sector. NAF's collaborative efforts extend to partnerships with various government and non-government organizations, educational and research institutes, financial institutions, and corporate entities.

In collaboration with APL, NAF is actively engaged in the implementation of CSR projects centred around water resource development in the states of Telangana, Uttar Pradesh, Karnataka, and Tamil Nadu. This strategic partnership underscores a shared commitment to fostering the rejuvenation of water bodies, amplifying livelihood opportunities for farmers, and effectively managing natural resources. Within this collaborative framework, NAF assumes the responsibility of executing the specified activities, ensuring their timely completion, adherence to budgetary constraints, and achievement of anticipated outcomes. Simultaneously, APL extends crucial

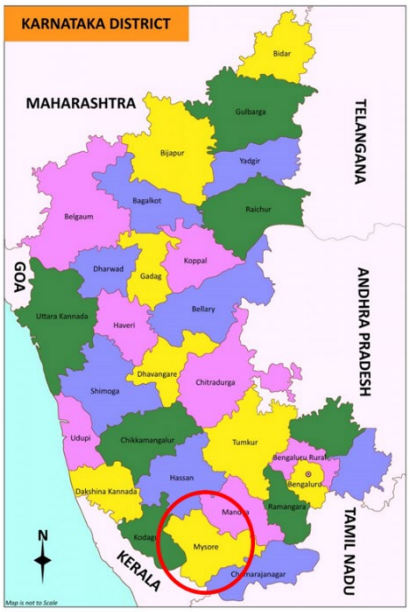
technical and financial support to NAF, facilitating the realization of project objectives and the establishment of a sustainable and inclusive development model. This cooperative effort aims to deliver tangible benefits to marginalized communities while addressing critical issues related to water resources and rural livelihoods.

1.6 Project Geographies

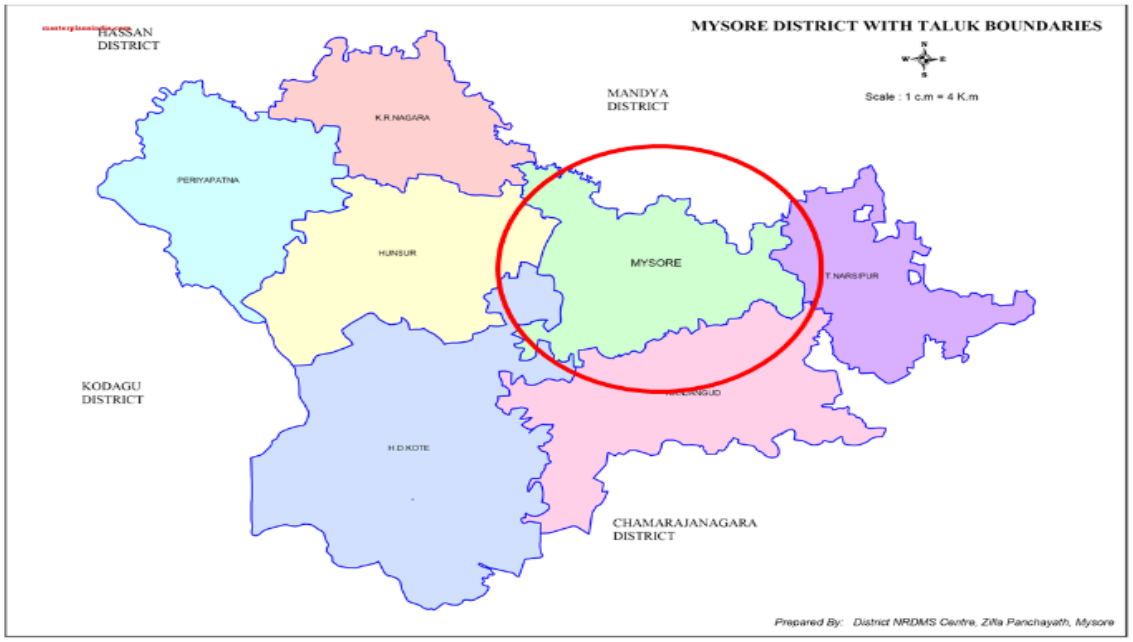
The impact assessment will cover the following states where the projects were implemented: Mysuru, Karnataka.

A brief description of the following project locations has been presented below:

Mysore, Karnataka



Karnataka, located in southern India, grapples with a complex set of water challenges owing to extreme variations in rainfall and distinct aquifer characteristics. The Western Ghats witness the highest rainfall in peninsular India, exceeding 8000mm annually, whereas, the eastern plains, receive 600mm or less rainfall per annum, contributing to Karnataka having the second or third-largest semi-arid area in the country[v]. Water demand has experienced rapid growth in recent years due to population growth, urbanization, and industrialization. Urbanization, notably in Bengaluru, fuels domestic and commercial water demand, while agriculture, primarily in the less-endowed eastern plains, remains a major consumer due to extensive irrigation projects and groundwater extraction. The current water situation is concerning, with declining summer flows in rivers, alarming groundwater depletion in many regions, and surface water pollution. Summer flows in most rivers are declining, with evidence of some rivers nearly drying up, impacting major reservoir inflows and leading to the complete drying of numerous minor irrigation tanks. These declines are primarily attributed to increased water use in the catchments rather than climate change. Groundwater depletion significantly contributes to declining summer season flows in rivers. Groundwater levels have been plummeting for several decades, particularly in the eastern plains, where 44 out of 176 talukas are declared 'over-exploited,' posing severe challenges to sustainable water management. Moreover, surface water bodies across the state face varying pollution, with 13 out of 17 monitored river stretches and most urban tanks showing contamination[vi]. Karnataka is possibly the most drought-prone state in the country, having experienced a drought in 12 of the 16 years between 2001 and 2016[vii]. Water scarcity, pollution, and the uneven distribution of water resources for life and livelihood further compound the issues faced by the state. Water consumption patterns range from over 340 liters per capita per day (lpcd) in parts of Bengaluru to less than 50 lpcd in poorer households and many small towns[viii]. Approximately 60% of rural habitations receive less than 40 lpcd water supply, leading to widespread water scarcity during the summer season for most households[ix]. Thus, the water resources in Karnataka are facing severe stress, posing a threat to water security in both rural and urban areas.



Mysore, the state's southernmost city, is bordered by Kerala and Tamil Nadu to the south and Bengaluru and Hubli to the north and east, respectively. Mysore district receives an average rainfall of 786.7 mm, with about 50% of the annual rainfall occurring during the southwest monsoon period[x]. The net sown area accounts for 72% of total geographical area with covering approximately 1107 km², followed by pulses and Ragi cultivated in 989 and 972 km², respectively. Cotton, Sugarcane, Jowar, Tobacco, and Oilseeds also contribute significantly to the agricultural diversity. There are two agro-climatic zones in the district as a result of the influence of climate and soil conditions on crop patterns- the Southern Dry Zone and the Southern Transition Zone[xi]. The Southern Dry Zone is characterized by a mean annual rainfall of 670 to 888 mm[xii], with red sandy loams and black soils being the predominant soil types. The main crops grown in this zone include ragi, sugarcane, cotton, and plantation crops. On the other hand, the Southern Transition Zone, which has a relatively higher rainfall ranging from 611 to 1053 mm[xiii], features red sandy loams as the primary soil type. The major crops cultivated in this zone are rice, pulses, and groundnut. Despite having significant water sources, concerns about the sustainability of groundwater persist due to rapid urbanization and heightened demand. There is a need for adopting sustainable water management practices to augment ground water recharge and address the water challenges in Mysore.

Ground Water Resources Data (in ham) (2020)[xiv]		
Details (Value in ham)	**Mysuru Block**	**Mysuru District**
Annual Domestic and Industrial Draft	1861.308	6700.8
Annual Irrigation Draft	2236.751	27001.56
Annual Groundwater Draft (Total)	4098.063	33702.36
Annual Replenishable Groundwater Resources (Total)	6327.257	80153.28
Net Groundwater Availability	5745.714	72545.5
Stage of Groundwater Development (%)	71.324	46.46

02

Approach & Methodology

2 APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

2.1 Our Approach

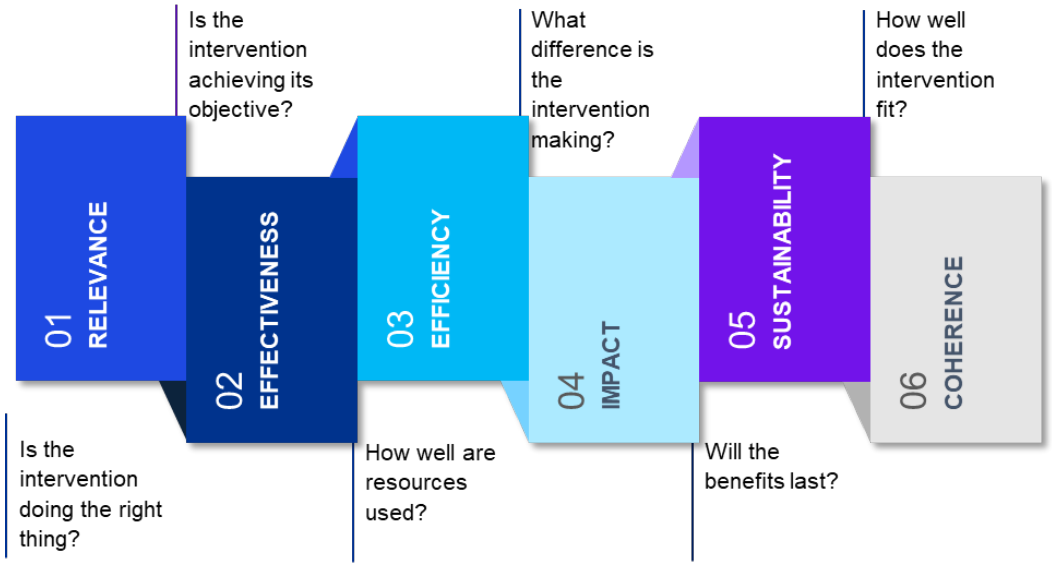
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*

Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project?	*Likelihood that project achievements will continue after project*

	▪ What can be some of the innovative ways to make the project sustainable in the long run?	
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –

Establishing scope and identifying stakeholders

The scope of the analysis is clearly delineated through a roadmap to ensure a streamlined SROI development process. Stakeholders to be involved are identified and the key SROI structural elements are defined, with a particular focus on the research question.

Mapping outcomes

This step articulates the program logic, mapping the resources (input) that would be used to deliver activities (measured outputs), and how these activities may result in outcomes for stakeholders.

Evidencing and valuing outcomes

Data is gathered through qualitative and quantitative methods to evidence and measure the extent to which they are being achieved and how long they last.

Establishing impact

The extend to which activities contribute to the impact achieved is determined by placing the intervention in context and by understanding what would represent material and valuable changes resulting from an intervention, testing the Theory of Change.

Calculating the SROI

In this stage, the social return is calculated and expressed in the form of an SROI ration by ascribing a monetary value to the material outcomes identified through the research phase.

Reporting, using, and embedding

The SROI report includes qualitative, quantitative and calculating the net present value including calculation of ratio and undertaking sensitivity analysis to arrive at nearest possible social value created.

Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Ca SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

2.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

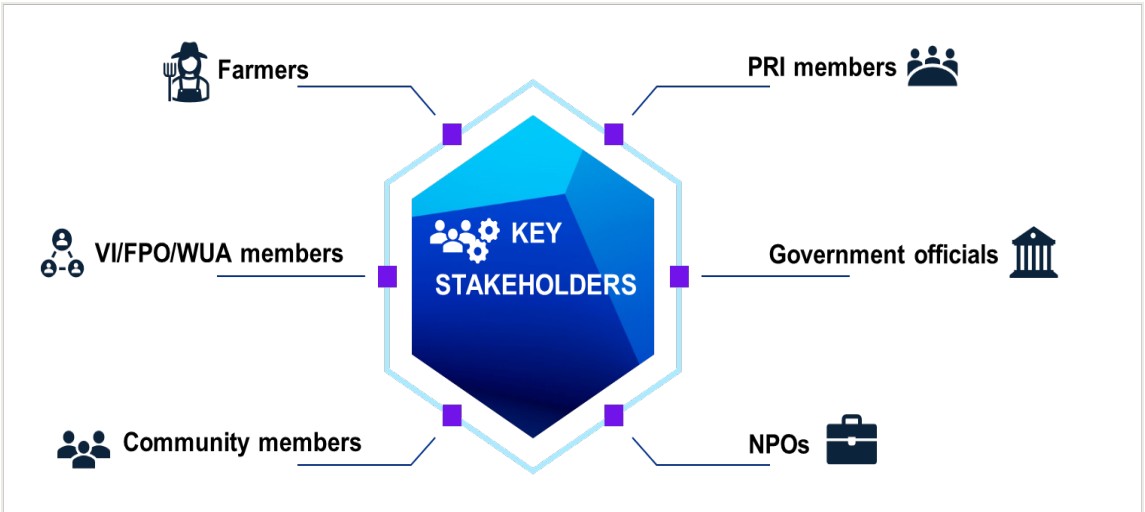
Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

Impact map for the Project:

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to intervention	4057	100	100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Impact Map

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members **FPO/VI/WUA**	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment.	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)

	To organize and strengthen the village institutions around water harvesting and related livelihoods		No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices
			No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area, Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on

a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

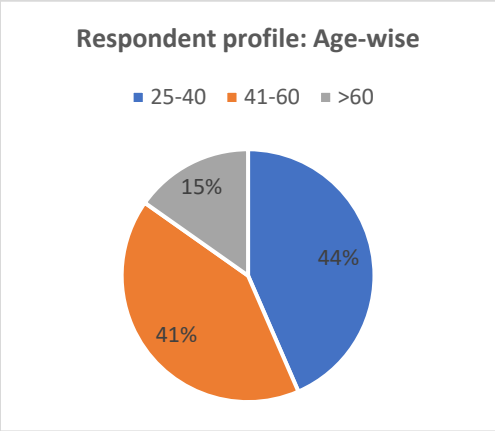
Analysis and Findings

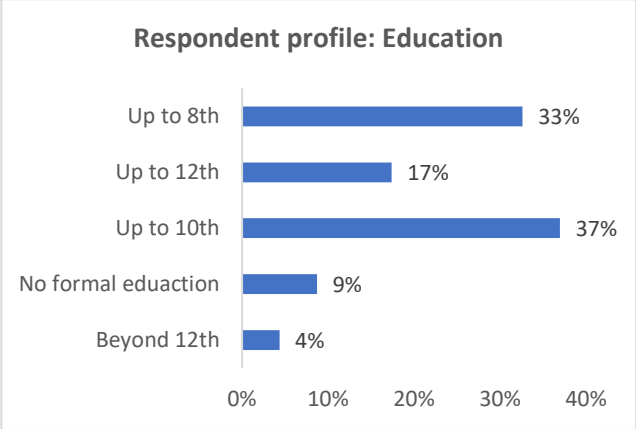
3 Analysis and findings

The section below highlights the findings and observations based on the interactions conducted with 100 beneficiaries of the Water Resource Development project supported by Asian Paints Ltd. across the ten villages of Mysuru districts of Karnataka.

Respondents profile

Distribution of the respondents is as follows:





The respondents interviewed were largely (43 percent) from the age group of 25 to 40 years, followed by 41 percent from 41 to 60 years and 15 percent from Above 60 years. In terms of education level, majority (37 and 33 percent) of the respondents had education up to 10th and 8th standard whereas 9 percent had no formal education.

All the respondents (100 percent) shared that primary occupation/ source of income is agriculture. Whereas, 24 percent reported labour and non-salaried work as a secondary occupation/ source of income.

The household size of the majority of respondents ranges from four to five. Maximum family size reported by the 3 respondents is ten members and 1 responded 25 members.

It was understood that a significant number (60 percent) of households have only two earning members.

93 percent of the respondents shared that they own land for agriculture purposes in Mysore block. 4 percent of the respondents do not have own land and 1 responded stated about share cropping.

During the discussion, 61 and 13 percent of respondents shared that they have 2-5 acres and more than 5 acres of cultivable land, respectively. 26 percentage of respondents have less than 2 acres of cultivable land. 87 percent of respondents had irrigation facilities on their land, while the remaining 13 percent of farmers were dependent on rain for agricultural purposes. A vast majority of respondents (65%) cultivate their land in both Kharif and Rabi season, while 33% cultivate in Summer season.

During discussion, it was understood that millets, pulses, grains, and vegetables are the most commonly cultivated crops in the region.

100 percent of the respondents from Karohatti, Muguru, P Marenahalli, Sujulur and Vatal have received the benefit from WHS. 34 percent of the respondents from across the Maysuru block have received the benefit from agriculture interventions and most of the respondent have received benefit from other awareness programs. 93 percent of the respondents reported that they are aware about the water for livelihood project of APL.

	Seasons of cultivation		
Villages	Kharif	Rabi	Summer
Daknaharlihundi	4%	-	13%
Hebbiya	-	-	13%
Karohatti	16%	-	-
Kudlapura	16%	40%	47%
Muguru	20%	-	-
P Marenhalli	16%	-	-
Sujulur	8%	40%	7%
Tandavapura	-	-	20%
Vatal	20%	20%	-

	Crops cultivated			
Villages	Grains	Pulses	Vegetable	Fruits
Daknaharlihundi	12%	-	-	-
Hebbiya	-	50%	8%	-
Karohatti	12%	-	8%	-
Kudlapura	4%	-	69%	75%
Muguru	19%	-	-	-
P Marenhalli	15%	-	-	-
Sujulur	8%	-	15%	25%
Tandavapura	12%	-	-	-
Vatal	19%	50%	-	-

Support received under the project:

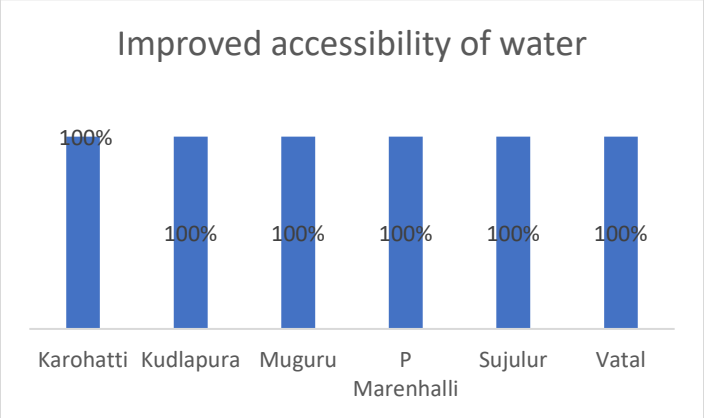
Villages	Benefitted from WHS	Benefited from agriculture interventions	Benefitted from other awareness programs
Daknaharlihundi	-	19%	-
Hebbiya	-	13%	-
Karohatti	13%	6%	-
Kudlapura	-	44%	100%
Muguru	22%	-	-
P Marenhalli	17%	-	-
Sujulur	22%	-	-
Tandavapura	-	19%	-
Vatal	26%	-	-

3.1 Support for water harvesting structure

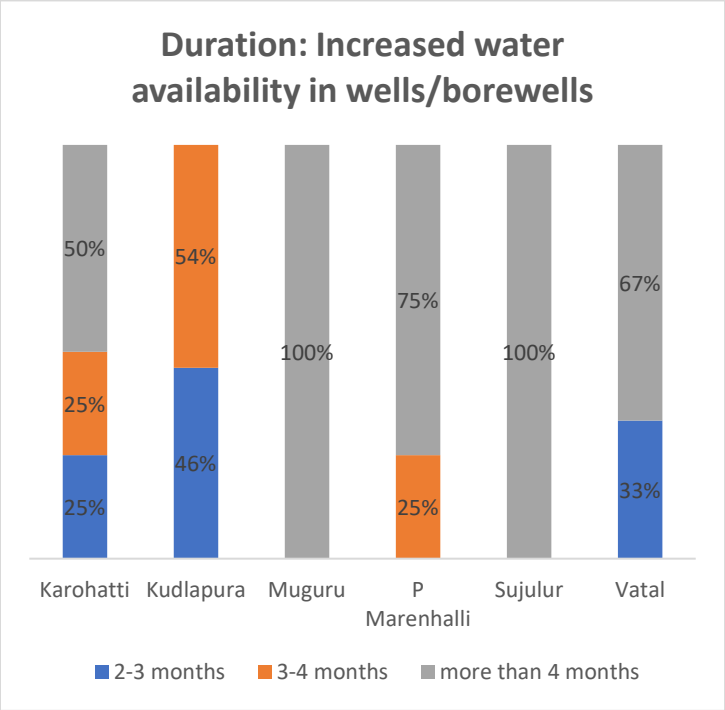
As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that most of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents stated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial in ensuring the successful implementation and sustainability of the project.

3.1.1 Impact on access and availability of surface and ground water



The interventions of the project were planned and executed to provide the community members with better access to water resources. Across all six villages where lake desilting work was implemented, 100 percent of community members shared that they have experienced improved accessibility of water post-intervention.



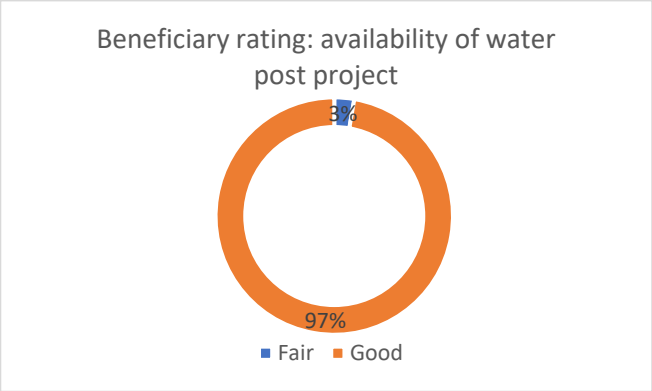
The majority of respondents across three villages reported that the project interventions resulted in increased water availability in their wells/borewells. About 52 percent of the respondents shared that there was an improvement in water availability/retention in wells/borewells for an additional more than four months as compared to the previous condition. The remaining 48 percent indicated that the duration is three to four and two to three months equally.

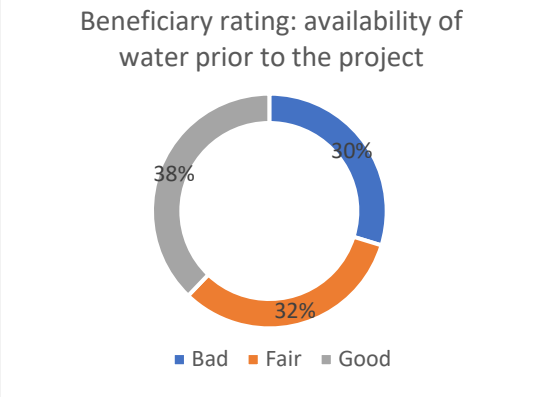
As per below table, around 6 percent of the respondents observed an improvement in water availability in wells due to groundwater recharge. 47 percent of respondents reported accessing water

directly from canals for irrigation purposes. Also, 8 percent of the respondents benefited from enhanced soil moisture, while 31 percent experienced water availability for their livestock.

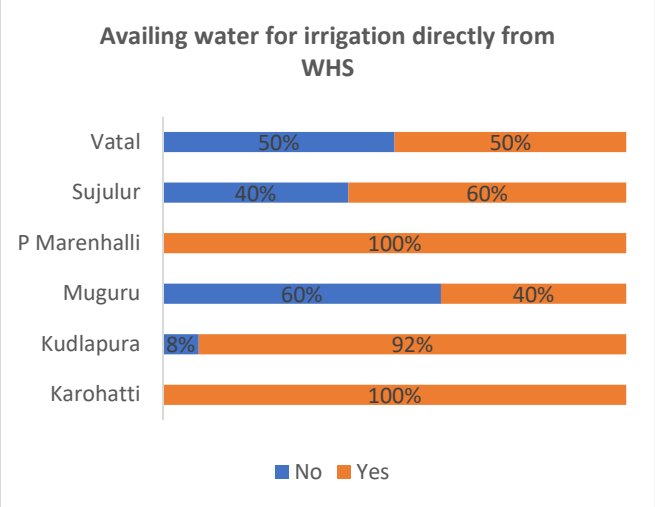
Benefits from Water for livelihood				
Water for livestock	**Potable drinking water**	**Water availability in well due to GW recharge**	**Improved soil moisture**	**Direct irrigation from WHS**
31%	8%	6%	8%	47%

Availability of water:





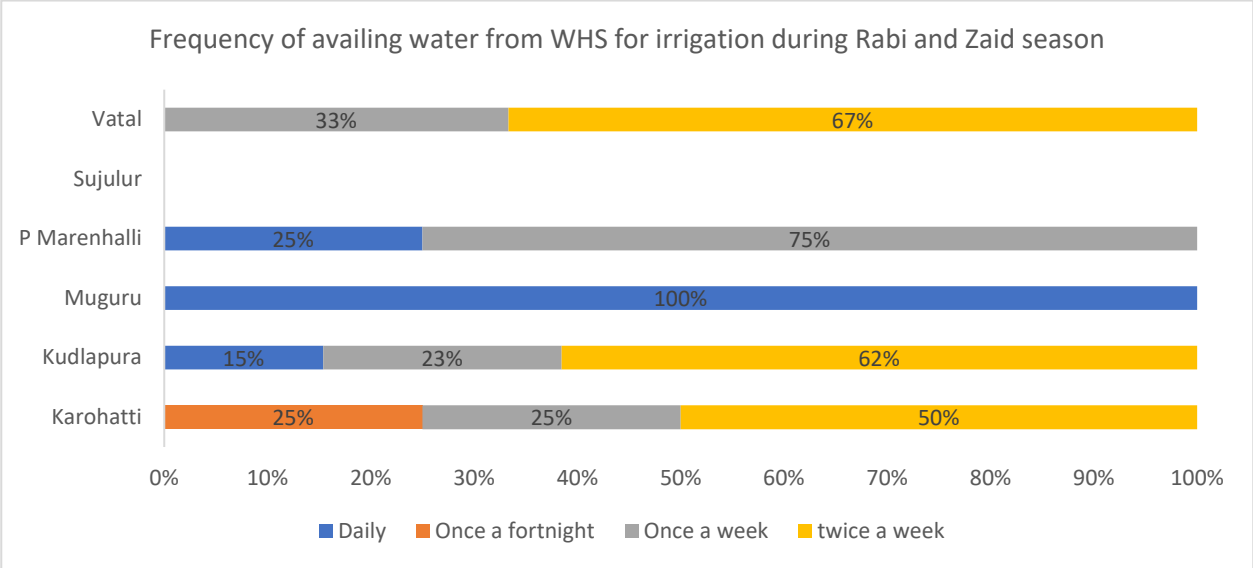
Prior to the implementation of the water for livelihood project in their area, 30 percent of respondents from across the region rated the availability of water as bad, and 32 percent rated it as fair. However, after the implementation, 97 percent of respondents rated the availability of water for agricultural purposes as good. Below graphs shows the percentage break-up:



Around 76 percent of the respondents shared that they availed water directly from the water harvesting structures for irrigation purposes. In Vatal, Sujulur, Muguru and Kudlapura 50, 60, 40 percent and 92 percent, respectively shared that they directly accessed water from the structures to irrigate their fields whereas, all respondents from P Marenhalli and Karohatti avail water from WHS for irrigation purposes. Therefore, majority number of community members use pond water for irrigation. However, a significant number of

community members use the water for livestock purposes.

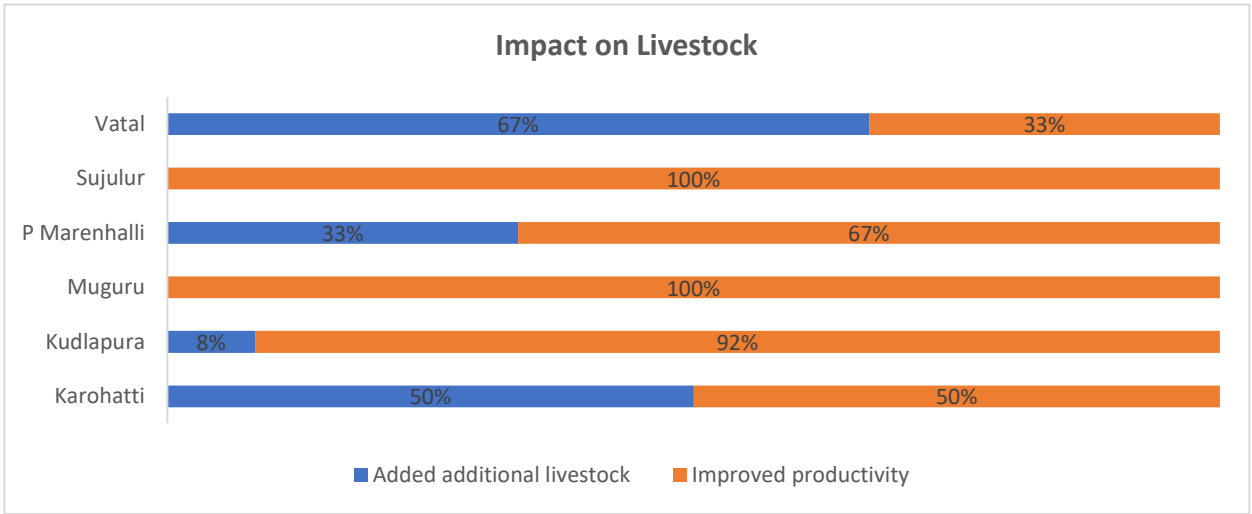
Out of the WHS beneficiaries who shared that they availed water directly from the water harvesting



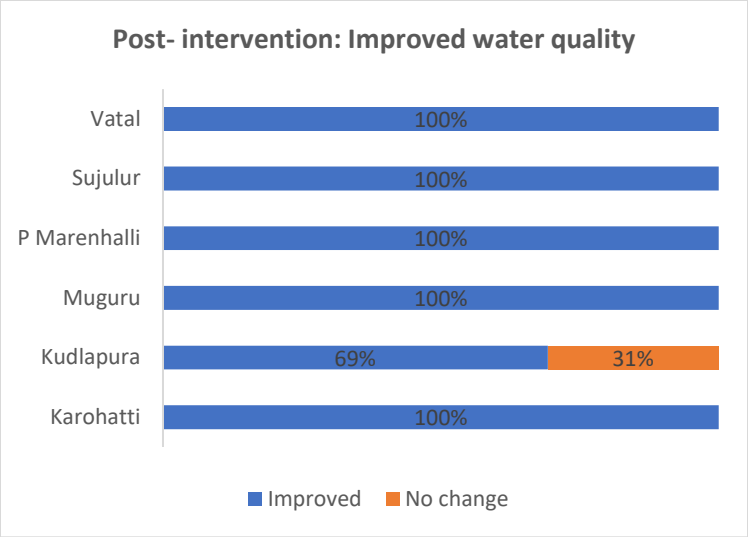
structures for irrigation purposes, most of them reported accessing water from the structure twice a week and once a week. Where as in Sujuluru no farmers are availing the water for irrigation.

3.1.2 Impact on livestock

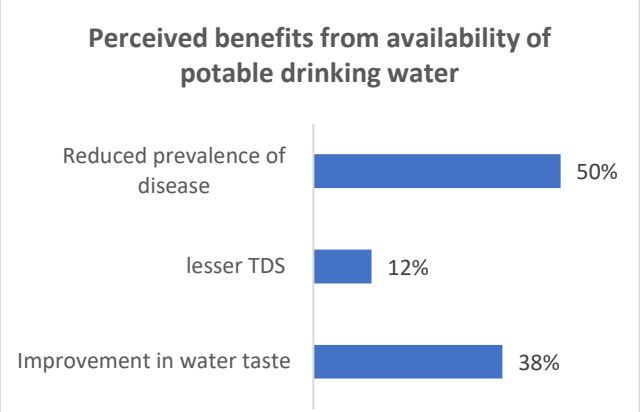
Most of the respondents feel that availability of water has positive outcome on the livestock, either they have witnessed adding additional livestock or improved productivity. There were some farmers in Sujulur also reported that they do not have the livestock.



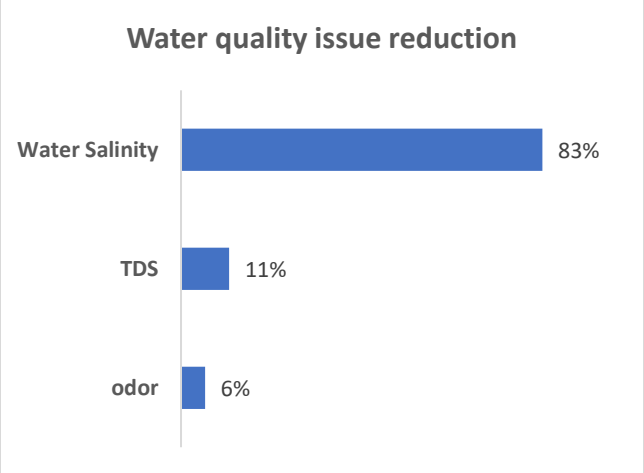
3.1.3 Quality of drinking water



Except Kudlapura village, where 31 percent respondents feel there is no change in remaining all 5 villages all (100 percent) respondents across the three villages shared that there was an improvement in the quality of drinking water post-project intervention. During discussion with the community members, it was shared that the hardness of water has been reduced post-project implementation. 95 percent of respondents shared that the availability of potable drinking water has brought health benefits to the community.

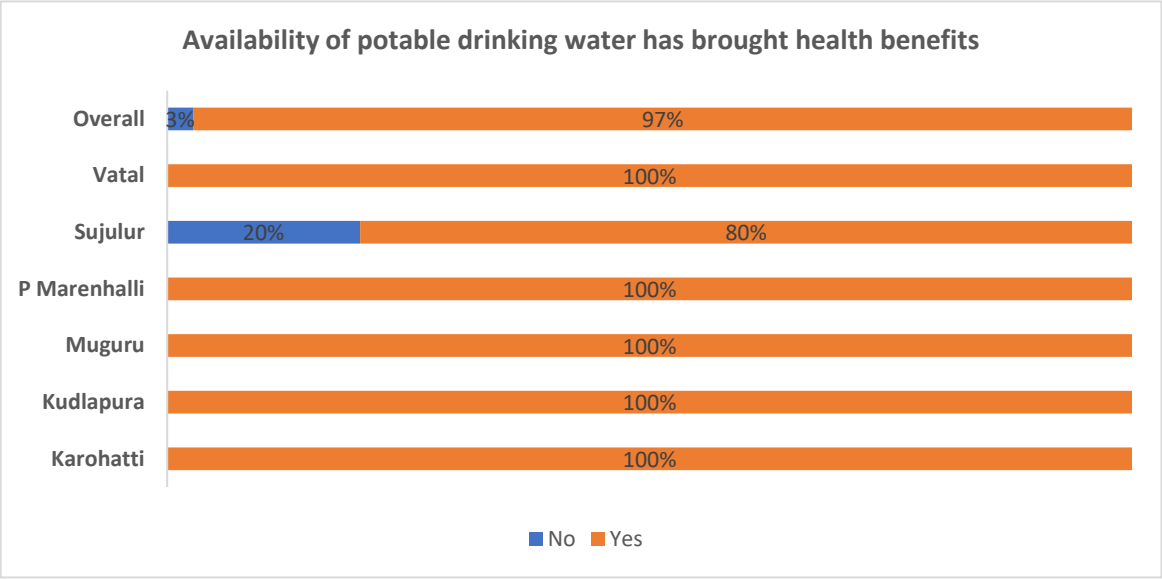


Out of 95 percent of respondents who reported positive health benefits, 50 percent respondents believe that the water availability has resulted in reduced prevalence of disease, 38 percent highlighted improvement in water taste and 12 percent highlighted lesser TDS. During the visit at Vatal village it is also observed that the school borewell has provided the access to quality ground water to the students.



Around 95 percent respondents reported that the water quality has improved post project intervention. Out of respondents who reported improvement in water quality post intervention, around 11 percent shared that there has been a reduction in TDS, 6 percent reported decrement in unpleasant smell and about 83 percent indicated reduced water salinity. Out of the respondents who shared that there has been a reduction in in water salinity levels, majority of them belong to Kudlapura and Muguru village.

Out of the respondents who shared that there has been a reduction in the prevalence of disease due to the

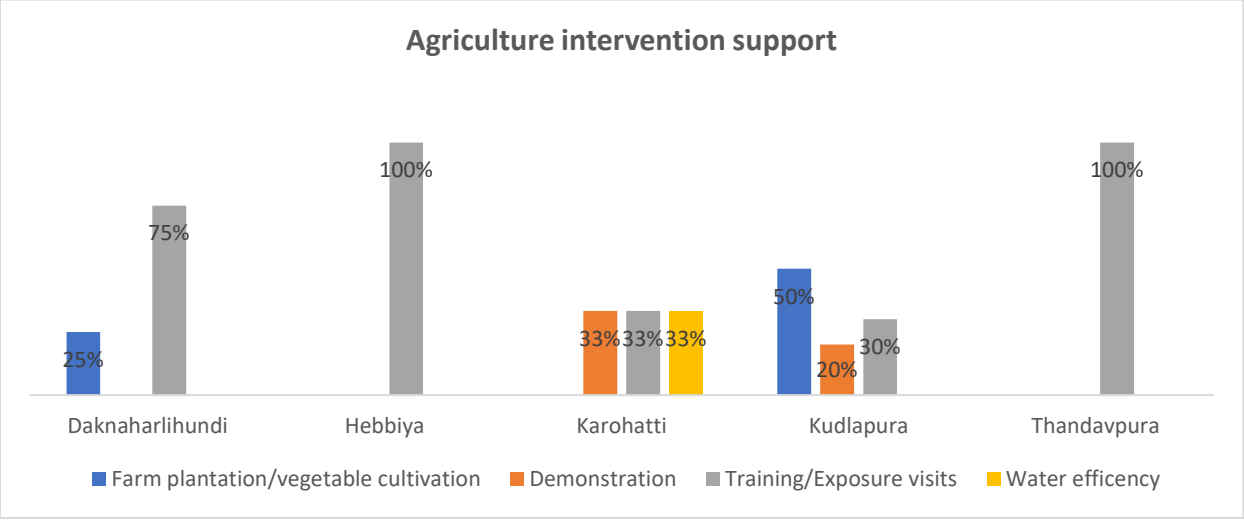


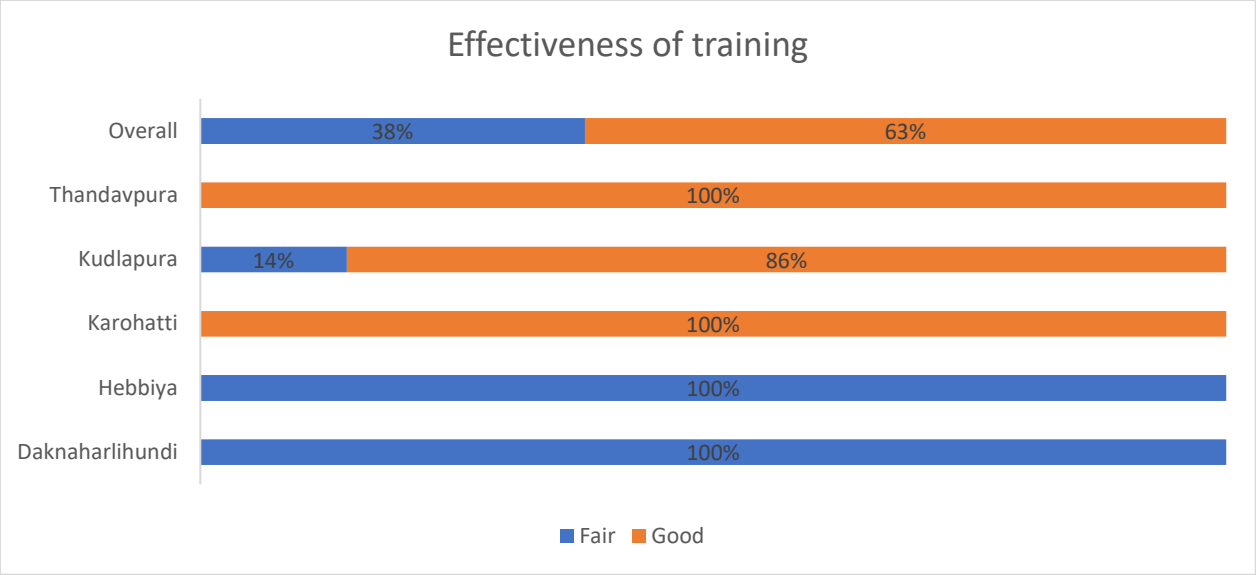
availability of potable drinking water, around 35 and 18 percent of beneficiaries from Kudlapura and P Marenhalli and Muguru reported a reduction in the prevalence of diseases, respectively. Whereas around 46, and 23 percent of respondents shared improved water taste from Kudlapura and Muguru respectively.

During discussion, an average 97 percent of respondents across six villages shared the reduction in health-related expenses due to project intervention. Except Sujuluru where 80 percent remaining all five villages shared that the availability of potable drinking water resulted in reduction in health-related expenditures.

3.1.4 Impact on Farmer's livelihood

Agriculture interventions:





During the discussion, all respondents who have received agriculture intervention support shared positive experiences.

All the respondents from Hebbiya, and Tandavapura shared that they have received training /capacity-building sessions and workshops on vermicompost, vegetable cultivation, technology-based cultivation, and preparation of organic formulation. 25 and 50 percent respondents from Daknaharlihundi and Kudlapura shared that they received farm plantation/vegetable cultivation intervention respectively. 33 percent repondents from Kuldapura stated that they received water efficiently support. 33 and 20 percent respondents from Karohatti and Kuldapura stated that they received demonstration support respectively.

Impact on farming practices

It was understood that in intervention villages majority of beneficiaries are dependent on rain for agricultural purposes whereas, 50 percent have borewell. It was shared that there has been no significant impact on total agriculture production and cost of cultivation. Overall 63 respondents rated good for the trainings provided.

Improved knowledge, attitude, and practices:

During the discussion community members shared their experience of awareness sessions, capacity-building workshops and demonstrations they have attended. The training on organic farming, vermicomposting, horticulture, crop diversification and integrated pest management has improved their knowledge about agriculture practices. Around 75 percent respondents share that they have done soli testing. Farmers who have rated agriculture interventions shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity in the long-run.

04

Conclusion and Recommendations

4 OECD-DAC

4.1 Evaluation criteria: Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed. It also seeks to determine whether the programme is relevant to the needs of the beneficiaries. The program's relevance is understood in this context in terms of community needs as well as connections to existing government operations.

4.1.1 Need of the community:

Water resource development in the Mysuru block of Karnataka state is crucial to address water scarcity and ensure sustainable agriculture practices. Upon focused group discussion, community members shared water scarcity challenges faced before the project implementation. They shared that there has been lack of systematic harvesting of rainwater in the region resulting in fallow land. For farmers practicing agriculture was becoming cost intensive. Existing ponds/ tanks were shallow in nature and needed deepening to improve storage capacity. These ponds were predominantly used for cattle rearing and not for agriculture purposes. Most of the agricultural lands of small and marginal farmers were rainfed, ground water availability was at 600 ft and above (average).

According to the information shared, large scale farmers mostly cultivate water intensive crops like sugar cane and banana. On the other hand, small and marginal farmers grow Ragi, Maize, Pulses, and Vegetables. However, the agriculture practices were chemical intensive and lacked scientific methods.

4.1.2 Alignment to Schedule VII of the Companies Act, 2013[xv]

The programme has been designed to cater to marginalised communities residing in the vicinity of Asian Paints Ltd.'s operational areas in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water

[including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].

- (x) rural development projects

4.2 Evaluation criteria: Coherence

Coherence refers to the compatibility of the intervention with other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa

4.2.1 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal		Targets	Relevance
GOAL 1	No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and	The project initiated a programme on Water resource development to improve the water management and governance of land and water resources by strengthening community stewardship

		financial services, including microfinance.	
GOAL 2	Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6	Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all.	The project activities included rejuvenation of water bodies and canal lining in villages to improve access to water for the community members for drinking and irrigation purposes.

		Target 6.4 By 2030, substantially increase water- use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.	
GOAL 15	Life on Land  	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. **Target 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	Project activities included promotion of prevention of natural resources among the community members. Within water resource development initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[xvi] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[xvii] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched "catch the rain campaign" in 2021[xviii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Ltd. project on water for livelihood aligns with the national priorities of and the government's efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

4.3 Evaluation criteria: Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program's activities were carried out as well as the effectiveness with which the program's systems and processes were implemented.

