



KEC INTERNATIONAL LIMITED

CSR IMPACT ASSESSMENT REPORT

FY 2022 - 2024



SoulAce
Path to Sustainability

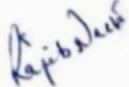
SOULACE CONSULTING PVT. LTD.



SOCIAL IMPACT ASSESSMENT CERTIFICATE

This is to certify that SoulAce Consultancy PVT Limited has carried out Social Impact Assessments of various initiatives undertaken by KEC International Limited as part of the Corporate Social Responsibility for the Financial Year 2022-23 & 2023-24.

The Social Impact Assessments were carried out during the Period of January to March 2024



For SOULACE CONSULTING (P) LTD.
Authorised Signatory

Place: Kolkata, West Bengal

Date: 31/03/2025

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01. ABBREVIATIONS

FY	Financial Year
KEC	KEC International: A flagship organisation of the RPG Group
NGO	Non-Governmental Organisation
SDG	Sustainable Development Goal
OBC	Other Backward Class
RPGF	RPG Foundation
SHG	Self-Help Group
ST	Scheduled Tribe
ASER	Annual Status of Education Report
BMC	Brihanmumbai Municipal Corporation
CBSE	Central Board of Secondary Education
EPC	Engineering, Procurement, and Construction
FGD	Focus Group Discussion
FY	Financial Year
HM	Headmaster
NSSO	National Sample Survey Office
PAF	Pehlay Akshar Foundation
RPGF	RPG Foundation
SSC	Secondary School Certificate

CHAPTER 1

EXECUTIVE SUMMARY

BACKGROUND AND NEED OF THE PROGRAM FOR KEC

The KEC-supported program was implemented by the RPG Foundation. It addressed various key developmental gaps through a comprehensive range of transformative initiatives that were designed to benefit select populations in the communities and create an impact for positive transformation and long-term change. Within the Community Development initiatives undertaken, the various projects tackled critical developmental challenges across thematic areas of i. Agriculture, ii. Healthcare, iii. Education, iv. Environmental sustainability, and v. Cultural preservation, aiming to uplift communities and foster long-term resilience.

In Katol Taluka, Nagpur, Maharashtra, the farmers faced an uphill problem of rising cultivation costs, deteriorating soil health, and water scarcity due to heavy reliance on chemical fertilisers and outdated and inefficient irrigation methods. Similarly, in Fetari village in Nagpur, Maharashtra, the soil degradation and declining crop productivity necessitated the adoption of more specific farming practices. The program strategy in these two areas was designed and implemented to ensure the reversal of and shift from unsustainable practices, such as the use of chemicals and fertilisers, to organic and sustainable farming methods, such as the use of vermicompost, etc. The program also facilitated the learning and propagation of preparative regenerative practices such as (organic) input preparation, micro-irrigation, and water conservation, along with non-agri practices such as providing and implementing the adoption of renewable energy solutions like biodigesters and biochar. These efforts were strategically aimed at reducing emissions, improving soil health, and enhancing the livelihoods of farmers, thus aligning with global goals of sustainable development.

While addressing multiple aspects of overall community development, the program addressed significant health system gaps, such as those of limited access to quality medical services, particularly in rural and underserved areas where the need for medical services and support was high. Initiatives like 'the Fever Clinics' and multiple 'Rural Health and Eye Camps' ensured timely intervention for conditions such as infectious diseases, anaemia, gynaecological disorders, and chronic conditions like diabetes and hypertension to ~3300 beneficiaries in the project area. The project also provided skilling and training to ~500 individuals from socio-economically backward sections (in Nagpur, Jaipur, Jabalpur, Delhi NCR, Vadodara, Mysuru, Aurangabad, Koliwada-Mumbai) towards making them become financially independent and empowered by skilling them, thus enabling them to be employable. These individuals were trained and skilled through the program, which helped bridge the gap in the availability of skilled healthcare personnel by offering free training to underprivileged individuals on becoming General Duty Assistants (GDAs), Bedside Assistants, Home Health Aides, Emergency Patient Assistants, etc.; while concomitantly addressing the need for the delivery of standardised care which was identified as an important gap in need and supply in the urban healthcare market. These efforts not only improved the health outcomes within the community but also empowered these individuals and collectives to take charge of their own overall growth, thus, holistic well-being of self and all.

The program also prioritised environmental sustainability and community well-being. In regions like Bastar, Chhattisgarh, and Karwahi, Maharashtra, deforestation, soil erosion, and water scarcity threatened the livelihoods of indigenous tribal communities. Through tree plantation drives, the program aimed at restoring ecological balance, enhancing biodiversity, and providing sustainable resources.

Additionally, the clean cookstove initiative addressed indoor air pollution, reducing health risks for women from poor socio-economic backgrounds while promoting environmental conservation.

The Cultural preservation and economic empowerment activities undertaken in this project were equally central to the program's mission. In Worli Koliwada, Mumbai, the KEC Heritage Project revitalised the historic fishing community by refurbishing public spaces, improving infrastructure, and showcasing cultural heritage through art and storytelling. Similarly, the weaving training program revived traditional crafts, providing skill-based opportunities and market access to artisans, thereby preserving cultural heritage while fostering economic sustainability.

Education and child welfare were also focused on through various interventions. The installation of water purification systems in rural schools ensured access to clean drinking water, reducing illnesses and improving learning outcomes for children. This initiative highlighted the program's commitment to creating healthier environments for future generations.

Through these multi-faceted efforts, the KEC-supported program not only addressed immediate challenges but also laid the foundation for long-term and sustainable development, empowering communities to thrive in the face of evolving societal and environmental demands.

OBJECTIVES OF THE CSR PROGRAM

The overarching objectives of the program portfolio were multi-focal, encompassing a diverse range of initiatives aimed at addressing crucial societal needs and fostering holistic development. These objectives were designed to empower communities, promote sustainability, and create lasting positive impacts across various sectors.

In the realm of agriculture, the program aimed at the empowerment of small and marginal farmers by building their capacity to adopt and rejuvenate soil health through organic and regenerative farming practices in the Nagpur area. This included training farmers in sustainable methods such as vermicomposting, reducing reliance on chemical fertilisers, and improving soil health by producing the naturally sourced compost and fertilisers required for sustainable organic farming. Additional fostering of market linkages for organic produce ensured profitable farmers' income through organic and sustainable farming practices while promoting long-term environmental benefits.

For artisans and traditional craftspeople, the program focused on reviving and sustaining cultural heritage through structured training in weaving techniques. By equipping participants with modern tools and market-driven approaches, the initiative aimed at enhancing income, facilitating direct market access, and promoting sustainable livelihoods.

In the healthcare sector, the program aimed to bridge critical gaps by providing accessible and quality medical services to underserved populations. Initiatives like the Fever Clinic and rural healthcare camps focused on early detection and treatment of diseases, reducing mortality rates, and improving overall health outcomes. The General Duty Assistant (GDA) training program further aimed to equip individuals with industry-relevant skills, ensuring better employment opportunities and standardised care delivery.