Asian Paints Ltd. implemented the water for livelihood project in partnership with NAF that have a presence in the field. ensured that they developed good rapport with the villagers and increased their awareness about the project through various activities like FGD's, workshops and trainings. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In Water resource development project, promotion of better irrigation methods and techniques through interventions such as, and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries (100 percent) were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as water conservation and management and soil analysis.

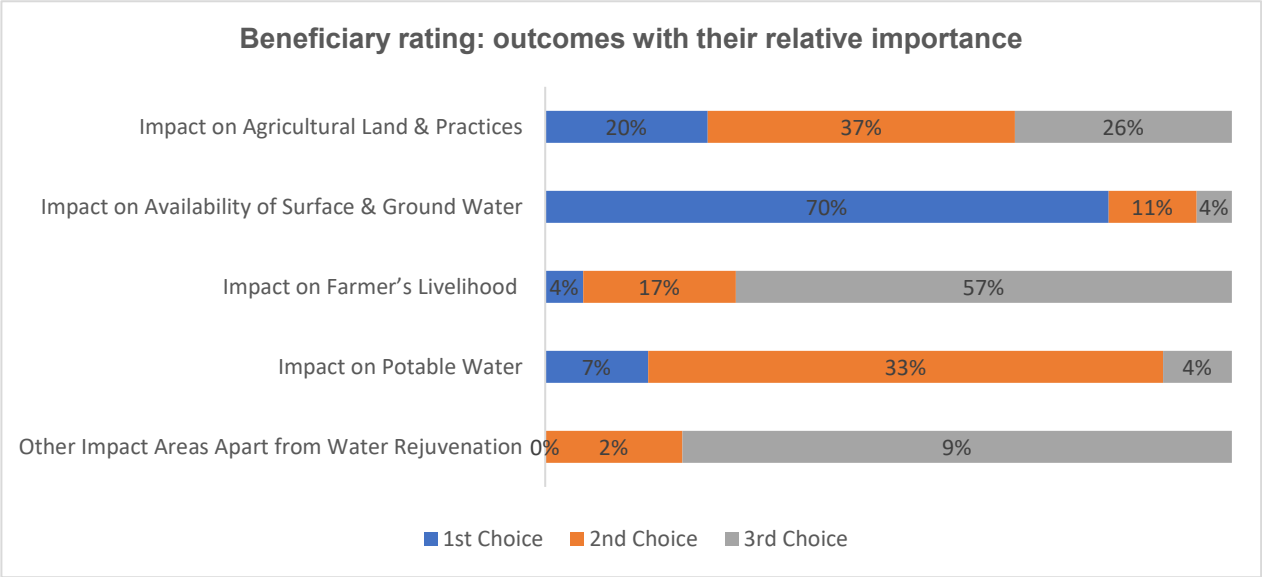
Across the Maysuru region respondents felt that there has been a positive impact of water-related activities implemented by NAF. They have shared the experience of increased accessibility of surface water, improvement in soil moisture regime, and availability of potable drinking water for their families and livestock. The below table shows the responses recorded from the ground on above mentioned outcomes.

Location	Direct irrigation from WHS/Canal	Water availability in well due to GW recharge	Improved soil moisture	Potable drinking water	Water for livestock
Karohatti	20%	-	-	-	27%
Muguru	27%	-	-	-	18%
P Marenhalli	27%	50%	-	33%	27%

Sujulur	20%	50%	33%	-	-
Vatal	7%	-	67%	67%	27%

Water resource development programs focused on agriculture interventions included training, demonstration, awareness program and efficient use of water in irrigation activities. During interaction, respondents shared positive remarks about improved soil health, and increased agriculture yield over the year. They have also shared the experience of improved water potential in the region across the season.

Agriculture outcomes shared by beneficiaries:



The graph displays the project outcomes' ranking based on beneficiaries' experience and impact. Approximately 70% of beneficiaries prioritized the impact on availability of surface & ground water as their first choice, followed by 37% ranking the impact on agricultural land & practices as the second, and 57% selecting the impact on farmer's livelihood.

Village	Crop Change	Timey Availability of water	Increase area under irrigation	Multiple Seasons	Reduced input cost due to less irrigation or less use of electricity/fuel engine	Increased Yield
Karohatti	27%	19%	12%	8%	-	20%
Kudlapura	55%	24%	29%	58%	100%	20%
Muguru	-	14%	18%	0%	-	-
P Marenhalli	9%	19%	-	-	-	-
Sujulur	-	5%	12%	17%	-	-
Tandavapura	-	-	-	-	-	20%
Vatal	9%	19%	29%	17%	-	40%

The table above displays the outcomes observed in Karohatti, Kudlapura, Muguru, P Marenhalli, Sujulur, Tandavapura and Vatal villages due to lake rejuvenation activity. In all the above villages, the beneficiaries reported the positive impact of water availability in their region. They stated that they have experienced timely availability of water, crop change, increase in are under irrigation, multiple seasons increased yield throughout the year.

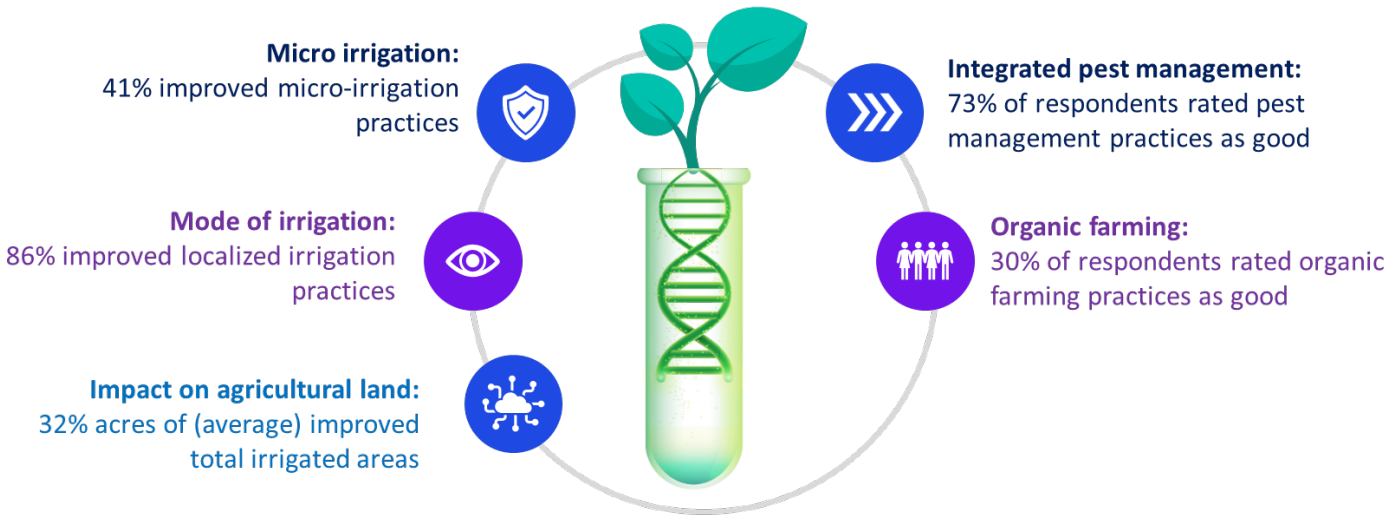
4.4 Evaluation criteria: Efficiency

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

4.5 Evaluation criteria: Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.



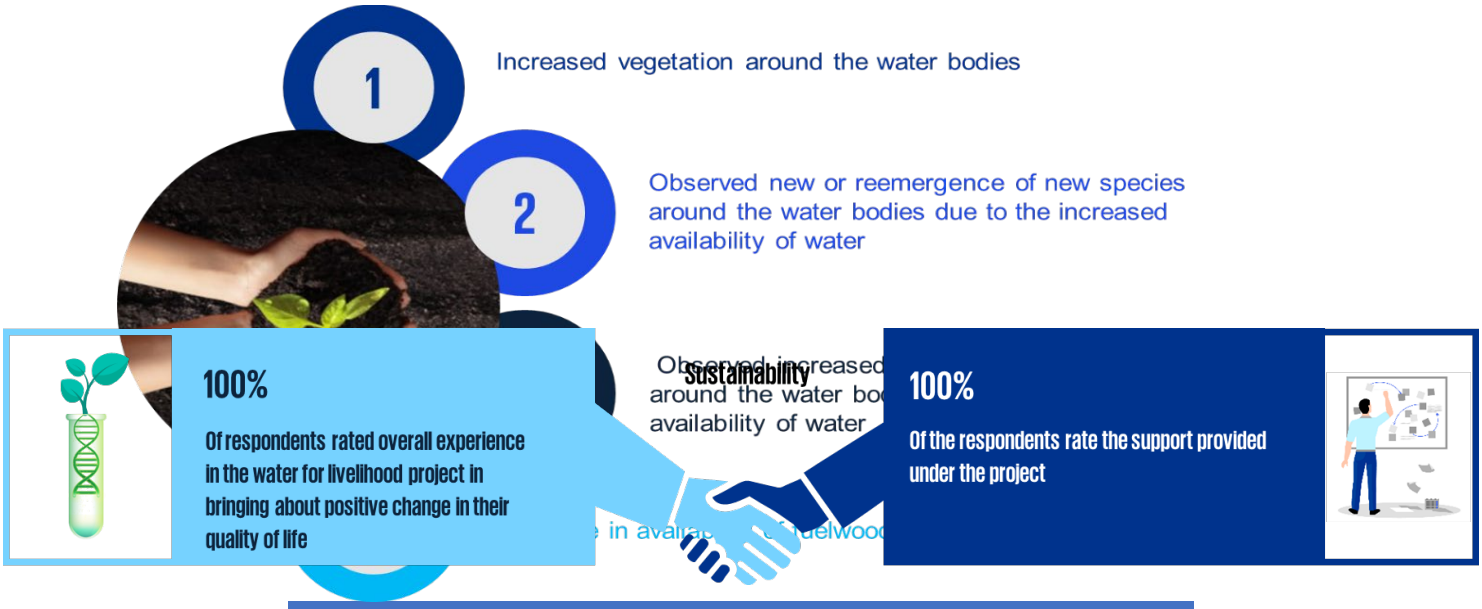
4.6 Evaluation criteria: Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. The continuation of a positive effect after development or aid has stopped is referred to as sustainability. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

46 and 41 percent of the Community members rated the support provided under the project as good and fair respectively.

Sustainability refers to the sustainability of an intervention's positive effects after development or assistance has ended. This evaluation criterion includes significant elements related to the likelihood of ongoing long-term benefits and risk tolerance. Setting up a governance structure, financial model, and operating system is necessary to ensure sustainability.

Due to programme activities: and agricultural and physical interventions, the economically marginalized people benefitted the most. The promotion of organic farming and sustainable agriculture has triggered a change in the perception of the people. On a similar note, respondents shared their views on the long-lasting impact of the project. As a result, all respondents shared that they believe that the project impact can last more than five years whereas.



Duration of project	Mysuru
more than 5 years	56%
3 to 5 years	26%
1 to 3 years	9%
Less than 1 year	9%

4.6.1 Governance system

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

5 Recommendations

Water is a crucial resource and a critical input in nearly all processes of life. Adequate availability of water is important for agriculture and animal husbandry to increase the productivity. As has been mentioned in the introductory chapter, with groundwater being increasingly over-exploited, agriculture is becoming increasingly difficult to pursue; thus, contributing to rural distress and migration. The water resource development initiative aimed to improve the livelihoods of people living in rural areas. One of the objectives of the programme was to revive traditional institutional mechanisms related to water and enable them to function effectively in a water-stressed environment. This includes governing complex and scarce resources like groundwater. Some of the suggestive way forward is outlined below:

Scalability/ Replicability	• An integrated program to bring about a change by leveraging technology in agriculture to move it from subsistence to enterprise-level cultivation can be aimed. the approach can be a mix of sustainable farming approaches (good agriculture practices, creating Agri-entrepreneurs, Input and Output aggregation for small farmer groups, establishing Hitech Farm Demonstrations, Organising Krishi Choupals for specific technical information dissemination), deployment of IoT solutions (installation of weather stations to measure real time in-situ dynamic climatic and edaphic factors; and pest traps) and by improving their access to information through technology use (Missed call facility, phone call consultations, Smart App notifications, WhatsApp groups, SMSs and the Agri-entrepreneur service to provide more personalized and one on one support to farmers.) • In agriculture intervention, to bring more awareness- soil health card can be introduced. This should contain recommendations regarding chemical characteristics, physical properties and biological attributes essential and suitable for farmers. • The program may expand the other set of watershed activities in the same geography. It could be around treating other drainage lines, fodder grass seeding, strengthening

	other rural livelihoods, decreasing anthropogenic pressure and others.
Enablers	• Increased involvement and capacity building can be promoted to ensure greater participation from women in the program implementation and decision-making. This could be achieved through enabling strong institutions, and participation in user groups with acceptance by PRI members. • Improving the program delivery by training and orienting PRI members on the larger objectives, intended outcomes, and the process to be followed. • Convergence opportunities with government and non-government institutions can be explored to scale and replicate the programme. • Establishing village institutions/FPOs/ milk banks led by community members can build support systems for small and marginal farmers. This ensures transparency and fairness in product pricing.
Community participation	• It is essential to explore and implement new and innovative methods for engaging communities. This will help in sharing knowledge among community members, making communities equal partners in the pursuit of water security. • Community participation is the to bring about effective change in challenging common beliefs and guiding them towards recognizing and addressing the water crisis in their community. For instance, the prevailing notion in many communities is that groundwater depletion is solely caused by low rainfall. However, interactive discussions can help the community understand that while rainfall may have

		become erratic, changes in agricultural practices over the years could also contribute to the fast-depleting groundwater.
	Establishing institutions for community led governance	• To ensure the sustainability of the interventions, local governance mechanisms must be further strengthened. This could be achieved through enabling strong community institutions and their acceptance by PRI members. Community institutions may be formed at habitation level to ensure reaching out to the last mile. These institutions shall draft their byelaws and their capacity building can be done to make them self-reliant over a period of time. Involvement of women in community institutions, program implementation and decision making in future course of action • In order to establish water stewardship, community driven by-laws would ensure optimum utilisation of water from common resources by all stakeholders. To enable the same, activities like crop-water budgeting exercise shall be carried out at habitation level. • It is advisable to allocate user rights and collection of user charges formally for usage of the benefits created under common property resources.

06

Measuring the Social Return

6 measuring the social return

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

- Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.
- Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

- Stage 1: Establishing Scope and identifying key stakeholders
- Stage 2: Mapping outcomes
- Stage 3: Evidencing outcomes and giving them a value
- Stage 4: Establishing impact
- Stage 5: Calculating the SRoI
- Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

6.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Table 1- Quantities of change

Outcome	Outcomes	Indicators and Sources	Quantity (scale)
Construction and refurbishment of Check dams/ Water Harvesting Structures (Ponds)	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1944
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	2400
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	312
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	50
Trainings/ Workshops/ Demonstrations/ Organic farming/ soil health testing	Increased agriculture production due to enhanced agriculture practice through trainings, demonstrations and water conservation & management	Adoption of improved agriculture practices such as usgae of micro nutirnts and organic farmig (% of members indicating adoption of improved agriculture practices)	2400
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees through VI and traiing for water management (Number of village water user groups formed)	12

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the improved accessibility of canal water rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.

- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer Table 4- Financial proxies for outcome wise proxy details.

6.2 Establishing Impacts

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.

- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.

- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved i. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self-confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values.

For a detailed view, refer *Table 3- SROI Calculation*

Considering the above parameters, the impact of each outcome is calculated with the following formula:

6.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Table 2- Inputs calculation

Input Type	Input description	Total input value (INR)
Financial inputs	**CSR Funding from APL**	**2,11,28,405**
Time input	**Time input from beneficiaries**	**2,90,400**
Total		**2,14,18,805**

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome)

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	Outcome description									Discount rate		4.00%			
Construction and refurbishment of Check dams/ Water Harvesting Strcutures (Ponds)	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2	25%	0%	36%	20%	74,851	74,851	59,881	47,905	38,324	30,659	0
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges of government (per hactare)	173	30%	0%	40%	20%	114,413	114,413	91,531	73,225	58,580	46,864	0
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330	30%	0%	40%	20%	1,330,560	1,330,560	1,064,448	851,558	681,247	544,997	0
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Bajra in Fy22-23	3,578	30%	0%	44%	20%	2,012,977	2,012,977	1,610,382	1,288,305	1,030,644	824,515	0
		Improve livestock health due to vacccination	Reduction in economic losses due to major Bovine diseases in India (on an average) - Loss of milk+cost of treatment)	8,649	30%	0%	44%	20%	2,034,245	1,15,84,	1,627,396	1,301,917	1,041,533	833,227	0
Trainings/ Workshops/ Demonstrations/ Organic farming/ soil health testing	Increased agriculture production due to enhanced agriculture practice through trainings, demonstratio	Adoption of improved agriculture practices such as usgae of micro nutirnts and organic farmig (% of members indicating	training	5,000	30%	0%	44%	33%	7,056,000	7,056,000	4,704,235	3,136,314	0	0	0

Outputs	Outcomes Outcome description	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0 Discount rate	Year 1	Year 2 4.00%	Year 3	Year 4	Year 5
	ns and water conservation & management	adoption of improved agriculture practices)													
Awareness campaign for community members	Increased awareness on water conservation & management	Increased knowledge on water conservation & management	Cost of online course on water management (https://www.udemy.com/course/water-management/)	500	30%	0%	54%	33%	1,932,000	1,932,000	1,288,064	858,753	0	0	0
Awareness campaign to school students	Increased awareness on water conservation & management	Increased knowledge on water conservation & management	Cost of online course on water management (https://www.udemy.com/course/water-management/)	500	30%	0%	54%	33%	1,932,000	1,932,000	1,288,064	858,753	0	0	0
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees through VI and traiing for water management (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5,000	30%	0%	30%	33%	29,400	29,400	19,601	13,068	0	0	0
										0	0	0	0	0	0

4.4 SROI Results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2027) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2023 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:

Net present value of social value created	SRoI value
3,84,23,066.91	1.79
Net present value of total Investment	**SRoI Ratio**
2,14,18,805	1:1.79

For every INR 1 invested, the programme has generated social impact of INR 1.79

Sensitivity Analysis:

Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between **INR 1.61 and INR 2.46.**

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	1.79 Max = 2.46 Min = 1.61	Deadweight is 20%	2.44	No significant change
			Deadweight is 35%	2.27	
1	Displacement		Displacement 0%	2.36	No significant change
			Displacement is 5%	2.3	

3	Attribution		Attribution is 25%	2.46	No significant change
			Attribution is 59%	2.25	
4	Drop-off		Drop-off is 20%	1.95	No significant change
			Drop-off is 33%	1.61	

6.4 Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

Annexures

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Tamil Nadu- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Training cost-eQuest - Quality Council of India	5000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00

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[iv] https://www.adriindia.org/adri/india_water_facts

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[vi] https://admin.indiawaterportal.org/sites/default/files/iwp2/karnataka_state_water_policy_kja_recommendation_2019.pdf

[vii] https://admin.indiawaterportal.org/sites/default/files/iwp2/karnataka_state_water_policy_kja_recommendation_2019.pdf

[viii] https://admin.indiawaterportal.org/sites/default/files/iwp2/karnataka_state_water_policy_kja_recommendation_2019.pdf

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[xii] https://www.dairyknowledge.in/sites/default/files/book/fbook/Dairying-in-Karnataka/files/assets/common/downloads/page0123.pdf

[xiii] https://www.dairyknowledge.in/sites/default/files/book/fbook/Dairying-in-Karnataka/files/assets/common/downloads/page0123.pdf

[xiv] India-WRIS (indiawris.gov.in)

[xv] Schedule-VII.pdf (icai.org)

[xvi] Ministry of Jal Shakti

[xvii] Press Information Bureau (pib.gov.in)

[xviii] pib.gov.in/PressReleaseIframePage.aspx?PRID=1705798#:~:text=Ministry of Jal Shakti is taking up a,areas of all the districts in the country.

Impact Assessment of Water Resource Development Project- Sriperumbudur and Cuddalore, Tamil Nadu

Asian Paint Limited

February 2025

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

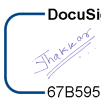
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

67B595C3ADEC43E...

Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

CONTENT

DISCLAIMER AND NOTICE TO READERS

- This report has been prepared exclusively for the Asian Paint Limited ("Client") following the terms of the Engagement letter/agreement dated 6th November 2024 between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is it to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent, as per terms of business agreed under the Contract.
- Our report shall be prepared solely for APL. KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our Client, to the extent agreed in the Agreement.
- Impact assessment is limited to the projects allocated by APL
- OECD-DAC and SROI frameworks have been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.
- Procedures, analysis and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.
- Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.
- Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.
- We shall not perform an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.
- Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with [Client] team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.
- In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

ABBRIVATIONS

ANMs	Auxiliary Nurse Midwives
APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

01

Executive Summary

EXECUTIVE SUMMARY

The philosophy of transformation has been in DNA of Asian Paints Limited and reinventing the industry has been in its nature. The same philosophy of transforming lives has been driving the CSR efforts concentrating on holistic and sustainable development of the community. The company believes in fostering relationship of trusts with the communities around the vicinity of plants and people in the unorganized sector. Under the umbrella of inclusive development, the initiatives focus on sectors of health & hygiene, water conservation, skill development and disaster management.

According to UN World Water Development Report (2022), India is the largest groundwater user globally. Approximately 45% of total irrigation and 80% of domestic water needs are met by groundwater. the unsustainable extraction practices over decades have thus led to overexploitation and water scarcity. In such challenging landscape, water harvesting and conservation under the umbrella of watershed management became need of the hour. Asian Paints engaged in holistic approach through their program "Water resource development" in Sriperumbudur and Cuddalore blocks of Tamil Nadu, which addresses not only water scarcity but also soil conservation and natural resource management for ensuring a sustainable and resilient water future for the country.

The main objectives of the impact study are to assess the impact of water stewardship activities with focus on the access and availability of surface and ground water, potable water, farmer`s livelihood, land and agriculture practices, and governance. The study covered mix-methods approach consisting of quantitative and qualitative research methodology using primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of SROI framework and OECD-DAC framework. A total of 200 respondents from nine villages were interacted for data collection in Sriperumbudur and Cuddalore blocks of Tamil Nadu including farmers, community members, and PRI members.

More than half of the respondents were between 41-60 age group and have formal education till class tenth. The sample covered respondents from economically weaker background (income ranging from 25 to 27 thousand), small to marginal farmers and primary source of income being agriculture. This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2021-22. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by APL for the water resource development programme, INR 4.82 and INR 2.82 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries in Sriperumbudur and Cuddalore, respectively.

1 Relevance

- 80% of respondent indicated challenges they faced before the intervention was scarcity of water for their agriculture use
- 24% of beneficiary shared that they did not have adequate access to water for agriculture before the intervention

2 Effectiveness

- Sriperumbudur with 100% and Cuddlore 72% improved water availability more than four months post monsoon
- Sriperumbudur 95% and Cuddlore 96% water availability in well due to GW recharge
- All beneficiaries are aware of the sustainable agriculture practices.

3 Impact

- Impact on water- Sriperumbudur 76% and Cuddlore 74% rated improved water availability and accessibility
- Impact on agriculture- 100% improved pest management
- Impact on biodiversity- observed new or reemergence of new species around the water bodies due to the increased availability of water

4 Coherence

- Directly convergence with ' Jal Shakti Abhiyan' and Catch the rain' campaign by the Ministry of Jal Shakti
- The programme has direct contribution to SDGs

5 Efficiency

- The programme has completed on schedule and within the proposed budget.
- No dublication or overlap of actviities was observed with any othe programme on-ground and collaborated by respondents

6 Sustainability

- 100% respondents rated overall experience in water for livelihood project in bringing about the positive change in their quality of life
- 100% respondent rate the support provided under the project
- Improved governance system for water resporce management

02

Introduction

1 INTRODUCTION

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 2050. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources[i]. According to FAO's Aqua-stat reports[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007)[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

About the study

To strategize and plan their water stewardship projects, Asian Paints Ltd. empanelled KPMG to facilitate impact assessment of the following project:

Water resource development projects: Water resource development project has been initiated by Asian paints Ltd at Sriperumbudur and Cuddalore (Tamil Nadu). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the below immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility,

	availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

About The Projects

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints

aims to make a positive impact on both its operations and the communities it serves. The following projects under Water Stewardship have been selected for the impact assessment:

WATER RESOURCE DEVELOPMENT

Water resource development projects have been initiated by Asian paints Ltd at Sriperumbudur and Cuddalore (Tamil Nadu). These interventions are specifically targeted towards water resource management in alignment with the improved agriculture practices.

Objectives of project:

Rejuvenation of Water Bodies:

- To increase water storage capacity and recharge through revival of traditional water bodies and construction of water harvesting structures so that to enhance irrigation and drinking water availability.
- To promote farm-based livelihood through demonstration of improved agricultural practices like Integrated pest management, crop diversification, soil testing, agroforestry, agro-horticultural, Azola production, Vermi composting, organic farming, and others etc.
- To create awareness, education among the community on judicious utilization of water resources and collective actions.

Implementing Partners

The National Agro Foundation (NAF), established in 2000 by Mr. C. Subramaniam, a prominent figure in India's Green Revolution and recipient of the Bharat Ratna Award, is a Public Charitable Trust with a vision to catalyze a rural revolution focused on agriculture and small and marginal farmers. Anchored in the principles of inclusive growth, NAF operates with a "Soil to Market" approach, building on Mr. Subramaniam's pioneering "Seed to Grain" philosophy from the Green Revolution era. Over the years, NAF has transitioned from modest beginnings to a dynamic and professional organization, delivering cutting-edge services that have made a substantial impact on rural communities. Collaborating with the government, corporate entities, and other stakeholders, NAF has implemented core programs addressing local and global challenges in agriculture and rural development. Its approach includes tailored training programs, capacity development initiatives, and the integration of new modalities and technologies. With dedicated research and development efforts, NAF has reached over 220,000 farmers in 830+ villages across 15 states in India, demonstrating a commitment to positive change and sustainable development in the agricultural sector. NAF's collaborative efforts extend to partnerships with various government and non-government organizations, educational and research institutes, financial institutions, and corporate entities.

In collaboration with APL, NAF is actively engaged in the implementation of CSR projects centered around water resource development in the states of Haryana, Uttar Pradesh, Karnataka, and Tamil Nadu. This strategic partnership underscores a shared commitment to fostering the rejuvenation of water bodies, amplifying livelihood opportunities for farmers, and effectively managing natural

resources. Within this collaborative framework, NAF assumes the responsibility of executing the specified activities, ensuring their timely completion, adherence to budgetary constraints, and achievement of anticipated outcomes. Simultaneously, APL extends crucial technical and financial support to NAF, facilitating the realization of project objectives and the establishment of a sustainable and inclusive development model. This cooperative effort aims to deliver tangible benefits to marginalized communities while addressing critical issues related to water resources and rural livelihoods.

Project Geographies

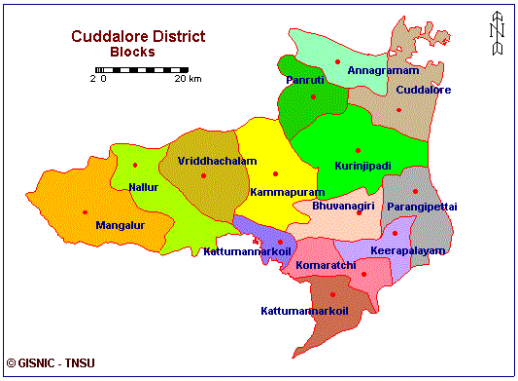
The impact assessment will cover the following states where the projects were implemented: inTamil Nadu.

A brief description of the following project locations has been presented below:

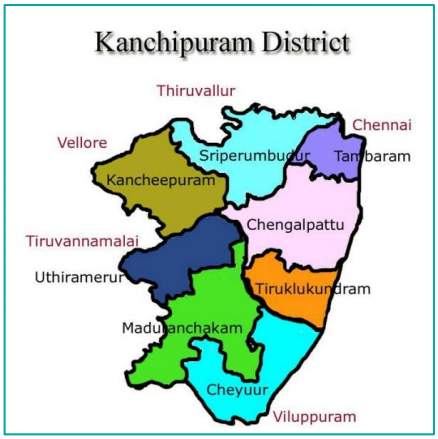
Sriperumbudur and Cuddalore, Tamil Nadu

Tamil Nadu, the eleventh-largest state in India, faces significant water challenges exacerbated by its heavy reliance on monsoons. The state experiences a tropical climate with temperatures ranging from 18°C in winter to 43°C in summer. Its average annual rainfall of 925 mm, sourced from both the northeast and southwest monsoons, falls short of the national average (1,170 mm)[v]. With a population of 72,147,030 and an economy ranking second in India, the state grapples with acute water scarcity and drought due to unpredictable monsoon patterns[vi]. The current water deficit exceeds 11%, expected to worsen in the future[vii]. Covering 4% of India's total area, it houses 7% of the population but possesses only 3% of the country's water resources[viii]. Water scarcity compels Tamil Nadu to seek solutions such as water reuse and seawater desalination. In 2025, the projected water needs for irrigation, domestic use, livestock, and industry are 52.7, 1.5, 1, and 2 billion m³, respectively[ix]. However, available surface water and groundwater are estimated at 24.6 BCM and 23 BCM, highlighting a substantial deficit. Over 90% utilization of surface water necessitates a focus on groundwater resources[x]. Despite challenges, the state ranks sixth in Indian agriculture, irrigating 3.5 MHA[xi]. The net sown area in the state stands at 4908041 ha[xii]. Rice cultivation, consuming over 45% of agricultural water, depends on canals, tanks, and groundwater[xiii]. Previously, water distribution was evenly split, but current usage stands at 30% reservoir water, 20% tank water, and 50% groundwater[xiv]. This shift in water usage can be attributed to the increasing scarcity of reservoir and tank water due to factors such as climate change and

population growth. As a result, farmers have been relying more heavily on groundwater sources to sustain rice cultivation which highlights the need for interventions to build long-term water sustainability and mitigate potential negative impacts on local ecosystems.



Cuddalore, is a district in northeastern Tamil Nadu, India, is situated on the Coromandel Coast of the Bay of Bengal. The district has a rich agricultural heritage, with the total cultivated area being 3,13,223 hectares, out of which about 1,85,925 hectares are irrigated[xv]. Of the entire cultivated land, 59% is irrigated and 41% is rainfed; the total area under cultivation is 247,582 hectares[xvi]. The main crops grown in the district are paddy Cumbu, Maize, Varagu, Blackgram, Greengram, Sugarcane, Groundnut, Gingelly and Cotton[xvii]. The district receives an average rainfall of 1206.7 mm[xviii]. Groundwater is a significant source of irrigation in Cuddalore, with 593 tanks, 270 canals, and one major reservoir serving as the main source for irrigation[xix]. The district faces various water challenges, including groundwater quality issues[xx] indicating the need for sustainable water resource management.



Sriperumbudur, a town in Kanchipuram district, Tamil Nadu, India, is known for its industrial activities, with several multinational companies having set up their manufacturing units in the region. The town and its surroundings are endowed with numerous water bodies such as the Sriperumbudur Lake, Elaneer Kulam and Perumal koil kulam, which serves as a source of water for irrigation and other purposes[xxi]. Kancheepuram district generally encounters warm and moist climatic conditions. The typical annual precipitation across the district ranges from 1105 mm to 1214mm[xxii]. According to the Kancheepuram district handbook, the cultivated land area amounts to 39,481 hectares[xxiii]. The primary crops cultivated in the vicinity include paddy, sugarcane, groundnuts, cereals, and pulses. The district excels in the production of fruits, vegetables, and flowers within the state. The key horticultural crops comprise mango, cashew, and banana. The cultivation is primarily sustained by the tanks and dug wells situated in the region.

Ground Water Resources Data (in ham) (2020) [xxiv]

Details (Value in ham)	Cuddalore District	Kancheepuram District	Sriperumbudur block, Kancheepuram
Annual Domestic and Industrial Draft	8731.22	2041.01	26.101
Annual Irrigation Draft	57970.79	21698.52	169.6
Annual Groundwater Draft (Total)	66702.01	23739.53	195.7

02

Approach & Methodology

2 APPROACH AND METHODOLOGY

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

Our Approach

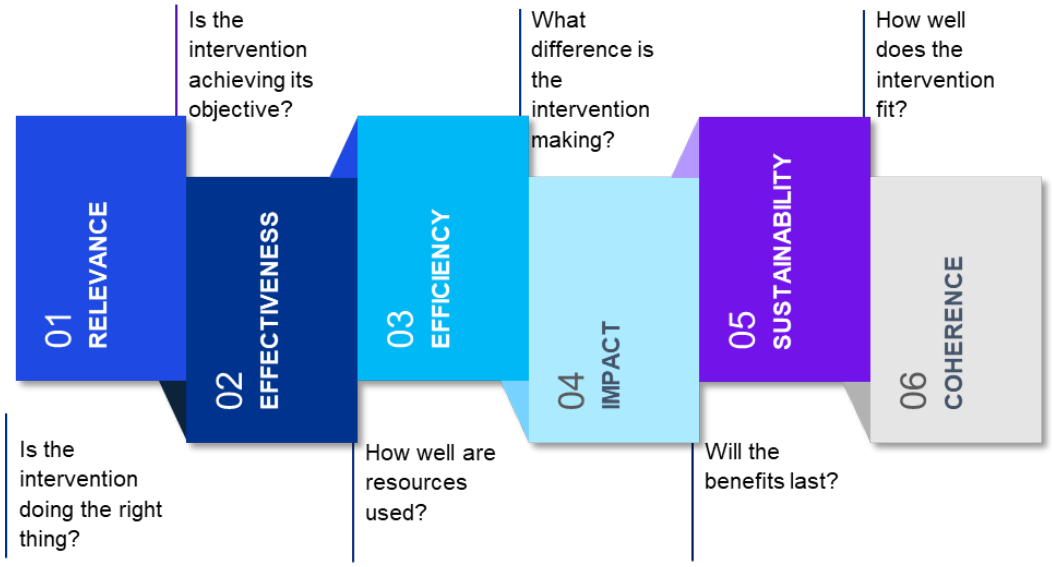
The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

2.1.1 OECD-DAC

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	*Commitments of the stakeholders are integrated into Project design and planning*
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*

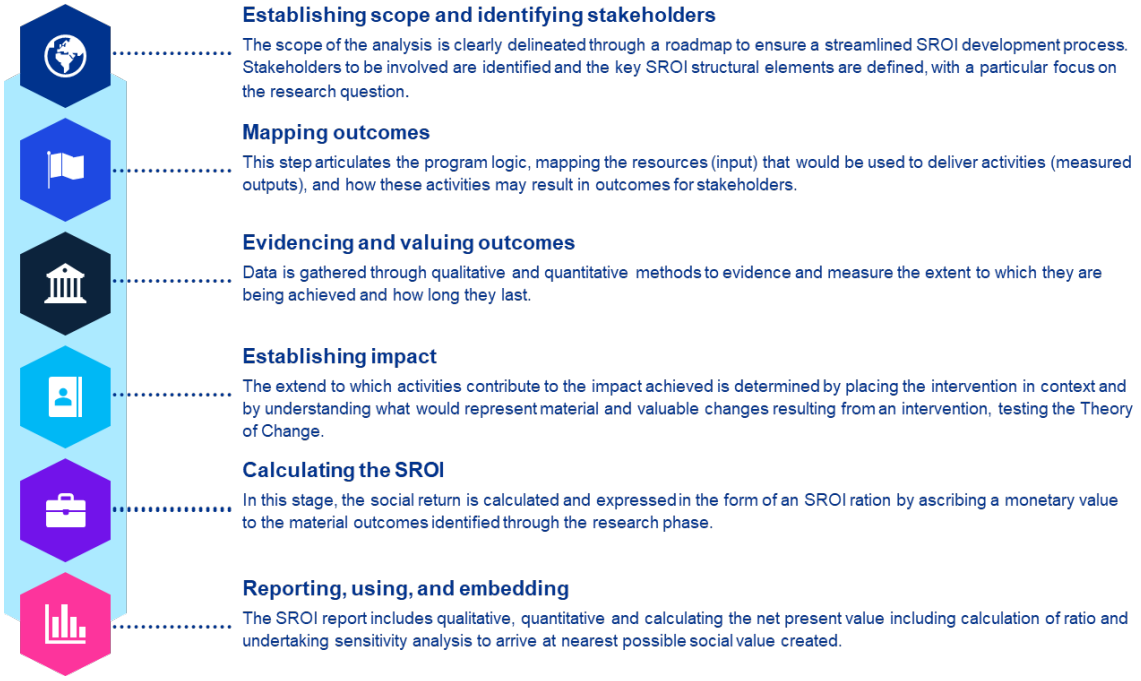
Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long-lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

2.1.2 Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to

monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –



Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last

Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

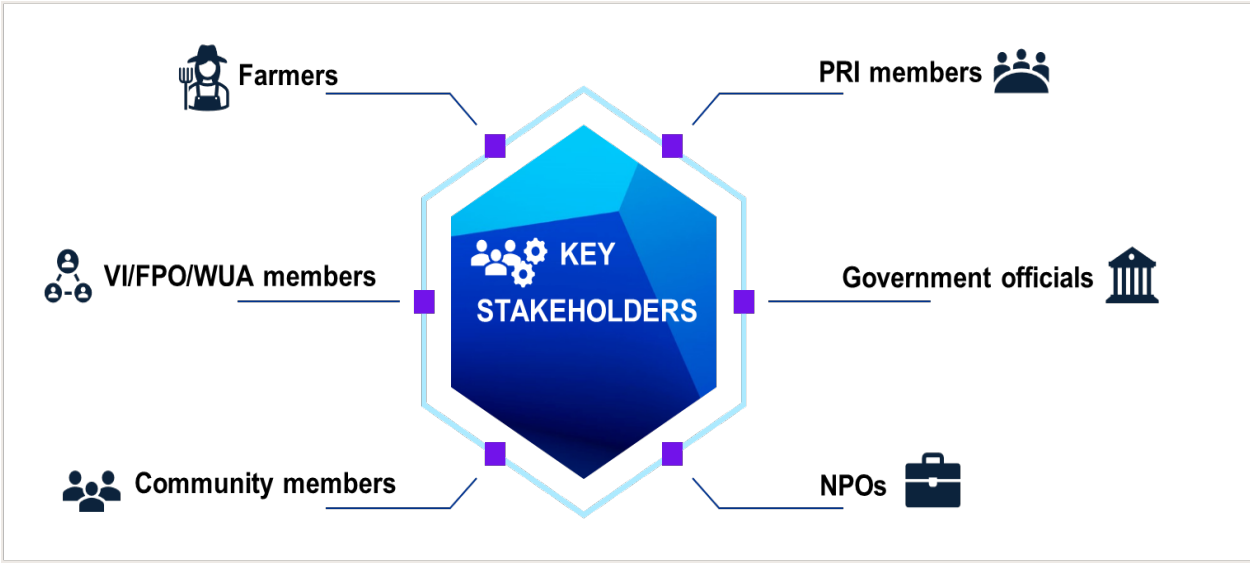
A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

Impact map for the Project:

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions

carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers			
Benefitted due to intervention	Sriperibundur-4057 Cuddalore 1300	100 100	100 100

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Impact Map

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment. To organize and strengthen the village institutions around water harvesting and related livelihoods	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices
			No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area,

					Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions
- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has facilitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

03

Analysis and Findings

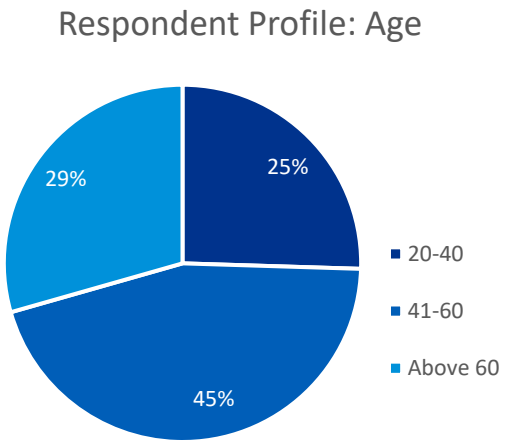
3 ANALYSIS AND FINDINGS

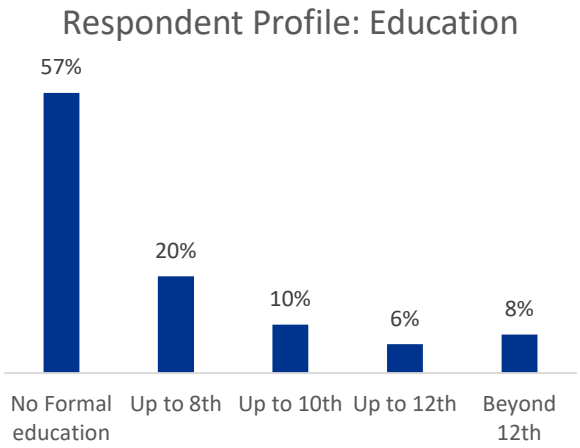
Sriperumbudur block

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water Resource Development program supported by Asian Paints Limited. across two villages Mahadevimangalam, Gunakarambakkam in Sriperumbudur block in Kanchipuram district of Tamil Nadu.

3.1.1 Demography of respondents

The respondents interviewed were largely (81 percent) from the age group of 40 to 60 years, followed by 17 percent from 25 to 40 years age group and two percent whose age is more than 60 years. In terms of education levels, majority (40 percent) of respondents had no formal education whereas 17% completed their education up to 10th standard.





Support received through project intervention:

WHS	47%
Direct irrigation from WHS	25%
water availability in well due to GW recharge	38%
improved soil moisture	29%
potable drinking water	71%
water for livestock	4%
Application of Silt from WHS	4%

Agriculture Interventions	41%
Training/Exposure visits	43%
Demonstrations	33%
Farm plantation/vegetable cultivation	43%
Water efficiency	33%

Other awareness programs	12%
Workshops	100%

The analysis of the table presented indicates that the beneficiaries of the project have received support through multiple interventions, indicating a strong emphasis on inclusivity in sample coverage. In addition to water resource management activities, the project promotes sustainable agriculture practices to enhance farm productivity through the provision of quality inputs, direct extension services, mechanization, and integration of agriculture with livestock.

The project adopts a holistic approach to ensure the sustainability of agriculture practices while improving productivity. This approach focuses on enhancing the efficient use of water resources, promoting sustainable practices, and improving the livelihoods of smallholder farmers. By addressing these key areas, the project is well-positioned to deliver meaningful impact and drive positive outcomes for the communities it serves.

Overall, the inclusive approach adopted by the project to support beneficiaries through multiple interventions represents a significant step forward in promoting sustainable agricultural development and improved livelihoods for smallholder farmers. The continued implementation of these interventions will be crucial for long-term success and progress towards sustainable development goals.

Source of income	61% of respondents shared that their primary source of income is agriculture, followed by 14% and 4% rely on non-salaried and salaried work respectively. Rest 22% respondents reported to have other activities such as labor work as their primary source of income.
HH income	Annual HH income of majority of (52%) of respondents ranges between INR 25,000 to INR 1,00,000 wherein the average annual household income being INR 30,862
Land holding size	33% of respondents reported land size ranging from 2 to 5 acres whereas 65% respondents reported to have landholding of less than 2 acres.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Gunakarambakkam	39%	4%	20%
Mahadevimangalam	27%	8%	2%

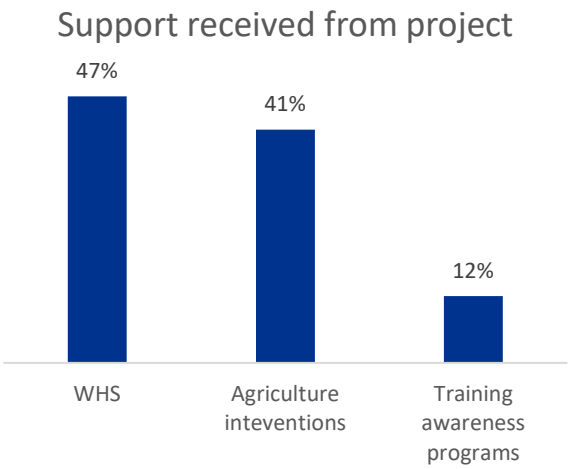
The table reveals the percentage of farmers practicing farming in Kharif, Rabi, and Zaid seasons in different villages. Gunakarambakkam has the highest percentage of farmers practicing agriculture in Kharif season, while Mahadevimangalam has the lowest percentage (2%) with less activities in Zaid season. Gunakarambakkam has lowest activities in Rabi season i.e., (4%) whereas Zaid season has been preferable for 20% respondents for practicing cultivation.

About Irrigation facility:

Village Name	Yes	No, only dependent on rains	Others
Mahadevimangalam	68%	26%	5%
Gunakarambakkam	72%	22%	6%

The table shows the percentage of villages with access to irrigation facilities and those dependent only on rainfall for farming. 72% and 68% respondents from Gunakarambakkam and Mahadevimangalam respectively reported of farmers with access to irrigation facilities, while 26&% respondents from Mahadevimangalam and 22% respondents from Gunakarambakkam has the depend only on rainfall. The data highlights the importance of irrigation facilities for agricultural activities and the need for more resources to improve infrastructure in the region for better crop yields and economic growth.

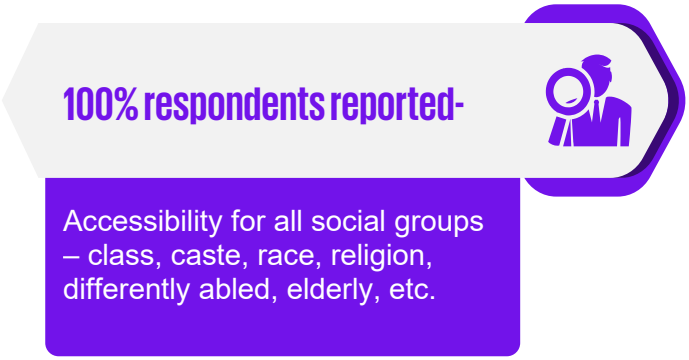
Support received from project:



The table presented indicates the percentage of beneficiaries who received support through different interventions of the project.

In accordance to the analysis 41% respondents reported that agriculture intervention support was provided in Mahadevi Mangalam and Gunakarambakkam villages, whereas 47% respondents reported to get support of WHS activities in both the villages. Whereas 12% respondents reported of receiving training awareness program as a support from the intervention.

About Accessibility of the project across all community groups:



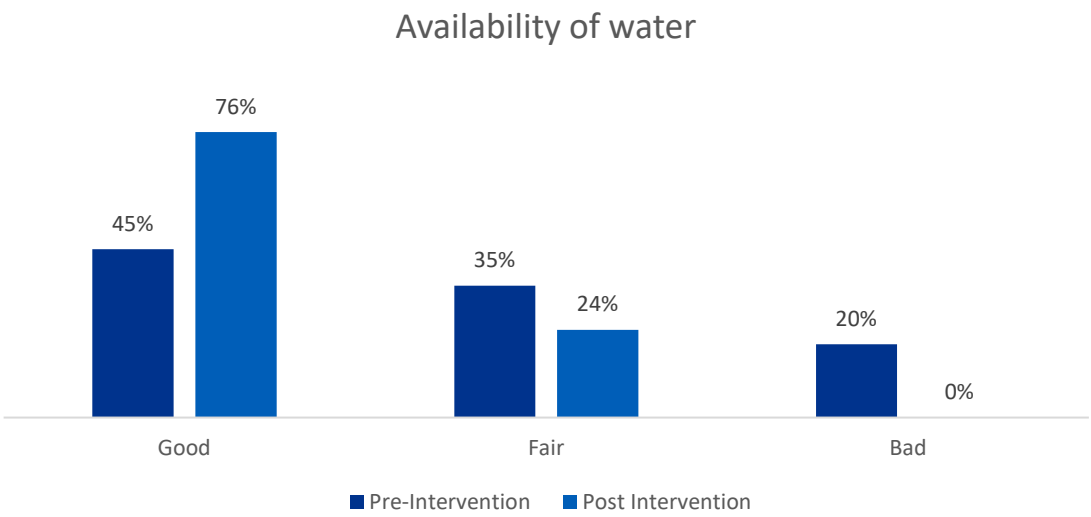
Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrates the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

Support for Water Harvesting Structures.

As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that 100% of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents stated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial in ensuring the successful implementation and sustainability of the project.

3.1.2 Impact on availability and accessibility of water



The graph illustrates respondents' ratings of water availability before and after the project's implementation. The ratings are divided into three categories: Good, Fair, and Bad. The analysis clearly shows that the project has greatly enhanced water availability in the area.

Prior to the project's implementation, only 45% of respondents rated water availability as 'good,' 35% rated it as 'fair,' and 20% rated it as 'bad.' This highlights the disparities in water availability before the project, with many beneficiaries experiencing water scarcity issues.

After the project's interventions, the ratings improved significantly, with 76% of respondents rating water availability as 'good,' 24% rating it as 'fair,' and none rating it as 'bad.' These findings underscore the project's positive impact on water availability, resulting in better access to water resources, improved irrigation, and increased agricultural productivity.

100%

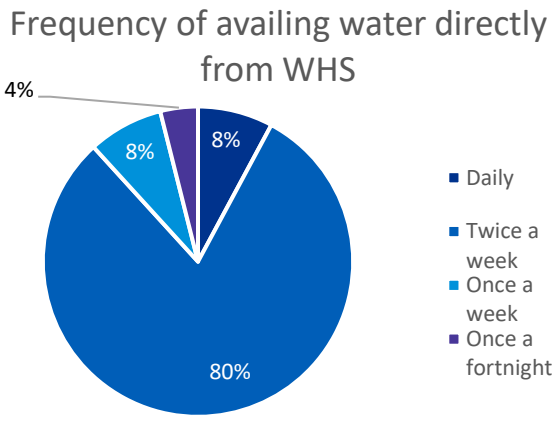
Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

92% Of respondents reported that intervention resulted in increased water availability in your well/borewell

100% Of respondents reported that the duration of improved water availability more than four months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income generation. Above responses show the effectiveness of the project in improving water resource management in the region.



The data indicates that the majority of respondents (47%) avail water twice a week. 26% of the respondents access water from WHS once daily and weekly each, respectively. The results demonstrate that WHS has been effective in providing beneficiaries with a reliable and stable supply of water for their daily needs. Overall, the outcomes of the analysis showcase the positive impact of the project interventions in improving water access.

3.1.3 Improved water level

Season	Intervention	Depth of water in well/ borewell (Ft)	Delta Change (Ft)
Monsoon	Pre intervention	145	85
	Post intervention	60	
Winter	Pre intervention	180	95
	Post intervention	85	
Summer	Pre intervention	197	98
	Post intervention	99	

The chart illustrates the influence of project initiatives on the depth of water in wells and borewells during various seasons. The information indicates beneficial effects, with increases in water availability throughout all seasons, which results in higher levels of the groundwater table and improved agricultural output.

The success of these initiatives is apparent from the notable delta changes, most significantly in the summer season by 98 feet, followed by the winter season at 95 feet, and the monsoon season recording a change of 85 feet. In summary, the findings underscore the significance of adopting sustainable practices for water management through the project, which ensures improved access to water resources. In the course of evaluating the project, the participants noted advantageous impacts arising from the rejuvenation of ponds to boost surface water resources. The statistics reveal that all surveyed participants noted enhanced conditions in surface water availability, with every respondent affirming availability of surface water during the summer. The enhanced access

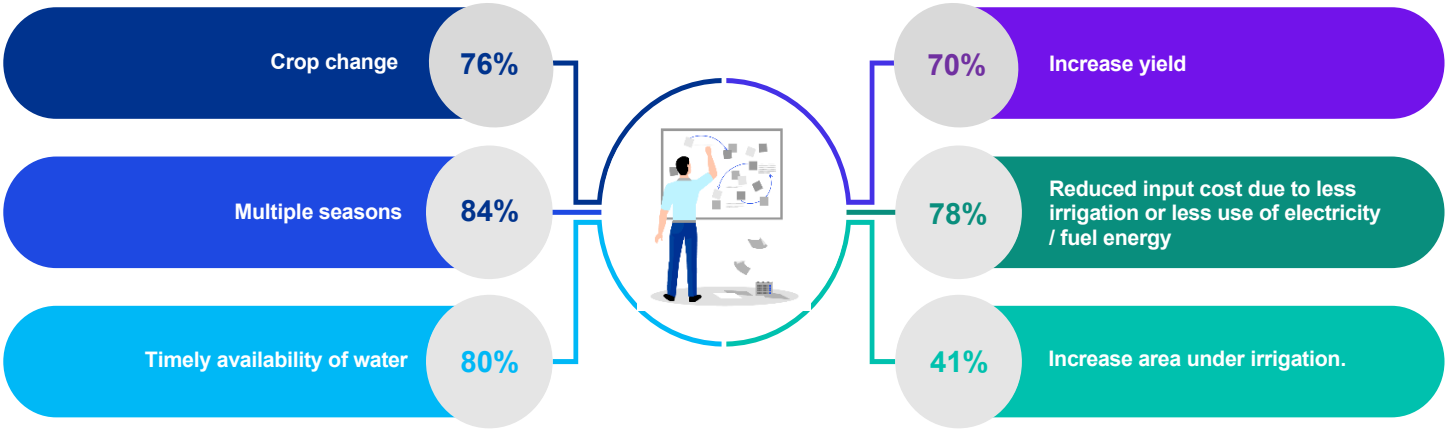
to surface water has been linked to substantial advantages for both livestock and household purposes, resulting in favorable socio-economic impacts.

> **The village women faced challenges in fetching water before the project interventions. The severity increased during water scarcity, making it difficult for livestock. After pond rejuvenation activities, the community experienced access to clean water, significantly improving the quality of life for villagers and their livestock.**
>
> ***- Farmer beneficiary from Chikada village***

3.1.4 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

3.1.5 Impact on agriculture practices

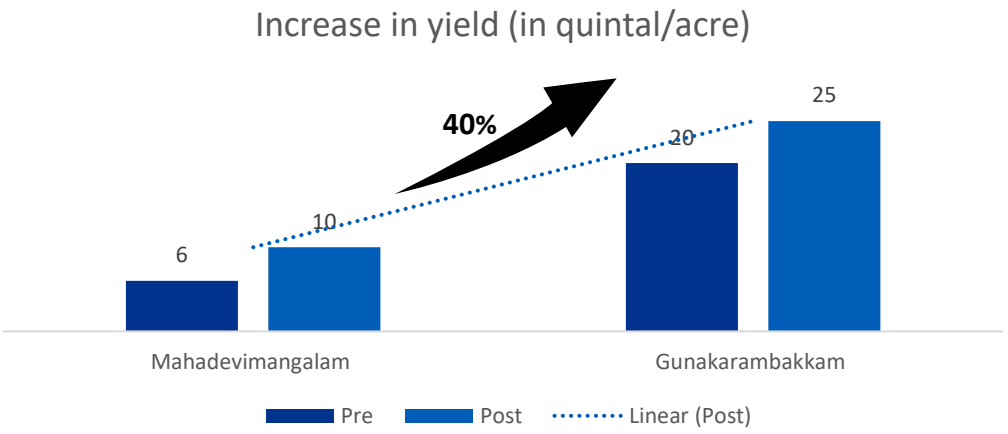


Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity, reduced input costs, and timely access to water resources. These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.

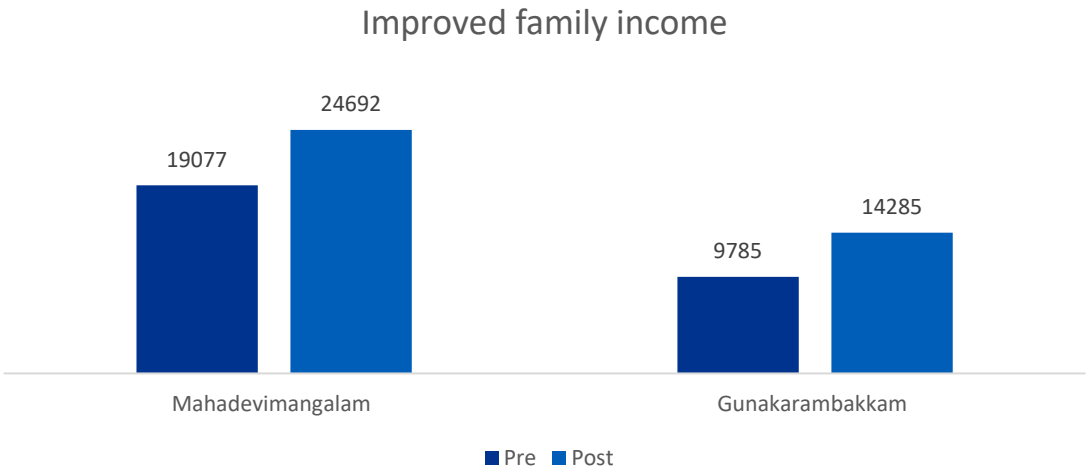
3.1.6 Increase in yield

The graph provided shows the impact of water availability and improved access on farming practices in the specified villages.



The data depicts a significant improvement in crop productivity after the interventions, with all villages showing an increase in yield. The delta change highlights a considerable difference between the pre- and post-intervention period. The analysis reveals that all villages experienced an increase in yield, with the most significant difference observed in both Mahadevimangalam and Gunakarambakkam villages, with a 1667 and 5 quintal/acre delta change, respectively.

3.1.7 Impact family income



The graph illustrates the effect of project interventions on the family income in the intervention villages. The data reveals a substantial rise in the average family income by 35 percent, increasing from Rs 14,259 per year to Rs 19,296 per year after the interventions, showcasing the overall positive impact of the project's targeted measures.

The data analysis indicates that every village saw an increase in family income post-interventions. Mahadevimangalam village recorded the highest change in family income, with an increase of approximately Rs 5,615 per year. Gunakarambakkam village also showed a significant rise, with a family income increase of Rs 4,500 per year.

3.1.8 Impact on livestock

35%

Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.

29%

Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

INR 4,909

Improved family income

The income generated through livestock business resulted in an average increment of INR 4,909 in the beneficiaries' annual family income.

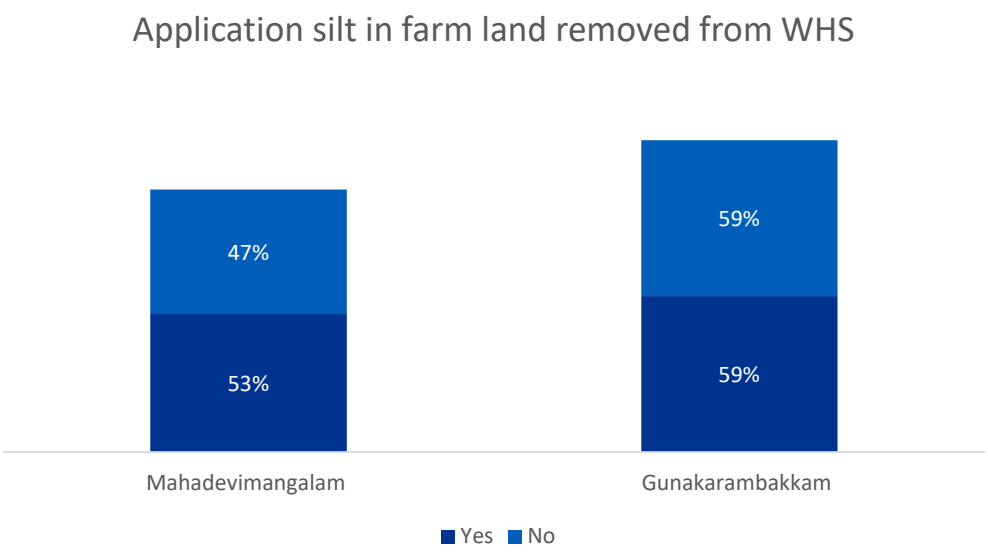
The data presented suggests that the WHS has positively impacted livestock management practices. The increase in productivity, coupled with the addition of additional livestock in response to improved income generation, underscores the significant impact of the WHS. The qualitative survey responses showing the quantifiable impact on family income indicate that the WHS has provided a reliable and stable supply of water, enabling efficient livestock management practices, leading to enhanced livelihoods and socio-economic outcomes for the beneficiaries.

3.1.9 Impact on personal life

The initiative of the project has yielded numerous favorable effects that have greatly influenced personal living situations. Feedback from those who benefited indicates that the WHS has facilitated time savings and a notable decrease in manual labor. Additionally, the information gathered shows enhanced health results, with 57% of participants emphasizing the effects on their bodily health. These results prove that the WHS has lightened the load of collecting water and has allowed beneficiaries to pay more attention to their personal endeavors. The dependable and quick water access has lessened the need for physical toil, bettered personal health, and heightened the general quality of life. Therefore, the project initiatives have fostered improved socio-economic results and elevated the overall wellness of those affected.

3.1.10 Silt application on agriculture land

The application of silt on agricultural land has several benefits in promoting sustainable agriculture and improving soil fertility. Silt, which is a natural byproduct of water management activities like the WHS system, is rich in nutrients and minerals that enrich the soil quality. The use of silt in agriculture improves soil texture, water retention, and soil fertility, promoting better plant growth and crop yields.



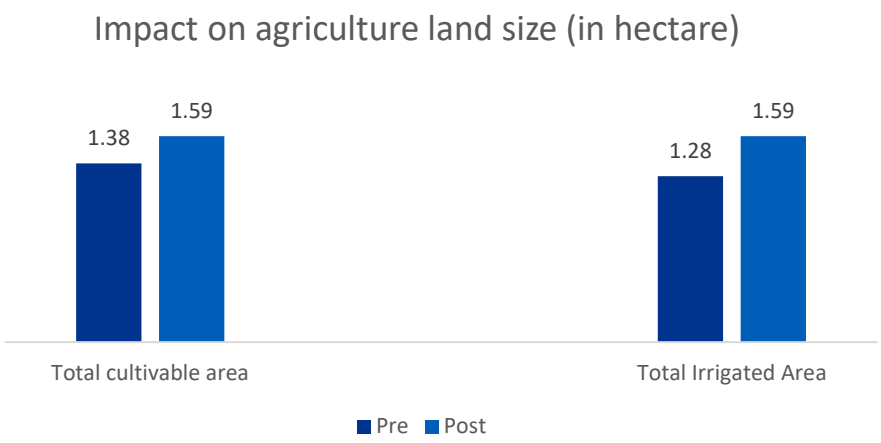
In During conversations with recipients from the two villages, Mahadevimangalam and Gunakarambakkam, 53% and 59% of those surveyed, respectively, shared that they used the silt produced from the WHS structure for their farmlands with assistance from the implementation agency. The beneficiaries noted positive effects such as better soil condition and increased soil output, which led to improved agricultural yields and greater water holding ability. This feedback highlights the importance of fostering sustainable agricultural methods and the promotion of important materials like silt from the WHS structure for sustainable development in that area.

All participants (43%) observed enhancements in soil quality, which led to a decreased reliance on chemical additives. The collected responses additionally reflected (57%) success in boosting productivity and diminishing the frequency of irrigation required by all those involved. The results show that the incorporation of silt into farming methods has supplied vital nutrients to the soil, supported environmentally friendly practices, and consequently reduced the dependency on synthetic fertilizers.

Agriculture and Livelihood

3.1.11 Impact on agriculture land

Through discussion with respondents, it was reported that the increase in average total net sown area from 1.36 hectare to 1.66-hectare post-intervention. This suggests that the project interventions have yielded positive outcomes on agriculture and water resource management practices. The increase in net sown area reaffirms the efficiency of the WHS interventions in promoting sustainable water management practices and enhancing agricultural productivity in the project area. This can be explained further through below graph-



The rise in the total cultivable are from 1.38 hectare to 1.59 hectare (15% of improvement)and the increase in the total irrigated area from 1.28 hectares to 1.59 hectares (24% of improvement) after the intervention demonstrate a positive effect of the project interventions on agricultural productivity. The findings imply that the interventions have helped to boost the agricultural potential of the project area through better water resource management and sustainable practices.

It is crucial to distinguish between cultivable area and irrigated area. Cultivable area refers to the total land suitable for cultivation, while irrigated area denotes the land that receives water through artificial means, such as water pumps, canals, or other irrigation systems. Many beneficiaries were supported for drip irrigation through the project intervention, leading to a potential average increase in the total irrigated area.

The village wise details-

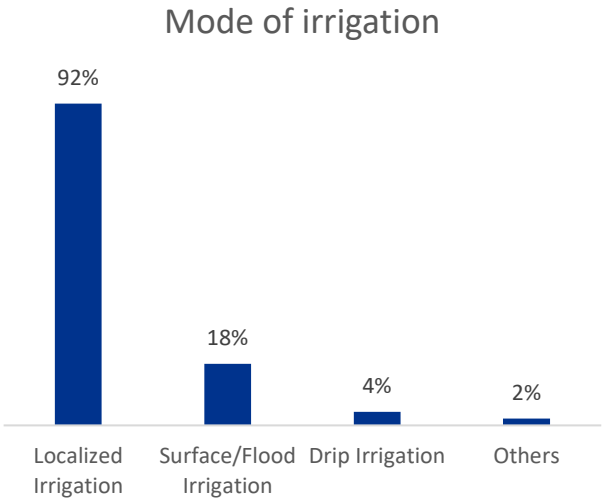
	Total cultivable area		Total Irrigated Area	
Village name	**Pre-intervention**	**Post intervention**	**Pre-intervention**	**Post intervention**
Mahadevimangalam	1.40	1.54	1.32	1.54
Gunakarambakkam	1.36	1.66	1.21	1.66

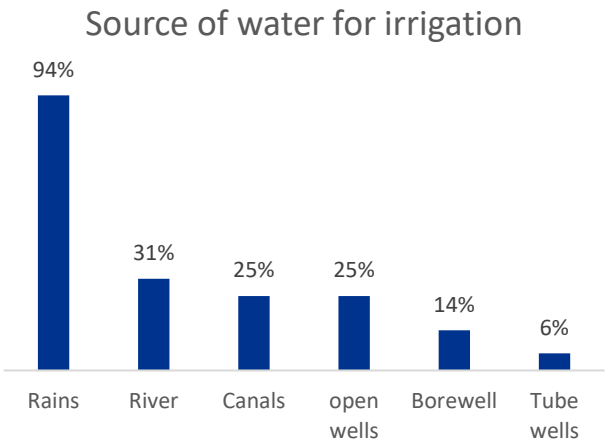
Grand Total	**2.76**	**3.2**	**2.53**	**3.2**

The village-level analysis indicates variable outcomes across villages. Mahadevimangalam and Gunakarambakkam report an increase in both total cultivable area and total irrigated area.

3.1.12 Mode of irrigation

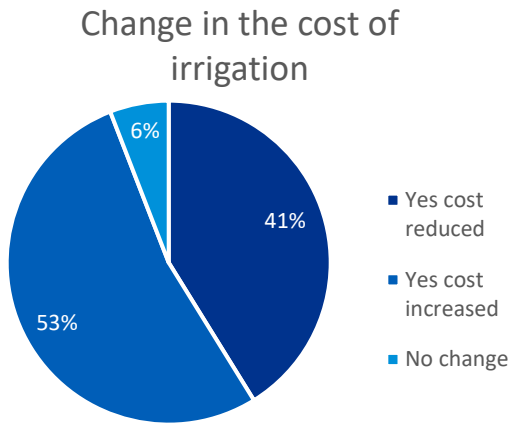
The allocation of irrigation techniques within the project vicinity shows that localized irrigation is the predominant method used, succeeded by drip irrigation, surface/flood irrigation, and additional techniques. The information underscores a transition towards localized and drip irrigation, methods that are more efficient and environmentally sustainable when compared to traditional irrigation approaches such as surface/flood irrigation. The findings indicate that the agricultural initiatives have produced favorable effects on irrigation methods in the project region, motivating recipients to embrace sustainable and effective irrigation strategies.





The chart highlights the different sources of water for irrigation practices in the project area, indicating that the majority of the respondents rely on rivers for irrigation purposes (31%). Borewells and open wells account for 14% and 25% of the sources of water for irrigation respectively, while rainwater accounts for only 94% of the sources. The results emphasize the significance of proper management of water resources, particularly in arid and semi-arid regions such as the project area.

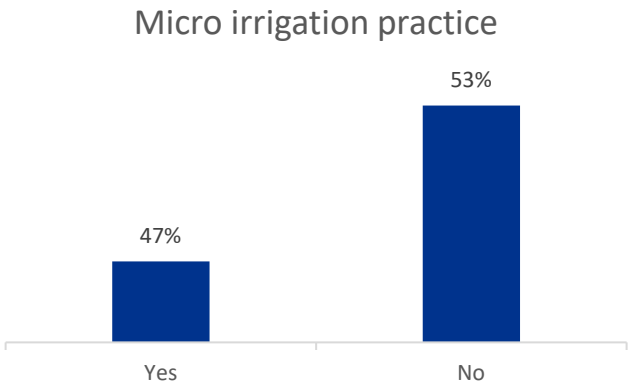
3.1.13 Cost of irrigation



Based on conversations with project beneficiaries, only 52% of respondents indicated an increase in irrigation costs, while 41% reported a decrease. The beneficiaries attributed the rise in costs to higher expenses for chemical fertilizers and pesticides, compounded by increased market rates for these inputs. The project included training on non-pesticide management (NPM) techniques and organic farming demonstrations. Despite this, respondents mentioned that they only use organic and NPM techniques on the land intended for personal consumption, continuing to use chemical fertilizers on the rest. They noted that organic farming yields are lower compared to chemical methods and that there is no demand for organic produce in local markets. This reluctance to fully adopt organic farming hinders the effective implementation of sustainable agricultural practices.

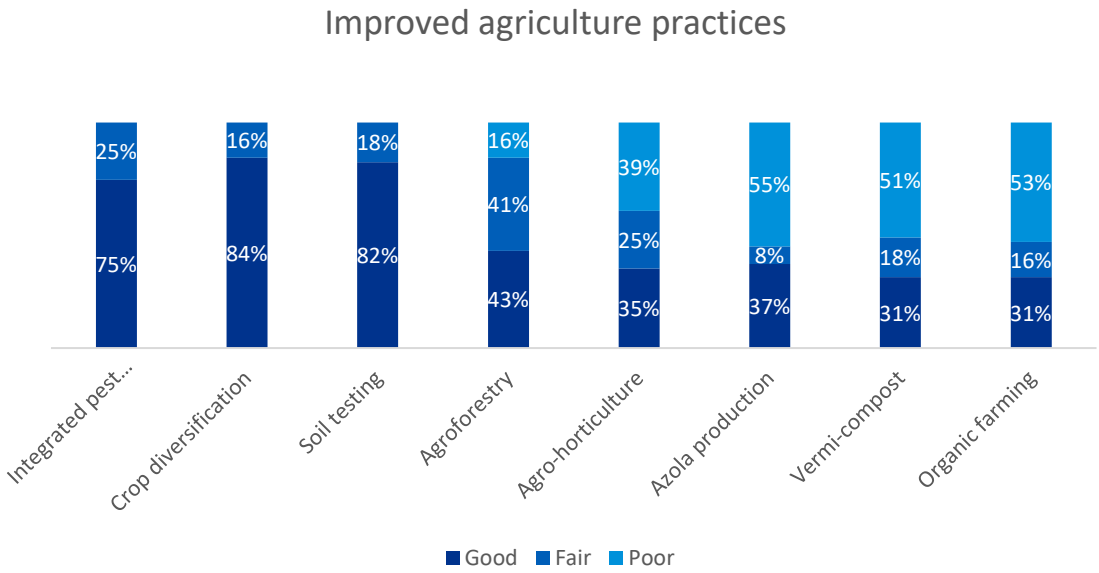
	Average cost (INR)	Delta change
Cost of irrigation pre-project intervention	9,889	4,111 (41%)
Cost of irrigation pre-project intervention	14,000	

3.1.14 Micro irrigation



The chart above illustrates the percentage of project beneficiaries who have adopted efficient water use for irrigation via micro-irrigation techniques. According to the data, 47% of participants are practicing efficient water usage, while 53% are not yet doing so but have shown a willingness to start and have requested additional support from the implementation partner. These responses indicate that nearly half of the respondents need further assistance to effectively adopt micro-irrigation techniques. Although the project interventions may have already achieved some positive outcomes in promoting sustainable water resource management practices, ongoing support is necessary to ensure the broad adoption of efficient irrigation practices.

3.1.15 Understanding on improved agriculture practices



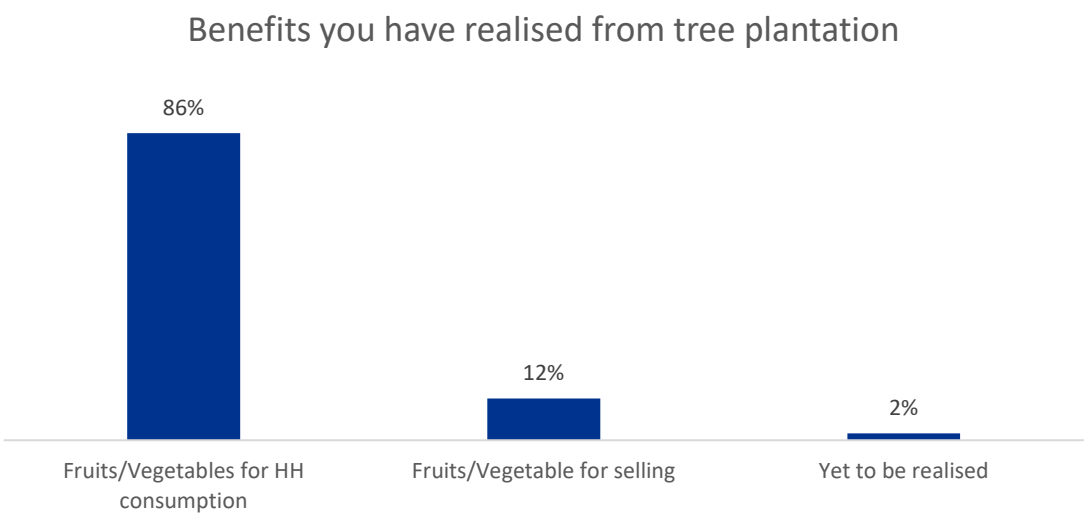
The graph indicates the rating given by project beneficiaries for their understanding of various improved agricultural practices, including integrated pest management, crop diversification, soil testing, agroforestry, Agro-horticulture, vermicompost, and organic farming. The majority of the respondents rated their understanding of integrated pest management, crop diversification, and soil testing as good, indicating that these practices have been well-received and understood by the beneficiaries.

The rating for Agro-forestry was somewhat mixed, with approximately more than of the respondents rating their understanding as good, and the remainder rating it as fair or poor. The relatively low rating for organic-farming suggests that further educational efforts and awareness building may be necessary to promote the adoption of organic-farming as a measure of improving the quality of the produce.

Moreover, the rating for Vermi-compost and Azola production practices indicates the need for greater awareness building and knowledge dissemination to promote and encourage the widespread adoption of these practices. While it is encouraging to note that some of the respondents considered their understanding good for Agro-horticulture, a significant proportion rated their understanding as fair or poor.

3.1.16 Tree plantation

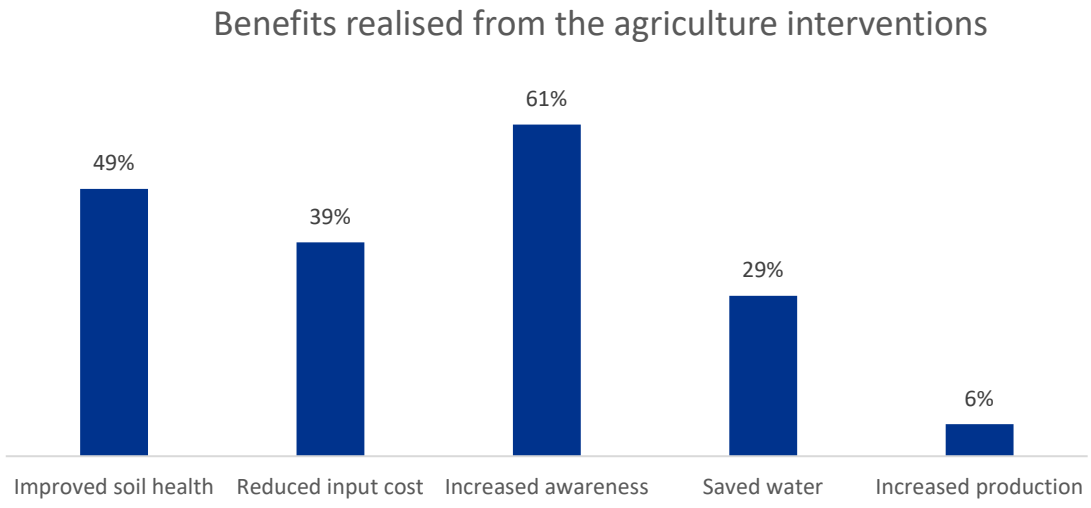
86% of respondents indicated their participation in the tree plantation intervention carried out through the project. This intervention involved the implementation partner distributing seeds and saplings for various trees and vegetables to the beneficiaries, including mango, lemon, chiku, and guava. The aim of this activity was to boost farmers' income levels and enhance food security.



The graph shows the percentage of project beneficiaries who have adopted improved agricultural practices for household consumption, selling, or have yet to see the benefits. The results reveal that 86% of respondents have implemented these practices for household consumption, 12% have been cultivating for selling purposes, and 2% have not yet realized the benefits of the interventions.

In summary, the chart's results demonstrate that the project interventions have positively impacted the promotion of sustainable agricultural practices among the beneficiaries.

3.1.17 Benefit realized from agriculture intervention



The graph above illustrates the benefits derived from the agricultural interventions and the number of beneficiaries who reported these benefits. The findings show that the interventions achieved a

61% success rate in raising awareness, 29% in water conservation, and only 6% in boosting production.

Additionally, nearly half of the respondents (49%) noted improved soil health, suggesting that the project interventions had a positive and lasting impact on soil quality. Enhanced soil health is crucial for increasing agricultural productivity, ensuring food security, and protecting the environment.

However, only a small percentage of beneficiaries (39%) reported reduced input costs, indicating a need for further interventions to lower agricultural input costs and make resources more affordable. Despite this, the high success rate in other areas underscores the significant potential of promoting sustainable agricultural practices in the region.

In summary, the project interventions have allowed communities to experience various benefits, greatly enhancing their socio-economic well-being.

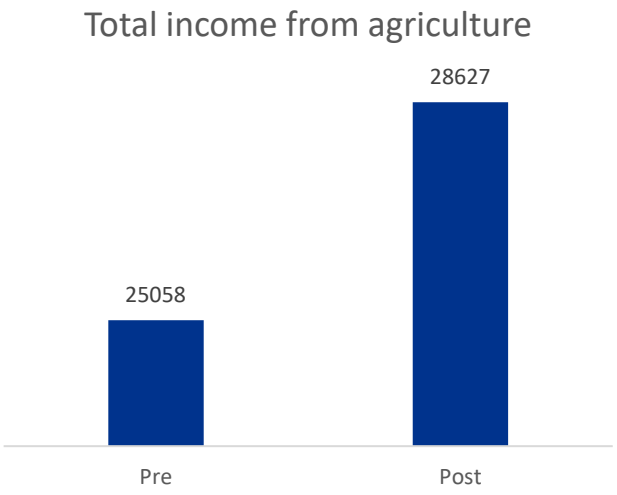
3.1.18 Impact on cost and produce from agriculture practice

Discussions with project beneficiaries revealed that 74% of respondents have successfully reduced their input costs, while the remaining 26% have not. Lowering input costs is crucial for enhancing the efficiency and sustainability of agricultural practices, as well as increasing the beneficiaries' profitability. The relatively low percentage of respondents who have managed to reduce their input costs may suggest obstacles such as reliance on chemical pesticides.

These findings highlight the necessity for additional interventions that encourage the adoption of cost-effective and sustainable agricultural practices. By implementing such measures, beneficiaries can lower their input costs, boost their yields, and improve their financial well-being.

3.1.18.1 Agriculture income

The graph illustrates the total income from agriculture, the average income, and the change before and after the interventions. The data shows that the total income from agriculture has risen by nearly 14% post-intervention, from 25,058 to 28,627.



This substantial increase in income highlights the significant impact of the agricultural interventions on the beneficiaries' financial well-being. The interventions have greatly improved productivity and yield, resulting in higher economic returns. In summary, the rise in total income for the beneficiaries following the project interventions demonstrates the success of these agricultural interventions in boosting productivity and yield.

3.1.19 Case Study: Transforming Lives through the Water Resource Development Project in Kanchipuram, Tamil Nadu

Venkatesh Ramana is a resident of one of the villages in Sriperumbudur block of Kanchipuram district. He had five acres of agricultural land, but it was rain-fed, which made it difficult for him to cultivate throughout the year. During the off-cultivation season, he along with his family had to migrate to nearby towns for work as they barely managed to sustain their livelihood on the farm. During the COVID wave he re-migrated to his hometown due to the lockdown and loss of employment opportunities in the city.

Further he discovered about the 'Water Resource Development' project implemented by Asian Paints Limited. Further he received training on sustainable and organic farming practices. The project team provided support for water for irrigation through the construction of check dams, silt application, farm border plantation, and promoted paddy cultivation through the System of Rice Intensification (SRI).

After implementing the interventions for some time, V. Ramana saw a significant improvement in his farm. He was able to practice agriculture throughout the year, which not only contributed to his self-sufficiency but also helped improve his soil quality. He earned a stable income from the farm, which allowed him to add two more livestock - a cow and a buffalo - to the farm and start a small milk business. He continued to practice sustainable and organic farming for household consumption. While he acknowledged the importance of organic farming, he understood the lack of a marketplace in rural regions. However, he was determined to find suitable solutions and shift towards organic farming at full scale.

V. Ramana is grateful for the 'Water Resource Development' project and the support that helped transform his farm and his life. He thanked the project team for the handholding support and for making a positive impact on his life. The project not only improved his agricultural productivity but also enhanced his overall livelihood, providing a stable and sustainable source of income for his family.

Cuddalore Block

The section below highlights the findings and observations based on the interactions conducted with sampled beneficiaries of the Water Resource Development program supported by Asian Paints Limited. across two villages, Kanarpatai and Kothandaramapuram, in Cuddalore and Kurinjipadi blocks, respectively, in the Cuddalore district of Tamil Nadu.

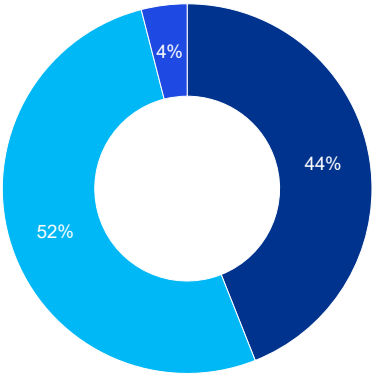
3.1.20 Demography of respondents

As per the responses noted from the respondents, the age distribution of the population in the villages of Kanarpatai and Gunakarambakkam reveals a significant concentration of individuals in the 20-60 years age bracket. Specifically, 44% of the respondents fall within the 20-40 years age group, while 52% are aged between 41-60 years. Only a small fraction, 4%, are above 60 years. This demographic structure suggests a predominantly working-age population, which has implications for labor availability and economic productivity in these villages.

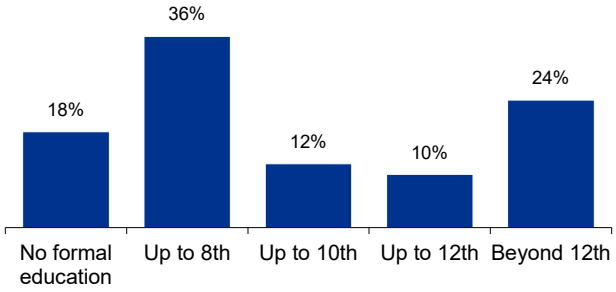
The respondents interviewed provided insights into the education levels in these villages, which vary widely. A notable 18% of the respondents have no formal education, which could impact their employment opportunities and economic mobility. The majority, 36%, have education up to the 8th grade, followed by 12% up to the 10th grade, and 10% up to the 12th grade. Interestingly, 24% of the respondents have education beyond the 12th grade, indicating a significant portion of the

population has pursued higher education, which could positively influence the socioeconomic development of the area.

Age Distribution



Education Levels



Source of income

94% of the respondents, underscoring the agrarian nature of these villages. Only 6% of the respondents rely on other sources of income, such as jobs and pensions. This heavy dependence on agriculture highlights the importance of agricultural policies and support systems to sustain the livelihoods of the majority..

HH income

Household income levels, as reported by the respondents, show that 74% of households earn between 50,000 to 1,00,000 INR annually, while 26% earn between 1,00,000 to 1,50,000 INR.

Land holding size

The land holding sizes among the respondents are relatively small, with 40% owning 1-2 acres, 30% owning 2-5 acres, and another 30% owning more than 5 acres. The distribution of land holdings indicates a mix of small and medium-scale farming operations, which could affect agricultural productivity and income levels.

Season of cultivation:

Village Name	Kharif	Rabi	Zaid
Kanarpatai	100%	84%	25%
Gunakarambakkam	100%	89%	35%

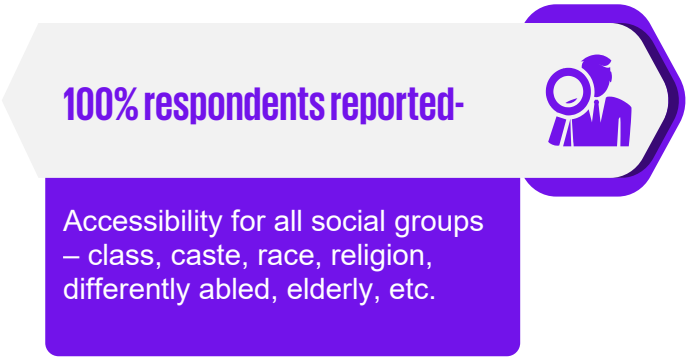
The season of cultivation data shows that both Kanarpatai and Gunakarambakkam have high participation in the Kharif season, with 100% of the population engaged in cultivation during this period. Participation drops slightly in the Rabi season, with 84% in Kanarpatai and 89% in Gunakarambakkam. The Zaid season sees the least participation, with 25% in Kanarpatai and 35% in Gunakarambakkam. This seasonal variation in cultivation activities could be influenced by climatic conditions, water availability, and crop choices.

About the Irrigation facility:

Village Name	Yes	No, only dependent on rains	Others
Kanarpatai	92%	8%	0%
Gunakarambakkam	85%	15%	0%

The dependency on rains for agricultural activities is significant, with 92% of the population in Kanarpatai and 85% in Gunakarambakkam relying on rainfall. Only 8% in Kanarpatai and 15% in Gunakarambakkam do not depend solely on rains, indicating limited access to irrigation facilities. This reliance on rainfall makes the agricultural output vulnerable to weather fluctuations and highlights the need for improved irrigation infrastructure.

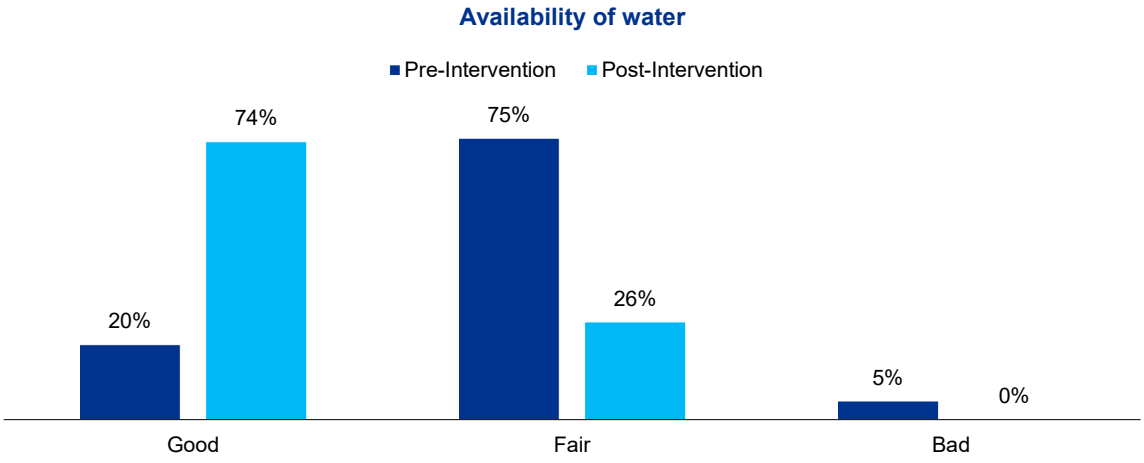
About the Accessibility of the project across all community groups:



Analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrates the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

3.1.21 Impact on availability and accessibility of water

The pre-intervention and post-intervention analysis based on the respondents' feedback demonstrates a marked improvement in the quality of life and services in Kanarpatai and Gunakarambakkam. The intervention has successfully elevated the conditions from predominantly fair to good, with no aspects remaining in the bad category. This positive outcome underscores the importance of targeted interventions in enhancing the well-being of rural communities.