Environmental sustainability was the key focus area for initiatives like tree plantation drives and clean cookstove adoption. These efforts aimed at the restoration of degraded lands, enhanced biodiversity, and improved water cycles while reducing indoor air pollution and dependency on firewood for cooking. By creating local employment opportunities and promoting environmental stewardship, the program achieved its objective of upliftment of community members and mitigating ecological challenges.

Cultural preservation and community development that were central to the program's objectives were undertaken in Mumbai's Worli Koliwada. The KEC Heritage Project aimed to celebrate the cultural heritage of the fisherman community through art and illumination while upgrading public spaces to enhance safety and accessibility. The initiative also created livelihood opportunities for women-led self-help groups, fostering pride, self-respect, confidence and responsibility among the residents.

In the education sector, the program aimed to integrate functional English into the curriculum and empower every child with English Literacy and 21st-century skills to make them job-ready at the school level. Additionally, by promoting awareness about hygiene and the importance of clean, purified, safe potable water, the initiative sought to improve overall health and academic performance by ensuring children do not fall ill and attend school regularly.

Through these multi-faceted and focal but interconnected objectives, the RPG Foundation's wide-arrayed program portfolio aimed to address immediate challenges while laying the foundation for sustainable development, empowering communities to thrive in the face of evolving societal and environmental demands.

ABOUT KEC

KEC International is a leading global player in infrastructure Engineering, Procurement, and Construction (EPC), with a strong presence across diverse sectors such as Power Transmission & Distribution, Civil, Transportation, Renewables, Oil & Gas Pipelines, and Cables. The company is actively engaged in executing infrastructure projects in over 30 countries and has established a significant footprint in more than 110 countries, encompassing EPC projects as well as the supply of towers and cables. As the flagship company of the RPG Group, KEC International is committed to driving innovation and excellence in the domain of infrastructure worldwide.

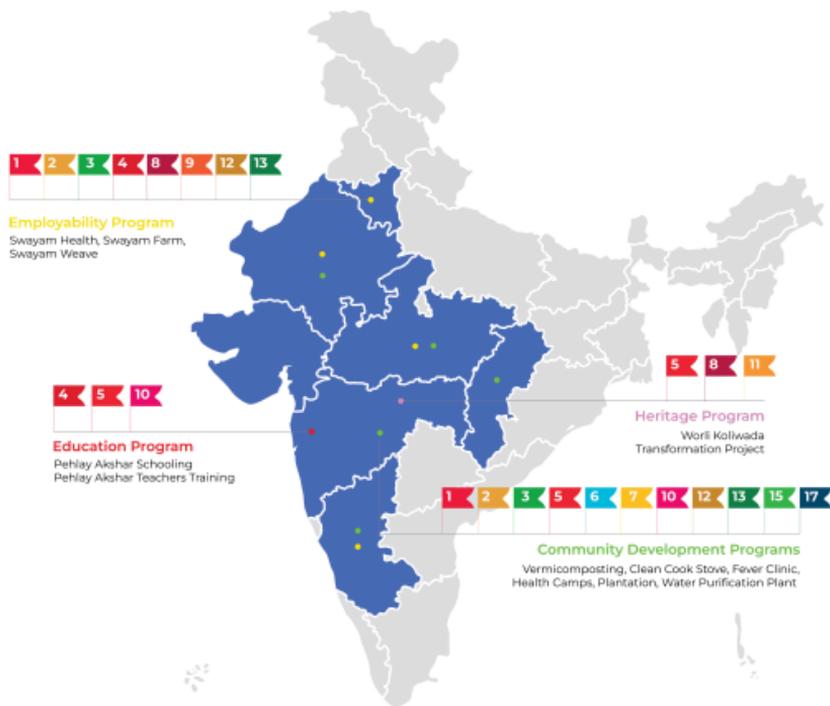
ABOUT IMPLEMENTING PARTNER

The RPG Foundation (RPGF) oversees the Corporate Social Responsibility (CSR) initiatives for all companies within the RPG Group, including that of KEC International. They have been assigned the need to directly execute these CSR initiatives or collaborate with external partners, such as trusts, institutions, or other NGOs. In the context of this report, RPGF took upon the role of the implementing agency, thus directly leading the CSR activities and objectives that were defined for FYs 21-22 and 22-23. At the same time, they worked along with external partners to ensure the successful implementation and completion of specific project tasks and activities for KEC International Limited as pre-decided in the CSR strategy laid down at the commencement of the FY, thus fostering collaboration and shared expertise to achieve impactful outcomes.



PROJECT LOCATION DETAILS

1. Employability - Nagpur, Jaipur, Jabalpur, Delhi NCR, Vadodara, Mysuru, Aurangabad
2. Heritage - Worli Koliwada
3. Community Development - Nagpur, Jaipur, Mysuru, Jaipur, Jabalpur, Akola, Aurangabad, Latur, Kolhapur, Bastar, Palghar and Raigad
4. Education - Mumbai



SUMMARY OF PROJECTS

Pillar	Project	Implementation Year	Budget (In Rupees)	Key interventions
Employment Enhancement and Vocational Skills	Swayam Farm	22-23 & 23-24	₹2,36,34,000 (FY 22-23) ₹2,10,00,000 (FY 23-24)	<ul style="list-style-type: none"> 500 farmers trained in Organic Farming (Nagpur). 4 Traditional families Upskilled.
	Vocational skills training for entry-level job roles in the healthcare industry	23-24		<ul style="list-style-type: none"> 500 trained and 422 placed (84.40% Placement).
	Swayam Weave (Vocational Training for Handloom & Agriculture)	22-23 & 23-24		<ul style="list-style-type: none"> 31 Women underwent a Weaving & Dyeing workshop (FY 22-23).
Fostering Education	Pehlay Akshar Schooling (Functional English Classes)	22-23 & 23-24	₹1,74,85,000 (FY 22-23)	<ul style="list-style-type: none"> FY 22-23: 3,257 children benefited in Mumbai. FY 23-24: 1,710+ children benefitted. 10+ Functional Learning Rooms set up in BMC Schools.
	Pehlay Akshar Training (Teacher Capacity Building)	22-23 & 23-24	₹2,15,00,000 (FY 23-24)	<ul style="list-style-type: none"> FY 22-23: 2,562 teachers trained: 1,841 handholding (Sathi) sessions. FY 23-24: 1,800+ teachers trained: 150+ handholding sessions.
Promotion and Restoration of National Heritage	Heritage Project	22-23 & 23-24	₹3,85,10,000 (FY 22-23) ₹86,00,000 (FY 23-24)	<ul style="list-style-type: none"> FY 22-23: Painting & Artwork in Worli Koliwada, 69 Streetlights replaced with Heritage-themed lights. FY 23-24: 77 heritage-themed streetlights installed, 20+ designed signage installed. Refurbishment of Cora Dapkal Ground, 210 Artificial reefs installed, 4 important structures illuminated for Night Tourism.

Pillar	Project	Implementation Year	Budget (In Rupees)	Key interventions
Community Development	Fever Clinics (Support to Public Health Systems)	22-23 & 23-24	₹1,32,82,000 (FY 22-23) ₹4,64,29,986 (FY 23-24)	<ul style="list-style-type: none"> FY 22-23: 67 Fever Clinics installed. 5,29,064 patients visited, 2,04,908 tests conducted, 20,214 people vaccinated. FY 23-24: More than 10 Lakh patients treated; Fever Clinics handed over to National Health Mission (NHM).
	Health & Eye Care Interventions	22-23 & 23-24		<ul style="list-style-type: none"> FY 22-23: 13,041 people screened for eye care; 8,109 women and adolescents received health check-ups, and Special Learning Resources were distributed for PwDs. FY 23-24: 16,500 people benefited from eye check-up camps.
	Clean Cook Stove Distribution	23-24		<ul style="list-style-type: none"> 8,220 beneficiaries received Clean Cook Stoves in Raigad and Palghar Districts.
	Tree Plantation	23-24		<ul style="list-style-type: none"> 50,000 saplings planted in Nagpur, Maharashtra and Bastar, Chhattisgarh.
	Water Purification Systems	22-23 & 23-24		<ul style="list-style-type: none"> FY 22-23: 500 LPH RO system installed in 3 schools in Jaipur & Mysuru and 200 LPH Industrial RO installed in 2 schools in Nagpur. 3 RO Water Purifiers installed, 13 Solar Panels installed.
	Vermicompost Bed Distribution	23-24		<ul style="list-style-type: none"> 150 vermicompost beds distributed to farmers in Nagpur.

ABOUT THE IMPACT ASSESSMENT AND THE REPORT

KEC has mandated SoulAce consulting to carry out an impact assessment study to examine the immediate and long-term effects of the various projects implemented under Employability Enhancement, Community Development, Promoting Education & Heritage restoration. The study was conducted during the fiscal year 2024-25.

OBJECTIVES OF IMPACT ASSESSMENT



To analyse the short-term and long-term impacts of the CSR program implemented by KEC.



To identify strengths and areas that require improvement in the implementation process.



To examine how effectively the program has achieved its intended goals and objectives.



To offer recommendations for enhancing the program's impact and long-term sustainability.



To assess the program's success in addressing key employability challenges faced by participants.



OECD (OVERALL) RATINGS OF KEC PROGRAM



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

The RPG Foundation's comprehensive program portfolio for implementing the various CSR objectives of KEC International aligns closely with the OECD framework for development initiatives, which is based on the 6 pillars that resonate and reflect in those of the program's innate strategies. The projects demonstrate the 6 strong virtues of Relevance, Coherence, Effectiveness, Efficiency, Impact, and Sustainability. It is important, therefore, to address the CSR-linked project achievements through these 6 pillar lenses in order to be able to evaluate whether and how many of the project activities were able to meet the critical societal needs while fostering holistic development in the communities that worked with. The ratings per pillar are on a scale of 1 to 5, where 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low, and 1 Point - Very Low score with respect to performance.

Below is a detailed report with analysis and insights based on the OECD framework approach:



RELEVANCE

The projects evaluated were noted to be highly relevant, addressing critical and specific challenges of the communities they worked in. The challenges were chiefly seen in the activity- the domain of agriculture, healthcare, education, and environmental sustainability.

Initiatives like organic farming, mulching, preparing and using jeevamrut and vermicomposting responded to reversing to a large extent and controlling further soil degradation while addressing critical aligned issues of managing crops and quality produce with the existing conditions of water scarcity. The program strategy and its implementation were executed in a way such that the training program alongside integrated the revival of traditional practices of arts and crafts, thus creating opportunities for additional income in these communities and families.

Delivery of select and highly focussed healthcare projects like the Fever Clinic and General Duty Assistants (GDAs), Bedside Assistants, Home Health Aides, and Emergency Patient Assistant training helped address gaps in the supply-demand of skilled medical care providers in geographies with high potential and need for skilled care. The projects also addressed environmental efforts through afforestation and plantation drives in an effort to reverse and control the damage caused by unregulated and sudden surges in deforestation and curb the rate and extent of indoor air pollution in the remote tribal villages due to the burning of wood for cooking fuel. Each of the unique initiatives were tailored to ensure that the specific needs of the communities of interest for betterment were addressed, while ensuring alignment with their priorities.



COHERENCE

Each project aligned with the UNDP-defined Sustainable Development Goals (SDGs) while demonstrating absolute coherence with national goals, policies and initiatives to reduce poverty and inequality. The alignments with the SDGs were observed to have facilitated a strong synergy with the existing efforts and enhanced the projects' overall effectiveness and relevance. The following SDGs were observed to be relevant across all the projects and locations of implementation:




EFFECTIVENESS

The programs achieved significant outcomes, demonstrating their effectiveness. Farmers adopted sustainable practices, improving soil health and incomes. Artisans gained market access and preserved traditional crafts. Healthcare initiatives improved access to quality care and created jobs. Environmental efforts enhanced biodiversity and reduced pollution. The KEC Heritage Project revitalised public spaces and boosted community pride. These measurable results highlight the programs' success in achieving their objectives.



EFFICIENCY

The programs were implemented efficiently, maximising impact with limited resources. Organic farming used low-cost, locally available materials while ensuring training was integrated for wider reach and adoption. Healthcare initiatives decentralised care delivery while addressing the gap in caregiving and need burden. The KEC Heritage Project helped transform the underutilised community-critical spaces into vibrant active-community hubs. Thus, by optimising all available resources, the programs ensured cost-effective and scalable solutions.



IMPACT

The programs generated transformative impacts across sectors. Farmers saw higher yields and incomes, artisans gained economic independence, and healthcare access improved. Environmental initiatives enhanced biodiversity and reduced pollution, while the KEC Heritage Project fostered community engagement and economic growth. These outcomes underscore the programs' ability to create meaningful and lasting change.



Relevance

Coherence

Effectiveness

Efficiency

Impact

Sustainability



SUSTAINABILITY

Sustainability was a core focus, ensuring long-term benefits as well as continuity of practices that are deemed as beneficial to man and the ecosystem in toto. The organic farming practices that were promoted towards regenerative practices, weaving training integrated modern tools, and healthcare programs created skilled professionals that together helped communities and their members support and foster collective and holistic well-being. Environmental initiatives fostered community stewardship, and the KEC Heritage Project engaged residents in maintaining the now-transformed spaces, thus helping youth of today and generations of tomorrow seek an identity with their culture and indigenous practices. These efforts ensured that the programs' impacts would endure, empowering communities and their unique cultural practices to thrive sustainably in the years to come.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

KEY IMPACT OF KEC PROGRAM

COMMUNITY DEVELOPMENT



Fever Clinic

Strengthened community resilience by ensuring early detection, timely treatment, and effective management of COVID-19 and other acute infectious diseases, reducing mortality rates, preventing outbreaks, decentralising care, supporting home-isolated patients, enhancing disease surveillance, and improving public awareness for better health outcomes and future crisis preparedness.