100%

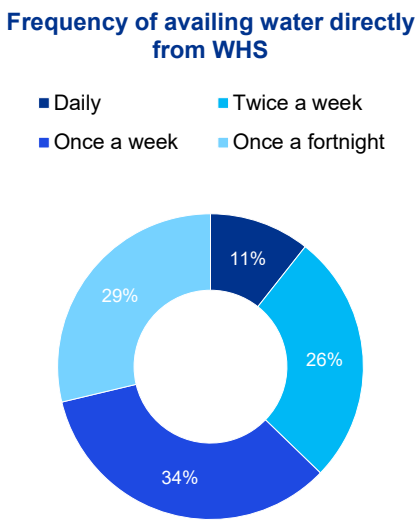
Of respondents reported the improved accessibility of water for HH and agriculture need.

High level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies a significant success of the project in promoting sustainable development.

96% Of respondents reported that intervention resulted in increased water availability in your well/borewell

72% Of respondents reported that the duration of improved water availability more than four months

This indicates the solutions adopted under the project have focused on ensuring sustained improvements in water availability, leading to more stable agricultural productivity and income



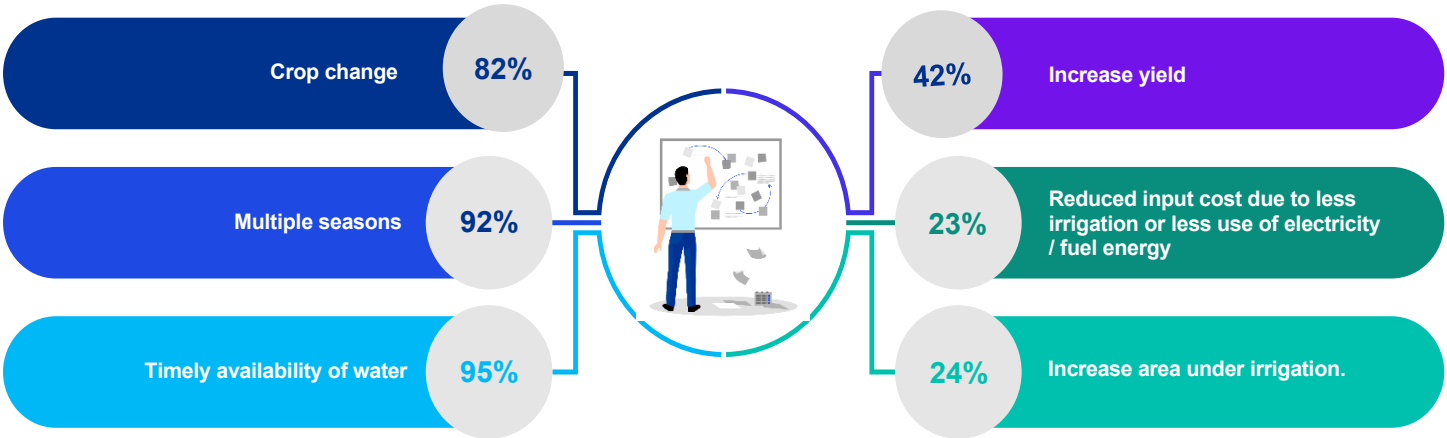
generation. Above responses show the effectiveness of the project in improving water resource management in the region.

The frequency of availing water directly from Water Harvesting Structures varies among the respondents in Kanarpatai and Gunakarambakkam. While a small percentage relies on WHS daily, the majority access it on a weekly or fortnightly basis. Understanding these usage patterns is crucial for managing water resources effectively and ensuring sustainable water supply for the villagers.

3.1.22 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

3.1.23 Impact on agriculture practices



Above fig. presents responses captured as part of the project evaluation, depicting the impact of water availability and improved access on farming practices. The data shown in the table indicates that the project interventions have yielded a range of positive outcomes, enhancing farming practices and contributing to better agricultural productivity.

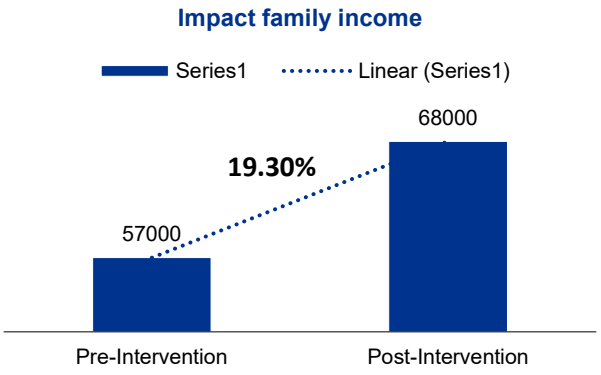
The analysis of the data indicates that the project's targeted interventions have positively impacted farming practices, leading to better agricultural productivity and timely access to water resources.

It was noted that no increase or decrease was found in reduced input cost due less irrigation or less use of electricity/fuel energy

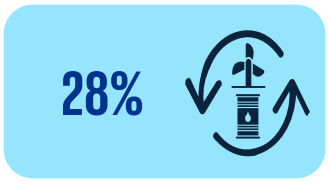
These outcomes underscore the importance of promoting sustainable water resource management practices in enhancing agricultural productivity and livelihoods in the project area.

3.1.24 Impact family income

The comparison of income levels pre-intervention and post-intervention demonstrates a significant economic benefit for the respondents in Kanarpatai and Gunakarambakkam. The intervention has successfully elevated the average income, contributing to the overall economic development and well-being of the villagers. This positive outcome underscores the importance of targeted interventions in enhancing the livelihoods and economic stability of rural communities.

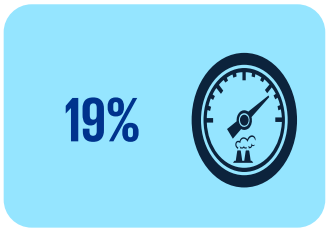


The analysis of income levels before and after the intervention in Kanarpatai and Gunakarambakkam reveals a significant economic improvement for the respondents. The average income increased from 57,000 INR pre-intervention to 68,000 INR post-intervention, representing an approximate 19.30% increase.



Improved productivity

Due to improved water availability throughout the year has resulted into the improved productivity.



Added a livestock.

Project interventions resulted in improved family income and purchasing ability, enabling beneficiaries to acquire new livestock.

Improved family income

The income generated through livestock business resulted in an average increment of INR 3000 in the beneficiaries' annual family income.

3.1.25 Impact on livestock

The data indicates that the Water Harvesting Structures (WHS) have had a positive effect on livestock management practices. The increase in productivity, along with the addition of more livestock due to improved income generation, highlights the significant impact of the WHS. Qualitative survey responses that quantify the impact on family income suggest that the WHS has provided a reliable and stable water supply. This has enabled efficient livestock management practices, resulting in enhanced livelihoods and better socio-economic outcomes for the beneficiaries.

3.1.26 Impact on personal life

The initiative of the project has yielded numerous favorable effects that have greatly influenced personal living situations. Feedback from those who benefited indicates that the WHS has facilitated time savings and a notable decrease in manual labor. Additionally, the information gathered shows enhanced health results, with 95% of participants emphasizing the effects on their bodily health. These results prove that the WHS has lightened the load of collecting water and has allowed beneficiaries to pay more attention to their personal endeavors. The dependable and quick water access has lessened the need for physical toil, bettered personal health, and heightened the general quality of life. Therefore, the project initiatives have fostered improved socio-economic results and elevated the overall wellness of those affected.

04

Conclusion and Recommendations

4 OECD-DAC

Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

4.1.1 Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 83 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 32 percent of the respondents were only dependent on rainfed agriculture. Around 35 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

It was observed that access to clean water was particularly challenging during dry seasons, where the demand for water significantly increased. The lack of appropriate water storage facilities and infrastructure further exacerbated the issue.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

4.1.2 Alignment to Schedule VII of the Companies Act, 2013

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water
- (x) rural development projects

Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

4.1.3 Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship
GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of	Project activities included promotion of agro-forestry and prevention of forest

terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements.

Target 15.2

By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

among the community members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti[xxv] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 2019[xxvi] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 2021[xxvii] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on Water Resource Development aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

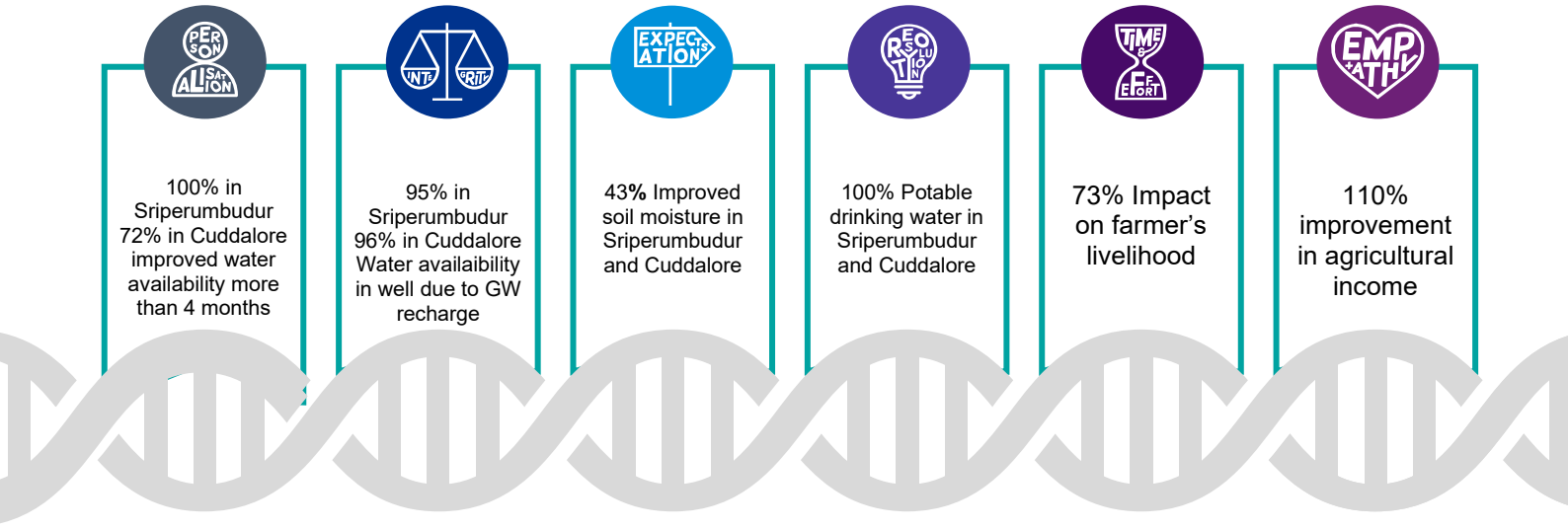
Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



Through Water Resource Development project, promotion of better irrigation methods and techniques through interventions such as, exposure visits and training programmes were undertaken with the communities, across the project locations. Farmers shared that they found such exercises very relevant to their livelihoods and adopted the suggested agricultural and irrigation techniques aiming at improving agriculture productivity. It was reported that during the interaction, all beneficiaries were aware of sustainable agricultural practices. They gave a positive rating on the effectiveness of the training sessions conducted on various topics such as integrated pest management, crop diversification, agroforestry, agro-horticulture, vermicomposting, and organic farming.

In all villages respondents shared positive impact of agriculture interventions in their region. It was shared that they have experienced the effect of the intervention in terms of improved soil health, reduced input cost, increased awareness in agriculture practices, water potential, and increased production across the year. Below table showcase the outcome experienced by beneficiaries due to agriculture interventions:

Programme focused on agriculture interventions included training, demonstration and capacity building activities, promotion of paddy cultivation through SRI, efficient use of water in irrigation, farm border plantation, mulching, non-pesticide management, and vegetable cultivation.

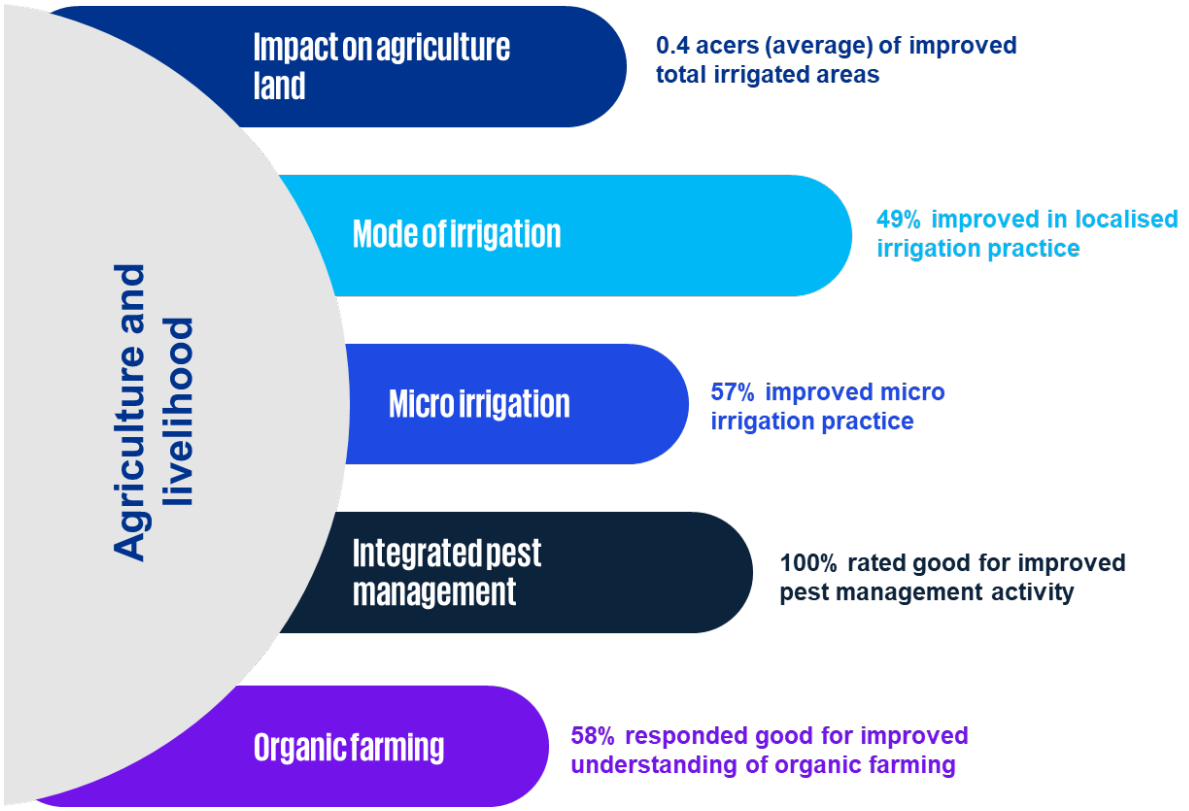
Evaluation Criteria- Efficiency

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.



1. Increased vegetation around the water bodies
2. Observed new or reemergence of new species around the water bodies due to the increased availability of water
3. Observed increased citing of birds/wild animals around the water bodies due to the increased availability of water
4. Increase in availability of fuelwood due to the intervention

Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

Support for water harvesting structure

Water availability and accessibility	Improved water level	Impact on agriculture practice	Increase in yield	Impact on family income	Impact on livestock
87% respondents rated good to availaibility of water post intervention	100% of respondents reported the improved accessibility of water for HH and agriculture need	91% responded practicing agriculture for multiple season	94% responded improved agriculture yield	99% improved family income	28% improved livestock productivity

4.1.4 Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government

All respondents stated that the Water User Association (WUA) has been formed in their village. During discussions, it was understood that all respondents (100 percent) were aware of the formation and role played by WUAs. WHS beneficiaries reported that they or their family members are part of WUAs, indicating awareness of governance structure for WHS. Respondents from shared that a separate fund for O&M of the WHS has been set up and water tax of INR 200 to 500 annually depending on the land holding is being levied.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

5 Recommendations

Project Design	
Key Issues	**Recommendations**
Lack of a system for effective tracking of the progress of initiatives, particularly those related to agriculture and non-pesticide management training.	Establish a robust tracking system using appropriate software tools and maintain regular communication with farmers to monitor progress and address issues promptly.
Limited women's participation in the project cycle, restricted to labor work in agricultural activities.	Initiate targeted training and capacity-building programs to involve women in decision-making and financial management processes, promoting gender equality.
Increased cost of cultivation due to dependency on chemical fertilizers and pesticides.	Explore and promote sustainable farming practices such as the use of natural fertilizers, crop rotations, and integrated pest management to reduce reliance on chemical inputs
During our field visit, we observed that although water user associations (WUAs) had been established for the beneficiaries of the Water Harvesting Structures (WHS), they were largely inactive. The duties and roles of the WUAs were not effectively communicated, leading to minimal active participation by their members in water stewardship.	To guarantee the enduring sustainability of the Water Harvesting Structures (WHS) and foster effective water resource management, it is crucial to motivate the active involvement of all Water User Association (WUA) members. Therefore, it is advisable to implement and practice water budgeting and crop planning within the community, which can equip farmers with essential information to more accurately evaluate their irrigation needs and water demands.
After the completion of the project, there has been no de-silting of the Water Harvesting Structures (WHS). This lack of maintenance has resulted in the accumulation of silt, which can significantly reduce the efficiency and capacity of these structures over time. Regular de-silting is essential to ensure that the WHS continue to function effectively and provide the intended benefits to the community.	Establish a consistent and systematic schedule for de-silting the Water Harvesting Structures (WHS) to ensure their optimal functionality. Additionally, make use of the removed silt by applying it to agricultural lands, which can enhance soil quality and fertility. This practice not only maintains the efficiency of the WHS but also provides a valuable resource for improving crop yields and supporting sustainable farming practices.

Project Scale-up

Tailored strategies for outreach

- **Women and Youth Engagement:** Develop specific outreach programs targeting women and youth to ensure their active participation in the project. This includes organizing women-only and youth-only training sessions and workshops.
- **Empathy Mapping:** Use empathy maps to understand the unique needs and challenges faced by different community members. This will help in designing customized interventions that address their specific requirements.
- **Follow-Up Support:** Provide continuous follow-up support to ensure that the beneficiaries are able to implement the knowledge and skills gained from the training sessions effectively.

Promotion of organic farming

- **Training on Organic Practices:** Conduct training sessions on organic farming techniques, including the use of compost, vermicompost, and bio-pesticides.
- **Demonstration Plots:** Establish demonstration plots to showcase the benefits of organic farming and encourage adoption among farmers.
- **Organic Certification:** Facilitate the process of obtaining organic certification for farmers to help them access premium markets and fetch better prices for their produce.

Collectivisation

- **Formation of Farmer Groups:** Establish and strengthen farmer groups, such as Farmer Producer Organizations (FPOs), to enable collective action and bargaining power.
- **Shared Resources:** Promote the sharing of resources, such as farm equipment and inputs, among group members to reduce costs and increase efficiency.
- **Capacity Building:** Provide training on group management, financial literacy, and business planning to enhance the capacity of farmer groups.

05

Measuring the Social Return

6 MEASURING THE SOCIAL RETURN

As explained in Chapter 2, this report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Quantities of Change-Sriperumbudur

Outcomes	Indicators and Sources	Quantity (scale)
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	1388
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	1458
Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	1722
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	1318
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	668
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattle and other animals (Number of households x % increase in milk yield)	527
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	474
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	825.79

Duration of Outcome: Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

- Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.
- In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.

- Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer the table for outcome wise proxy details.

Establishing Impacts`

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

***Attribution*:** Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.

There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.

Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:

- Asian Paints Limited along with implementation partner
- Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.

Basis the respondents' assertions, the deadweight has been considered as **3%** and the reasons have been presented below:

- There are no other organisations working in the region on similar issues.
- The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.
- Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.

***Displacement*:** Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.

In case of this SRoI study, displacement was assumed as **Nil** percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

***Drop-off and Duration*:** Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

- *Intangibles @33 percent:* Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

- *Water Resources Development @20 percent*: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.
For a detailed view, refer table for SROI calculation.
Considering the above parameters, the impact of each outcome is calculated with the following formula:

4.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022- 2023:

Input Type	Input description	Total Input Value (INR)
Sriperumbudur Financial inputs	CSR Funding from APL	***1,69,95,379.00***
Cuddalore Financial input	CSR Funding from APL	***99,96,451***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

For Sriperumbudur refer this table

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	10.00 %	0.00%	25.00 %	20 %	76,262	76261.50	61009.20	48807.36	39045.89	31236.71	0.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78	10.00 %	0.00%	25.00 %	20 %	45,728	45727.52	36582.01	29265.61	23412.49	18729.99	0.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00	10.00 %	0.00%	25.00 %	20 %	2,69,616	269616.00	215692.80	172554.24	138043.39	110434.71	0.00

For Sriperumbudur refer this table

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Tamil Nadu-2203/Q	2203.00	10.00 %	0.00%	25.00 %	20 %	51,20,898	5120897.73	4096718.19	3277374.55	2621899.64	2097519.71	0.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00	10.00 %	10.00 %	25.00 %	20 %	2,07,138	207137.95	165710.36	132568.29	106054.63	84843.70	0.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639	10.00 %	0.00%	25.00 %	20 %	1,90,29,111	19029111.19	15223288.95	12178631.16	9742904.93	7794323.94	0.00
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00	10.00 %	0.00%	25.00 %	20 %	15,655	15654.87	12523.90	10019.12	8015.29	6412.23	0.00

Total	2,65,06,604.03		26506604.03	20973048.33	16623607.66	12679376.26	10143501.01	0.00
Present value of each year			26506604.03	20166392.62	15369459.74	11271919.32	8670707.17	0.00
Total Present Value (PV)								81985082.90
Net Present Value (PV minus the investment)								64989703.90
Social Return (Value per amount invested)								**4.82**

For Cuddalore refer this table

Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	10.00%	0.00%	25.00%	20%	26,302	26,302.05	21,041.64	16,833.31	13,466.65	10,773.32	0.00
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78	10.00%	0.00%	25.00%	20%	31,692	31,692.31	25,353.84	20,283.08	16,226.46	12,981.17	0.00

	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00	10.00%	0.00%	25.00%	20%	173,050	173,050.02	138,440.02	110,752.01	88,601.61	70,881.29	0.00
Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Gujarat- 2203/Q	2203.00	10.00%	0.00%	25.00%	20%	1,894,470	1,894,469.85	1,515,575.88	1,212,460.70	969,968.56	775,974.85	0.00
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00	10.00%	10.00%	25.00%	20%	153,261	153,260.86	122,608.69	98,086.95	78,469.56	62,775.65	0.00
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639	10.00%	0.00%	25.00%	20%	6,669,281	6,669,280.80	5,335,424.64	4,268,339.71	3,414,671.77	2,731,737.42	0.00
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00	10.00%	0.00%	25.00%	20%	11,583	11,583.00	9,266.40	7,413.12	5,930.50	4,744.40	0.00

Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Training cost-eQuest - Quality Council of India	5000.00	10.00%	0.00%	25.00%	33%	0	0.00	0.00	0.00	0.00	0.00	0.00
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00	10.00%	0.00%	25.00%	33%	0	0.00	0.00	0.00	0.00	0.00	0.00
									0.00	0.00	0.00	0.00	0.00	0.00

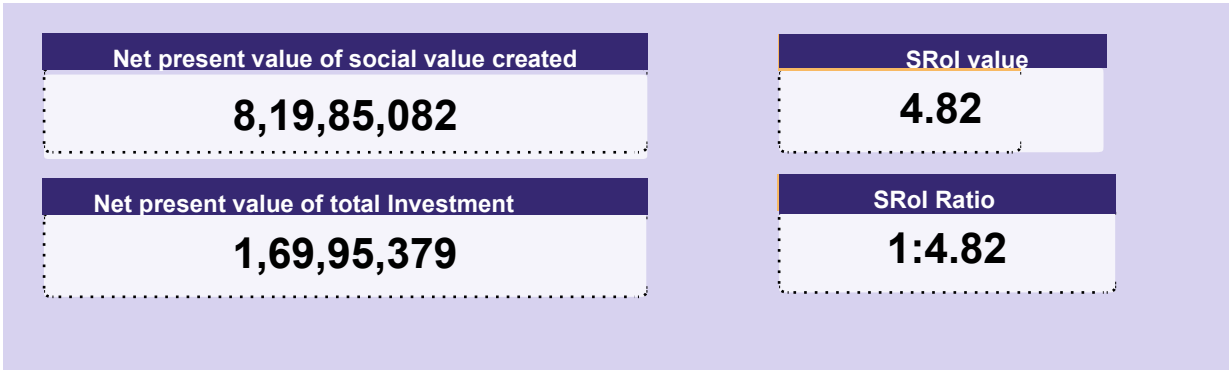
Total	8,959,638.89	7,167,711.11	5,734,168.89	4,587,335.11	3,669,868.09	0.00

Present value of each year	8,959,638.89	6,892,029.91	5,301,561.47	4,078,124.21	3,137,018.62	0.00
Total Present Value (PV)						28,368,373.10
Net Present Value (PV minus the investment)						18,371,922.10
Social Return (Value per amount invested)						2.82

SROI results- Sriperumbudur

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:



For every INR 1 invested, the programme has generated social impact of INR 4.82

***Sensitivity Analysis**:* Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.
Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.
With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between **INR 3.83** and **INR 5.15**.

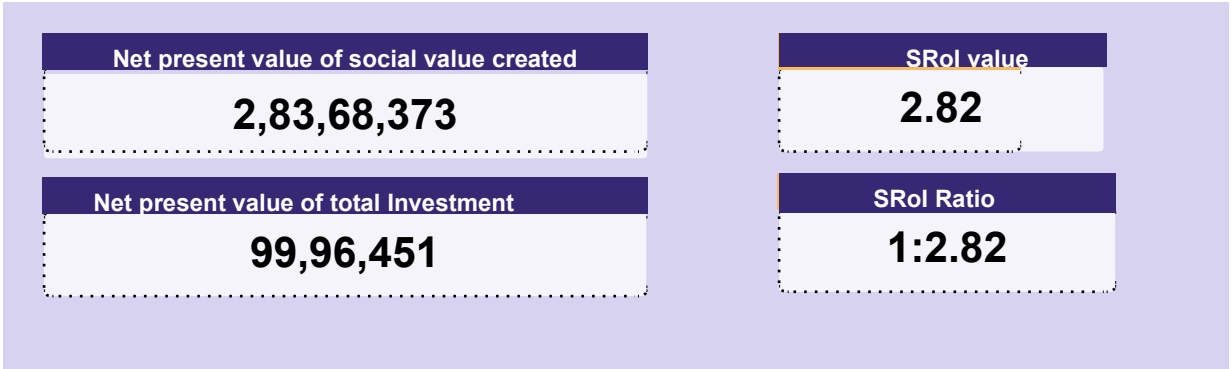
Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	4.82	Deadweight is 5%	5.09	No significant change
			Deadweight is 15%	4.56	
1	Displacement		Displacement 0%	4.83	No significant change
			Displacement is 15%	4.58	

3	Attribution		Attribution is 80%	5.15	No significant change
			Attribution is 70%	4.50	
4	Drop-off		Drop-off is 5 years	4.86	No significant change
			Drop-off is 3 years	3.83	

SROI results- Cuddalore

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2022 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:



For every INR 1 invested, the programme has generated social impact of

INR 2.82

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables and assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between **INR 2.24** and **INR 3.03**

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI	Observation
1	Deadweight	2.82	Deadweight is 5%	3.0	No significant change
			Deadweight is 15%	2.68	
1	Displacement		Displacement 0%	2.84	No significant change
			Displacement is 15%	2.42	
3	Attribution		Attribution is 80%	3.03	No significant change
			Attribution is 70%	2.65	
4	Drop-off		Drop-off is 5 years	2.84	No significant change
			Drop-off is 3 Years	2.24	

Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. *(Refer to Appendix B for details of financial proxies)*
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

7 ANNEXURES

Financial Proxies

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Tamil Nadu government (per hactare)	61.78
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Average charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/-	330.00
	Increased agriculture production due to increment in availability of water	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Tamil Nadu- 2203/Q	2203.00
		Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	Average reduction in Cost of Cultivation indicated by respondents (INR)	345.00
		Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	Average reduction in Irrigation cost indicated by respondents (INR)	2639
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk in Tamil Nadu	44.00
Trainings/ Workshops/ Demonstrations/ Non-pesticide management/ Mulching	Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	Training cost- eQuest - Quality Council of India	5000.00
Establishing village-level institutions	Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	Subsidy given for training of Farmer Groups under ATMA scheme (NMAET)	5000.00

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KPMG

Impact Assessment of Integrated Water Resource Management Project Khandala, Satara

Asian Paint Limited

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Strictly Private and Confidential

V. Ravi

General Manager
Asian Paints Limited
Mumbai, Maharashtra– 400055
India
07 March 2025

Subject: Final report for Impact assessment of CSR Projects

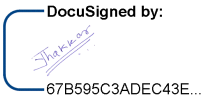
Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

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Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

1. Contents

2. Disclaimer And Notice To Readers

- This report has been prepared exclusively for the Asian Paint Limited ("Client") following the terms of the Engagement letter/agreement dated 6th November 2024 between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is it to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent, as per terms of business agreed under the Contract.
- Our report shall be prepared solely for APL. KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our Client, to the extent agreed in the Agreement.
- Impact assessment is limited to the projects allocated by APL
- OECD-DAC and SROI frameworks have been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.
- Procedures, analysis and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.
- Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.
- Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.
- We shall not perform an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.
- Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with [Client] team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.
- In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

Abbreviations

ANMs	Auxiliary Nurse Midwives
APL	Asian Paints Ltd
ARWR	Annual Renewable Water Resources
BCM	Billion Cubic Meters
CEEW	Council on Energy, Environment and Water
CSE	Center for Science Education
CSR	Corporate Social Responsibility
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
HH	Households
INR	Indian Rupees
NCIWRD	National Commission on Integrated Water Resources Development
NPV	Net present value
O&M	Operations and Maintenance
OECD DAC	Organization for Economic Co-operation and Development Assistance Committee Development
PRA	Participatory Rural Appraisal
PRI	Panchayati Raj Institutions
RFP	Request For Proposal
ROI	Return on Investment
SDG	Sustainable Development Goals
SPOCs	Single Point of contact
SROI	Social Return on Investment
TDS	Total Dissolved Solids
WHS	Water Harvesting Structure
WRD	Water Resource Development

3. Executive Summary

Groundwater is a critical resource in India, serving as the backbone for agricultural, industrial, and domestic water needs. India is the largest user of groundwater globally, extracting about 230 cubic kilometers annually. This extensive use supports approximately 60% of the country's irrigation requirements. However, the over-extraction and contamination of groundwater, particularly with nitrates and other pollutants, pose significant challenges. Sustainable management practices are essential to ensure the long-term availability of this vital resource.

In Maharashtra, groundwater plays a crucial role, especially in agriculture, which is the primary occupation. The state faces unique challenges due to its geological structure, with about 92% of the area underlain by hard rocks, limiting groundwater yield potential. Satara District, located on the Deccan Trap, relies heavily on groundwater for irrigation and drinking purposes. The Deccan Trap's basaltic formations present specific challenges for groundwater recharge, including limited storage capacity and rapid depletion due to the steep slopes and horizontal dips of the basalt flows. The district's groundwater recharge is highly dependent on the monsoon season, and various techniques like contour bunding, check dams, and percolation tanks are employed to enhance recharge. Sustainable practices and effective management are vital to address the region's groundwater challenges.

Asian Paints engaged in a holistic approach through its "Integrated Watershed Management" program in the Khandala block of Satara district in Maharashtra. This initiative addresses water scarcity and soil conservation in the project intervention area. Village Atit, Ghadgewadi and Karnwadi are the project intervention areas.

The objective of this impact study is to assess the impact of water stewardship activities, with a specific focus on access and availability of surface and ground water, potable water, agricultural practices, farmer livelihoods, and governance. The mixed-methods approach involved quantitative and qualitative research methodologies, utilizing primary and secondary data collection. The analysis of quantitative data was corroborated with anecdotal evidence from qualitative responses and observed through the lens of the Social Return on Investment (SROI) and Organisation for Economic Co-operation and Development-Development Assistance Committee (OECD-DAC) frameworks. During the survey, respondents from three villages from Khandala block, Satara district of Maharashtra, including farmers, community members, PRI members, interviewed for data collection

The sample size included respondents from diverse economic backgrounds, small to marginal farmers, and those whose primary source of income is agriculture. More than half of the respondents were between the age group of 40 to 60 years and had education till 8^{th} standard.

This report also estimates the impacts felt by the beneficiaries and wider community as a result of the APL programme, by valuing them in monetary terms. We have examined the social impact of the APL programme arising from its CSR project during the FY 2022-23. To achieve this, we have estimated the social return on investment (SROI) generated by the programme by comparing the financial costs of the programme to the monetary value of the impacts it creates among its stakeholders. Whilst many of the impacts arose during the period of analysis, impacts would also occur or continue the effect for some time in future. Thus, forecasting methods have been used.

We estimate that for every INR 1 spent by the Integrated Water Resource Management programme, INR 3.47 in social value has been generated through a mixture of socio-economic wellbeing among the beneficiaries.

\

RELEVANCE

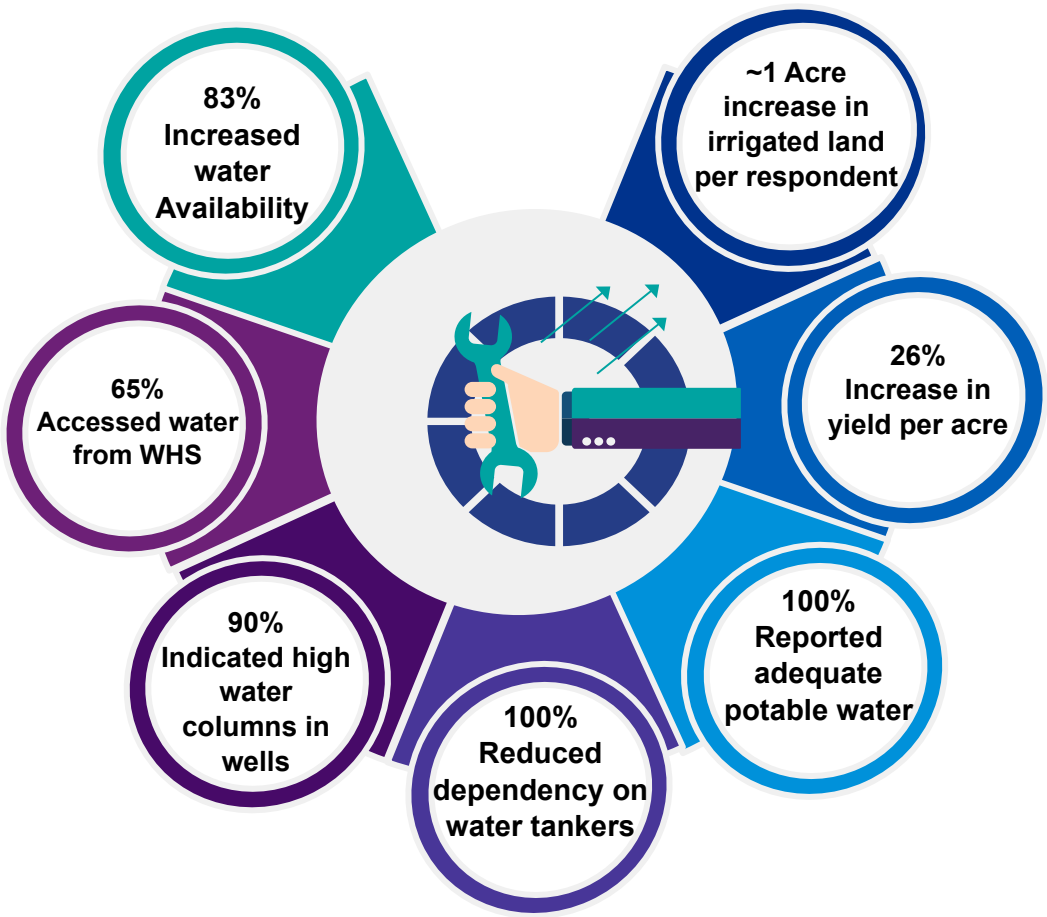
100 % of respondents indicated scarcity of water post-mansion season

20% of the farmers solely depend upon rainfed agriculture while reaming have irrigation facilities indicating dependency on groundwater

EFFECTIVENESS

100% respondents felt positive changes because of the water-related activities of the program (increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water).

Impact



Project align with the SDGs as mentioned below
SDG 6, SDG 1, SDG 2, SDG 15

Project Alignment with National Priorities-

Directly converges with Jal Shakti Abhiyan and 'Catch the Rain' campaign of Ministry of Jal Shakti.

EFFICIENCY

- ✓ **The program was completed on schedule and within the proposed budget.**
- ✓ **No duplication or overlap of activities was observed with any other program on-ground and corroborated by respondents**

Sustainability

- ✓ **100% of respondents shared that this project has brought a positive change in their life**
- ✓ **100% of respondents shared good ratings for the project**
- ✓ **100% of respondents are aware that O&M of WHS are with respective Gram Panchayat**

4. Introduction

This chapter consists of an overview of the water stress in Indian context and Asian Paints Ltd.'s CSR efforts to address the issue. It provides an overview of the project, implementing partners, project geographies, scope, and purpose of the study.

4.1 Background

Water stress and availability represent a formidable global challenge, with increasing demand, population growth, and climate change exacerbating the strain on water resources. CSE's State of India's Environment Report (2023) estimates that if the ongoing decline in global water availability persists, 87 out of 180 countries will face annual renewable water resources (ARWR) per capita falling below 1,700 cubic meters per year by 20500F. India sustains around 17.74 percent of the world's population with only 4.5 percent of its freshwater resources1F[i]. According to FAO's Aqua-stat reports2F[ii] (2015), India receives an average annual rainfall of 1,170 mm. This contributes to a total rainfall input of around 4,000 cubic kilometres of water as per the Planning Commission's Report of the Expert Group on Ground Water Management and Ownership (2007) 3F[iii]. The same report indicates that within this, 1,869 cubic kilometres constitute the average annual potential flow in rivers, while 432 cubic kilometres replenish the groundwater. India, despite being endowed with substantial water resources, faces a complex set of challenges related to water availability, quality, and distribution.

The depletion of groundwater levels, coupled with the pollution of surface water, presents a dual challenge. Groundwater, a critical resource for millions, is being extracted at a rate faster than natural replenishment, leading to a significant deficit. Simultaneously, about 70 percent of surface water resources5F in India are polluted, compromising the health of both humans and ecosystems. Wastewater from various sources, intensive agriculture, industrial activities, and untreated urban runoff contribute to this pollution, which contributes to the water-related morbidity in India6F. Arsenic and fluoride contamination in groundwater further exacerbate India's water quality issues. Certain regions, including parts of Assam, Bihar, Uttar Pradesh, Chhattisgarh, and West Bengal, grapple with arsenic levels above permissible limits. Fluoride contamination is prevalent in multiple states including the locations for this study (Gujarat, Karnataka, Uttar Pradesh, Haryana, and Tamil Nadu), necessitating urgent remediation efforts7F[iv].

Thus, with increasing population, rapid urbanisation, and climate change impacts, India's water resources are under immense pressure.

In this challenging water landscape, the importance of watershed management becomes apparent. Watershed management is not merely a focus on water projects but involves a holistic approach to land-use practices, afforestation, and soil and water conservation. It is recognised as essential for sustainable water development, contributing not only to water conservation but also to self-reliance in terms of food and energy. Lack of adequate watershed management may lead to increased reservoir sedimentation, altered stream flow patterns, and a range of environmental and socio-economic consequences. In conclusion, the water issues in India necessitate urgent and comprehensive water resource management strategies, with a particular emphasis on watershed management. A holistic approach that addresses not only water scarcity but also soil conservation and natural resource management is crucial for ensuring a sustainable and resilient water future for the country.

Asian Paint Limited

Asian Paints, headquartered in Mumbai, is one of the largest and leading paint companies in India. Established in 1942, the company has expanded its presence globally and is recognised for its innovative and high-quality products. Asian Paints operates in various segments, including decorative coatings, industrial coatings, and automotive coatings. The company has a strong emphasis on research and development, leading to continuous product innovation. Asian Paints has introduced eco-friendly and sustainable paint options, aligning with global trends towards environmentally conscious choices.

Beyond business, Asian Paints actively engages in Corporate Social Responsibility (CSR) initiatives. Guided by its philosophy of trust, fairness and care the CSR interventions are envisioned to make a sustainable difference to the environment in which it operates including activities which shall allow it to leverage its strengths. The primary objective of their CSR activities is to enhance and empower marginalised communities by tackling crucial social, economic, and environmental issues. These efforts focus on healthcare, water conservation, and community development, reflecting the company's commitment to social and environmental sustainability. APL's CSR initiatives are in alignment with SDG Goals, namely Goal 1 (No Poverty), Goal 2 (Zero Hunger), Goal 3 (Good Health and Well-being), Goal 6 (Clean Water and Sanitation), Goal 8 (Decent work and economic growth), Goal 11 (Sustainable cities and communities) and Goal 17 (Partnership for the goals).

APL has been implementing several initiatives in the area of Water, Health and Hygiene, Skills Development, and Disaster Relief. The Water Stewardship Program, initiated by Asian Paints, seeks to contribute to increasing water availability in the ecosystems surrounding its plants, playing a crucial role in enhancing water security in these regions. The program encompasses a spectrum of initiatives, including pond cleaning, desilting, construction of check-dams, irrigation canal lining, and training farmers on micro-irrigation systems. Holistic approaches such as integrated pest and soil health management are integral to the program. The initiatives under the program are designed to fortify ecosystem services, enhancing water

supplementation for both indoor use and food production. The program significantly contributes to groundwater recharge, a critical aspect of sustainable water management.

4.3 About the study

To understand the impact created by its interventions implemented in FY 2022-23, Asian Paints Ltd. empanelled KPMG to facilitate the impact assessment of its Integrated Water Resource Management project. The objective of this study was to assess the impact of these water stewardship activities on the beneficiaries and stakeholders covered under the projects. The study aimed to understand the immediate, medium, and longer-term impact of the interventions on the targeted beneficiaries:

The duration considered for this study is financial year 2022-23.

Impact on Access & Availability of Surface & Ground Water	• To understand the impact on ground-water recharge based on well recharge data • To understand the duration of water availability post-monsoon (in months) • To understand the impact of water accessibility, availability & livelihood of the farmers
Impact on Potable Water	• To assess the impact on drinking water availability and quality due to rainwater water harvesting structures. • To assess impact on other areas like drudgery reduction, drop in health issues around the drinking water etc.
Impact on Agricultural Land & Practices	• To assess impact on season wise cropping pattern led by the availability of water in the area. • To assess impact on soil health due to balance use of fertilizer because of adoption of recommendations of soil testing report and application of organic fertilizers • To assess impact on knowledge level of the farmers about improved agricultural practices.
Impact on Farmer's Livelihood	• To assess impact of water availability on crop production (yield/acre) • To assess impact of water availability on productivity of livestock animals • To assess impact on net return/acre per farmer. • To assess the impact on livelihood opportunities created through the programme.
Other Impact Areas Apart from Water Rejuvenation & Canal Lining	• To assess knowledge and adoption level of water efficient agricultural and risk mitigation farm practices. • To assess level of ownership by the community in the asset created: Whether community-based institutions had been formed and taking care of maintenance aspects of the assets created under the project.

4.4 About the project

Asian Paints' Water Stewardship Programs signifies the company's dedication to sustainable practices and responsible corporate citizenship. By addressing the challenge of water scarcity through community partnerships and integrated initiatives, Asian Paints aims to make a positive impact on both its operations and the communities it serves.

Objective of the project:

- To organise and strengthen village institutions. (UG, FIG, FPO)
- To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and Increasing water storage and availability.
- To improve and stabilize surface soil from converting it from Unirrigated to irrigated.
- To encourage enhanced farming practices in order to increase household income of tribal farming communities, along with benefiting the environment.

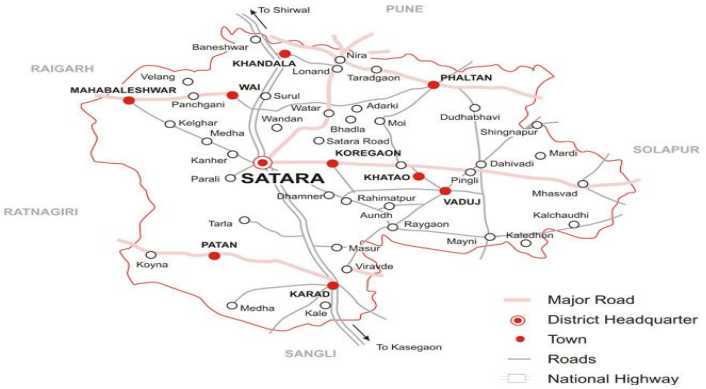
4.5 About implementing partner

Vanarai, established by Padma Vibhushan Dr. Mohan Dharia in 1986, has been addressing climate change through a comprehensive approach. Over the past three decades, Vanarai has worked to make villages self-reliant, impacting more than 250 villages across Maharashtra, Gujarat, Goa, Dadra, Nagar, Haveli, and Karnataka. The primary focus areas include watershed development, afforestation, health, hygiene and sanitation, education upliftment, and agriculture development.

Vanarai has transformed wastelands into productive fertile lands through extensive tree plantation drives, generating income and employment, thereby fostering socio-economic development in rural areas. Acting as planners, facilitators, and implementers of developmental plans, Vanarai promotes an integrated and sustainable rural development strategy. Grassroots involvement in planning, restoration, and execution of development activities has led to significant socio-economic improvements, encouraging reverse migration in alignment with Vanarai's vision.

4.6 Project geography

Map 1 Political Map of Maharashtra Highlighting Satara District



The Satara district is one of the historical districts in the western region of the Maharashtra state. Satara district lies at western limit of the Deccan table and southern Maharashtra. The geographical location of the district extends between 17° 5' to 18° 11' north latitudes and 73° 33' to 74° 54' east longitude. The district has component shape with a west stretch of about 144 Kms and south north 120 Kms. It covers an area of about 10,480 sq. kms. This is 3.4 per cent of the Maharashtra States Among the 35 district of state, Satara ranks 15 in the terms of area. The district is bordered by Pune district to the north, Sangli distriet to the south and Ratnagiri district to the west. It has a small boundary of twenty four km with Raigarh district in the northwest. The district consists of eleven tahsils namely Satara, Koregaon, Jaoli, Wai, Khandala, Mahabaleshwar, Patan, Karad, Phaltan, Khatav and Man. Satara city is the administrative headquarter of the district[v]

Satara's economy is diverse, with agriculture being the primary sector. The district is renowned for its production of sugarcane, groundnuts, and various fruits and vegetables. The presence of several sugar factories highlights the importance of sugarcane in the local economy. Additionally, Satara is known for its floriculture, particularly the cultivation of roses and gerberas

The industrial sector in Satara is growing, with small and medium-sized enterprises (SMEs)

playing a significant role. These enterprises are involved in manufacturing, textiles, food processing, and engineering goods. The district also has a few large-scale industries, including those in the automotive and pharmaceutical sectors1.

Tourism is another vital component of Satara's economy. The district is home to several popular tourist destinations, such as Mahabaleshwar, Panchgani, and the Kaas Plateau, which attract visitors from across the country [vi]

As of the 2011 Census, Satara has a population of approximately 3 million people. The district has a population density of 287 people per square kilometer2. The majority of the population (about 81%) resides in rural areas, while the remaining 19% live in urban areas2. The sex ratio is 988 females per 1,000 males[2]. The literacy rate is quite high, with an overall literacy rate of 82.87%, and a higher literacy rate among males (89.42%) compared to females (76.31%)[2].

The district's population is predominantly Hindu, with significant communities of Buddhists, Muslims, and Jains3. The rural population is primarily engaged in agriculture and allied activities, while the urban population is involved in various industrial and service sectors

Given the agrarian nature of Satara's economy, a water project can have a substantial impact on the district. Improved water availability can enhance agricultural productivity, support the growth of floriculture, and ensure the sustainability of sugarcane cultivation. This, in turn, can boost the local economy and improve the livelihoods of the rural population.

In urban areas, better water infrastructure can support industrial growth and attract new businesses, further diversifying the economy. Additionally, improved water supply can enhance the quality of life for residents and support the tourism sector by ensuring the availability of water at popular tourist destinations.

The entire Satara district falls in the drainage of the Krishna river basin and is drained by the Nira River and its tributaries in the entire northern part, the Man River and its tributaries in the south-east and the Krishna River and its tributaries in the south. Krishna River which is one of the major rivers of Southern Peninsula rises on the eastern brow of the Mahabaleshwar plateau in the district and flows for about 176 km. in the district. Kudal, Vena, Urmodi, Tarli, Koyna, Vasna and Verla rivers are the main tributaries of Krishna River. The entire river system has sub-parallel to semi-dendritic drainage pattern and the drainage density is quite high in the district. Satara district is part of two main watersheds, the Nira River and Man River forming the Bhima River watershed north of the Mahadeo hills and the upper Krishna watershed to the south and further divided into 50 minor watersheds. The drainage map of the district is presented in Fig 1.4 Land Use (Figure .1.5) details have been observed that the major parts are covered by agricultural land with net sown area of 6829.07 Sq. Km (65.16%). Forest covers very little area of 386.53Sq.km (6.11 %) and cultivable area covers 4633.52 Sq.km (73.20%). The built-up area is reflected wherever settlement have come up. The soils in the district are derived from the Deccan basalt formation. The western fringe of the district is covered by laterite and lateritic soils which are followed by reddish to yellowish brown soils of mixed origin eastwards on hill slopes. Further east, coarse shallow

soils occur on plateau flats, medium black soil occurring in central part are rich in clay content in the intermediate area and deep black soil occur in the valleys in central and southern parts of the district. Along the major river/tributaries silty loam soil (>100 cm) is observed. [vii]

Approach & Methodology

5. Approach & methodology

The chapter provides details on the research design and methodology adopted for the impact assessment. It includes description of the key activities, data collection methods, and sampling strategies, employed to ensure the reliability and validity of the findings.

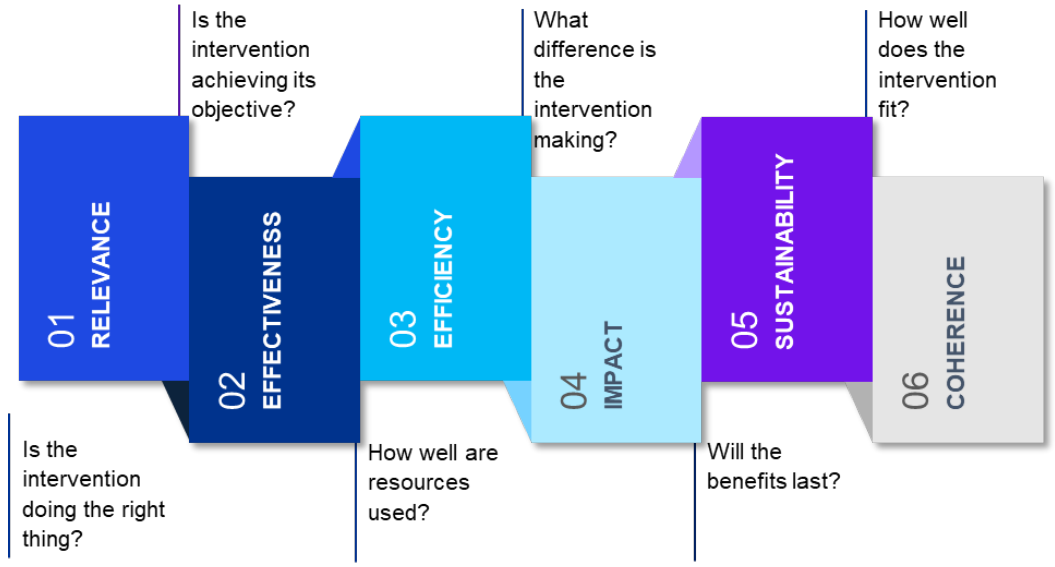
5.1 Our Approach

The study used the OECD DAC and SROI frameworks for designing the study and calculating social returns and impacts created due to APL's CSR projects on water stewardship. The former is widely used evaluation framework to assess the impact of social development programs, while SROI provides insights into project impact beyond traditional economic assessment tools.

This study adopted a four-phase structured methodology for evaluation as illustrated below. The adopted methodology ensured that OECD DAC evaluation criteria and SROI framework were followed throughout to effectively capture the impact of the program.

Phase I: Consulting and Scoping	Phase II: Research Design	Phase III: Data Collection	Phase IV: Analysis and Reporting
Kick-off meeting	Development of Impact Map	Development of field visit plan	Analysis of collected data using OECD DAC framework and estimating the SROI of the projects
Desk review of documents and reports related to the program	Mapping the stakeholders	Field visits and stakeholder interactions	Development of draft and final report
Determining the scope of the study	Designing sampling strategy and data collection tools		Presentation to APL Team

Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) first laid out the evaluation criteria in the 1991. It is a framework that comprises of a set of criteria that aid in systemic assessment of on-going or completed development programs. This method helps to effectively assess various facets of the program and gain qualitative insights along with quantitative impact. The six evaluative criteria in accordance with the OECD-DAC evaluation framework are as follows:



These evaluation criteria have been defined below along with illustrative questions:

Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
Relevance	A measure of the extent to which the intervention objectives and design respond to beneficiaries, global, country, and	*Commitments of the stakeholders are integrated into Project design and planning*

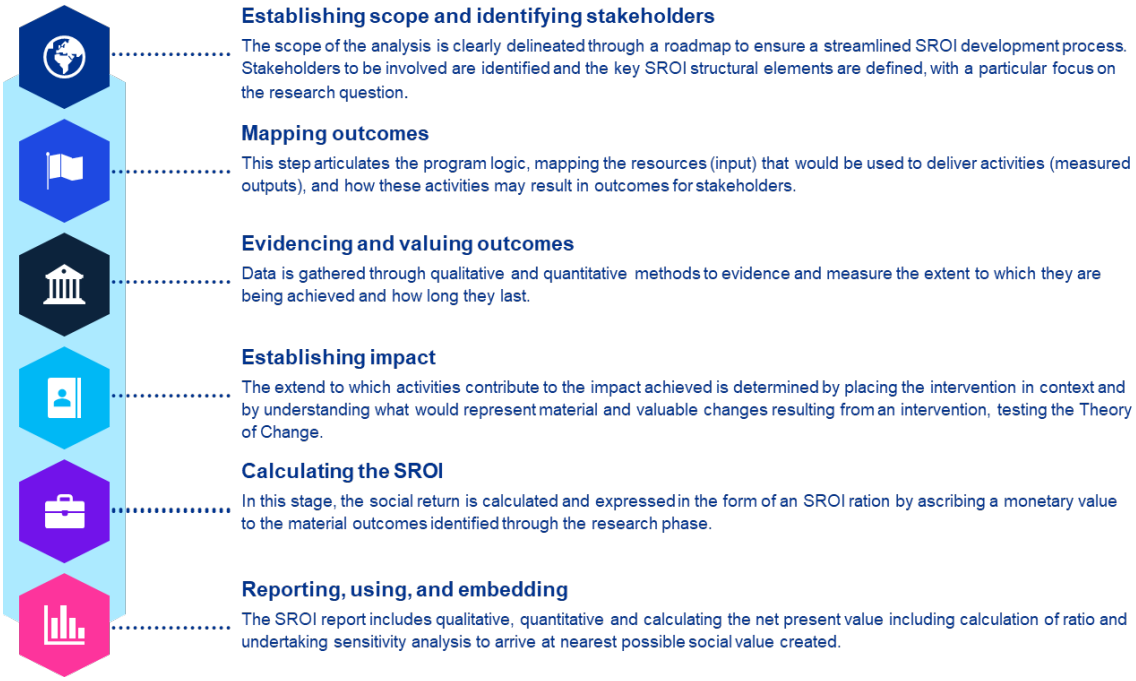
Evaluation Criteria	Illustrative Evaluation Questions	Cross-cutting Objectives
	partner/institution needs, policies, and priorities, and continue to do so if circumstances change. ▪ To what extent are the objectives of the project still valid? ▪ Are the activities and outputs of the project consistent with the overall goal? ▪ Are the activities and outputs of the project consistent with the intended impacts and effects?	
Effectiveness	A measure of the extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups. ▪ To what extent were the objectives achieved / are likely to be achieved? ▪ What were the major factors influencing the achievement or non-achievement of the objectives?	*Achieved cross-cutting objectives during project implementation*
Efficiency	A measure of the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way. ▪ Were activities cost-efficient? ▪ Were objectives achieved on time? ▪ Was the project implemented in the most efficient way compared to alternatives?	*Resources are provided and efficiently used for participation of all stakeholders*
Impact	A measure of the extent to which the intervention has generated or is expected to generate significant positive or negative, intended, or unintended, higher-level effects. ▪ What has happened as a result of the project? ▪ What real difference has the activity made to the beneficiaries? How many people have been affected?	*Achieved real and long- lasting positive changes in the lives of intended beneficiaries*
Sustainability	A measure of the extent to which the net benefits of the intervention continue or are likely to continue. ▪ To what extent did the benefits of a project continue after donor funding ceased? ▪ What were the major factors which influenced the achievement or non-achievement of sustainability of the project? ▪ What can be some of the innovative ways to make the project sustainable in the long run?	*Likelihood that project achievements will continue after project*
Coherence	A measure of the extent to which the intervention is compatible with other interventions in a country, sector, or institution. ▪ Does the project address the synergies and interlinkages between the intervention and other interventions in the same organisation and in the same sector/policy landscape? Does it weaken or enhance the impact of any current programs or policies? ▪ Does the program lead to duplication of efforts?	*The extent to which other interventions (particularly policies) support or undermine the intervention and vice versa.*

Social Return on Investment (SROI)

Social Return on Investment (SROI) is a systematic method that endeavours to measure and incorporate value created because of investment – namely social, environmental, and economic value which is not fully reflected in conventional cost-benefit analyses. This method is used to monetise the social and environmental impact of the program and measure how much value has been created for each rupee invested/ spent on the program. The evaluative aspect of an SROI quantifies the value of the social impact of programs, and policies, and measures change in ways that are relevant to the people or organisations that experience or contribute to it. Through an SROI, organisations can evidence the social value their programs are achieving, gain deeper insight into what impact they are having for their stakeholders and can thus use this as an input for their company strategy. SROI is about value, rather than money. It can encompass the social value generated by an entire organisation or focus on just one specific aspect of the organisation's work.

SROI utilises the concept of "theory of change/ impact map" to describe the change creation by measuring social, environmental, and economic outcomes. It uses monetary values to represent the outcomes thus enabling calculation of ratio of benefits to costs to be calculated. SROI analysis includes case studies and qualitative, quantitative, and financial

information thus helping organisations/ people to base their future decisions. The striking advantage of SROI study is that other impact assessment methodologies stop at identifying outcomes while SROI methodology goes beyond to value them and calculate the social value of impact. Steps of a SROI study are listed below –



Setting the Scope 	Identification of stakeholders including beneficiary group, finalising the scope- setting the boundary of what is going to be considered for evaluative SROI - stakeholders including beneficiaries, impacts, program period, etc.
Mapping Outcomes 	Creating impact map, identifying investments, and valuing inputs, identifying outcome sand indicators for monitoring / evidencing outcomes
Evidencing Outcomes 	Collecting and analysing outcome data and establishing how long the outcome will last
Establishing Impacts 	Identifying and valuing financial proxies, adjusting outcomes using deadweight, displacement, attribution and drop off, calculating the impact
Calculating SROI 	Programming the value of outcome into future based on the duration for which the impact will last, calculating the net present value including calculation of ratio and undertaking sensitivity analysis.

The process of calculation of SROI largely focuses on deadweight, displacement, attribution, and drop-off in association with any outcomes achieved. All these aspects are generally expressed as percentages and these percentages are applied to the financial proxy of each outcome to arrive at the total impact for the outcome. Therefore, we used a customised framework involving a combination of OECD-DAC and SROI to obtain a full picture of the impact created by APL.

5.2 Detailed Methodology

The following section discusses the methodology being employed by KPMG in this impact assessment, which has been broken down into four phases.

PHASE I: CONSULTING AND SCOPING

Activity 1: Inception meeting

As a first step, the KPMG team set up a scoping and kick-off meeting with the APL team to discuss the proposed work plan detailing out the various tasks to be conducted along with stipulated timelines. KPMG team had developed a detailed project plan to drive the engagement.

Activity 2: Desk-review and internal stakeholder engagement

The team conducted desk review of documents and reports shared by the client such as program concept notes, annual reports, program progress/closure reports, etc. Additionally secondary research was conducted to develop an in-depth understanding of the project locations, interventions, etc. Discussions with APL team and implementing agencies were conducted to understand the project interventions' KPIs, map external stakeholders, and determine sampling strategy and size.

PHASE II: RESEARCH DESIGN

Activity 1: Development of Impact Map/Theory of Change

A theory of change-based impact map was developed to establish the outcome and impact parameters for the project. An impact map is defined as a logical chain/ framework giving an overview of how inputs (actions taken, or work performed) result into outputs (changes resulting from the interventions relevant to the outcomes), causing outcomes (likely or achieved short or medium-term effects arising out of the outputs of intervention) and impact (positive or negative, intended, or unintended, direct, or indirect effects created by the interventions.

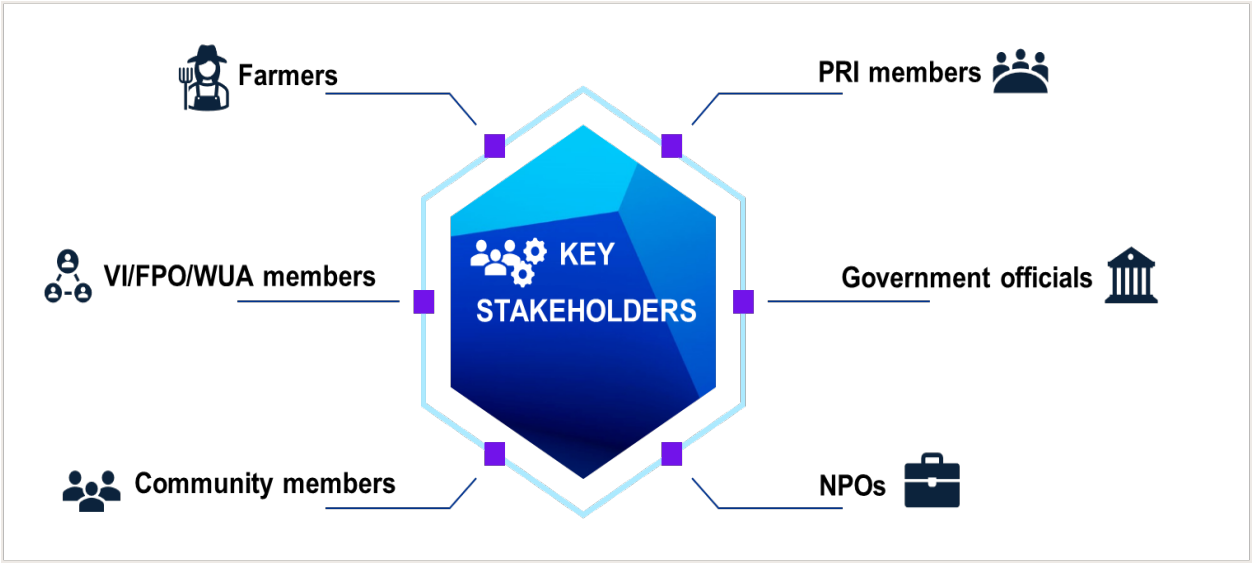
Impact map for the Integrated Water Resource Management Project:

(Please refer next page)

Stakeholder	Project Objectives	Inputs	Output	Outcome	Evidence Indicator
Farmers, Community members FPO/VI/WUA	To promote basic supplementary irrigation facilities by creating and strengthening water harvesting structures and increase water storage and availability; To improve and stabilize surface soil to convert unirrigated land to irrigated land. To encourage sustainable farming practices to increase household income of tribal farming community, in addition to benefiting the environment. To organize and strengthen the village institutions around water harvesting and related livelihoods	Construction and refurbishment of check dams, ponds and other WHS, Capacity building, Access to Finance, Time	Number of families reached out / availed benefits of check dams and other water harvesting structures	Increase in agricultural production	Changes in availability of cultivated land Changes in cropping pattern by farmers Changes in multi-seasonal cropping
				Access to secure livelihood	Changes in the input cost required for agriculture
				Creation of sustainable water supply	Changes in the irrigation fed agriculture, changes in the availability of water, reduced dependency on the other sources of water
				Creation of employment opportunities	Changes in the labour employment by the local population
			No. of families benefited from Group wells & Borewell	Access to potable water	Reduction in water borne diseases (Improvement in health), reduction of drudgery (time saved)
			No. of families benefited from agriculture interventions	Access to secure livelihood	Changes in the input cost required for agriculture, adoption of improved agriculture practices
			No. of village institutions benefited	Establishing community stewardship over the common water resources	Community led governance of its resources, effective operations, and maintenance of water structures
			Increase in water storage capacity	Improved biodiversity in the catchment area	Increase in biomass in command area, Improved bio-diversity – presence of bird and animal species, Improved soil health, Reduced soil pollution.

Activity 2: Stakeholder Mapping and Sampling strategy

Stakeholder mapping is the process of identifying all the stakeholders involved in a project and their roles and responsibilities on one map. The main benefit of a stakeholder map is to get a visual representation of all the people who can influence the project and how they are connected. Stakeholders who experience change, whether positive or negative because of the interventions carried out were considered for the study. Furthermore, their pertinence to the scope of the study and relevance to the overall analysis were assessed.



Sampling of stakeholders for engagement was done based on the materiality of the stakeholder and the extent of the impact on the stakeholder. Considering the overall outreach of the project as nearly 1300 beneficiaries. Additionally, we have taken extra sample stakeholder in order to derive accurate social return on investment ratio. The stakeholder-wise mode of interaction has been detailed out below:

Stakeholder type	Universe	Sample	Actual coverage
Farmers Benefitted due to water intervention	1300	100	119

Stakeholder	Reason for Inclusion	Data collection tool
Farmers who have been benefitted due to water harvesting related interventions	Since the farmers are the direct beneficiaries of this study hence it is important to include them to understand if the objectives of this program have been met.	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Farmers who have been benefitted due to agriculture related interventions	Agriculture is a key intervention, Hence, it is critical to get their perspective of the beneficiaries	***Structured Questionnaire:*** were developed for Teachers ***In-depth Interview:*** *were also undertaken*
Community members benefitted due to potable drinking water	The community members from the intervention area have been a key stakeholder and receiver of the impact hence, it is important to get their perspective.	***Semi-structured Questionnaire:*** were developed for Teachers
WUA members	In order to understand the governance mechanism established over the water usage, these stakeholders are important	***Structured Questionnaire:*** were developed ***In-depth Interview:*** *were also undertaken*
Stakeholders excluded from the study		
PRI Members and government officials	Excluded - Tertiary stakeholders not considered	Not applicable
Community members from periphery of intervention villages	Excluded - It was understood from the implementing team that due to no direct intervention, these stakeholders will remain outside the scope of the intervention	Not applicable

The study includes coverage of primary, secondary and tertiary beneficiaries. The primary beneficiaries covered as part of study are the farmers, who are direct intended beneficiaries. The family members of the farmers and community members are also included in the study, which constitute the secondary beneficiaries. As part of institutional interactions, PRI members and government officials were interacted with, which constitute tertiary stakeholders.

Activity 3: Development of Data Collection Tools

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data collection and analysis techniques. In the initial phases, detailed desk review was conducted to examine current knowledge and identify gaps and areas for further exploration. After literature review and development of research design, survey instruments were developed based on the impact map to collect data (quantitative and qualitative) from a sample population, utilizing an offline method to gather information on participants' experiences, attitudes, and behaviours. Semi-structured interviews with key stakeholders, including experts, PRI members, government officials, community leaders, and practitioners, were also designed to gain an in-depth exploration of the research topic and insights into emerging trends and best practices. Developed data collection tools were aligned to the key program objectives, scope outlined in the RFP, along with additional questions to add valuable insights for the case study. Tools prepared include:

- Tools for individual interactions

- Tools for focus group discussions
- Tools for other key stakeholder interactions
- Development of a research and data collection plan

PHASE III: DATA COLLECTION

Activity 1: Development of field-visit plan

Stakeholder interactions were through mutual discussion with APL and project implementing partner- AKRSP. A detailed timeline was developed for the field visits. The implementing partner has falitated support in scheduling interactions, mobilising the stakeholders and translator (if needed). Additionally, the team consulted with the implementing partner to identify any potential challenges or obstacles that may arise during the field visit, such as language barriers, cultural differences, or safety concerns. This ensured that the data collection teams had access to the necessary resources and support to conduct the study in an efficient and ethical manner.

Activity 2: Conducting field visits

The stakeholder consultations were conducted through individual interviews, focus group discussions, KIIs with other stakeholders. KPMG ensured inclusion of facilitators who possess previous experience in engaging with participants using their native/local languages. Training and sensitizing sessions were conducted for the data collection team to help them effectively communicate with the stakeholders. Team had conducted pre-testing/pilot testing of tools. The data collection process was monitored for completeness, accuracy, backcheck, and triangulation.

PHASE IV: ANALYSIS AND REPORTING

Activity 1: Data analysis and preliminary findings

During the data analysis, both qualitative and quantitative analysis were conducted on the data collected. To enhance accuracy and reliability, the findings from the quantitative data collected on the ground were triangulated to an extent. The collected information was thoroughly analysed on a location disaggregated basis, allowing for a detailed understanding of the specific areas involved. To calculate the social returns and impacts resulting from the program, the SROI framework and OECD-DAC framework were utilized. Additionally, a sensitivity analysis was conducted to examine the results of the ROI. The data and observations obtained during the primary data collection phase and document review were carefully analysed to inform report writing. The findings were further scrutinised basis the assurance standards for SROI assessments.

Activity 2: Development of report and presentation

A comprehensive and detailed report was created for Asian Paints Limited at the enterprise level encompassing the key observations, analysis, findings, and recommendations derived from the assessment. The report adhered to the guidelines provided by the OECD-DAC and SROI frameworks, ensuring accuracy and relevance. Before finalising the report, a draft version was shared with APL for discussion and their valuable inputs. After finalising, the report was presented to the leadership at APL. Furthermore, separate reports were prepared for each project, providing a breakdown of data and analysis. The data collected and the analysis have also been shared with APL.

6. Analysis & findings

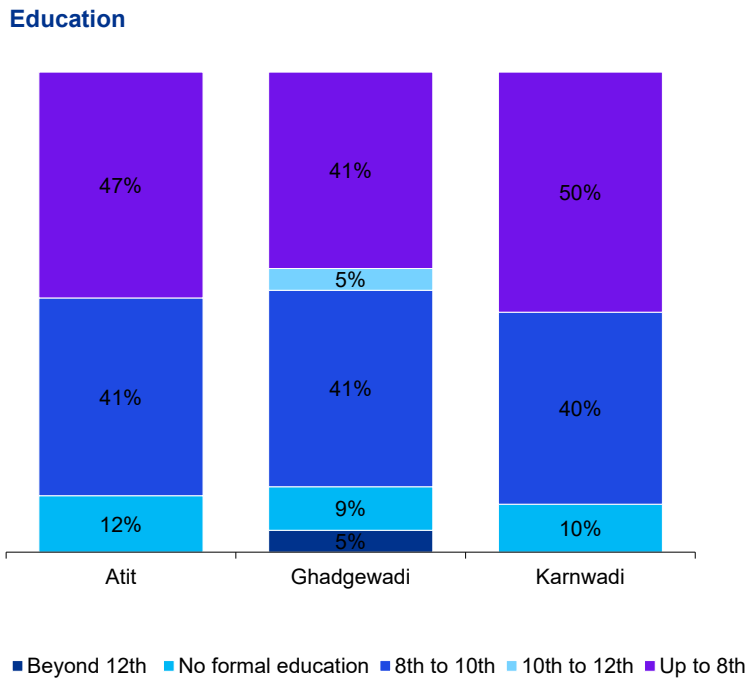
The section below highlights the findings and observations based on the interactions conducted with the sampled beneficiaries of the Water Resource Management program of Asian Paints Limited implemented by Vanarai in Atit, Ghadgewadi, and Karnwadi villages of Khandala block of Satara district, Maharashtra.

6.1 Demography of respondents

The following table represents the age profile of the respondents. It is noted that across three age groups, the majority of the population is 40 to 60 years old. The average family size across the villages is 4. It was noted during FGD that the youth of the villages are employed in nearby MIDC areas or Pune city, resulting in a nuclear family pattern.

Village/ Age in years	25 to 40	40 to 60	Above 60
Atit	12%	47%	41%
Ghadgewadi	14%	59%	27%
Karnwadi	20%	80%	0%

6.2 Education



The data indicates a prevalent trend of educational attainment up to the 8th and 10th grades across all three villages. Atit and Karnwadi show no representation in the categories Beyond 12th and 10th to 12th grades, suggesting potential barriers to higher education. Ghadgewadi, while also showing a strong presence in the lower educational categories, has a small but notable percentage of individuals with higher educational attainment.

6.3 Income

All respondents across all three villages shared that their primary income source is based on agriculture. 85% of the total sample shared that their secondary income is based on labour services, and the remaining respondents shared that their secondary income is based on livestock.

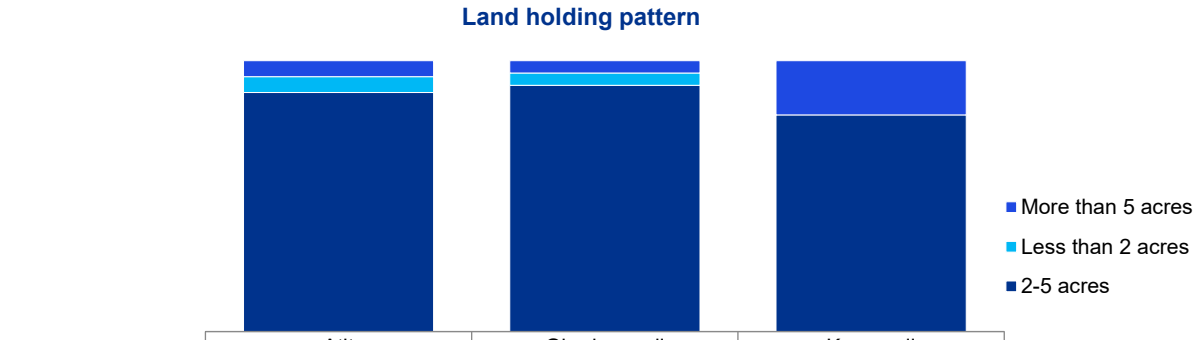
₹

90% of the respondents across three villages have annual household income between INR 50,000 to INR 1,00,000.

All respondents across three villages are dependent upon Agriculture

6.4 Land holding, Crop Pattern and Irrigation Facility

All respondents stated that they owned the land they cultivated. The following graph shows the land-holding pattern across three villages.

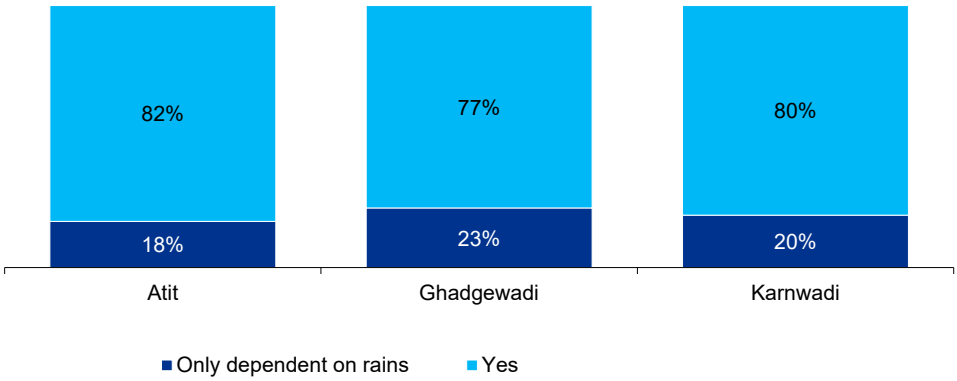


	Atit	Ghadgewadi	Karnwadi
More than 5 acres	6%	5%	20%
Less than 2 acres	6%	5%	0%
2-5 acres	88%	91%	80%

All respondents shared that they harvest Kharif season and 75% of the respondents shared that they take the Rabbi season. 20% of the respondents shared that they take crops in summer. It was noted that no respondents from Ghadgewadi and Karnwadi were taking any crop during the summer season. It was noted that farmers across three villages are taking the following crops across the harvesting seasons.

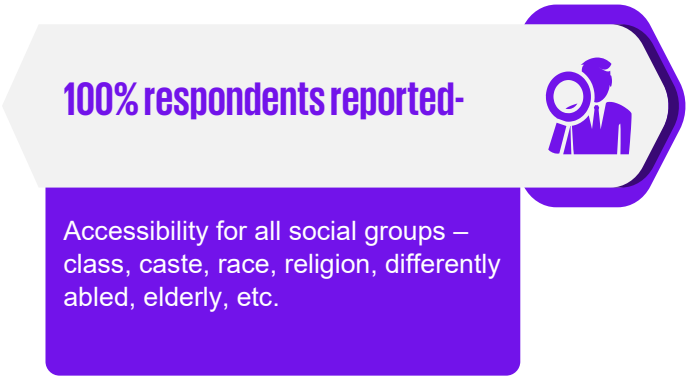
Kharif	Rabi	Summer
Paddy	Wheat	Groundnuts
Sorghum	Chickpeas	Pulses
Pearl Millet		

Irrigation Facilities



The data indicates that, on average, 80% of the population across the three villages has access to irrigation facilities, while 20% rely solely on rainfall for agriculture. It noted that all three villages have similar status of irrigation facilities.

6.5 About the accessibility of the project across all community groups:



The analysis reflects the level of inclusivity in the project's activities. The KPIs, accessibility for all social groups, is a critical measure of the project's social inclusivity, and the data indicate that the project has performed well, with a 100% accessibility rate. This indicates that the project has taken the necessary measures to ensure that all social groups, regardless of caste, class, race, religion, or other factors, have equal access to the support interventions. This demonstrate the project's commitment to social equity and inclusion. By improving accessibility for all social groups, the project can ensure that the benefits of its activities are shared equitably, promoting sustainable development in the region.

6.6 Support for Water Harvesting Structures

As part of the project evaluation, discussions were conducted with the project beneficiaries to gather their feedback. During these consultations, it was observed that 100% of the respondents reported a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

Furthermore, the respondents indicated that they were consulted during the project planning and implementation process, and their feedback was taken into consideration, demonstrating the participatory nature of the project. This approach to community engagement is crucial for ensuring the successful implementation and sustainability of the project.

During the implementation phase, the implementing partner conducted regular sessions to persuade farmers who initially showed little interest in providing support

6.7 Impact on availability and accessibility of water

As a part of the project evaluation, discussions were held with the project beneficiaries to gather their feedback. During the consultation, it was observed that 100% of the respondents expressed a positive impact from the water-related activities implemented in the project area. This indicates a high level of satisfaction among the beneficiaries with the project interventions.

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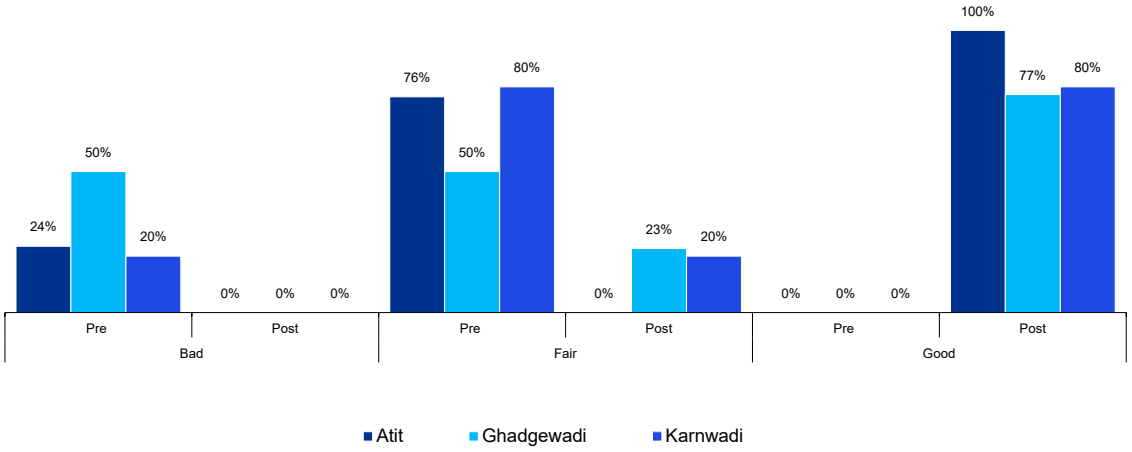
The responses indicate a substantial positive impact of the project on water availability and accessibility in the targeted areas. In Atit, the shift from 24% "Bad" ratings pre-project to 100% "Good" ratings post-project is particularly notable. Ghadgewadi and Karnwadi also show significant improvements, with "Bad" ratings dropping to 0% and "Good" ratings increasing substantially.

Impact on rating on availability and accessibility of water



100%

Of respondents reported the improved accessibility of water for HH and agriculture needs.

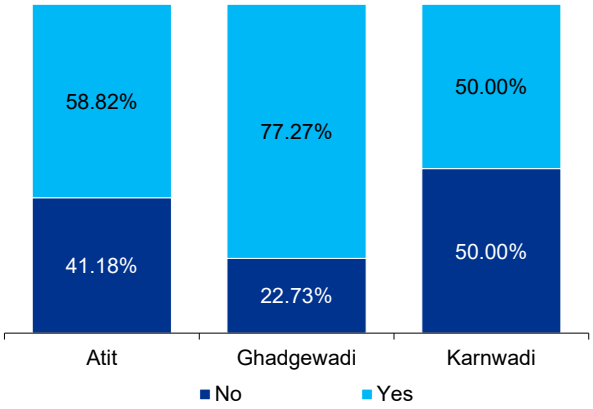
The high level of satisfaction expressed by the beneficiaries regarding the improvement in water accessibility signifies the significant success of the project in promoting sustainable development and water conservation

83% Of respondents reported that intervention resulted in increased water availability in your well/borewell

55% Of respondents reported that intervention resulted in increased water availability in your well/borewell more than four months

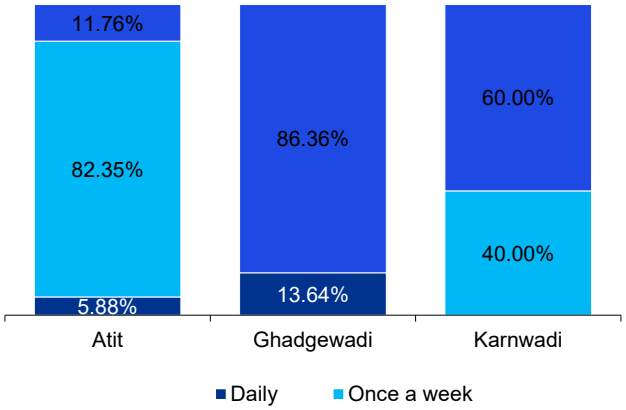
The increased availability of water has instilled confidence in farmers regarding the health of their crops and the overall management of agricultural planning, resulting in higher yields.45% of the respondents shared that they have observed increased water availability for 1-2 months. This indicates all respondents shared that they have observed increased water availability

Availing water for irrigation directly from WHS



The data on the utilization of water for irrigation directly from Water Harvesting Structures (WHS) indicates a significant positive impact, with 65.31% of respondents across all surveyed villages availing water from WHS. In Ghadgewadi, the highest adoption rate is observed at 77.27%, followed by Atit at 58.82%, and Karnwadi at 50%. This widespread use of WHS highlights the project's success in providing a valuable resource for irrigation, thereby enhancing agricultural productivity. However, the varying levels of adoption suggest the need for targeted interventions to address barriers faced by farmers not utilizing WHS, ensuring broader and more equitable benefits from the project.

Frequency of availing water directly from WHS

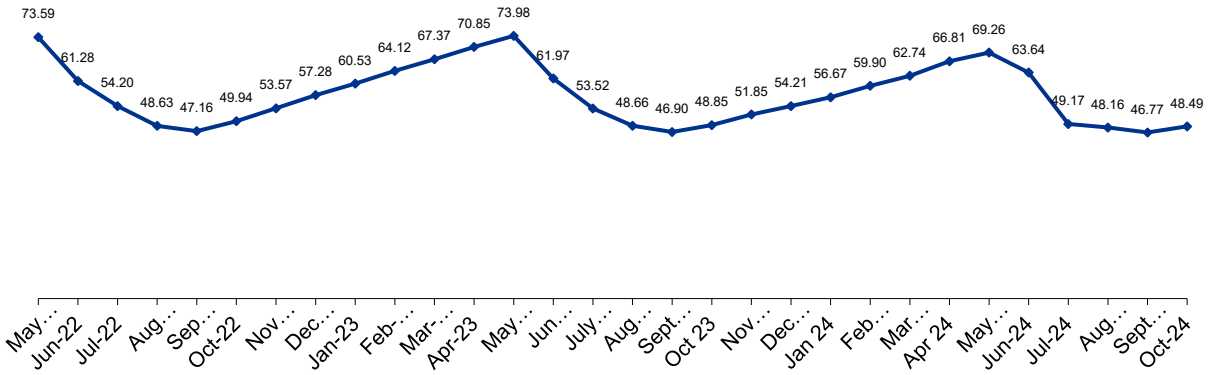


The responses on the frequency of water usage for irrigation from Water Harvesting Structures (WHS) reveal varied patterns across the surveyed villages. In Atit, 82% of respondents use water once a week, 11% twice a week, and 5% daily. Ghadgewadi shows a different trend, with 86% using water twice a week and 13% daily, while none use it once a week. In Karnwadi, 60% of respondents use water twice a week, 40% once a week, and none daily. Overall, 55% of respondents use water twice a week, 36% once a week, and 8% daily. This data indicates that the majority of farmers prefer using water from WHS on a weekly basis, with a significant portion utilizing it twice a week, reflecting the varying irrigation needs and practices across different villages.

6.8 Impact on water level

The data on water levels from observation wells has been provided by the implementing partner. This data has been analyzed by KPMG and is reported below. KPMG has not independently verified the accuracy or completeness of the data provided by the implementing partner.

Well Water level Across Season (Unit - Foot, 1 Meter = 3.28 Foot)



Season Ending	Average Value (Unit Foot, 1 Meter = 3.28 Foot)
Jun-22	53.21
Sep-22	50.00
Dec-22	53.60
Mar-23	64.01
Jun-23	68.93
Sep-23	49.69
Dec-23	51.64
Mar-24	59.77
Jun-24	66.57
Sep-24	48.03
Dec-24	48.49

Seasonal Fluctuations: The well water levels exhibit clear seasonal patterns. There are noticeable peaks and troughs corresponding to different times of the year, indicating the influence of seasonal changes on water levels.

Rising Trend: There is a general upward trend in water levels from May 2022 to March 2023, followed by a decline and subsequent fluctuations. This suggests that the well water levels are influenced by factors such as rainfall, groundwater recharge, and possibly water usage patterns.

Peak Levels: The highest water levels are observed around March 2023 and January 2024. These peaks could be attributed to increased rainfall or reduced water extraction during these periods.

Trough Levels: The lowest water levels are observed around November 2022 and August 2023. These troughs may be due to higher water extraction rates or reduced rainfall during these months.