Plantation

Enhanced ecological awareness and community involvement in forest restoration, fostering environmental stewardship.



Clean Cookstove

Increased awareness about the health environmental & economical benefits of clean cooking practices.



Health Camps

To enhance community well-being by offering comprehensive healthcare services, including general health checks, vision screenings, and specialised attention to women and adolescent health, fostering awareness, prevention, and early treatment.



Vermicomposting

Enhanced farmers' income by reducing input costs and improving crop yields through organic practices.



Water Purification Plant

Improved school infrastructure by ensuring access to clean drinking water, creating a healthier learning environment.

EMPLOYABILITY ENHANCEMENT



Organic Farming

Improved farm productivity and income through the adoption of sustainable organic practices and market linkages.



Weaving

Enabled participants to generate income by producing and selling market-ready handwoven products.



Vocational Training (GDA)

Strengthened financial independence by equipping participants with skills for stable healthcare jobs.

AESTHETIC AND INFRASTRUCTURE IMPROVEMENT



Heritage

Transformed public spaces like Cora Dapkal Ground into vibrant hubs for sports, events, and cultural activities and restoration of historic sights.

EDUCATIONAL ENHANCEMENT



Schooling

Focus on improving the quality of learning and ensuring holistic development for students through modern skills.



Teacher training

Empowering educators with modern skills and strategies to improve teaching quality and student outcomes.

CHAPTER 2

RESEARCH METHODOLOGY

USE OF MIXED METHOD APPROACH

This evaluation employed a mixed-method approach, combining qualitative and quantitative techniques to assess the program's impact while complementing statistical findings with personal experiences. Quantitative methods gathered and analysed numerical data, offering statistical insights and measurable outcomes. A descriptive research design was used to provide a detailed analysis of the program's components. This design effectively captured the current situation, identified patterns and presented an in-depth overview. By integrating both methodologies, the evaluation offered a comprehensive understanding of the program, measuring its impact and highlighting areas for improvement. This approach ensured a balanced analysis, capturing both detailed insights and broader trends.

APPLICATION OF QUALITATIVE TECHNIQUES

Qualitative methods offer insights into the real-life experiences, perspectives and stories of beneficiaries and those involved in project implementation. Conducting in-depth interviews and focus group discussions enables a thorough examination of observed changes. These methods help explore improvements in skilling and employability among beneficiaries through the intervention. By capturing personal experiences and narratives, qualitative approaches provide a deeper understanding of the project and its impact.

APPLICATION OF QUANTITATIVE TECHNIQUES

Quantitative techniques assess the project and its impact through objective data analysis. Surveys and questionnaires collect numerical data on various indicators from program beneficiaries. Comparing data from before and after the intervention helps evaluate the project's effects and improvements.

These methods offer a measurable approach to assessing outcomes and determining success through statistical evidence.

PROJECT EVALUATION FRAMEWORK

Once the necessary information and insights were gathered through interviews, the OECD framework was applied. This framework evaluates the program based on six key pillars: relevance, coherence, efficiency, effectiveness, impact, and sustainability for each indicator.



ENSURING TRIANGULATION

Triangulation between findings from the primary survey with those of qualitative insights gathered through FGDs, interactions, and case studies was used to enhance the credibility and reliability of the research findings. It also helped ensure the trustworthiness of the research process, and the report was structured to highlight this approach.

ENSURING COMMITMENT TO RESEARCH ETHICS



Informed Consent

The study followed strict informed consent protocols. Participants were fully briefed on the objectives, methods and potential risks and benefits. They were encouraged to ask questions to ensure informed participation.



Confidentiality

Steps were taken to protect participants' confidentiality and privacy. Data was securely stored with access limited to authorised personnel. Identities were safeguarded, and personal information was anonymised or coded to ensure confidentiality.



Voluntary Participation

Participation in the study was completely voluntary, allowing individuals to decide freely without any pressure or coercion.



Ethical Treatment

Participants were treated with respect, dignity and fairness throughout the study. Their well-being and rights were prioritised, with necessary support provided for their comfort and understanding.



03. EMPLOYABILITY PROGRAM



3.1 SWAYAM FARM - ORGANIC FARMING

3.1.1 EXECUTIVE SUMMARY

Project Background

The project was carried out in Katol tehsil of Nagpur district, Maharashtra, covering 10 villages within a 5-20 km radius. It focuses on promoting organic farming practices among 500 farmers, with a total certified organic area of 728.24 hectares as per NPOP standards. Through training, capacity building, and technical assistance, farmers are equipped with knowledge of organic input preparation, pest management, and water conservation. The project also emphasises renewable energy adoption, soil health improvement, and smart agriculture interventions to enhance sustainability and productivity.

Project Activities that were designed for farmers in Nagpur



To train farmers in organic farming practices, including seed treatment, organic manure preparation, and pest management.



To establish 150 vermicomposting beds and provide organic culture to enhance compost production.



To demonstrate on-farm input preparation, including composting, nutrient management and organic pest control.



To support farmers with micro-irrigation systems and promote water conservation through pond rejuvenation.



Implementation year

2022-23 & 2023-24



Implementing Partners

RPG Foundation



Qualitative Methods Used

Focus Group Discussion and Interviews



Key Stakeholders

Program Team, Agrigenic FPC, Farmers



Project location

Katol tehsil, Nagpur District, Maharashtra



Financial Year of Impact Assessment

2024-25



SDG Goals



- Goal 2: Zero hunger
- Goal 3: Good health and well-being
- Goal 8: Decent work and economic growth
- Goal 12: Responsible consumption and production
- Goal 13: Climate action

Design Snapshot



Name of the project

Swayam Weave & Farm



Research methodology used

Qualitative research approach



Sampling Technique

Random Sampling Method



Sample Size

40

Key Output



77.5%

of the farmers used the compost pits created for making compost required in certified organic farming.



100.0%

of the farmers received training in seed treatment in organic farming under the project.



92.5%

of the farmers were trained in organic manure application, and 67.5% learned organic farming practices such as crop rotation, intercropping, composting, mulching, weed management, jeevamrut preparation, etc.



70.0%

of the farmers attended the compost preparation sessions during the demonstrations held in the villages, promoting organic input adoption.



66.7%

of the farmers reported an increase in crop yield production due to vermicompost use.



72.5%

of the farmers experienced improved soil health from organic culture practices adopted through the project interventions.



97.5%

of the farmers received training and became members of local FPOs.

Key Impact



100.0%

of the respondents were trained for and were seen to follow the NPOP and USDA-NOP standard for organic certifications.



52.5%

of the respondents said they had better quality of yield-produce and improved soil health.



55.0%

of the respondents said they saw better nutrient management outcomes from soil testings that were done subsequent to the organic farming practices being implemented.



All (100% of respondents) said they had an increase in crop production due to improved composting and soil health.

Observational Findings from the Impact Assessment



Expansion of alternative energy sources through biogas adoption.



Improved market access for farmers through FPO membership and training.



Improvement in income levels with farmers moving into higher salary ranges.



Strengthened farming resilience with dedicated input production centres and resource support, reducing expenditure and cost on fertilisers and pesticides.



Reduced dependency on chemical fertilisers, improving environmental sustainability.



Higher farmer satisfaction with certification and project activities.



3.1.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The organic farming project in Katol tehsil, Nagpur, was initiated to address the challenge of rising cultivation costs, deteriorating soil health, and water scarcity faced by farmers. Heavy reliance on chemical fertilisers and pesticides, which accounted for nearly 60% of farming expenses, had led to environmental degradation and increased carbon emissions. Additionally, the semi-arid climate and inefficient irrigation methods worsened water scarcity, impacting crop yields. The project aimed to transition farmers to sustainable practices like organic input preparation, micro-irrigation, and water conservation while also introducing renewable energy solutions such as biodigesters and biochar. By promoting regenerative agriculture, the initiative seeks to reduce emissions, improve soil health, and enhance farmers' livelihoods, aligning with global efforts toward sustainable and climate-resilient farming.

OBJECTIVES OF THE PROGRAM



To empower small and marginal farmers in rural areas through capacity building for adopting organic and regenerative agricultural practices.



To create opportunities for farmers to earn additional income through sustainable farming methods.

3.1.3 KEY STUDY FINDINGS AND IMPACT

The following section presents a comprehensive overview of the key study findings and impact analysis of the certified organic farming practices adopted by respondents. It highlights the methods used for composting, types of seeds, soil testing practices and the effectiveness of training and demonstrations. The analysis also covers the benefits of organic farming, including improved soil health, reduced chemical use and economic gains, along with the role of FPOs and marketing support in enhancing organic farming outcomes.

KEY FINDINGS

DEMOGRAPHY OF BENEFICIARY POPULATION

CHART 1: AGE GROUP DISTRIBUTION

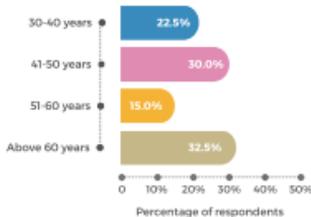
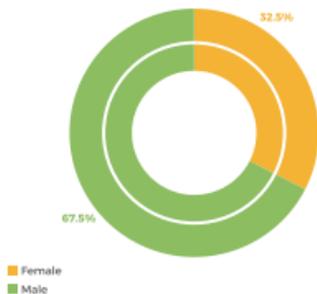


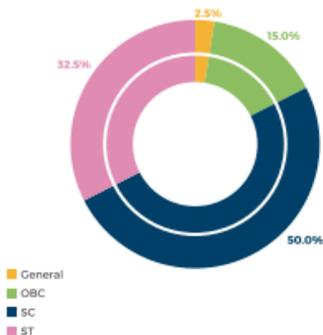
Chart 1 shows that 30.0% of the respondents belonged to the age group of 46-60 years, while 28.0% of them were between 18-30 years, 24.0% of them were senior citizens above 60 years of age.

CHART 2: GENDER-WISE DISTRIBUTION



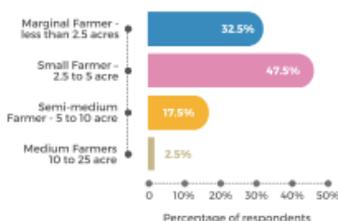
The demographic profile showed that a majority (67.5%) of the respondents were male, while females represented 32.5%, reflecting greater participation from men.

CHART 3: SOCIAL CATEGORY



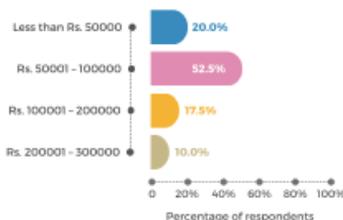
Half of the respondents (50.0%) belonged to the SC category, followed by 32.5% from the ST category. Meanwhile, a considerable portion (15.0%) of the respondents were from the OBC category, while 2.5% were from the General category.

CHART 4: LAND OWNERSHIP



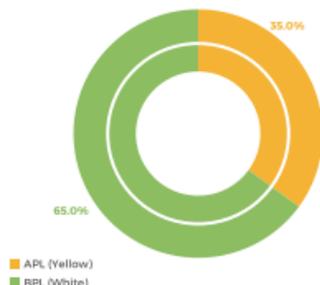
The data on land ownership provided information as nearly half of the respondents (47.5%) were small farmers with landholdings between 2.5 to 5 acres, while 32.5% were marginal farmers owning less than 2.5 acres. Semi-medium farmers with 5 to 10 acres accounted for 17.5%, whereas the lowest (2.5%) was medium farmers owning 10 to 25 acres.

CHART 5: ANNUAL FAMILY INCOME



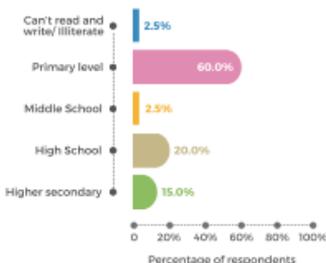
More than half of the majority (52.5%) of respondents had an annual family income between ₹50,001 - ₹1,00,000, indicating a concentration in the lower-income bracket. Nearly one-fifth (20.0%) earned less than ₹50,000, while 17.5% reported an income of ₹1,00,001 - ₹2,00,000. The lowest representation (10.0%) was from those earning ₹2,00,001 - ₹3,00,000, showing limited presence in higher income categories. This distribution reflected the economic challenges faced by many respondents, reinforcing the importance of the project in supporting low-income families..

CHART 6: TYPE OF RATION CARD



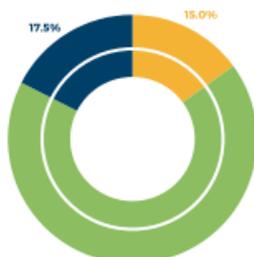
A significant majority (65.0%) of respondents held a Below Poverty Line (BPL) ration card, while 35.0% had an Above Poverty Line (APL) card. This indicated that most respondents belonged to economically disadvantaged households. The high percentage of BPL cardholders underscored the need for targeted support, and the project played a crucial role in addressing their challenges.