Yearly Comparison: Comparing the yearly averages, there is an increase in the average water level from 2022 to 2023. This indicates increase in water availability and usage over the years

All respondents shared that intervention resulted in surface water availability in water harvesting structures or streams.

During the project evaluation, the beneficiaries reported positive outcomes resulting from pond rejuvenation activities as part of improving surface water availability. The data indicate that 100% of the respondents experienced an improvement in surface water availability, with 90% confirming surface water availability during ending of winter season. Improved surface water access indicates significant benefits in livestock and domestic use, leading to positive socio-economic outcomes. Respondents also shared during the Focus Group Discussions (FGD) that they are no longer dependent on water tankers, a reliance they previously had.

> Previously, during the summer, villagers depended on water tankers provided by the government. However, we are no longer reliant on water tankers. We used to ration water for our livestock, but now we have enough water to meet their needs as well.- *Sarpanch* (Ghadgewadi)

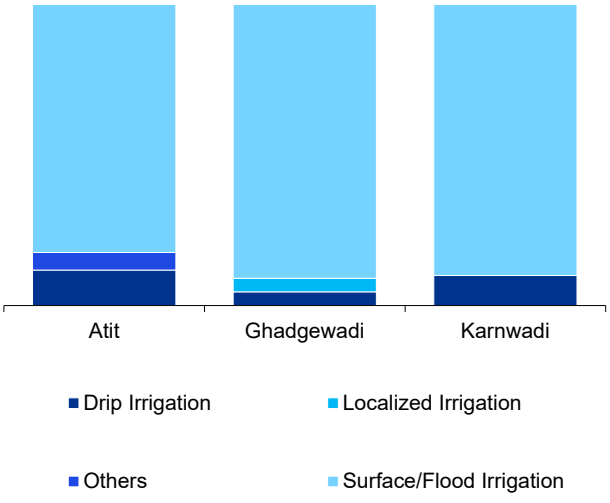
6.9 Impact on water quality

As part of the project evaluation, a discussion was held with the beneficiaries to assess the water quality situation. The results indicate that all respondents reported no challenges, and the situation remains consistent with previous water quality. During the focused group discussions, the respondents further confirmed having no issues or challenges related to waterborne diseases. This indicates the safe access to water for all community members across all villages of project intervention area.

6.10 Impact on agriculture practices and livelihood

As per the responses received, the majority of the farmers are from the 2-5 acres. 58% of the respondents shared that they have increased irrigated land by 1 acre because of increased water availability due to WHS.

It was noted that cultivable areas remained constant, whereas irrigated areas were increased by 1 acre. It is important to note that cultivable areas and irrigated areas are not the same. While cultivable area refers to the total area that is suitable for cultivation, irrigated area refers to the area of land that receives water through artificial means, such as the use of water pumps, canals, or other irrigation systems. Through project intervention, many of the beneficiaries were supported by drip irrigation. Hence, this has resulted in a potential increase in the average of the total irrigated area.



The responses indicate that open wells are the primary source of water for irrigation across all surveyed villages, accounting for 78% of the total. Rainwater is the least utilized source, making up 12%, while canals contribute 10%. Ghadgewadi has the highest reliance on open wells at 86%, followed by Atit at 71% and Karnwadi at 70%. The use of canals is most prominent in Karnwadi at 20%, whereas Ghadgewadi does not use canals at all. These findings suggest that open wells are a critical resource for irrigation in these villages, and there may be opportunities to enhance the use of alternative water sources, such as canals and rainwater harvesting, to diversify and improve water availability for irrigation.

The responses indicate that surface/flood irrigation is the predominant method used across all surveyed villages, accounting for 87.76% of the total irrigation methods. Drip irrigation and localized irrigation are less commonly used, with drip irrigation making up 8.16% and localized irrigation 2.04%. The village of Ghadgewadi has the highest reliance on surface/flood irrigation at 41%, followed by Atit at 29% and Karnwadi at 18%. The limited use of drip and localized irrigation methods suggests potential areas for improvement in promoting more efficient irrigation techniques. These findings highlight the need for targeted interventions to encourage the adoption of more sustainable and water-efficient irrigation practices. 20% of the respondents shared that they were able to use micro irrigation.

During FGD, it was noted that farmers are not keeping records of the cost of irrigation regularly, but they have shared that the average cost of irrigation is around INR 2306.

With the availability of water, farmers reported that the frequency of irrigating land has increased, irrigating land as per the farming requirement.

6.11 Impact on agriculture produce and income

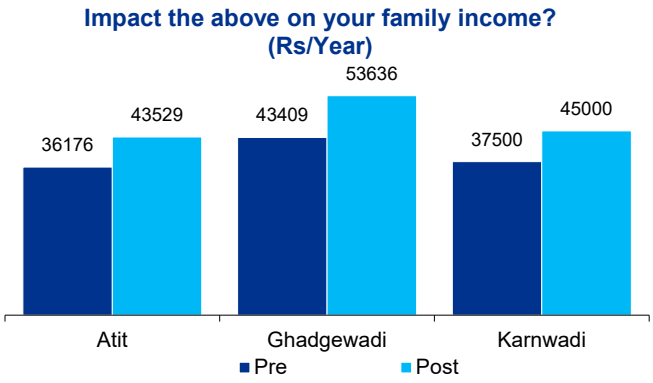
83% respondents shared that they have started extra crop season due to improved water accessibility and shared that the have observed increase yield.

Villages	Pre (quintal/acre)	Post (quintal/acre)
Atit	6.4	8.4
Ghadgewadi	5.2	7.2
Karnwadi	5.8	7.8

Villages	Increase in yield %
Atit	24%
Ghadgewadi	28%
Karnwadi	26%
Average	26%

The responses indicates that the project interventions have led to an increase in crop yields across all surveyed villages. In Atit, crop yields increased from 6.4 to 8.4 quintals per acre, in Ghadgewadi from 5.2 to 7.2 quintals per acre, and in Karnwadi from 5.8 to 7.8 quintals per acre. Each village experienced an increase of 2.0 quintals per acre. These improvements suggest that the interventions have positively impacted agricultural productivity, contributing to higher yields and potentially better economic outcomes for the farmers.

Economic outcomes before and after the project interventions, measured in Indian currency units, shows the following improvements across the surveyed villages:



Increase in economic outcomes across all villages suggests that the interventions have effectively enhanced the financial stability and prosperity of the farming communities. This growth is reflected in the increased income levels post-intervention, which can be attributed to improved agricultural productivity and better resource management.

Villages	Increase in income due to increased produce and additional crop season
Atit	17%
Ghadgewadi	19%
Karnwadi	17%
Average	18%

Project interventions have led to notable economic improvements across the surveyed villages, enhancing the financial well-being of farmers and contributing to the overall development and sustainability of the farming communities. These positive outcomes highlight the importance of continued support and investment in agricultural projects to ensure long-term success and prosperity.

6.12 Impact on environment

55% of the respondents have shared that they now observing increased water availability for more than 4 months. This result shows that there is increase in water availability

(Disclaimer: The impact on the environment is dependent upon various factors. Government and other private parties can also have an impact on the nearby environment. These environmental impacts cannot be solely attributed to the work of Asian Paints Limited. The following section of the chapter aims to analyze the changes in environmental attributes before and after the implementation of the project.)

Impact in Atit Watershed Area

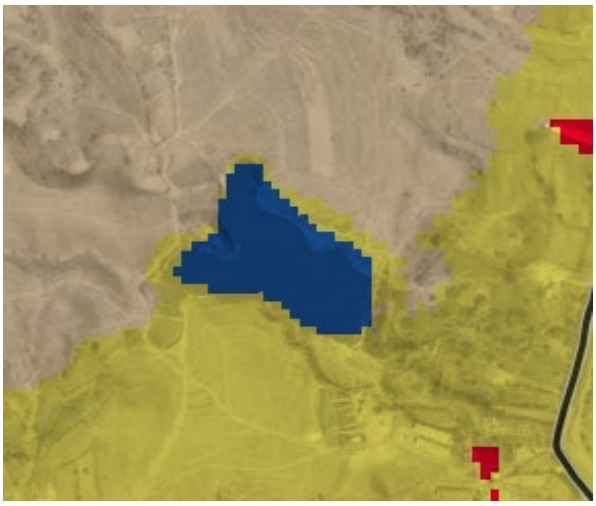


Image 1 Water body in Atit watershed area in 2023

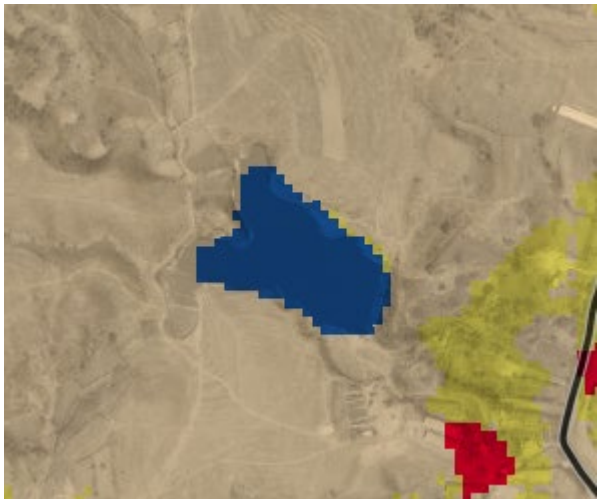


Image 2 Water body in Atit watershed area in 2020

Legend

Water Body	Crop Area	Built-up Area

Based on the satellite data from trusted open-source satellite data[viii], it has been noted that the crop area in Atit village and the surrounding area has increased by 8% approximately. The result in increased crop area is associated with increased water availability.

Impact in Ghadgewadi and Karnwadi Watershed Area

In the Ghadgewadi and Karnwadi watershed area, an increase in crop cover has been noted near the steppes of the mountains surrounding these regions. This can be attributed to CNB and CCT on the mountain steppes. *Refer to images 3 and 4.*

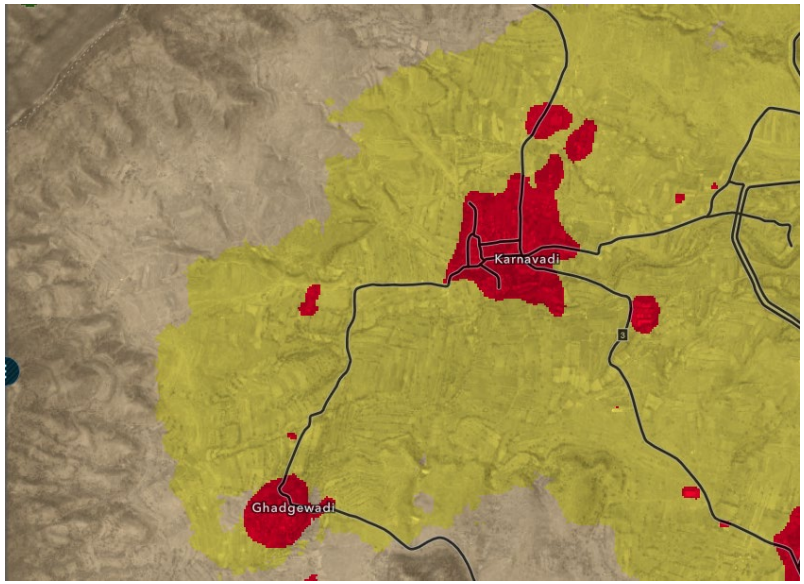


Image 3 Crop cover in Ghadgewadi and Karnwadi in 2023

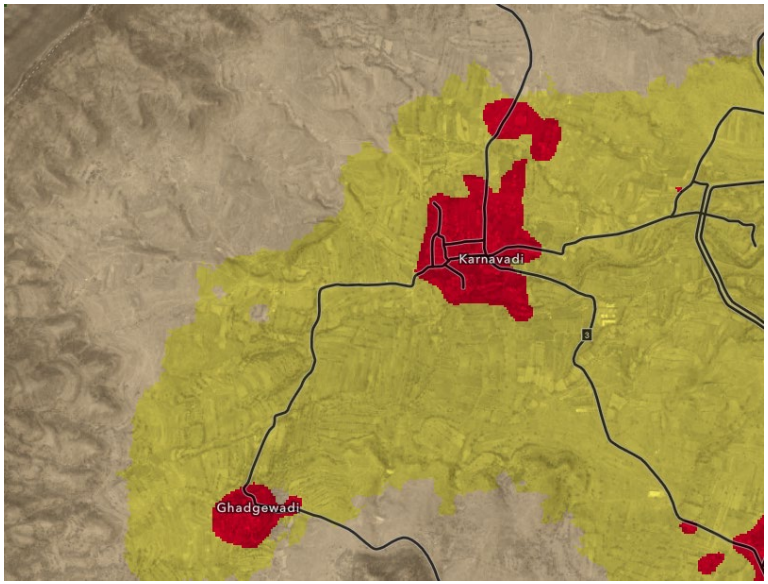


Image 4 Crop cover in Ghadgewadi and Karnwadi in 2020

Legend

Water Body	Crop Area	Built-up Area

It is noted that increase in 3% approximately of crop areas have increased in Ghadgewadi and Karnwadi watershed area when compared between 2020 and 2023.

All the respondents shared that they have observed more vegetation for longer months than previously.

40% of the respondents shared that they observed more birds, crabs and fishes around the WHS. Respondents shared that this mainly attributed to more water availability than last few years.

All respondents have shared that they have observed the surface water in the CNB and other WHSs for a longer duration when compared for the last decade

Water Quality Parameters (Tested for Atit village)

The water sample was tested for various parameters, The analysis was performed by Smartchem Technologies Limited's Farm Diagnostic Services (Agri Lab) and the results are summarized in the table below:

PARAMETER	Unit	Testing Method	Test Value	Permissible Limit	Remark
PH	--	Direct sample on pH meter	7.37	6.5-7.5	Not a Problem
ELECTRICAL CONDUCTIVITY (EC)	mS/cm	Direct sample on EC meter	0.30	≤ 0.25	Increasing Problem
CHLORIDES	meq/lit	Silver Nitrate Titration Method	3.00	≤ 4	Not a Problem
SULPHATES	meq/lit	Spectrophotometric (BaSO4 Precipitation) Method	0.88	≤ 2	Not a Problem
BICARBONATES (HCO3)	meq/lit	Titration with Standard H2SO4 Method	4.00	≤ 1.5	Severe Problem
SODIUM	meq/lit	Flame Photometric Method	0.15	≤ 22	Not a Problem
CALCIUM AND MAGNESIUM (CA+MG)	meq/lit	Calculation Method	8.74	≤ 8	Increasing Problem
MAGNESIUM TO CALCIUM RATIO (MGCA RATIO)	--	Calculation Method	0.36	≤ 1.5	Not a Problem
SODIUM ADSORPTION RATIO (SAR)	--	Calculation Method	0.07	≤ 10	Not a Problem

Suitability for Irrigation

PARAMETER	CLASS	SUITABILITY FOR IRRIGATION
CONDUCTIVITY	C2	Medium Salinity Class. Suitable for soils with good to moderately good drainage and crops semi-tolerant to salts. Examples: Rice, Sorghum, Maize, Pearl millet, Wheat, Pigeon pea, Gram, Soybean, various vegetables and fruits.
SODIUM HAZARDS	S1	Low Sodium Class. Suitable for all types of soils. Caution advised for sodium-sensitive crops like Wood Apple and Avocado.

The water sample from Atit village demonstrates overall good quality for agricultural use, with most parameters falling within permissible limits. While there are some concerns with bicarbonate levels and slight salinity, these issues can be effectively

managed with proper irrigation practices. By using good quality irrigation water alongside the tested sample, farmers can ensure the health and productivity of their crops. The water is particularly suitable for a wide range of crops, including rice, sorghum, maize, and various vegetables and fruits, making it a valuable resource for the agricultural community in Atit village.

Soil Quality Parameters (Tested for Atit village)

The soil sample was tested for various parameters analysis was performed by Smartchem Technologies Limited's Farm Diagnostic Services (Agri Lab).

PARAMETER	Unit	Test Value	Permissible Limit	Remark
PH	--	7.55	6.5-7.5	Moderately Alkaline
ELECTRICAL CONDUCTIVITY (EC)	mmhos/cm	0.84	0.01-0.80	High
ORGANIC CARBON (OC)	%	4.00	0.41-0.6	Moderately Calcareous
TOTAL CACO3	%	0.13	0.10-5.00	Normal

Available Nutrients in Soil

The availability of various nutrients in the soil is summarized in the table below:

NUTRIENT	Unit	Test Value	Permissible Limit	Remark
NITROGEN (N)	kg/ha	105.37	280-420	Very Low
PHOSPHORUS (P)	kg/ha	51.74	14-20	Very High
POTASSIUM (K)	kg/ha	222.66	150-200	Moderately High
CALCIUM (CA)	ppm	5025.00	>300	High
MAGNESIUM (MG)	ppm	1105.00	>122	High
SULPHUR (S)	ppm	1.98	10.00-20.00	Low
IRON (FE)	ppm	14.20	2.51-4.50	High
MANGANESE (MN)	ppm	8.86	2.01-5.00	High
ZINC (ZN)	ppm	1.12	0.61-1.20	Sufficient
COPPER (CU)	ppm	3.00	0.31-0.50	High
BORON (B)	ppm	0.25	0.50-0.60	Low

Suitability for Agriculture

The soil's electrical conductivity (EC) is within the normal range, making it suitable for all crops. However, the pH level is moderately alkaline, which can affect the availability of certain nutrients like phosphorus and boron. Additionally, deficiencies in copper, iron, manganese, zinc, and cobalt may arise at pH levels above 7.0.

The soil sample from Atit village shows a mix of nutrient levels, with some parameters requiring attention. By implementing the recommended management practices, farmers can enhance soil fertility and ensure optimal crop growth. The soil is suitable for a wide range of crops, making it a valuable resource for the agricultural community in Atit village.

With proper soil management and monitoring, the agricultural potential of the soil in Atit village can be fully realized, contributing to the prosperity and well-being of the local community.

Water Quality Parameters (Tested for Ghadgewadi village)

The water sample was tested for various parameters, The analysis was performed by Smartchem Technologies Limited's Farm Diagnostic Services (Agri Lab) and the results are summarized in the table below

The water sample was tested for various parameters, and the results are summarized in the table below

PARAMETER	Unit	Testing Method	Test Value	Permissible Limit	Remark
PH	--	Direct sample on pH meter	7.52	6.5-7.5	Increasing Problem
ELECTRICAL CONDUCTIVITY (EC)	mS/cm	Direct sample on EC meter	0.33	≤ 0.25	Increasing Problem
CHLORIDES	meq/lit	Silver Nitrate Titration Method	3.40	≤ 4	Not a Problem
SULPHATES	meq/lit	Spectrophotometric ($BaSO_4$ Precipitation) Method	0.79	≤ 2	Not a Problem
BICARBONATES (HCO_3)	meq/lit	Titration with Standard H_2SO_4 Method	4.00	≤ 1.5	Severe Problem
SODIUM	meq/lit	Flame Photometric Method	0.20	≤ 22	Not a Problem
CALCIUM AND MAGNESIUM (CA+MG)	meq/lit	Calculation Method	5.62	≤ 8	Not a Problem
MAGNESIUM TO CALCIUM RATIO (MGCA RATIO)	--	Calculation Method	0.33	≤ 1.5	Not a Problem
SODIUM ADSORPTION RATIO (SAR)	--	Calculation Method	0.12	≤ 10	Not a Problem

Suitability for Irrigation

The suitability of the water for irrigation is summarized in the table below:

Parameter	Class	Suitability For Irrigation
CONDUCTIVITY	C2	Medium Salinity Class. Suitable for soils with good to moderately good drainage and crops semi-tolerant to salts. Examples: Rice, Sorghum, Maize, Pearl millet, Wheat, Pigeon pea, Gram, Soybean, various vegetables and fruits.
SODIUM HAZARDS	S1	Low Sodium Class. Suitable for all types of soils. Caution advised for sodium-sensitive crops like Wood Apple and Avocado.

The water sample from Ghadgewadi village demonstrates overall good quality for agricultural use, with most parameters falling within permissible limits. While there are some concerns with bicarbonate levels and slight salinity, these issues can be effectively managed with proper irrigation practices. By using good quality irrigation water alongside the tested sample, farmers can ensure the health and productivity of their crops. The water is particularly suitable for a wide range of crops, including rice, sorghum, maize, and various vegetables and fruits, making it a valuable resource for the agricultural community in Ghadgewadi village.

Soil Quality Parameters (Tested for Ghadgewadi village)

The soil sample was tested for various parameters analysis was performed by Smartchem Technologies Limited's Farm Diagnostic Services (Agri Lab).

Soil Quality Parameters

The soil sample was tested for various parameters, and the results are summarized in the table below:

PARAMETER	Unit	Test Value	Permissible Limit	Remark
PH	--	7.26	6.5-7.5	Slightly Alkaline
ELECTRICAL CONDUCTIVITY (EC)	mmhos/cm	1.03	0.01-0.80	Very High
ORGANIC CARBON (OC)	%	3.50	0.41-0.6	Moderately Calcareous
TOTAL CACO3	%	0.10	0.10-5.00	Normal

Available Nutrients in Soil

The availability of various nutrients in the soil is summarized in the table below:

NUTRIENT	UNIT	TEST VALUE	PERMISSIBLE LIMIT	REMARK
NITROGEN (N)	kg/ha	120.42	280-420	Very Low
PHOSPHORUS (P)	kg/ha	81.31	14-20	Very High
POTASSIUM (K)	kg/ha	373.18	150-200	Very High
CALCIUM (CA)	ppm	4605.00	>300	High

MAGNESIUM (MG)	ppm	1265.00	>122	High
SULPHUR (S)	ppm	2.50	10.00-20.00	Low
IRON (FE)	ppm	31.72	2.51-4.50	High
MANGANESE (MN)	ppm	19.12	2.01-5.00	High
ZINC (ZN)	ppm	1.98	0.61-1.20	High
COPPER (CU)	ppm	8.56	0.31-0.50	High
BORON (B)	ppm	0.15	0.50-0.60	Low

The soil in Ghadgewadi village exhibits several favorable characteristics for agricultural use. The slightly alkaline pH level of 7.26 is within an acceptable range for many crops, ensuring that essential nutrients remain available for plant uptake. The soil's electrical conductivity (EC) is very high, indicating a rich presence of soluble salts, which can be beneficial for certain crops when managed properly.

The soil is particularly rich in essential nutrients such as phosphorus, potassium, calcium, magnesium, iron, manganese, zinc, and copper, all of which are present in high to very high concentrations. These nutrients are crucial for healthy plant growth and high crop yields. The presence of these nutrients in ample amounts suggests that the soil is well-suited for a variety of crops, including cereals, pulses, vegetables, and fruits.

With proper management practices, such as the application of nitrogen-rich and sulphur-containing fertilizers, and the use of soil amendments to optimize pH levels, farmers can maximize the productivity of their fields. The soil's nutrient-rich profile makes it a valuable resource for the agricultural community in Ghadgewadi village, supporting sustainable and productive farming.

7. Case Study

Image 5 Rejuvenated pond in Karnwadi in the month of December 2024

Milind Vasant Shende, a 54-year-old farmer from Karnawadi, has been engaged in agriculture on his ancestral land for several decades. His property is located adjacent to one of the rejuvenated ponds in the village, which has had a significant impact on his agricultural practices and productivity due increased water levels

Historical Farming Practices

During his childhood, Milind's parents primarily cultivated Kharif crops. However, due to frequent droughts, they eventually shifted to rainfed crops, which required less water. This transition was essential for their survival but limited the diversity and yield of their produce.

Impact of Pond Rejuvenation

The rejuvenation of the pond near Milind's land has been transformative. The increased availability of water has converted previously barren land into fertile, cultivable fields. This development has enabled Milind to adopt more intensive farming practices and increase the number of crop cycles per year.

Enhanced Productivity and Earnings

With the improved water supply, Milind can now cultivate multiple crops throughout the year, resulting in higher productivity and increased earnings. The rejuvenated pond has not only enhanced the quality of his land but also provided a reliable water source that supports diverse agricultural activities.

Contribution of the Next Generation

Milind's son, who holds a Bachelor of Science degree in Agriculture, plays a pivotal role in the farm's success. His expertise in modern agricultural practices has further boosted productivity. Together, they implement effective farm management strategies, ensuring sustainable and profitable farming operations.

8. OECD-DAC

8.1 Evaluation Criteria- Relevance

Relevance is a measure of the extent to which the intervention objectives and design respond to beneficiaries' needs, policies, and priorities, and continue to do so, if circumstances change.

Relevance assesses how well the programme connected with the aims and policies of the government in which it is being executed and to determine whether the programme is relevant to the needs of the beneficiaries.

Need of the community:

During the interview, the respondents were asked about the challenges they faced prior to this intervention. 35 percent respondent indicated that one of the challenges they faced before the intervention was scarcity of water for their agricultural use owing to decreasing groundwater levels. During group discussions with the beneficiaries, it was shared that unpredictable rainfall has been a major challenge especially, when 20 percent of the respondents were only dependent on rainfed agriculture. Around 65 percent of beneficiaries shared that they did not have adequate access to water for agriculture before the intervention.

The data gathered through interviews with community members indicated that a significant number of livestock were facing water scarcity on a daily basis. The limited availability of water in these areas was negatively impacting animal health and productivity, resulting in reduced livelihoods and economic opportunities for the rural communities.

The data collected from the beneficiaries on their water-related challenges before implementation of the program highlighted their poor conditions around water availability, thereby establishing the need for this program.

Alignment to Schedule VII of the Companies Act, 201320F

The programme has been designed to cater marginalised communities residing in the vicinity of Asian Paints Limited's area of operation in alignment with the provisions of Section 135 of the Companies Act (2013) and CSR Rules.

The actions undertaken as part of the programme fall into the following broad categories of the section:

- (i) eradicating hunger, poverty, and malnutrition, promoting health care including preventive health care and sanitation [including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water
- (iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water [including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].
- (x) rural development projects

8.2 Evaluation Criteria- Coherence

Coherence refers to the alignment of the intervention with national priorities and other interventions in a country, sector, or institution. It measures the extent to which other interventions (particularly policies) support or undermine the intervention, and vice versa.

Alignment of the programme with National Priorities and Sustainable Development Goals

The Sustainable Development Goals (SDGs), commonly referred to as the global goals, were established by all United Nations members in 2015 with the aim of eradicating poverty, preserving the environment, and guaranteeing that everyone lives in peace and prosperity by 2030. India was a key contributor to the development of the SDGs and is dedicated to fulfilling them by 2030.

Due to the nature of the intervention, the programme has an impact on a wide range of SDG-related outcomes, as shown below:

SDG Goal	Targets	Relevance
GOAL 1: No Poverty 	**Target 1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.	The project initiated a programme on Water Commons to improve the management and governance of land and water resources by strengthening community stewardship

GOAL 2: Zero Hunger 	**Target 2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	The project activities target to strengthen rural livelihoods through agriculture productivity and better adaptive capacities.
GOAL 6: Clean Water and Sanitation 	**Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **Target 6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from waterscarcity.	The project activities included constructing/repairing water harvesting structures such as farm ponds and check dams in villages to improve access to water for the community members for drinking and irrigation purposes.
GOAL 15: Life on Land 	**Target 15.1** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains, and drylands, in line with obligations under international agreements. **Target 15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	Project activities included promotion of agro-forestry and prevention of forest among the community members. Within WHS initiatives, water user groups were formed for operation and maintenance of the infrastructures constructed and sustainability of the project.

Water crisis threatens the health and development of communities across the world. Over the years, the government at centre and states has been making considerable efforts to address the issue of depleting groundwater. While the Ministry of Jal Shakti21F[ix] aims to devise policies and programs for better management of water in the country, the Government of India had launched the Jal Shakti Abhiyan in 201922F[x] with an aim to improve water availability including groundwater conditions in various water stressed blocks. Following that, the Government launched “catch the rain campaign” in 202123F[xi] emphasising on creating rainwater harvesting structures. In this scenario, Asian Paints Limited. project on Integrated Water Resource Management aligns with the national priorities of and the government’s efforts of rejuvenating water bodies to address the issue of depleting groundwater in the country.

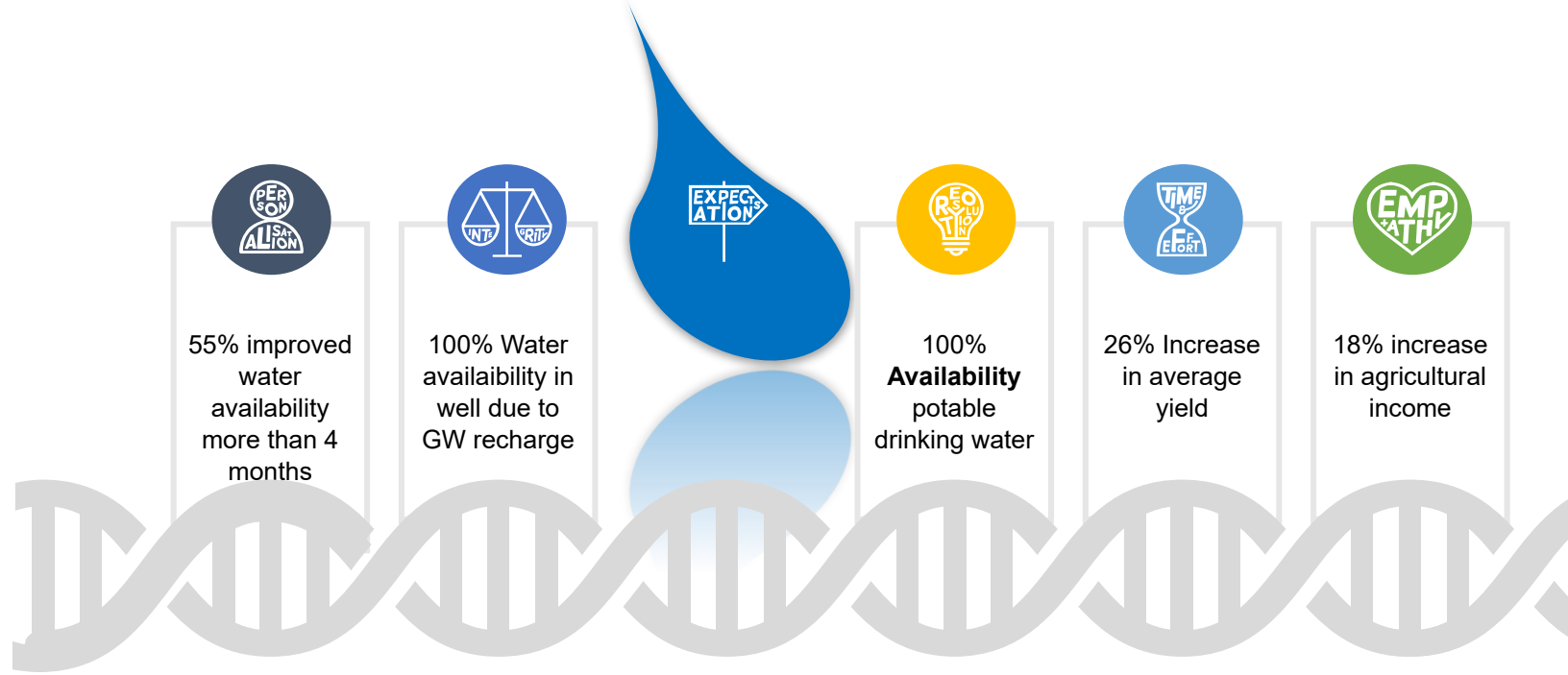
8.3 Evaluation Criteria- Effectiveness

Effectiveness is defined as an assessment of the factors influencing progress toward outcomes for each stakeholder as well as validation of the robustness of systems and processes.

It aids in ensuring that the implementation and monitoring processes are sturdy to achieve optimum social impact. The efficacy of the programme is established by examining how well the program’s activities were carried out as well as the effectiveness with which the program’s systems and processes were implemented.

Village level meetings were conducted in initial phase to develop a good rapport with the community members and institutional stakeholders. This helped the project team to get a glimpse of potential needs of the area. Feasibility checks were followed by defining scope of work and discussion with potential farmers. The project was implemented with support of village heads/ Gram Pradhan in the respective villages. Timelines and milestones for the project were also decided in consultation with village and panchayat members.

In all villages, respondents felt that there have been positive impacts of water-related activities in their area. They claimed to have witnessed an increase in availability of surface water, increase in water columns in wells, improvement in soil-moisture regime, availability of potable drinking water for their families and livestock.



8.4 Evaluation Criteria- Efficiency

The efficiency criterion seeks to determine whether the project was completed in a cost-effective and timely way. The purpose is to establish whether the inputs—funds, knowledge, time, etc. were effectively employed to create the intervention outcomes.

Duplication/ overlap of project activities: Duplication of effort arises when similar interventions are needlessly undertaken within the same community/ location due to poor knowledge management and inadequate coordination of projects, thereby resulting in fund and resource inefficiency. However, in this case, it was observed that the beneficiaries did not have access to any other similar programmes in the region during field observations and interaction with respondents.

8.5 Evaluation Criteria- Impact

The impact has been measured in terms of the proportion of respondents who reported having a significant change in their lives due to the initiation of the project. The goal of measuring the impact is to determine the project's primary or secondary long-term impacts. This could be direct or indirect, intentional, or unintentional. The unintended consequences of an intervention can be favorable or harmful.

8.6 Evaluation Criteria- Sustainability

Sustainability assesses how well the programme secures the long-term viability of its outcomes and influence. This evaluation criterion contains key elements concerning the likelihood of continuous long-term benefits and risk tolerance. To achieve sustainability, a governing framework, financial model, and operating system must be established.

Governance system:

Water is common pool resource. These resources are not owned or used by a single individual but are shared among multiple actors. the role of local communities in the management of natural resources is undermined in the dominant discourses. Local communities who are the primary stakeholders of natural resources, in many instances, lack the institutional spaces to manage these resources as common property regimes.

The programme had an in-built exit strategy with sustainability at its core. The programme took the idea of empowering beneficiaries to take control of their natural resources through of formation of WUA. Community members has set up a governance mechanism through WUA committees for Operations & Maintenance of check walls, timely repair work of structures, if needed and community led enterprises for the long run sustainability of the project. Financing of the O&M work will be done by contribution from the WHS beneficiaries or through seeking support from government.

All respondents stated that the responsibility of Water User Association (WUA) has been with the respective Gram Panchayat. During discussions, it was understood that all respondents (100 percent) were aware of responsibility Gram panchayat for maintenance of WHS.

Of the interviewed community members shared that they have attended training for water governance. The training has improved their knowledge about the water governance mechanism.

As stated by the respondents, the project impact will be sustained through collective action from the community and the village institutions by establishing governance rules and practices such efficient usage of water from WHS, finding supplementary sources of water, limited usage of borewell water, timely maintenance of check dam, saving water and through using limited groundwater for domestic usage.

9. Measuring The Social Return

Report has used two evaluation frameworks which are OECD-DAC and SRoI. Generally, OECD-DAC helps in gaining a qualitative understanding of the impact. On the other hand, SRoI helps organizations in evaluating changes which are being created by measuring social, environmental, and economic outcomes and providing monetary values to represent them. SRoI also helps in understanding the total value generated for every rupee invested for interventions.

There are two types of SRoI:

• Evaluative, which is conducted retrospectively and based on actual outcomes that have already taken place.

• Forecast, which predicts how much social value will be created if the activities meet their intended outcome.

For this study, both evaluative as well as forecasting SRoI has been considered. SRoI primarily involves six stages which are as follows:

Stage 1: Establishing Scope and identifying key stakeholders

Stage 2: Mapping outcomes

Stage 3: Evidencing outcomes and giving them a value

Stage 4: Establishing impact

Stage 5: Calculating the SRoI

Stage 6: Reporting

Stage 1 and Stage 2 have been discussed in-depth in Chapter 2. Further stages have been elaborated in the ensuing sections.

9.1 Evidencing outcomes

After formulating the impact map, indicators to measure the outcomes were developed based on the evaluation team's interaction with beneficiaries of the interventions and other relevant stakeholders like PRI Members, implementation team members etc. Also, evidence of outcomes was collected using primary and secondary data.

Quantity of Change: The quantity of change for the impact map has been calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending on the responses received during data collection, a proportionate percentage of total beneficiaries is calculated.

The below provides details about the evidence indicators for the outcomes and the quantity of change against each indicator.

Outcomes	**Indicators and Sources**	**Quantity (scale)**
Outcome description		
What is the change experienced by stakeholders?	Describe how you will measure the described outcome, and the source used to describe how to measure	Number of people experiencing described outcome.

Outcomes Outcome description	Indicators and Sources	Quantity (scale)
Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	1
	Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	845.00
	Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	82.32
Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	1300.00
	Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	923.00
	Reduction in Cost of Cultivation (Number of farmers x Avg reduction in cost annually)	
	Reduction in Cost of Irrigation (Number of farmers using Mobile Engines for irrigation x Avg hours of irrigation)	
Reduced cost of cultivation due to SRI techniques	Reduced cost of cultivation for paddy farmers using SRI techniques https://www.ceicdata.com/en/india/cost-of-cultivation-foodgrains-cereals-paddy-gujarat/cost-of-cultivation-paddy-gujarat-operating-cost	1300.00
Reduced cost of cultivation due to multching		
Increased agriculture production due to enhanced agriculture practice	Adoption of improved agriculture practices (% of members indicating adoption of improved agriculture practices)	1300.00
Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	1300.00
	Reduction in water borne diseases (number of households x % respondents indicating improvement in health)	
Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other animals (Number of households x % increase in milk yield)	364.00
Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	1300.00
Community led governance of water resources at village level	Formation of water committees in villages and creation of bylaws for water management in village (Number of village water user groups formed)	
Effective Operations and Management of water resources at village level	Efficient water management in village and repair-maintenance management (Number of water bodies created x Cost of manager)	

Outcomes Outcome description	Indicators and Sources	Quantity (scale)
Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	780.00
	Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	650.00

Some outcomes will last through a beneficiary's life, while some will last only till the input activity persists.

For the purpose of this SRoI Analysis, outcomes realised due to intervention of infrastructure activities have been considered for a maximum of 5 years for the impacts whereas, for the intangible interventions such as training the duration of impact is restricted to 3 years. These considerations are based on the following assumptions:

• Water Resources Development intervention has long lasting effects, especially the rise in ground water and surface water level due to the construction of check dams, rejuvenation of existing ponds, etc. This increased duration is also reflected in the resulting economic and social impacts for the community.

• In case of interventions which involve components of training or are related to skill/knowledge training, the beneficiaries will need to upgrade knowledge required for their respective subject due to advancement in technology and rapidly evolving market economy and climatic situations.

• Based on nature of interventions and dynamics of the income generating activities, impact due to the contribution from beneficiaries and other stakeholders will outweigh the impacts due to contribution and support from APL.

Financial Proxy and Value of Financial Proxy: An SRoI analysis has used financial proxies in order to establish the value of identified outcomes. As a standard practice, prices are used as a proxy for value of services. Sometimes, the outcomes reported by stakeholders cannot be traded in a market or are intangible. Hence for such outcomes, the closest, comparable value has been identified for that service. Please refer Table 12- Financial proxies for outcome wise proxy details.

9.2 Establishing Impacts

In order to provide credibility to the analysis and prevent over-claiming, the SRoI calculation has taken into consideration aspects like attribution, displacement, deadweight, and drop-off into account.

Establishing impact consists of an estimation on how much of the outcome would have happened anyway and what proportion of the outcome can be attributed to the activities that occur during the programme or project. Establishing impact is crucial, as it reduces the risk of over counting. Thus, an important part of SROI is 'measuring impact' by accounting for attribution, deadweight, displacement, and drop-off. The following section details how these were addressed:

Attribution: Attribution is the process of considering impact in exclusivity of any other intervention by other agencies.
There are two ways have been taken to arrive at Attribution. Beneficiaries have been asked to assign / attribute percentage against each stakeholder and against each change. Average of such attribution of beneficiaries helps to arrive at Attribution. In case of lack of sufficient data from beneficiaries, equity-based attribution was also considered.
Here the attribution was collected during data collection from individuals through questionnaire. The same was validated and moderated (if required) through attribution findings from FGDs of the respective interventions. List of stakeholders considered for attribution were as follows:
• Asian Paints Limited along with implementation partner

• Others- Self / Family/ Relatives, Community, Government officials from Agriculture, Animal Husbandry and Water Resources Development Sectors etc.

Deadweight: Deadweight is an estimation of social benefits that would have resulted anyway i.e., without the intervention.
Basis the respondents' assertions, the deadweight has been considered as 3% and the reasons have been presented below:
• There are no other organisations working in the region on similar issues.

• The focused approach of APL implemented through the support like training, affordable inputs and grant support has led to the increase in agricultural productivity.

Support provided by APL is aimed at efficient spending and creation of quality infrastructure and is participatory in nature.
Displacement: Displacement is positive impact on one stakeholder at the cost of a negative impact on another stakeholder.
In case of this SRoI study, displacement was assumed as Nil percent for agriculture intervention considering no adverse or negative impact reported by any respondents. In case of other interventions, there are no major organisations, private or non-profit working in similar sections.

Drop-off and Duration: Drop-off is the portion of outcomes that are not sustained. The drop-off will vary depending on nature of project interventions and activities involved in it. Intervention wise drop-off along with reasons is given below:

• Intangibles @33 percent: Acquiring of new skill sets, multi-cropping and other inputs have strengthened the base of agriculture economy in the region. Farmers have also reported a significant rise in self- confidence. Due to these factors, the impact is assumed to last for 3 years.

• Water Resources Development @20 percent: Creation of quality infrastructure for water resources development results in long lasting effects. Communities have also observed a significant improvement in ground water and surface water levels. Thus, it is assumed that impacts of these interventions would last over a period of 5 years.

Double Counting: Due to the nature of the identified impacts, there is a potential for double counting when aggregating isolated impact values. An example is the overlap between agriculture productivity increase due to agriculture as well as water interventions. To resolve this, we excluded the first year of impact due to agriculture for the overlapping respondents.
For a detailed view, refer

Considering the above parameters, the impact of each outcome is calculated with the following formula:

9.3 Calculating Impact

Impact = Quantity of outcome * Financial Proxy Value * Attribution – Deadweight – Displacement – Drop-off for each year

SRoI is a ratio of cumulative present value for each outcome against the total investment in the project i.e., **SRoI = Total NPV of social value / NPV of investment**

Total Input Value: The inputs from APL, beneficiaries and other stakeholders are considered for the SRoI calculation stage. The assumption being all the inputs have worked together to create the observed impact. Even absence of either one of the inputs from stakeholders other than APL will have not generated the impact observed as a part of the current study. Various inputs considered for this study included financial contribution from APL, beneficiaries and other stakeholders and the cost of time invested by beneficiaries as a part of training / exposure activities. The value of the financial inputs has been provided by the APL and the inputs of programme (other than financial inputs) have been valued in consultation with APL CSR team.

The below table represents the total cumulative investments from all the stakeholders towards the project from the time period 2022-2023:

Input Type	Input description	Total Input value (INR)
Financial inputs	CSR Funding from APL	*1,40,07,136*
Total		***1,40,07,136***

Net Present Value*:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present-day value of benefits projected into the future.