CHART 7: EDUCATIONAL LEVEL OF HEAD OF FAMILY



The high proportion of family heads with only primary education highlighted the need for educational awareness and skill-building initiatives. A majority (60.0%) of respondents had a family head with primary-level education, followed by 20.0% who had completed high school. While 15.0% had studied up to higher secondary and a small number (2.5%) had reached middle school. The lowest percentage (2.5%) was from those who were illiterate.

CHART 8: TYPE OF HOUSE



- Kutchha (temporary roof mud wall and floor)
- Pucca (cement concrete roof brick wall cement floor)
- Semi-pucca

67.5% of respondents lived in pucca houses, indicating better housing conditions. Meanwhile, 17.5% resided in semi-pucca houses, and 15.0% lived in kutchha houses, reflecting the presence of vulnerable households with temporary structures

CHART 9: ELECTRICITY CONNECTION



- No
- Yes

All respondents (100%) had access to electricity, showing complete household connectivity. This universal access to electricity played a crucial role in improving daily life, enabling better opportunities supporting livelihood activities, and enhancing overall well-being.

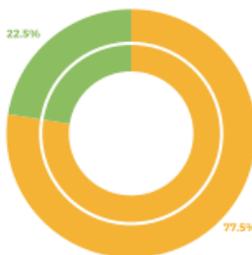
CHART 10: TYPE OF HOUSEHOLD TOILET



- Sewer system
- Septic Tank

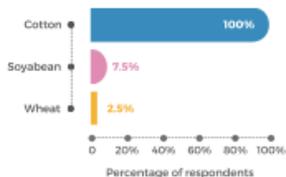
All respondents (100%) had household toilets connected to a sewer system, with no one relying on septic tanks or other sanitation methods.

CHART 11: METHODS USED FOR MAKING COMPOST IN CERTIFIED ORGANIC FARMING

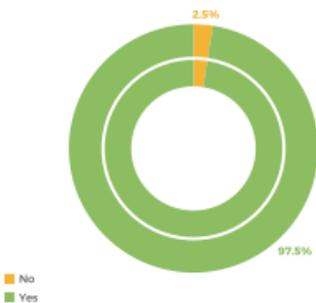


- Compost pit
- Other

Sustainable farming practices increasingly emphasise composting as a cost-effective and eco-friendly method to enhance soil health. Compost pits help retain nutrients and improve moisture retention, making them a reliable choice for farmers. A large majority of respondents (77.5%) used compost pits for making compost in certified organic farming, while 22.5% relied on other methods. Compost pits were the most preferred approach, likely due to their efficiency in decomposing organic matter and improving soil fertility.

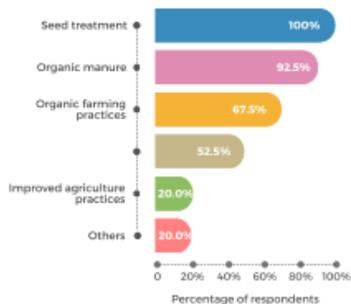
CHART 12: TYPES OF SEEDS USED BEFORE


Crop selection plays a crucial role in farm sustainability, and heavy reliance on a single crop like cotton can impact soil health and financial stability due to market fluctuations. Before the intervention, all respondents (100%) had used cotton seeds, making it the primary crop among them. A small percentage (7.5%) had also cultivated soybeans, while only 2.5% had used wheat seeds. This showed that cotton dominated farming practices with minimal crop diversification.

CHART 13: PREVIOUS PRACTICE OF SOIL TESTING


Regular soil testing is essential for sustainable agriculture, as it helps optimise fertiliser use, improve crop yields, and maintain soil fertility. Before the intervention, nearly all of the respondents (97.5%) had practised soil testing, while only 2.5% had not. This demonstrated widespread awareness of the importance of assessing soil health among farmers.

ACTIVITY: TRAININGS

CHART 14: TRAINING RECEIVED IN ORGANIC FARMING UNDER THE PROJECT


a. Seed Treatment: All respondents (100%) received training in seed treatment, making it the most widely covered aspect of organic farming under the project.

Seed treatment plays a vital role in organic farming by reducing the need for chemical inputs and strengthening crops against diseases. Widespread adoption of these practices can lead to improved yields, better soil health and long-term sustainability in agriculture.

Other qualitative findings

b. Organic Manure: A vast majority (92.5%) were trained in preparing and using organic manure. This emphasised the importance of natural fertilisers in maintaining soil fertility and replacing synthetic inputs.

c. Organic Farming Practices: More than two-thirds (67.5%) received training in organic farming practices. Organic farming improves soil structure, conserves biodiversity, and reduces the environmental impact of agriculture.

d. Organic Pest Management: Over half (52.5%) of the respondents learned organic pest management methods. Reducing reliance on chemical pesticides not only protects soil and water quality but also lowers health risks for farmers and consumers.

e. Improved Agriculture Practices & Others: A smaller number (20.0%) of the respondents were trained in improved agricultural practices, while another 20.0% learned additional farming techniques beyond the mentioned. Improved agricultural methods contribute to efficient water use, better soil management and enhanced resilience to climate change.



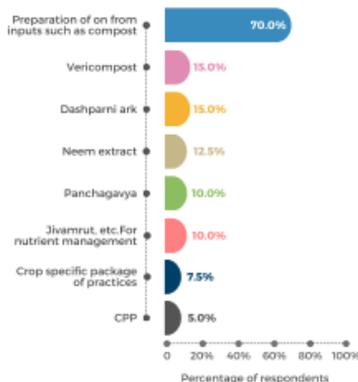
Before joining the organic farming program, I did not know how to improve my soil. After learning about organic manure and compost, I started using vermicompost and noticed a difference. My soil became healthier, and my cotton yield improved a little. Soil testing also helped me understand the right amount of nutrients, so I used fewer chemical fertilisers. This program helped me follow better farming practices.

- Nandkishore Wagade, Mohgaon Dhole



ACTIVITY: DEMONSTRATIONS IN VILLAGE

CHART 15: DEMONSTRATIONS OBSERVED IN THE VILLAGE



a. Preparation of On-Farm Inputs such as compost: A large majority (70.0%) observed demonstrations on preparing on-farm inputs like compost, highlighting a strong emphasis on organic soil enrichment techniques.

Other Qualitative findings:

b. Vermicompost & Dashparni Ark: Equal proportions (15.0%) observed demonstrations on vermicomposting and Dashparni ark. While vermicompost focused on using earthworms to produce nutrient-rich compost, Dashparni ark introduced farmers to a traditional pest repellent made from fermented plant extracts.

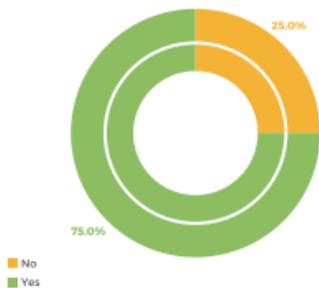
c. Neem Extract: Around 12.5% of respondents attended demonstrations on neem extract preparation and application. This traditional botanical pesticide is known for its effectiveness against a wide range of pests while being safe for the environment. Neem extract is a cost-effective and eco-friendly pest control solution that supports organic farming.

d. Panchagavya & Jivamrut for Nutrient Management: Demonstrations on Panchagavya and Jivamrut, both organic nutrient management solutions, were observed by 10.0% of respondents. These bio-enhancers, made from cow-based ingredients and natural fermenting agents, improve plant immunity and soil fertility. The use of Panchagavya and Jivamrut aligns with sustainable farming practices by enhancing soil microbial activity and plant growth naturally.

e. Crop-Specific Package of Practices & CPP

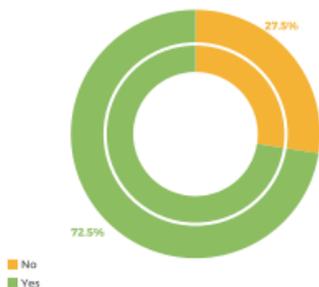
A smaller proportion (7.5%) observed demonstrations on crop-specific packages of practices, which provided tailored guidance for different crops. Additionally, 5.0% learned about CPP (Cow Pat Pit), a biodynamic farming method used to enrich soil fertility. Customised crop practices help farmers optimise yields based on soil type and climate conditions, while CPP contributes to sustainable soil health.

CHART 16: PROVISION OF VERMICOMPOSTING BED UNDER THE PROJECT



Vermicomposting enhances soil fertility by producing nutrient-rich compost, reducing dependency on chemical fertilisers. A majority of respondents (75.0%) received a vermicomposting bed under the project, while 25.0% did not. This indicated that most farmers had access to improved composting techniques through project support.

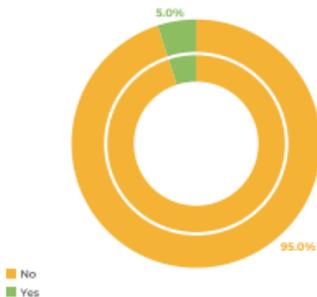
CHART 17: AVAILABILITY OF VERMICOMPOST IN THE VILLAGE



A significant number of respondents (72.5%) reported the availability of vermicompost in their village, while 27.5% stated it was not accessible. This showed that most farmers had local access to organic compost, supporting their farming needs. The availability of vermicompost in villages plays a key role in promoting organic farming by reducing reliance on synthetic fertilisers.

ACTIVITY: BIOGAS (PRODUCTION AND USE)

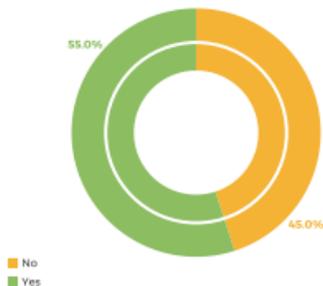
CHART 18: BIOGAS AVAILABILITY AND ACCESS



A vast majority of respondents (95%) did not have access to biogas, while only 5% reported its availability. This indicated that traditional fuel sources remained the primary energy option for most households.

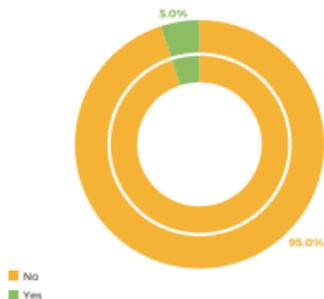
Biogas serves as a sustainable alternative to firewood and LPG, reducing indoor air pollution and lowering fuel costs. Expanding biogas adoption can improve energy security, enhance waste management, and contribute to environmental conservation.

CHART 19: PRESENCE OF BIOGAS IN THE VILLAGE



More than half of the respondents (55.0%) stated that biogas was present in their village, while 45.0% reported its absence. This expressed that although biogas infrastructure existed, accessibility and adoption might still be limited. The presence of biogas in villages provides an opportunity to promote clean energy solutions, reducing dependence on firewood and fossil fuels.

CHART 20: OBSERVATION OF BIOCHAR IN THE VILLAGE

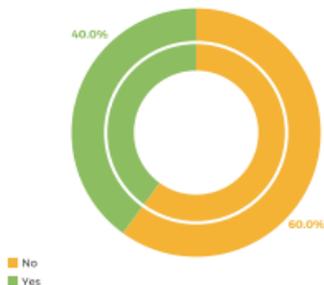


Biochar plays a crucial role in improving soil fertility, enhancing water retention, and sequestering carbon, making it a valuable tool for sustainable agriculture. A vast majority of respondents (95.0%) observed the presence of biochar in their village, while only 5.0% did not. This indicated that biochar production and usage were well-established in the area. Its widespread presence outlined that farmers have access to an effective method for soil enrichment and waste management.

The primary benefits of biochar observed include improved soil health, better moisture retention, and reduced carbon emissions. It is also used for seed treatment, insect control, and enhancing organic farming practices.

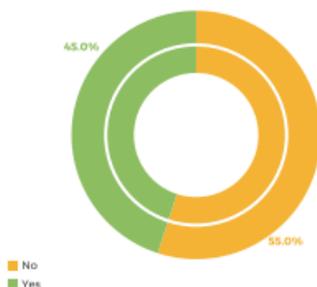
ACTIVITY: MICRO IRRIGATION SYSTEM

CHART 21: ACCESS TO MICRO IRRIGATION SYSTEM UNDER THE PROJECT



A larger share of respondents (60.0%) did not have access to a micro-irrigation system under the project, while 40.0% benefitted from it. This showed that efforts to introduce water-efficient irrigation methods reached some farmers, but traditional irrigation practices remained prevalent. Micro-irrigation plays a critical role in conserving water, especially in regions facing irregular rainfall and groundwater depletion.

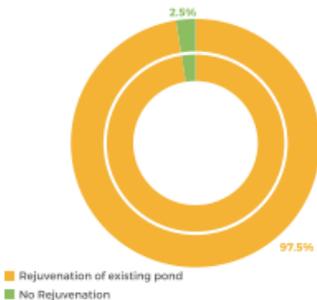
CHART 22: AVAILABILITY OF MICRO IRRIGATION SYSTEM IN THE VILLAGE



Micro-irrigation systems are essential for efficient water management, reducing dependency on erratic rainfall and minimising water wastage. More than half of the respondents (55.0%) stated that a micro-irrigation system was unavailable in their village, while 45.0% reported its presence. This indicated that although such systems existed in some areas, they were not yet widespread or easily accessible to all farmers.

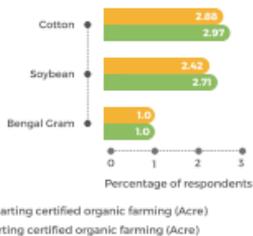


CHART 23: POND REJUVENATION ACTIVITY IN THE VILLAGE



Nearly all respondents (97.5%) reported that an existing pond in their village had undergone rejuvenation, while only 2.5% stated otherwise. This showed that efforts to restore water bodies were widely implemented, benefiting the majority of the community. Pond rejuvenation plays a crucial role in improving groundwater recharge, enhancing water availability for irrigation and supporting local biodiversity. Revitalising existing ponds helps mitigate water scarcity, provides a sustainable water source for agriculture and strengthens climate adaptation strategies in rural areas.