A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return	Year 0	Year 1	Year 2	Year 3	Year 4
Construction and refurbishment of Check dams/ Water Harvesting Strcutures	Creation of sustainable water supply through increment in availability and accessibility of water	Increase in water harvesting capacity (Quantum of Water Potential created or Water Harvested in Cubic Metre)	Groundwater abstraction charges for Drinking and Domestic use (Central Water Commission) per cubic metre	2.00	0.00%	0.00%	0.00%	20%	446,340.00	446,340.00	357,072.00	285,657.60	228,526.08	182,820.86	0.00
		Increased availability of water for irrigation - surface water from WHS (Number of farmers x Avg increase in Irrigated land)	Irrigation charges by Gujarat government (per hactare)	314.00	3.00%	0.00%	16.00%	20%	77,828.72	77,828.72	62,262.97	49,810.38	39,848.30	31,878.64	0.00
		Increased availability of water in wells / borewells (number of farmers/community members x Avg increase in availability of water in months/days)	Average HH requires 220 LPCD daily and using it for a months gets us the water requirement = 6600/HH/month Charges for purchasing water (One water tanker of 4000 litre capacity) - INR 200/- by Vadodara Municipal Corporation.	330.00	3.00%	0.00%	16.00%	20%	769,008.24	769,008.24	615,206.59	492,165.27	393,732.22	314,985.78	0.00
	Increased agriculture production due to increment in availability of water	Increase in availability of Net Sown Area (in Ha) (Number of farmers x Avg increase per farmer)	Average increase in Net sown area indicated by respondents (Ha) Avg Yield of Rice in Narmada district in Fy 2021-22 = 1026 kg/ha MSP of Paddy in Gujarat- 2203/Q	22602.78	3.00%	0.00%	16.00%	20%	4,788,353.74	4,788,353.74	3,830,682.99	3,064,546.39	2,451,637.11	1,961,309.69	0.00
		Increase in agriculture produce (Number of farmers x Avg increase in yield in the year)	Average increase in Yield indicated by respondents (Quintals) MSP of Paddy in Gujarat- 2203/Q	2203.00	3.00%	0.00%	16.00%	20%	2,485,183.59	2,485,183.59	1,988,146.87	1,590,517.50	1,272,414.00	1,017,931.20	0.00
Availability of potable water for household consumption due to increased Ground water level and WHS	Increased quality an accessibility to potable water leading to improved health of community members	Reduction in Drudgery for members of household (number of households x Avg person-hours saved)	Minimum hours spent in rural India to fetch water = 15 hours Minimum wage paid under MGNREGA in FY 2021-22 per hour	438.75	3.00%	0.00%	16.00%	20%	464,741.55	464,741.55	371,793.24	297,434.59	237,947.67	190,358.14	0.00
	Increased access to water for animal husbandry activities	Increase in annual income due to availability of quality potable water for cattles and other	Average increase in Milk Yield (in Litres per day) x Amount received for 1L of milk from	52.00	3.00%	0.00%	16.00%	20%	200,492.95	200,492.95	160,394.36	128,315.49	102,652.39	82,121.91	0.00

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return	Year 0	Year 1	Year 2	Year 3	Year 4
		animals (Number of households x % increase in milk yield)	Amul Dairy in Gujarat												
Creation of employment opportunities	Availability of increased labour opportuniities locally (own or nearby villages) due to reduced migration	Reduction in migration (seasonal for labour work) (number of members reporting instances of reduced migration x days of work in WHS MGNREGA and/or agriculture)	3 months of Summer season and 8 days of work/month basis MGNREGA gives a total of 24 days of work Minimum wage paid under MGNREGA in FY 2021-22	234.00	3.00%	0.00%	50.00%	20%	3,540,888.00	3,540,888.00	2,832,710.40	2,266,168.32	1,812,934.66	1,450,347.72	0.00
Extended impact on community (beneficiaries and their family members)	Improved wellbeing for the beneficiaries and their family members	Improvement in Health seeking behaviour (Number of respondents reporting increased consumption of self-grown fruits and vegetables))	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Fruits (Rs.41) and Vegetables (Rs.95). Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-70.63/- and Vegetable-163.67/-. For a family of 4 members, the yearly expenditure has been considered for calculation.	11246.61	3.00%	0.00%	70.00%	33%	2,552,755.24	2,552,755.24	1,701,921.92	1,134,671.34	756,485.38	504,348.81	0.00
		Improved sensitization towards child`s education (Number of respondents reporting increased spend on child`s education)	Basis NSS 68th Round (2011-12), MPCE in Rural areas on Education is Rs.50. Inflation Adjusted Cost (using Cost Inflation Index) for MPCE at 2021-22 prices comes out to be Fruit-86.14/-. For a family of 2 children, the yearly expenditure has been considered for calculation.	2067.36	3.00%	0.00%	70.00%	33%	391,041.14	391,041.14	260,707.13	173,813.44	115,881.42	77,258.14	0.00
Extended impact on the enviorment	Increased green cover due to access to water for extended period/ throughout the year due to WHS	Increased green cover canal/ river due to WHS construction for extended period/ throughout the year (in Metres)	Cost of Sowing/ Dibbling of seeds of grass, trees and shrubs under MGNREGA (cost per metre)	0.58	3.00%	0.00%	70.00%	20%	843.90	843.90	675.12	540.10	432.08	345.66	0.00

Outputs	Outcomes	Indicators and Sources	Valuation approach (monetary)	Monetary valuation	Deadweight %	Displacement %	Attribution %	Drop off %	Impact calculation	Calculating Social Return	Year 0	Year 1	Year 2	Year 3	Year 4
	Improved soil health due to water availability	Farmers using ploughing to dig lower layer of soil	Per acre ploughing rates for farmers	700.00	3.00%	0.00%	70.00%	20%	264,810.00	264,810.00	211,848.00	169,478.40	135,582.72	108,466.18	0.00

Table: Input Calculation

Input type	Input description	Total input value (INR)
Financial Input	CSR Funding from APL	**14,007,136.00**

***Net Present Value**:* The Impact Value is adjusted to reflect the Net Present Value (NPV) of the projected outcome values. This is to reflect the present day value of benefits projected into the future.
A **discount rate of 4%** has been used for the NPV calculations.

SRoI = {Total present value of impact/Total present value of input}

The below table depicts the NPV evaluated as of 2023 and forecasted for 2028 (considering the duration period of 5 years for each outcome):

SROI Results

The SROI for this Analysis- evaluative SROI (as on 2023) and evaluative cum forecast SROI (as on 2028) - is derived from dividing the total present value of the impacts by the total input value of the investment. This is considered because the beneficiaries who have received the support in 2023 would realise the impact for the next 5 years i.e., by 2028.

The below table describes the SROI Value and the SROI Ratio before sensitivity analysis:

Net present value of social value created	SRoI Value
48,596,398	3.47
Net present value of total investment	**SRoI Ratio**
14,007,136	1:3.47

For every INR 1 invested, the programme has generated social impact of INR 3.47

Sensitivity Analysis: Our calculations to arrive at the results provided in this report are relied on a variety of primary and secondary data, but the beneficiary data introduced a higher level of uncertainty. This survey was utilized to estimate the attribution, additionality of APL interventions to specific outcomes, and the duration of time the impact would last.

Sensitivity Analysis was used to test variables a nd assumptions to ensure that conservative estimates have been used in arriving at the SROI. For each impact area, we tested the impact of using one standard deviation above and below the average response to attribution survey questions.

With sensitivity computation, the value of the APL program can then be stated in a range. For every INR 1 invested, the social value generated is between INR 1.5 and INR 5.34.

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI
1	Deadweight	**3.47**	Deadweight is 0%	3.57
			Deadweight is 8%	3.29
			Displacement 0%	3.47
2	Displacement		Displacement is 5%	3.30

Sr. No.	Base case Parameters	Base case SRoI	Test case Parameters (Min-Max)	Test case SRoI
			Attribution is 11%	5.34
3	Attribution	**3.47**	Attribution is 75%	1.50
			Drop-off is 3 years	2.85
4	Drop-off		Drop-off is 5 years	3.61

Limitations & assumptions for the SROI study

- The study is limited to the sample of beneficiaries interacted with on-ground during field visits.
- The survey conducted with sample beneficiaries is subjective in nature.
- The study is limited to the recall of the participants in the study.
- The financial proxies are limited to publicly available resources. The financial proxies are representative and based on professional judgement, but it may not be reflective of actual costs incurred due to several considerations. (Refer to Appendix B for details of financial proxies)
- The deadweight, displacement, drop off values are derived from the responses from the stakeholders.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.

Way Forward

Project Design	
Key Issues	**Recommendations**
During our visit, it was found that women's participation in the project cycle is limited. Men are responsible for decision-making.	To enhance women's role, targeted training, capacity-building programs, and gender mainstreaming in decision-making processes should be initiated. Women should be involved at all stages of the project for sustainability and to promote gender equality.
Farmers have acknowledged the positive impact of the improved irrigation cycle for all three seasons. It has contributed to a significant increase in agricultural output. Few farmers have started taking water intensive crop like sugarcane, which can lead to tragedy of common if resource are not well managed.	To sustain the positive impact of the improved irrigation cycle and prevent the overuse of water resources, it is crucial to implement a balanced crop management strategy. Farmers should be encouraged to diversify their crops, focusing on less water-intensive options alongside sugarcane. Additionally, establishing water usage guidelines and promoting efficient irrigation techniques can help manage resources effectively, ensuring long-term agricultural productivity and preventing the tragedy of the commons.
During our field visit, we noted that despite the formation of water user associates (WUAs) for the Water Harvesting Structures (WHS) beneficiaries, they were mostly inactive. The responsibilities and roles of the WUAs were not clearly communicated, resulting in a lack of active participation by their members towards water stewardship.	To ensure the long-term sustainability of the WHS and promote efficient management of water resources, it is imperative to encourage the active participation of all WUA members. In this regard, it is recommended to introduce and practice water budgeting and crop planning at the community level, which can provide farmers with the necessary information to better assess their irrigation needs and water requirements.
To sustain water conservation efforts, the removal and utilization of silt are essential. The maintenance of Water Harvesting Structures (WHS) falls under the jurisdiction of the Gram Panchayat. During our field visit, it was observed that villagers require support for silt removal. According to the villagers, the Gram Panchayat lacks the necessary funds for this task.	The project can collaborate with local stakeholders and government initiatives such as MGNREGA to provide low-cost solution for slit removal which will enhance the effectiveness of WHS.

Project Scale-up

Tailored strategies for outreach

Tailored strategies for outreach for women and youth members of the communities must be implemented to ensure that they benefit from the Integrated Water Resource Management project. Utilizing design tools like empathy maps might be useful for understanding the varied needs, experiences, and aspirations, and designing tailored mobilization strategy as well as follow-up support. Key farmer personas can be identified such as tenant farmers, women, youth, elderly farmers, etc.

Promotion of organic farming practices

The project need include organic farming element from fresh perspective. The project can be upscaled by promoting organic farming practices that will enhance soil quality, reduce input costs, and ensure food safety. Farmers should be encouraged to adopt organic inputs and natural fertilisers, which can help minimize dependence on chemical pesticides and enhance the quality of produce. The use of organic certification can also be promoted to increase the market value of the produce.

Collectivisation

The formation of strong farmer groups can strengthen the bargaining power of farmers and enable them to take advantage of shared inputs, resources, and knowledge. Farmer producer organisations can be established, which will enable farmers to pool resources and market their produce collectively. This can help reduce transaction costs and provide a platform for capacity-building and technical training.

Market linkages

To scale up the project, it is imperative to develop an efficient market linkage system that ensures better prices and transparency for farmers. Training should be provided to villagers to enable them to access markets in Pune and nearby areas. This can be achieved by offering logistical support and conducting a thorough market needs assessment.

11. Annexures

11.1 Atit Soil Test Report – Point 1

Point 1 Location: Mr. Ankush Jadhav, Gat Number 723, Gujarmala, Atit, Khandala, Dist: Satara

TC-12011

FARM DIAGNOSTIC SERVICES (AGRI LAB)
Smartchem Technologies Limited
Creaticity Mall, 4th Floor,Opp.Mall Management Office,
Airport Road,Yerawada,Pune - 411006
Tel. : +91 (20) 4000 4100

Soil Test Report — **Report No. AL/24-25/3383/S**

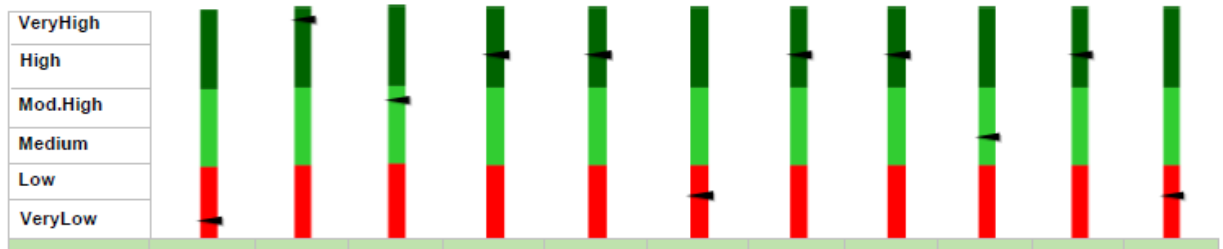
Name: Dhairyawardhan R.V. (KPMG)	Survey No.	Field Name	Sample No.			
ATIT,KHANDALA,SATARA	-	-		20-Dec-2024	25-Dec-2024	27-Dec-2024

Dear Sir / Madam,

Please find below, the detailed analysis report of your soil sample received by us for testing.

pH	EC(mmhos/cm)	OC(%)	T.CaCO3(%)
			
Test Value :7.55 (Moderately Alkaline)	Test Value :0.13 (Normal)	Test Value :0.84 (High)	Test Value:4.00 (Mod.calcareous)
Permissible Limit :(6.50 - 7.50)	Permissible Limit :(0.01-0.80)	Permissible Limit :(0.41-0.6)	Permissible Limit :(0.10 - 5.00)

Available Nutrients in Soil :



Parameter	N	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B
Unit	kg/ha	kg/ha	kg/ha	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Permissible Limit	280 - 420	14 - 20	150 - 200	>300	>122	10.00 - 20.00	2.51 - 4.50	2.01 - 5.00	0.61 - 1.20	0.31 - 0.50	0.50-0.60
Test Value	105.37	51.74	222.66	5025.00	1105.00	1.98	14.20	8.86	1.12	3.00	0.25
Remark	Very Low	Very High	Moderately High	High	High	Low	High	High	Sufficient	High	Low
	↓	✓	✓	✓	✓	↓	✓	✓	✓	✓	↓

- *pH of the soil is high. Phosphorus & Boron become unavailable when the pH is high; Deficiency of Copper,Iron,Manganese,Zinc & Cobalt may arise above a pH of 7.0*
- *EC of soil is Normal; Suitable for all crops*

Checked and Authorized By,

Nidhi Singh

N.B.

- This report applies to the sample tested. Test values are without considering Measurement Uncertainty.
- This report cannot be used for any legal purposes.
- This report cannot be reproduced in part or full without prior permission of this Lab.

11.2 Atit Water Sample – Point 2

Point 2 Location: Gram panchayat well, downstream side of Inamala storage tank Gat 165, Khandala, Dist. Satara

TC-12011

FARM DIAGNOSTIC SERVICES (AGRI LAB)
Smartchem Technologies Limited
Creaticity Mall, 4th Floor,Opp.Mall Management Office,
Airport Road,Yerawada,Pune - 411006
Tel. : +91 (20) 4000 4100

Water Test Report

Report No. AL/24-25/0016/W

Name :	:	Dhairyawardhan R.V. (KPMG)
Village	:	ATIT
Post	:	ATIT
Taluka	:	KHANDALA
District	:	SATARA, MAHARASHTRA

Work Order No.

Survey No.	Field Name	Sample No.
–	--	

Received Date :	Testing Date :	Dispatch Date :
20-Dec-2024	26-Dec-2024	26-Dec-2024

Source of Sample : Tubewell

Dear Sir / Madam,

Please find below, the detailed analysis report of your water sample received by us for testing.

Parameter	Unit	Testing Method	Test Value	Permissible Limit	Remark
pH	–	Direct sample on pH meter	7.37	6.5-7.5	Not a Problem
EC	mS/cm	Direct sample on EC meter	0.30	≤ 0.25	Increasing Problem
Chlorides	meq/lit	Silver Nitrate Titration Method	3.00	≤ 4	Not a Problem
Sulphates	meq/lit	Spectrophotometric(BaSO4 Precipitation) Method	0.88	≤ 2	Not a Problem
HCO3	meq/lit	Titration with Standard H2SO4 Method	4.00	≤ 1.5	Severe Problem
Sodium	meq/lit	Flame Photometric Method	0.15	≤ 22	Not a Problem
CaPlusMg	meq/lit	Calculation Method	8.74	≤ 8	Increasing Problem
MgCa Ratio	–	Calculation Method	0.36	≤ 1.5	Not a Problem
SAR	–	Calculation Method	0.07	≤ 10	Not a Problem

Conductivity :

* To minimize the water salinity, it is advisable to use it along with good quality irrigation water.

As per conductivity of the water it falls in Medium Salinity Class (C2).This water is suitable for soils having good to moderately good drainage and crops which are semi tolerant to salts e.g.Rice,Sorghum,Maize,Pearl millet,Wheat,Pigeon pea,Gram,Soybean,Fodder Sorghum,Fodder Maize,Berseem,Tomato,Cabbage,Cauliflower,Potato,Radish,Carrot,Onion,Lady Finger,Pea,Cucumber,Pumpkin,Sweet Potato,Grape,Fig,Guava,Mango,Banana,Pomegranate,Orange,Lemon.

Sodium Hazards :

As per SAR of the water it falls in Low Sodium Class (S1).This water is suitable for all types of soils;Possibility of exchangeable Sodium reaching moderately harmful level;Cultivation of Sodium sensitive crops like Wood Apple,Avocado etc.may result in raising the Sodium to harmful level

Remarks for suitability of irrigation water for drip - Suitable.

Checked and Authorized By,

Nidhi Singh

Tip :

- This report applies to the sample tested. Test values are without considering Measurement Uncertainty.
- This report cannot be used for any legal purposes.
- This report cannot be reproduced in part or full without prior permission of this Lab.

11.3 Ghadgewadi Soil Test Report – Point 1

Point 1 Location: Mohan Ghade Farm, Pagal Shivar, Ghadgewadi, Khandala, Dist: Satara

TC-12011

FARM DIAGNOSTIC SERVICES (AGRI LAB)

Smartchem Technologies Limited

Creaticity Mall, 4th Floor,Opp.Mall Management Office,
Airport Road,Yerawada,Pune - 411006
Tel. : +91 (20) 4000 4100

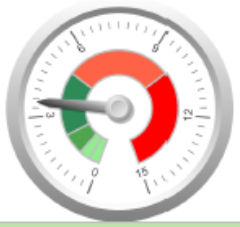
Soil Test Report

Report No. AL/24-25/3384/S

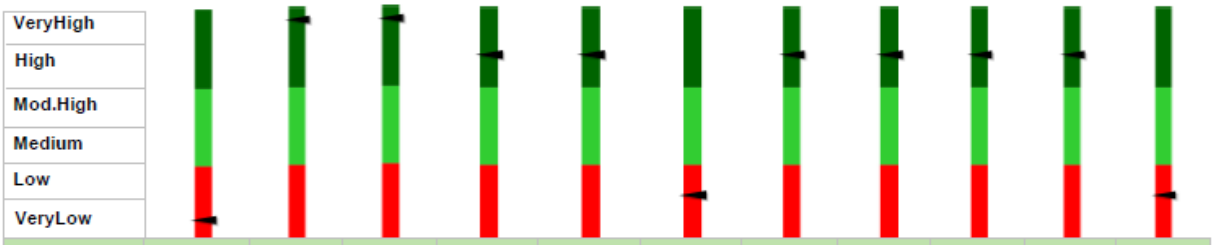
Name: Dhairyawardhan R.V. (KPMG)	Survey No.	Field Name	Sample No.			
GHADGEWADI,KHANDALA,SATARA	-	-		20-Dec-2024	25-Dec-2024	27-Dec-2024

Dear Sir / Madam,

Please find below, the detailed analysis report of your soil sample received by us for testing.

pH	EC(mmhos/cm)	OC(%)	T.CaCO3(%)
			
Test Value :7.26 (Slightly Alkaline)	Test Value :0.10 (Normal)	Test Value :1.03 (Very High)	Test Value:3.50 (Mod.calcareous)
Permissible Limit :(6.50 - 7.50)	Permissible Limit :(0.01-0.80)	Permissible Limit :(0.41-0.6)	Permissible Limit :(0.10 - 5.00)

Available Nutrients in Soil :



Parameter	N	P	K	Ca	Mg	S	Fe	Mn	Zn	Cu	B
Unit	kg/ha	kg/ha	kg/ha	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Permissible Limit	280 - 420	14 - 20	150 - 200	>300	>122	10.00 - 20.00	2.51 - 4.50	2.01 - 5.00	0.61 - 1.20	0.31 - 0.50	0.50-0.60
Test Value	120.42	81.31	373.18	4605.00	1265.00	2.50	31.72	19.12	1.98	8.56	0.15
Remark	Very Low	Very High	Very High	High	High	Low	High	High	High	High	Low
	↓	✓	✓	✓	✓	↓	✓	✓	✓	✓	↓

- *pH of the soil is high. Phosphorus & Boron become unavailable when the pH is high; Deficiency of Copper,Iron,Manganese,Zinc & Cobalt may arise above a pH of 7.0*
- *EC of soil is Normal; Suitable for all crops*

Checked and Authorized By,

Nidhi Singh

N.B.

- This report applies to the sample tested. Test values are without considering Measurement Uncertainty.
- This report cannot be used for any legal purposes.
- This report cannot be reproduced in part or full without prior permission of this Lab.

11.4 Ghadgewadi Water Test Report – Point 2

Point 2 Location: Gram Panchayat Handpump, Near Pandurang Farm, Nalicha Odha Ghadgewadi, Khandala, Dist: Satara

TC-12011

FARM DIAGNOSTIC SERVICES (AGRI LAB)
Smartchem Technologies Limited
Creaticity Mall, 4th Floor,Opp.Mall Management Office,
Airport Road,Yerawada,Pune - 411006
Tel. : +91 (20) 4000 4100

Water Test Report

Report No. AL/24-25/0021/W

Name :	:	Dhairyawardhan R.V. (KPMG)
Village	:	GHADGEWADI
Post	:	GHADGEWADI
Taluka	:	KHANDALA
District	:	SATARA, MAHARASHTRA

Work Order No.

Survey No.	Field Name	Sample No.
–	--	

Received Date :	Testing Date :	Dispatch Date :
20-Dec-2024	26-Dec-2024	26-Dec-2024

Source of Sample : Tubewell

Dear Sir / Madam,

Please find below, the detailed analysis report of your water sample received by us for testing.

Parameter	Unit	Testing Method	Test Value	Permissible Limit	Remark
pH	–	Direct sample on pH meter	7.52	6.5-7.5	Increasing Problem
EC	mS/cm	Direct sample on EC meter	0.33	≤ 0.25	Increasing Problem
Chlorides	meq/lit	Silver Nitrate Titration Method	3.40	≤ 4	Not a Problem
Sulphates	meq/lit	Spectrophotometric(BaSO4 Precipitation) Method	0.79	≤ 2	Not a Problem
HCO3	meq/lit	Titration with Standard H2SO4 Method	4.00	≤ 1.5	Severe Problem
Sodium	meq/lit	Flame Photometric Method	0.20	≤ 22	Not a Problem
CaPlusMg	meq/lit	Calculation Method	5.62	≤ 8	Not a Problem
MgCa Ratio	–	Calculation Method	0.33	≤ 1.5	Not a Problem
SAR	–	Calculation Method	0.12	≤ 10	Not a Problem

Conductivity :

* To minimize the water salinity, it is advisable to use it along with good quality irrigation water.

As per conductivity of the water it falls in Medium Salinity Class (C2).This water is suitable for soils having good to moderately good drainage and crops which are semi tolerant to salts e.g.Rice,Sorghum,Maize,Pearl millet,Wheat,Pigeon pea,Gram,Soybean,Fodder Sorghum,Fodder Maize,Berseem,Tomato,Cabbage,Cauliflower,Potato,Radish,Carrot,Onion,Lady Finger,Pea,Cucumber,Pumpkin,Sweet Potato,Grape,Fig,Guava,Mango,Banana,Pomegranate,Orange,Lemon.

Sodium Hazards :

As per SAR of the water it falls in Low Sodium Class (S1).This water is suitable for all types of soils;Possibility of exchangeable Sodium reaching moderately harmful level;Cultivation of Sodium sensitive crops like Wood Apple,Avocado etc.may result in raising the Sodium to harmful level

Remarks for suitability of irrigation water for drip - Suitable.

Checked and Authorized By,

Nidhi Singh

Tip :

- This report applies to the sample tested. Test values are without considering Measurement Uncertainty.
- This report cannot be used for any legal purposes.
- This report cannot be reproduced in part or full without prior permission of this Lab.

Tailored strategies for outreach

Tailored strategies for outreach for women and youth members of the communities must be implemented to ensure that they benefit from the Namma Jal Bhadrate project. Utilizing design tools like empathy maps might be useful for understanding the varied needs, experiences, and aspirations, and designing tailored mobilization strategy as well as follow-up support. Key farmer personas can be identified such as tenant farmers, women, youth, elderly farmers, etc.

Promotion of organic farming

The project can be upscaled by promoting organic farming practices that will enhance soil quality, reduce input costs, and ensure food safety. Farmers should be encouraged to adopt organic inputs and natural fertilisers, which can help minimize dependence on chemical pesticides and enhance the quality of produce. The use of organic certification can also be promoted to increase the market value of the produce.

Collectivisation

The formation of strong farmer groups can strengthen the bargaining power of farmers and enable them to take advantage of shared inputs, resources, and knowledge. Farmer producer organisations can be established, which will enable farmers to pool resources and market their produce collectively. This can help reduce transaction costs and provide a platform for capacity-building and technical training.

Market linkages

To scale up the project, an efficient market linkage system that provides better prices and transparency for farmers must be developed. This can be achieved by creating e-commerce platforms for the farmers to sell their produce or by initiating agreements with neighbouring towns and cities to purchase the farmers' crops. Additionally, integrated value chains that create new jobs and markets can be promoted.

References:

I.Centre for Science and Environment and Down To Earth Magazine. "State of India's Environment 2023." Down To Earth.

II. Food and Agriculture Organization of the United Nations. "India Country Profile." AQUASTAT.

III. Planning Commission, Government of India. "Report of the Expert Group on Ground Water Management and Ownership." New Delhi, September 2007.

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V. D.P. Bhosale College. "Irrigation Development in Satara District." DPBCK.

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VII. Central Ground Water Board. "NAQUIM Report: Satara, Maharashtra." CGWB.

VIII. Esri. "Land Cover Explorer." Living Atlas.

IX. Ministry of Jal Shakti, Government of India. Press Information Bureau.

[1] State of India's Environment 2023 by Centre for Science and Environment and Down To Earth Magazine. Article sourced at: https://www.downtoearth.org.in/news/water/world-water-week-2023-demand-and-pollution-of-the-precious-resource-are-increasing-which-is-not-a-good-sign-91220

[1] fao.org/aquastat/en/countries-and-basins/country-profiles/country/IND/index.html

[1] Planning Commission 2007 Report of the Expert Group on Ground Water Management and Ownership, Government of India, New Delhi, September 2007.

[1] https://www.adriindia.org/adri/india_water_facts

[1] https://dpbck.ac.in/wp-content/uploads/2022/10/3.-Irrigation-Development-in-Satara-District.pdf

[1] https://www.satara.gov.in/en/about-district/district-social-economic-review/

[1]https://www.cgwb.gov.in/old_website/AQM/NAQUIM_REPORT/Maharshtra/NAQUIM%20_Satara_Part%201%20MAHARASHTRA.pdf

[11]https://livingatlas.arcgis.com/landcoverexplorer/#mapCenter=73.88970%2C18.10482%2C16&mode=swipe&timeExtent=2020%2C2023&month=12&renderingRule=1&landCover=Water

[1] Ministry of Jal Shakti

[1] Press Information Bureau (pib.gov.in)

[1] pib.gov.in/PressReleaseIframePage.aspx?PRID=1705798#:~:text=Ministry of Jal Shakti is taking up a,areas of all the districts in the country.

Contact:

Jignesh Thakkar

Partner (ESG -Social Advisory)

Email: jigneshthakkar@kpmg.com

home.kpmg/in

Impact Assessment of Mobile Health Unit Program

Asian Paints Limited (APL)

February 2025

Strictly Private and Confidential

V. Ravi

General Manager

Asian Paints Limited

Mumbai, Maharashtra– 400055

India

07 March 2025

Subject: Final report for Impact assessment of CSR Projects

Dear Mr. V. Ravi,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of CSR Projects** related services**.**

Please find enclosed our final-report, which has been prepared in accordance with the scope and terms stated in our engagement letter dated 6th November 2024. With this deliverable, we have completed our obligations as stated in our engagement letter.

It has been our privilege to have this opportunity to work with you, and we look forward to continuing our relationship.

Yours sincerely,

DocuSigned by:

67B595C3ADEC43E...

Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

Disclaimer

Proprietary Nature

This report is confidential and for the use of management only. It is not to be distributed beyond the management nor is to be copied, circulated, referred to or quoted in correspondence, or discussed with any other party, in whole or in part, without our prior written consent, as per terms of business agreed under the Engagement Letter

Others

- *Our report shall be prepared solely for Asian Paints Limited (APL). KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our Client, to the extent agreed in the Agreement.*
- *Impact assessment is limited to the projects allocated by APL*
- *OECD-DAC framework has been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.*
- *Procedures, analysis and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.*
- *Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.*
- *Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.*
- *We shall not perform an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.*
- *While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.*
- *Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with APL team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.*
- *In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.*
- *In accordance with its policy, KPMG advises that neither it nor any of its partners, directors or employees undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.*

- *In connection with our report or any part thereof, KPMG does not owe a duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, or expenses incurred by such third party arising out of or in connection with the report or any part thereof.*
- *By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.*

Contents

Executive Summary

Asian Paints Limited is a leading paint company in India, known for its innovative and high-quality products in decorative, industrial, and automotive coatings. The company emphasizes research and development, promote sustainability and actively engaged in CSR initiatives aligned with SDGs, focusing on Healthcare, Water Conservation, and Community development.

The healthcare initiatives include mobile health units and static health units that provide essential services to underserved communities near their plant locations, benefitting over 10,000 individuals. KPMG has conducted an impact assessment to evaluates the effectiveness and outcomes of these interventions.

Cumulative SROI indicates a social return of INR 4.13 for every One Rupee invested in this project

Relevance

- Community health and hygiene is one of the key focus areas for Asian Paints Limited (APL) CSR activities.
- The intervention is carried out through Mobile Health Care Units (MHUs) and Static Health Care Units (SHUs) with an objective to reach the unreached.
- The impact assessment revealed that MMU have impacted elderly people and women to access to healthcare facilities in their community without travelling long distance.
- 91% of the respondents shared those administrative challenges (Complicated paper work and long waiting time is major challenge in other health facility). Respondents shared that this lead to wage loss which impact their household income

Effectiveness

- The program effectiveness in building awareness about hygiene, sanitation, maternal and child health care to improve community knowledge was limited
- 98% respondents have visited MMU for free medication.
- 99% respondents reported MHU/SHUs as their preferred medical facility

Impact

- Overall, the MMU has been able to offer primary healthcare services, for both communicable and non-communicable diseases, directly to the beneficiaries at their doorstep.
- 95% respondents reported owing to MHUs/SHUs services the waiting time has reduced to get treatment
- 96% of the respondents travel less than 1 to get medical care from SHU/MHU
- 89% of the respondents shared that they have observed improvement in their health

INR 25,558 reduction in health expenditure at HH level

INR 5,484 wage loss avoided at HH level Annually

Coherence

- Asian Paints Limited funded SHUs intervention aligns with national priorities while also contributes to other related healthcare challenges in the country.
- The programme impacts directly to United Nations Sustainable Development Goals (UNSDG) **Goal 3: GOOD HEALTH AND WELL-BEING**

Efficiency

- The project showed efficiency in addressing the emerging basic healthcare needs of the beneficiaries.
- 100% respondents reported it is easy to access MHUs/SHUs services when it is stationed in their community.

Sustainability

- The MMU is equipped with medical professionals such as doctors and pharmacists to provide healthcare facilities to underprivileged community members.
- A prevalent demand observed from the respondents/beneficiaries to permit administering injections or intravenous (IV) saline solutions within the SHUs. Also, respondents recommended that MHU/SHU should have an adequate medicine supply available

Context

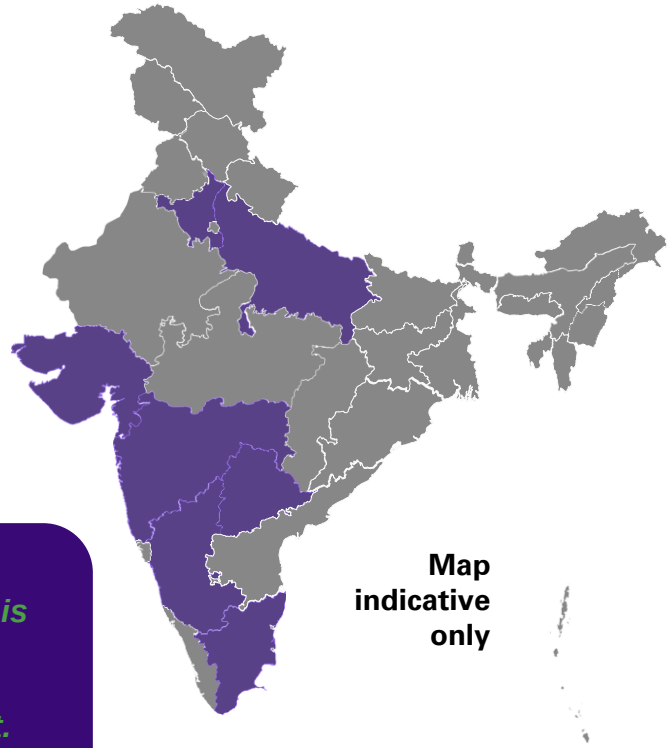
- **Primary Healthcare Access:** Ensuring universal access to primary healthcare and diagnostic services.
- **Awareness and Referrals:** Increasing awareness of government schemes and facilitating referrals for advanced treatments.
- To ensure that everyone receives adequate healthcare, health infrastructure must be holistically revisited and ingrained into the community setting. This would allow for an adequate response to the healthcare needs of the local population and prevent anyone from being denied treatment.

APL's Support

- As a part of CSR initiative, APL supported HelpAge India in augmenting and strengthen the health care infrastructure with MHU support in project villages.
- Infrastructural and medical equipment support in the form of Mobile-Medical van, Doctor, Driver, Nurse, Medicines, Diagnostic lab-testing equipment etc.

CSR Policy Alignment

The relief support project is in line with CSR Policy of the Company and aligned to Schedule VII of section 135 of the Companies Act, 2013



Map indicative only

Spent in the year FY 2022-23

₹2.39 Cr

Good health is essential to sustainable development.

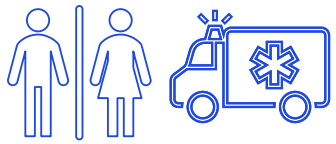
Objective

- To assess the overall impact of the MHU services.
- To assess the health scenario of the area, quality of medical consultation, medicine distribution and referral system.
- To understand the cost-benefit availed by patients due to MHU services.
- To assess the impact of the counselling sessions
- To assess the other unintended and extended impact areas apart from MHU services

Methodology

- **Primary Research** – The team interacted with **100** primary beneficiaries of the project, and stakeholders/ project implementation partners (community leaders, village volunteers, and project implementation staff).
- **Secondary Research** – Documents like annual reports submitted by HelpAge India to Asian Paints Limited.

Location wise sample



Locations	Sample
Rohtak, Haryana	100
Kasna, Uttar Pradesh	100
Ankaleshwar Gujarat	100
Khandala, Maharashtra	100

Locations	Sample
Pattancheru, Telangana	100
Penta, Tamil Nadu	100
Sriperumbudur, Tamil Nadu	100
Mysore, Karnataka	100

*Please refer to limitations

Impact Assessment of Health Initiatives

Overall Impact

96%

On average less than 1KM distance traveled to get medical care from SHU/MHU

63% Reduction in health expenditure

INR 15,984

Average Overall cost saved per household per year

100%

Preferred Health Care Facility (SHU/MHU)

100%

Respondents indicated accessibility of MHU/SHU services

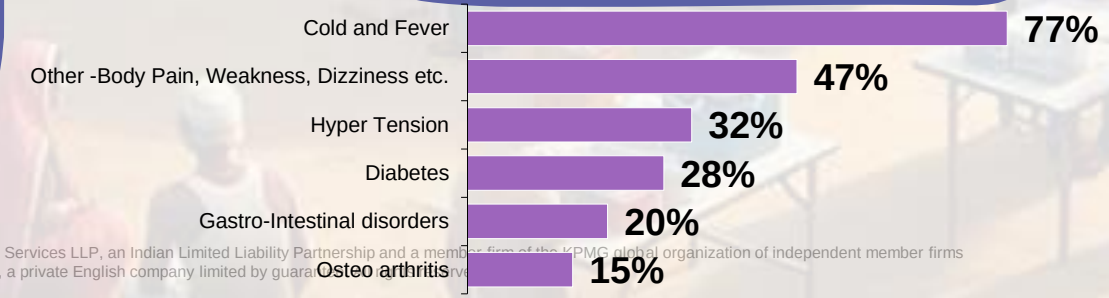
INR 5,484

wage loss avoided due to MHU intervention – On an average saving per household per annum

98%

Free medications available

Predominate Health Issues Catered by MHU/SHU



Impact of Healthcare Project

Impact / Outcome	Kasna	Rohtak	Ankaleshwar	Khandala	Mysuru	Patancheru	Cuddlore	Sriperumbudur
People availing primary health care services through static MHUs	100%	100%	96%	100%	98%	96%	100%	97%
Expert consultation observed for non-communicable diseases	98%	100%	85%	87%	100%	100%	100%	60%
Expert consultation observed for communicable diseases	92%	100%	94%	98%	100%	100%	100%	98%

Impact of Healthcare Project

Impact / Outcome	Kasna	Rohtak	Ankaleshwar	Khandala	Mysuru	Patancheru	Cuddlore	Sriperumbudur
Support received related to seasonal healthcare diseases	87%	51%	83%	80%	81%	83%	90%	87%
Provision of free medical consultation and medication	100%	100%	91%	100%	100%	100%	100%	93%
Quality consultation by medical practitioner & briefing on dosage by the pharmacist	88%	100%	93%	90%	96%	100%	100%	100%

Impact of Healthcare Project

Impact / Outcome	Kasna	Rohtak	Ankaleshwar	Khandala	Mysuru	Patancheru	Cuddlore	Sriperumbudur
Proper follow-up after consultation at MHU	78%	100%	62%	74%	98%	100%	100%	68%
Preference of healthcare facility to MHU/SHU	80%	100%	98%	89%	96%	100%	100%	92%
Reduction in time to access medical facility	100%	100%	89%	90%	90%	100%	100%	82%

Impact of Healthcare Project

Impact / Outcome	Kasna	Rohtak	Ankaleshwar	Khandala	Mysuru	Patancheru	Cuddlore	Sriperumbudur
Knowledge enhancement in terms of health, hygiene & sanitation	85%	100%	87%	100%	87%	100%	100%	100%
Significant reduction in wage loss due to improved access	47%	41%	36%	74%	77%	66%	95%	82%
Reduction in family's (HH) expense towards healthcare services	100%	100%	80%	93%	96%	90%	90%	97%

Impact Assessment of Health Initiatives

Overall Impact

Cumulative SRoI

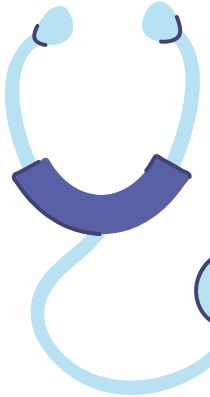
4.13

Total Impact Value generated

INR 12.28 Cr

Investment
INR 2,39,39,300

Net Present Value
INR 9,89,48,995



- Low delta: only ~3% of outcomes possible without the project intervention
- Hight attribution of this project 75% (average)

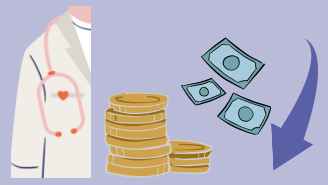
- Low negative impact: Project created only ~10% displacement

SRoI Highlights

Outcomes

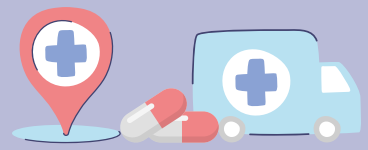
Reduction in no. of consultations with private doctor
INR 3,32,84,001

Reduced medication expenditure
INR 1,25,25,084



Reduction in daily wage loss due to visits to doctor and hospital
INR 22,34,871

Reduced out of pocket expenditure on health due to early diagnosis
INR 5,22,22,606



Reduced no. of trips to hospital
INR 35,17,270

Reduced expenses on diagnostic tests such as blood pressure and diabetics
INR 92,27,457

SROI-Impact of Healthcare Project

#	State	Location	Project Cost	NPV Social value	Ratio
1	**Gujarat**	Ankleshwar	32,07,796	3,26,09,568	**10.2**
2	**Uttar Pradesh**	Kasna	36,99,258	65,78,615	**1.8**
3	**Maharashtra**	Khandala	26,73,465	1,56,45,505	**5.9**
4	**Karnataka**	Mysuru	31,33,680	89,13,790	**2.8**
5	**Telangana**	Patancheru	27,10,283	44,09,918	**1.6**
6	**Tamil Nadu**	Penta	19,74,500	1,34,51,960	**6.8**
7	**Haryana**	Rohtak	31,87,738	1,24,95,893	**3.9**
8	**Tamil Nadu**	Sriperumbudur	33,52,580	62,10,787	**1.9**

Key suggestions

Project Design	Project Scale-up	Sustainability
• More **awareness sessions on the social protection scheme** and to disseminate knowledge on its enrolment and benefits. Schemes like: JJBY, PMJBY, Ayushman Card, Private Life Insurance Schemes, etc. • Conducting **Village-wide drive for Anemia** Screening or having mandatory Anemia screening for newly registering patients. • To fix a particular date fortnightly for **special home visits** for bedridden patients and pregnant or newly Lactating mothers.	• The MHU program **needs to be scaled up again in these regions** as the beneficiaries are heavily dependent on the service and there is no alternate service in the region that caters to such facilities accessible at the village doorstep in the region. • Mandatory **inclusion of female staff** (nurse or a female Doctor) in the team for women beneficiaries to screen their gender-based health impediments. • Inclusion of a **special Physiotherapy training camp** at the village level for caretakers to be trained on taking care of their old/ailing family members	• More special **awareness of dietary-based recovery management** to address non-communicable diseases which are mostly lifestyle and dietary-based. • **Convergence with the Government Health department and nearby Medical Universities** by engaging them for special screening camps village level through volunteering opportunity.

Impact on other parameters

Project Design	Project Scale-up	Sustainability
• Implement a strategic plan for the **change of location (Sanjali)** to ensure outreach and accessibility to healthcare facilities. • Develop and offer comprehensive **counseling programs focused on health, hygiene, and pregnancy-related guidance** for the community. • Provide detailed **consultations and educational resources regarding both communicable and non-communicable diseases** to enhance public awareness and health literacy. • Establish a **systematic process for collecting follow-up feedback** on the quality of consultations provided by doctors, ensuring continued improvement in service delivery. • **Increase awareness** and understanding by providing knowledge about available **diagnostic services, helping patients make informed decisions about their health care**.	• Implement targeted outreach and support programs to **encourage male participation in health initiatives,** focusing on education and engagement to promote healthier lifestyle choices. • Provide **support for chronic conditions** **a. Diabetes**: Develop comprehensive **diabetes education programs** and support groups to empower patients in managing their condition effectively **b. Blood Pressure**: Encourage **regular blood pressure checks** **c. Arthritis**: Offer **workshops** and resources that promote physical activity and **pain management strategies** tailored for arthritis patients **d. Maternity Support**: Establish comprehensive prenatal and postnatal **care programs, including counseling** and resources for expecting and new mothers.	• Improve physical infrastructure and services to **ensure that healthcare facilities are fully accessible to individuals with disabilities.** This includes accessible to MHU vehicles and comfortable patient examination facility • **Expand home visit services** provided by SHU to deliver person**alized care to patients** with chronic illnesses, ensuring that they receive **necessary medical attention and support in the comfort of their homes.** Consider integrating telehealth options for follow-up care and consultations.

Comparison with previous assessment

Parameter	2023-24*	2024-25
Consultation for a communicable disease	81%	99%
Consultation for a non -communicable disease	79%	97%
Free Consultation	66%	100%
Free Medication	83%	98%
Effective Consultation	78.9%	100%
Less Travel Distance	69.2%	100%
Waiting Time	40.6%	100%
Detection of diabetes at MHU/SHU	56.8%	79%

* As per the data provided by APL

Jignesh Thakkar

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Thank you

kpmg.com/socialmedia

Impact Assessment of Beautiful Homes Academy

Asian Paints Limited

March 2025

Strictly Private and Confidential

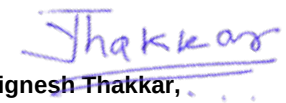
Subject: Final report for Impact assessment of Asian Paints Beautiful Homes Academy

Dear Sir/Ma'am,,

We appreciate the opportunity to assist Asian Paints Limited in providing **Impact assessment of Asian Paints Beautiful Homes Academy** related services**.**

- This report has been prepared exclusively for Asian Paints Limited (APL) ("Client") in accordance with the below terms between Client and KPMG Assurance and Consulting Services LLP ("KPMG" or "we") (collectively 'Contract'). The performance of KPMG's services and the report issued to the Client are based on and subject to the terms of the Contract.
- KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our client, to the extent agreed in the Agreement.
- Impact assessment is limited to the projects allocated by Asian Paints Limited.
- OECD-DAC framework has been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.
- Procedures, analysis, and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.
- Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.
- Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.
- We have not performed an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.
- Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with Client's team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.
- In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

Yours sincerely,



Jignesh Thakkar,

Partner- ESG, Head-Social

KPMG Assurance and Consulting Services LLP

Contents

Setting the Context

1. About Beautiful Homes Academy

Beautiful Homes Academy offers comprehensive training programs for respondents in the fields of Painting, Carpentry, and Plumbing. The academy offers a meticulously curated curriculum consisting of over 22 courses designed to enhance the skills of the respondents. Courses range from textures, waterproofing, wood finishes, wardrobe/drawer fittings, plumbing fixtures installation, to financial management. Beautiful Homes Academy's CSR initiative initially focused on training painting applicators and later expanded to include carpenters and plumbers as the academy possessed the necessary expertise and resources for skilling them. The primary goal of the training programs is to upskill the respondents, promote professionalism, and provide them with theoretical knowledge and practical experience before they enter the field. Training will not only improve the respondents' skills but also lead to career advancement, expanded service offerings, and overall improvement in livelihood.

24 fixed setups present in major metro and tier one towns across country

53 mobile setups to effectively reach every corner of the country

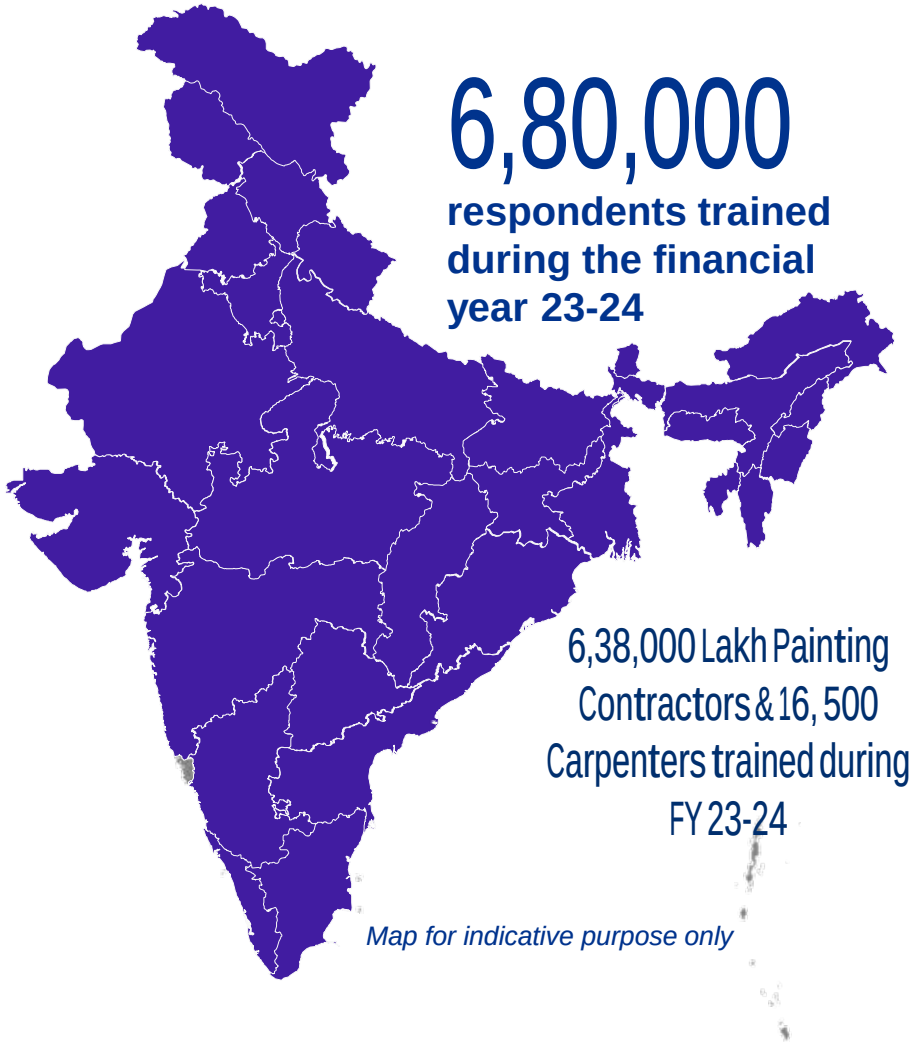
Key Features:

- **Comprehensive Curriculum**
- **Skilled Instructors**
- **Hands-On Approach**
- **Career Development**
- **Nationwide Accessibility**

Benefits:

- **Enhanced Skills**
- **Career Advancement**
- **Professionalism**
- **Expanded Service Offerings**
- **Improved Livelihood**
- **Accessible to respondents across the**

Presence across India



6,80,000

respondents trained during the financial year 23-24

6,38,000 Lakh Painting Contractors & 16,500 Carpenters trained during FY 23-24

Map for indicative purpose only

Note- The numbers stated above are as reported by APL team and KPMG has not verified the same.

2.1 About the study

The project brief entails conducting an impact assessment for the various courses offered by the AP BH Academy to gauge the functional, social, and emotional impact and benefits of these courses on the trainees.

Focus Areas:

- **Knowledge and Awareness:** The assessment evaluated the extent to which the trainees have enhanced their knowledge and awareness through the courses.
- **Technical Skill Improvement:** The assessment measured the improvement in the technical skills and knowledge of the trainees as a direct result of the training provided by AP BH Academy.
- **Interpersonal and Social Skills:** The assessment examined the enhancement in interpersonal and social skills that the trainees have experienced after undergoing the training.
- **Livelihood Opportunities:** The assessment analyzed the improvement in the trainees' livelihood opportunities and the impact on their earning potential resulting from the courses offered by the academy.

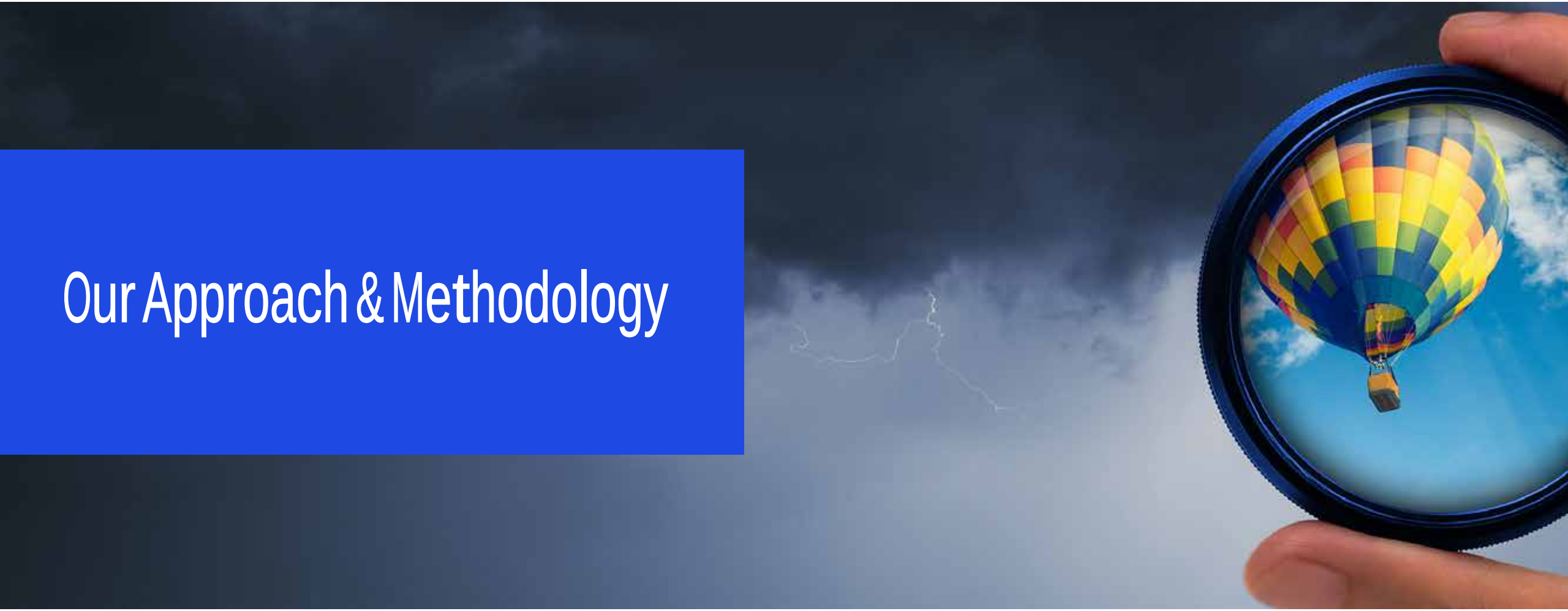
Sample for the study

- 15 towns
- 200+ Respondents
- 150+ Painting Contractors and 50+ Carpenters
- Beneficiaries' interaction in both Physical & Telephonic modes

Sample Covered:

Division	Telephonic		Physical		Trainers
	Carpenters	Painting Contractors	Carpenters	Painting Contractors	
CENTRAL	9	21			
EAST	9	11			
NORTH 1	5	6	5	5	1
NORTH 2	5	10			
SOUTH 1	11	27	5	6	1
SOUTH 2	7	20	4	8	3
WEST	10	20		17	2
Total	**56**	**115**	**14**	**36**	**7**
Grand total	**221**				**7**

Our Approach & Methodology



2.2 Our Approach & Methodology

	Initiate	Design	Collect	Analyze and report
Key Activities	• Kick-off meeting with the APL BH CSR team and implementing partners to understand the objectives, scope, and expectations. • Collect and review all relevant project documents, and data to gain insights into the project's objectives, target beneficiaries, and geographical coverage.	• Create a Theory of Change in consultation with the APL BH team, mapping out the expected outcomes and impact areas. • Design an evaluation framework including impact indicators, data collection techniques, and sampling strategies. • Develop data collection instruments (e.g., surveys, interview guides, focus group discussion guides).	• Capacitate the team on the use of instruments, ethical considerations, and data collection protocols. • Conduct field visits to collect primary data through surveys, KIIs, FGDs and observations. • Gather secondary data from existing reports, databases, and other relevant sources. • Implement quality assurance measures, including regular field supervision and data validation checks, to ensure data reliability.	• Use appropriate analytical tools and techniques to analyze quantitative and qualitative data, identifying key trends, patterns, and insights. • Prepare detailed assessment reports, including: a concise summary of key findings, incorporating feedback from the APL BH team. • Prepare the presentation deck.
Key Outputs	• **Inception report**	• **Sampling plan** • **Survey tools**	• **Preliminary insights from primary and secondary research**	• **Draft report** • **Final report of impact assessment study including recommendations** • **Executive summary deck**

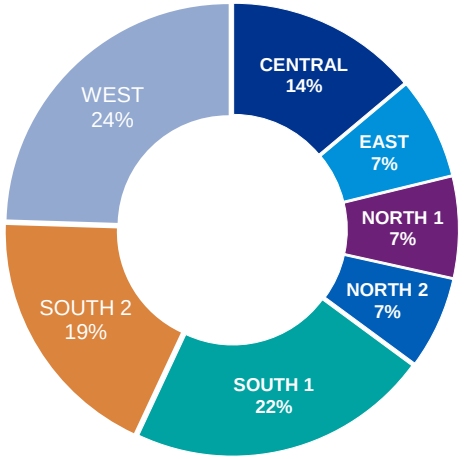
Analysis & Findings (Painting Contractors)

3.1 Demographic Profile of respondents

Mode of receiving training information

- Call from the company — 46%
- Dealers — 27%
- Friends/Peers — 19%
- Contractors — 7%
- Social Media — 1%

Region wise respondent profile



98% of the Painting contractors had a prior experience of more than a year.

Motivation to join the training

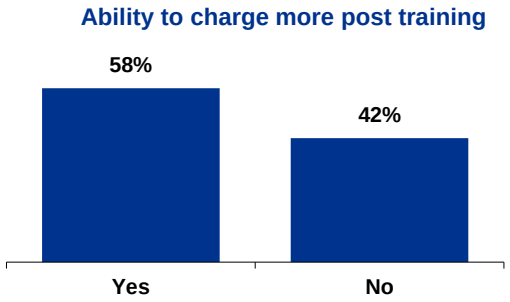
- Desire to enhance their skills and acquire new knowledge in order to improve the quality of their work and remain competitive in the industry.
- To advance their careers, secure better job opportunities, and gain credentials that would give them confidence in pursuing higher-level roles.
- Potential to grow their businesses, attract more clients, and expand their services through the skills and knowledge acquired during the training.
- Personal passion for painting played a significant role in motivating respondents, fueling their eagerness to learn and improve techniques for job satisfaction.
- Recognition of the importance of certifications in enhancing credibility and building client trust

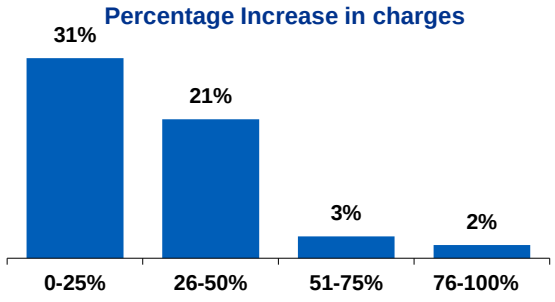
3.2 Improving Availability & Premiumization of Jobs

Pre-Training **53%**

Post-Training **63%**

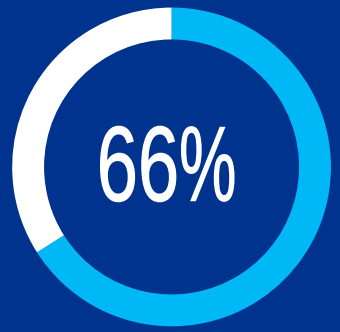
The training led to a significant increase in self-employment among Painting Contractors, rising from **53% to 63%,** indicating enhanced skills and confidence to start their own businesses.





The training program enabled many respondents to charge higher rates for their services, leading to increased earning potential through enhanced skills, knowledge, and confidence. Market conditions, client base, and competition may have hindered some from raising rates. respondents who worked daily before training likely had stable opportunities and client bases to negotiate better rates. Conversely, those who worked less faced challenges in raising rates. Overall, the training positively impacted respondents' financial outcomes, with pre-training work frequency and market conditions influencing the extent of improvement.

Average increase in sites covered per month



- As a result of the training, the average number of sites covered per month by Painting Contractors **increased by 66%.** This improvement highlights the positive impact of the training on their productivity and efficiency.
- The enhanced skills, knowledge, and confidence gained from the training enabled the contractors to take on more projects and manage their time more effectively, leading to a significant increase in the number of sites they could cover each month. This boost in productivity not only improved their earning potential but also contributed to better financial stability and job satisfaction.

3.3 Enhancing Financial Stability

Respondents reported financial readiness in case of emergency

- The intervention had a significant positive impact on the financial stability of the painting contractors. This could be gauged through various factors including being able to comfortably handle an emergency without borrowing money from someone or selling assets, indicating sufficient financial stability and savings. This financial security was further supported by the increase in the average number of sites covered per month and thereby boosting productivity and efficiency and increasing their income.
- Overall, the training not only improved the respondents' financial stability but also enhanced their productivity, earning potential, and ability to handle financial emergencies. This comprehensive improvement contributed to better financial security and overall well-being for the respondents.

Respondents were able to **increase savings** and **make significant investment**s after services. Their enhanced skills, knowledge, and confidence, combined with training, likely due to charging higher rates for prior work opportunities, helped negotiate better rates.

3.4 Improving Business Critical Skills

99%

Improved communication skills

Of the respondents stated improved communication skills due to the intervention

94%

Improved confidence

Of the respondents stated improved confidence due to the intervention

The training program has significantly improved respondents' relationships with clients and colleagues by enhancing communication skills. This has led to better client relationships, higher satisfaction, and increased referrals. respondents find it easier to explain processes to clients, building trust and confidence.

Enhanced communication skills also foster better teamwork, resulting in more efficient project completion and improved business outcomes. The training contributes to respondents' overall professional growth and success by enhancing technical skills and relationship management abilities.

70%

of the contractors reported that they frequently use the technological tools like colour consultancy, estimate builder, etc. in their daily operations.

Key Factors Contributing to Increased Confidence:

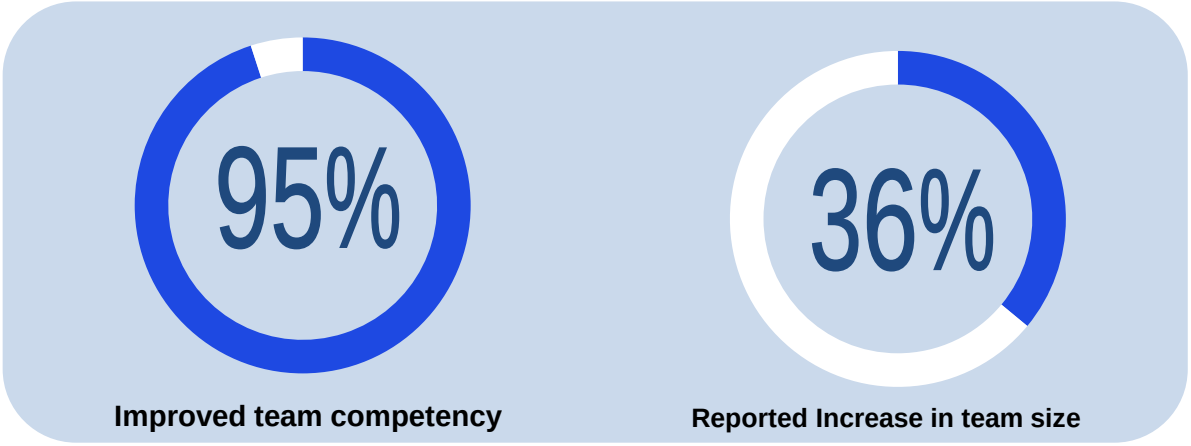
1.Enhanced Technical Skills: New skills and knowledge from training boosted confidence in handling complex tasks.

2.Practical Application: Hands-on training allowed direct application of learning, reinforcing confidence.

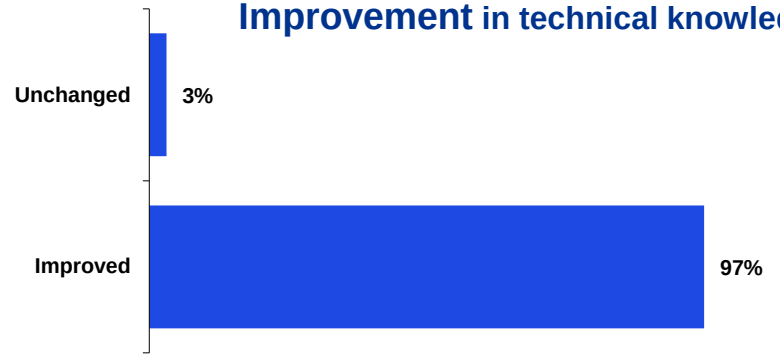
3.Problem-Solving Abilities: Improved skills in problem-solving increased confidence in facing challenges.

4.Communication Skills: Enhanced communication abilities led to better articulation, boosting confidence in client interactions and teamwork.

3.5 Building Commercial Capacities



- The training program enabled respondents to expand their business teams, leading to improved project completion, client relationships, and revenue.
- Factors contributing to team growth included enhanced skills, confidence, and business acumen gained from training, larger site coverage, completion of training, new ventures, new customers, business expansion, and a strong brand reputation.
- The program significantly improved team competency through technical skills, communication, problem-solving, and efficiency, resulting in better project outcomes, client satisfaction, and business growth.
- Financial stability and increased productivity also played crucial roles in team expansion and competency enhancement, allowing respondents to take on more projects and increase income sustainably.



Key areas of improvement in technical knowledge:

1.Quality of Work: respondents noted that their ability to produce high-quality work improved significantly. This includes better finishing, precision, and overall craftsmanship.

2.Speed of Task Completion: The training introduced new techniques and tools that helped respondents' complete tasks more quickly and efficiently.

3.Usage of New Tools and Technologies: Many respondents highlighted their improved proficiency with new tools and technologies introduced during the training. This includes mechanized tools that enhanced their work efficiency and effectiveness.

4.Risk Management: The training also covered aspects of risk management, helping respondents to better handle potential issues and challenges in their work.

5.Client Satisfaction: Improved technical skills translated into higher client satisfaction, as respondents were able to meet client expectations more effectively.

3.6 Enriching Business Relations

82% respondents reported an increase in number of referrals

78% respondents reported to have experienced better collaboration with peers

Key Factors Contributing to Increased Referrals:

1. **Improved Quality of Work:** The training provided respondents with new skills and techniques that significantly improved the quality of their work. This led to higher client satisfaction and more referrals.
2. **Enhanced Client Relationships:** Improved communication skills and better project management contributed to stronger relationships with clients, resulting in more referrals.
3. **Consistency and Reliability:** respondents were able to deliver consistent and reliable results, which built trust with clients and encouraged them to refer others.
4. **Positive Client Feedback and referrals:** Satisfied clients were more likely to recommend respondents to others, leading to an increase in referrals

78% respondents reported being able to collaborate with others on projects after undergoing the training. This indicates that the training was highly effective in enhancing their collaborative skills and fostering teamwork.
Key Factors Contributing to Improved Collaboration

1. **Enhanced Communication Skills**
2. **Teamwork and Coordination**
3. **Problem-Solving Abilities**.
4. **Confidence**

Improved team's confidence

96%

of the respondents reported an increase in their team's overall confidence level. This indicates that the training was highly effective in boosting the confidence of their teams to handle work-related tasks.

The training program had a substantial positive impact on the overall confidence levels of respondents' teams in handling work-related tasks. The significant and moderate increases in confidence reported by most respondents highlight the value of the training in enhancing team capabilities, communication, and problem-solving skills.

3.7 Beneficiary Testimonials

“ The trainers delivered an excellent painting training program, providing detailed explanations of all the painting modules alongside engaging hands-on practical sessions. I have acquired new painting designs knowledge and learned how to effectively use painting machines. Additionally, the safety procedures explained by the trainers have been invaluable. I am truly grateful to Asian Paints for offering such a beneficial training program. Thank you once again for this valuable opportunity.“

- Painting Contractor

"Before attending the painting training program by Asian Paints, I used to do painting work manually. However, after completing the training, I have learned new techniques and gained skills on using machines for painting. I am grateful to Asian Paints for providing this valuable training opportunity, as it has significantly enhanced my painting abilities and opened up new possibilities in my work. Thank you once again for this impactful training program.“

-Painting Contractor

3.7 Beneficiary Testimonials

"Previously, I faced disrespect in my work, but after connecting with Asian Paints, the scenario has completely transformed. People now respect and value my work, allowing me to take on contracts independently. Currently, I manage 10 to 15 individuals working with me, and I receive regular contracts of 6 to 7 sites every month. This positive change in my career and the growth of my business are all thanks to the support and opportunities provided by Asian Paints.“

- ***Painting Contractor***

"I used to work as a painter until I attended training programs with Asian Paints. Thanks to the skills and opportunities provided by Asian Paints, I ventured into starting my own painting contracts. Today, I am respected in the field, and my value has significantly increased. Asian Paints has truly transformed my life, allowing me to manage 12 to 15 sites every month. I am grateful for the chance that Asian Paints gave me to turn my passion for painting into a successful career.“

- Painting Contractor

3.8 Conclusion

Based on the responses from the respondents, the training provided by the Beautiful Homes Academy has had a substantial positive impact on their professional and personal lives:

1. *Financial skills of respondents significantly improved after training, resulting in higher earnings and ability to invest in tools.*
2. *Respondents experienced business growth, expanded teams, and improved financial management.*
3. *Enhanced intrapersonal skills like confidence and initiative were noted post-training.*
4. *Improved technical knowledge and skills led to better risk management.*
5. *Transition from daily wage work to self-employment showcased self-reliance and initiative.*
6. *The training positively impacted respondents' personal lives by fostering self-improvement.*
7. *Respondents' interpersonal skills benefited from the training, resulting in better client communication, teamwork, and conflict resolution.*
8. *Respondents' interpersonal skills benefited from the training, resulting in better client communication, teamwork, and conflict resolution.*

3.9. Recommendations

Recommendations

Based on the respondents' responses, here are some key recommendations to enhance the training program:

- **Incorporate More Practical Knowledge and Live Field Visits:** Many respondents suggested including more practical sessions and live field visits to provide real-world experience and hands-on learning.
- **Regular Market Updates:** Keeping respondents informed about the latest market trends and new techniques can help the respondents stay competitive and up-to-date with industry standards.
- **Enhance Training Materials:** Providing more comprehensive training materials, catalogues, and practical samples can support the learning process and help respondents better understand the concepts.
- **Mastery of Mechanical Tools and Machinery:** Develop a dedicated course on mechanical tools usage and maintenance, offering detailed training on advanced equipment, maintenance procedures, and troubleshooting techniques.

By implementing these recommendations, the Beautiful Homes Academy can further enhance the effectiveness of its training program and continue to positively impact the productivity and livelihood of its respondents.

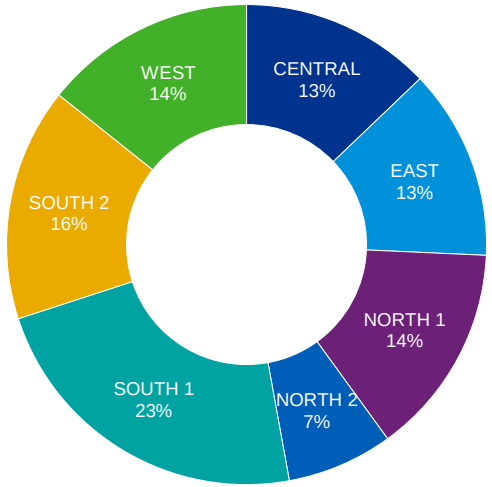
Analysis & Findings (Carpenters)

4.1 Demographic Profile of respondents

Mode of receiving training information

- Call from the company — 35%
- Dealers — 51%
- Friends/Peers — 12%
- Contractors — 1%
- Social Media — 1%

Region wise respondent profile

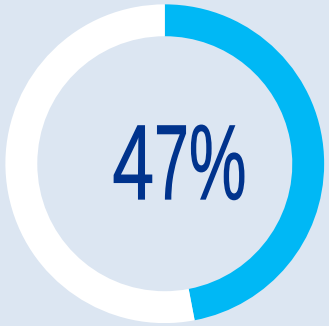


99% of the Painting contractors had an experience of more than a year.

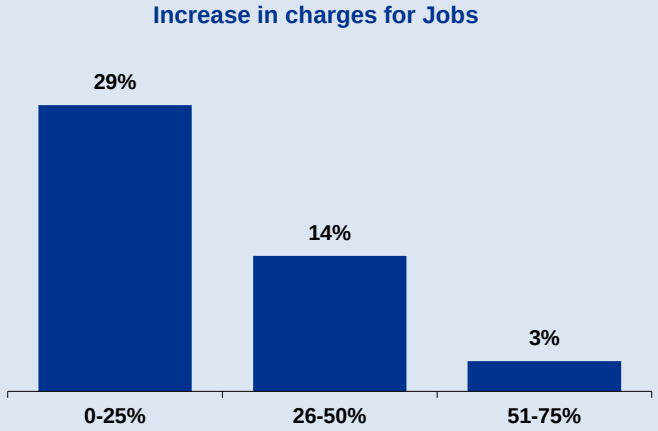
Motivation to join the training

- Desire to enhance their skills and acquire new knowledge in order to improve the quality of their work and remain competitive in the industry.
- To advance their careers, secure better job opportunities, and gain credentials that would give them confidence in pursuing higher-level roles.
- Potential to grow their businesses, attract more clients, and expand their services through the skills and knowledge acquired during the training.
- Personal passion for painting played a significant role in motivating respondents, fueling their eagerness to learn and improve techniques for job satisfaction.
- Recognition of the importance of certifications in enhancing credibility and building client trust

4.2 Improving Availability & Premiumization of Jobs



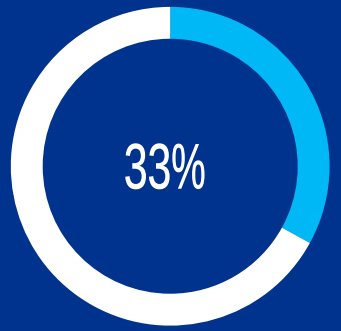
Ability to charge more



17% of the respondents reported more than 25% increase in their charge out rates.

- After completing the training, respondents reported an improved ability to charge higher rates for their services. This increase can be attributed to the enhanced skills, knowledge, and confidence gained through the training program.
- With advanced techniques and a deeper understanding of their craft, respondents felt more competent and capable of delivering higher-quality work, which justified the higher charges. The training also made them more competitive in the job market, enabling them to command higher prices.
- Overall, the training program effectively empowered respondents to enhance their professional capabilities, leading to increased income potential and career growth.

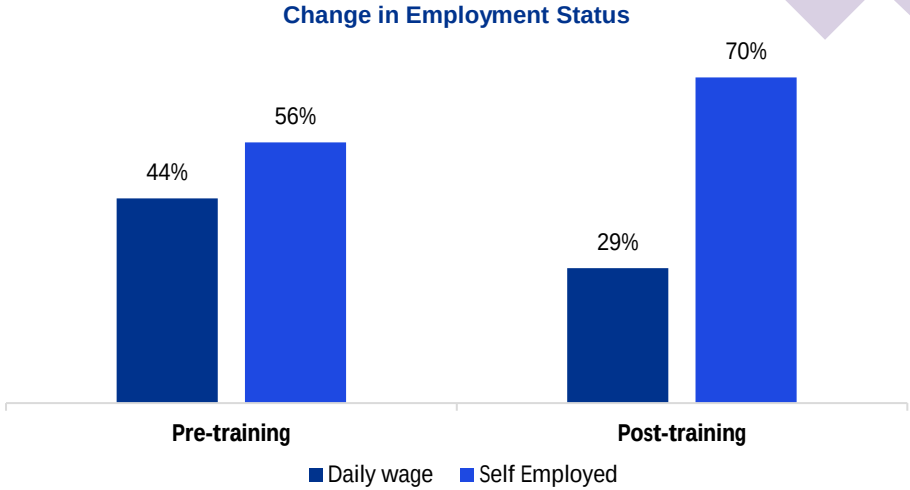
Average increase in sites covered per month



§ As a result of the training, the average number of sites covered per month by carpenters **increased by 33%.** This improvement highlights the positive impact of the training on their productivity and efficiency.

§ The enhanced skills, knowledge, and confidence gained from the training enabled the contractors to take on more projects and manage their time more effectively, leading to a significant increase in the number of sites they could cover each month. This boost in productivity not only improved their earning potential but also contributed to better financial stability and job satisfaction.

4.2 Improving Availability & Premiumization of Jobs



- From the data, it can be inferred that the training program had a significant positive impact on respondents' employment status. The increase in self-employment from **56% to 70%,** suggests that the training equipped respondents with the necessary skills and confidence to start their own businesses. This indicates that the program was effective in fostering entrepreneurial abilities.
- Overall, the training program appears to have contributed to enhancing respondents' job stability and career prospects

- From the data, it can be inferred that the training program had a positive impact on respondents' employment status. The increase in self-employment suggests that the training equipped respondents with the necessary skills and confidence to start their own businesses. This indicates that the program was effective in fostering entrepreneurial abilities.
- Additionally, the decrease in the percentage of daily wage workers implies that some respondents were able to transition from less stable daily wage work to more stable forms of employment, such as self-employment or other job opportunities.
- Overall, the training program appears to have contributed to enhancing respondents' job stability and career prospects

4.3 Enhancing Financial Stability

90%

Painting contractors reported financial readiness incase of any emergency

11%

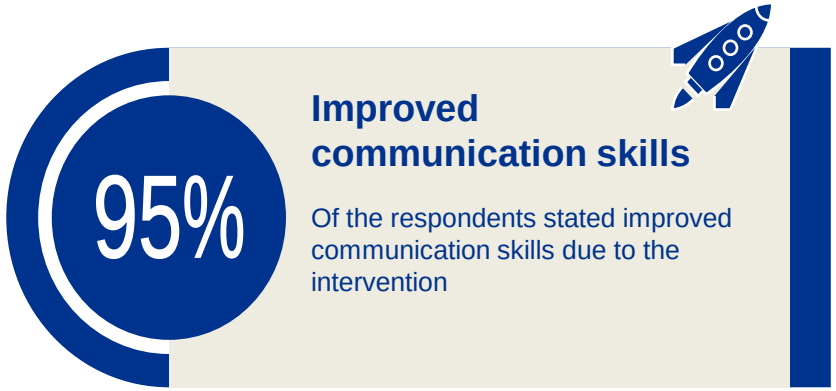
Carpenters reported making a significant purchase post-training

- The training program significantly contributed to respondents' financial stability. It helped them increase the number of projects they could handle monthly, which likely led to higher earnings. respondents also reported improved financial resilience, as many could cover emergencies without borrowing or selling assets.
- The training program has enabled many carpenters to make significant purchases, reflecting their improved financial stability and growth. respondents reported investing in essential assets such as vehicles and digital items, which support both their professional and personal lives. These purchases are a direct result of increased earnings and savings post-training. By acquiring new tools and materials, carpenters have further enhanced their work quality and efficiency, leading to better client satisfaction and more business opportunities.
- Additionally, the training enabled respondents to increase their savings and make significant investments, reflecting better financial management and long-term planning.

87%

- The training program has significantly improved the carpenters' financial well-being, leading to increased savings. Many carpenters reported higher earnings due to their enhanced skills and ability to charge more for their services, resulting in better financial stability. They are now able to handle emergencies without borrowing, invest in new tools and materials, and make significant purchases such as vehicles and digital items. This financial growth has also boosted their confidence in managing their finances, allowing them to plan more effectively.

4.4 Improving Business Critical Skills



- The training program significantly improved respondents' communication skills with both clients and team members. Enhanced technical skills and practical application allowed respondents to better articulate their ideas, processes, and solutions, leading to more effective client interactions and stronger team collaborations.
- Improved problem-solving abilities enabled respondents to approach and discuss new challenges with greater assurance and effectiveness. The overall increase in confidence from the training made respondents more comfortable in their interactions, resulting in clearer and more assertive communication.
- Respondents reported feeling more capable of explaining complex tasks and addressing client concerns, which contributed to higher client satisfaction and trust. Improved communication also facilitated better teamwork, as respondents were able to clearly convey their thoughts and collaborate more efficiently with their colleagues.
- Overall, the training program successfully enhanced respondents' communication abilities, resulting in improved professional relationships and project outcomes

- The training program had a positive impact on respondents' confidence levels. Many respondents reported feeling more confident in their abilities to handle complex tasks and approach new projects or challenges.
- This boost in confidence is attributed to the enhanced skills and knowledge gained through the training, which equipped them with the tools and techniques needed to excel in their work. The increased confidence also translated into better client interactions, as respondents felt more capable of explaining processes, problems, and solutions effectively.
- Overall, the training program successfully empowered respondents, leading to greater self-assurance and professional growth.

4.5 Building Commercial Capacities

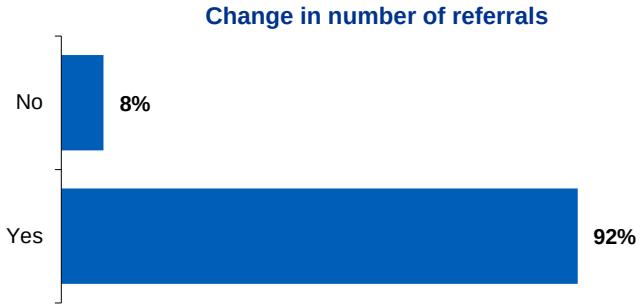
15% respondents reported an increase in team size

- While most respondents did not increase team size (85%), the training improved existing teams' competency and efficiency.
- Skill and performance enhancements resulted in better outcomes and higher client satisfaction.
- Improved collaboration and coordination led to better project completion rates and more recurring clients.
- The training successfully boosted team competency, supporting professional growth and business development.
- Valuable knowledge and techniques from the training were effectively implemented in work processes.

Basis the responses from the beneficiaries, the key areas of improvement in technical knowledge includes the following:

1.Quality of Work: respondents noted that their ability to produce high-quality work improved significantly. This includes better finishing, precision, and overall craftsmanship.
2.Speed of Task Completion: The training introduced new techniques and tools that helped respondents' complete tasks more quickly and efficiently.
3.Usage of New Tools and Technologies: Many respondents highlighted their improved proficiency with new tools and technologies introduced during the training. This includes mechanized tools that enhanced their work efficiency and effectiveness.
4.Risk Management: The training also covered aspects of risk management, helping respondents to better handle potential issues and challenges in their work.
5.Client Satisfaction: Improved technical skills translated into higher client satisfaction, as respondents were able to deliver better results and meet client expectations more effectively.

4.6 Enriching Business Relations



Majority of the carpenters reported receiving more referrals from existing clients due to the quality of their work. This indicates that the training was highly effective in enhancing the quality of their work, leading to increased client satisfaction and more referrals.

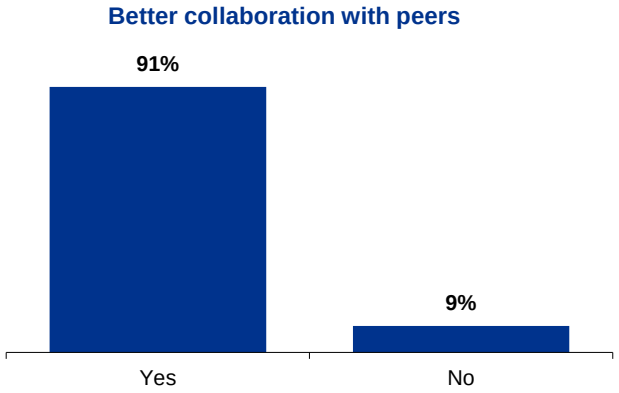
Key Factors Contributing to Increased Referrals

1.Improved Quality of Work: The training provided respondents with new skills and techniques that significantly improved the quality of their work. This led to higher client satisfaction and more referrals.

2.Enhanced Client Relationships: Improved communication skills and better project management contributed to stronger relationships with clients, resulting in more referrals.

3.Consistency and Reliability: respondents were able to deliver consistent and reliable results, which built trust with clients and encouraged them to refer others.

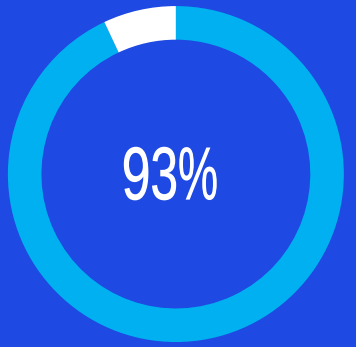
4.Positive Client Feedback: Satisfied clients were more likely to recommend respondents to others, leading to an increase in referrals



91% of the carpenters reported being able to collaborate with peers on projects after undergoing the training. This indicates that the training was highly effective in enhancing their collaborative skills and fostering teamwork.

Key Factors Contributing to Improved Collaboration
1.Enhanced Communication Skills
2.Teamwork and Coordination
3.Problem-Solving Abilities.
4.Increased Confidence

Improved team's confidence



93% of the carpenters reported an increase in their team's overall confidence level. This indicates that the training was highly effective in boosting the confidence of their teams to handle work-related tasks.

The significant increase in confidence reported by the majority of respondents underscores the value of the training in enhancing team capabilities, communication, and problem-solving skills.

4.7 Beneficiary Testimonials

"Thanks to my association with Asian Paints, my journey from being a carpenter to becoming a successful contractor has been incredibly rewarding. I have purchased my own plot in Bangalore and successfully expanded my business. Tasks have become more manageable with the support provided by Asian Paints, and I now have a team working under me. I am grateful for this opportunity, and my business has flourished, with 6 to 7 sites to manage every month."

- Carpenter

"Previously, I was heavily involved in manual work as a carpenter, but everything changed after participating in the Asian Paint Carpenter Training program. The training provided by Asian Paints has significantly improved my work efficiency, making tasks easier to handle. Now, I am working on 3 to 4 sites every month, and I have even been able to purchase a bike due to the increased productivity and effectiveness in my work. I am grateful to Asian Paints for introducing smart techniques that have positively impacted my career and lifestyle. Thank you, Asian Paints!"

- Carpenter

4.8 Conclusion

Based on the responses from respondents, the Beautiful Homes Academy training has had a substantial positive impact:

Financially

- Enabled respondents to charge more for services
- Increased income, allowing for investments in tools and materials
- Facilitated savings and significant investments in assets

Intrapersonally

- Boosted confidence in tackling new projects and challenges
- Enhanced technical knowledge and skills
- Enabled the implementation of new techniques for improved work quality and client satisfaction

Interpersonally

- Improved communication and collaboration skills with clients and colleagues
- Strengthened relationships and led to more referrals
- Enhanced ability to explain processes and collaborate effectively on projects

4.9 Recommendations

Recommendations

Based on the respondents' responses, here are some key recommendations to enhance the training program:

- **Enhance Training Materials:**
  - Improve the quality and effectiveness of training materials based on participant feedback.
  - Incorporate more practical examples and hands-on activities to enhance learning.
- **Focus on Advanced Techniques:**
  - Include advanced topics and techniques in future training sessions to cater to experienced respondents.
  - Offer specialized modules on new tools and technologies to keep respondents updated with industry trends.
- **Increase Practical Sessions:**
  - Increase the number of practical training sessions to provide respondents with more hands-on experience.
  - Conduct live field visits to give respondents real-world exposure.
- **Expand Training Reach:**
  - Expand the training program to reach more respondents, especially in underserved areas.
  - Collaborate with local organizations and communities to promote the training program.

By implementing these recommendations, the Beautiful Homes Academy can further enhance the effectiveness of its training program and continue to positively impact the productivity and livelihood of its respondents.

5.0 Trainers Perspective

The trainers view the Asian Paints Beautiful Homes training program as a comprehensive and effective initiative that significantly benefits the trainees, both in terms of skill enhancement and career development.

Effectiveness of the Training Program

•The program has been highly effective in enhancing the technical skills of Painting Contractors and carpenters, enabling them to work more efficiently and maintain high-quality standards. It also helps them stay updated with new trends.
•Painting Contractors have also benefited from improved soft skills, which help them build better relationships with architects, contractors, and clients.
•The training has increased Painting Contractors' awareness and professional standing, reducing their exploitation.

Strengths of the Training Program

•The program includes practical demonstrations and real-life examples, which are highly effective.
•There is a strong emphasis on follow-up, with offline and online support to ensure trainees apply what they've learned.
•The use of videos, ice-breaking sessions, and presentations keeps trainees engaged and interested.

Challenges Faced

•Due to time constraints, many Painting Contractors find it difficult to attend training sessions.
•The vast area of a metro city makes it challenging for trainers to reach every painter.
•Painting Contractors have varied needs, making it difficult to address all of them in a single program.

Trainee Engagement and Improvement

•Trainees are highly engaged and actively participate in the program.
•There is a 90% improvement in technical skills, safety knowledge, and efficiency among trainees.

Feedback and Real-World Application

•Trainees have reported significant improvements in their work quality and efficiency, thanks to the training.

Areas for Improvement

•Trainers believe the current modules and methodology are excellent and do not require changes.
•There is a consensus that refresher sessions and mentorship would be beneficial for trainees.

Career Prospects and Confidence

•The training has contributed significantly to the career prospects and confidence of the trainees, leading to more work opportunities and contracts.
•Trainers recommend follow-up initiatives to continue supporting the trainees in their professional journey.

Thank you