CHART 24: AREA COVERED UNDER DIFFERENT CROPS



Before intervention

Before adopting certified organic farming, cotton was cultivated on 2.88 acres; soybean covered 2.42 acres, and Bengal gram on 1.00 acres. The crop distribution suggested a reliance on conventional farming practices with limited diversification.

Post intervention status and impact:

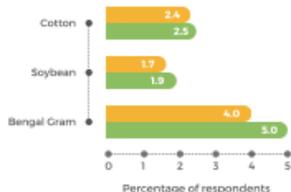
Following the shift to certified organic farming, the area under cotton cultivation slightly increased to 2.97 acres, while soybean expanded to 2.71 acres. Bengal gram cultivation remained unchanged at 1.00 acre, showing consistency in its land allocation.

The increase in land allocated to cotton and soybean after adopting organic farming suggests improved confidence in sustainable cultivation methods. Organic practices help enhance soil fertility, reduce dependency on chemical inputs, and promote better yields over time. Maintaining Bengal gram acreage indicates its continued importance in crop rotation, contributing to soil health and long-term sustainability.



ACTIVITY: CROP PRODUCTION & SALES

CHART 25: PRODUCTION OF DIFFERENT CROPS



Before intervention

Before transitioning to certified organic farming, the production per acre stood at 2.4 quintals for cotton, 1.7 quintals for soybean, and 4.0 quintals for Bengal gram. These yields reflected the outcomes of conventional farming practices, which relied on chemical inputs and traditional methods.

Post intervention status and impact

With the adoption of certified organic farming, cotton yield slightly improved to 2.5 quintals per acre, soybean increased to 1.9 quintals per acre, and Bengal gram showed the most significant rise, reaching 5.0 quintals per acre.

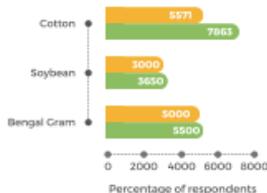
The increase in crop production highlights the potential of organic farming to enhance productivity without chemical fertilisers. The notable improvement in Bengal gram yield suggests better soil health and nutrient availability, likely due to organic soil enrichment techniques.



Being part of the FPO has been a good experience. The training on FPO management helped me learn how to work with other farmers. The input centres have made it easier to get the materials needed for organic farming. This program has brought our community closer, and we now know more about sustainable farming. It has been a helpful journey so far.

- Ganesh R Yewale, Junewani

CHART 26: THE SALE PRICE OF DIFFERENT CROPS



Before intervention

Prior to adopting certified organic farming, the sale price of cotton stood at ₹5,571 per quintal, soybean was sold for ₹3,000 per quintal, and Bengal gram fetched ₹5,000 per quintal. These prices reflected the market rates for conventionally grown crops, which often faced fluctuations due to quality concerns and dependency on external inputs.

Post intervention status and impact

Following the shift to organic farming, cotton saw a significant price increase to ₹7,863 per quintal, soybean rose to ₹3,650 per quintal, and Bengal gram reached ₹5,500 per quintal. The higher prices indicated a growing preference for organically produced crops in the market.

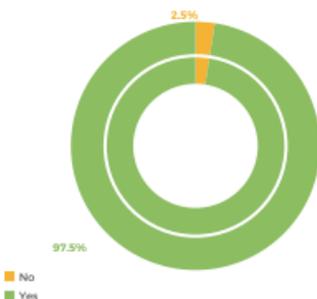


Switching to organic farming took time, but it has been worth it. The training on seed treatment and organic pest control helped me save on costs. I have seen my crops improve in quality, and I can sell them at a better price. The support for marketing has also made it easier to find buyers. It was not easy in the beginning, but now I can see the benefits.

- Marotrao Uike, Junewani

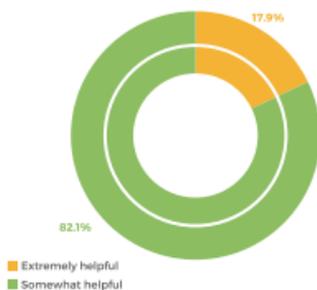


CHART 27: MEMBERSHIP STATUS IN FARMER PRODUCER ORGANISATION (FPO)



FPOs play a vital role in improving farmers' access to better markets, quality inputs, and financial resources. A vast majority of respondents (97.5%) were members of a Farmer Producer Organization (FPO), while only 2.5% were not.

CHART 28: EXTENT OF THE USEFULNESS OF TRAINING IN FPO MANAGEMENT



Training in FPO management is essential for equipping farmers with skills in collective decision-making, financial planning, and market linkages. Most respondents (82.1%) found the training in FPO management to be somewhat helpful, while 17.9% considered it extremely helpful.

KEY IMPACT INDICATORS

MOBILISATION, SCREENING AND ENROLLMENT OF FARMERS



Identifying and enrolling farmers interested in organic farming, ensuring they meet eligibility criteria and are motivated to adopt sustainable practices.

TRAINING METHODOLOGY



Designing and implementing a structured training curriculum covering organic farming techniques, including seed treatment, organic manure preparation, and pest management.

CERTIFICATION AND ASSESSMENT



Ensuring compliance with organic certification standards (NPOP/USDA-NOP) and conducting periodic assessments to evaluate farmers' understanding and implementation of organic practices.

POST-TRAINING SUPPORT AND PLACEMENT



Providing continuous technical support, access to organic inputs, and facilitating market linkages to help farmers transition successfully to organic farming.

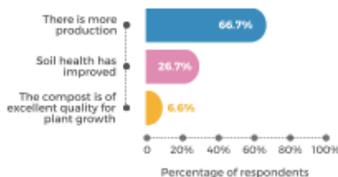
IMPROVED FARM PRODUCTIVITY AND INCOME



Enabling farmers to achieve higher crop yields and better income through the adoption of organic farming practices and improved market access.

BENEFIT LEVELS

CHART 29: PERCEIVED BENEFITS OF USING VERMICOMPOST



Increased Production

A majority (66.7%) of respondents reported higher crop yields after using vermicompost, making it the most recognised benefit. Higher production levels highlight the effectiveness of vermicompost in enhancing soil fertility and nutrient availability.

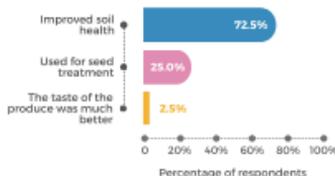
Improved Soil Health

Around 26.7% of respondents noticed better soil health, indicating that vermicompost played a role in restoring soil balance and structure.

Better Compost Quality

A small percentage (6.6%) believed that vermicompost was of excellent quality for plant growth, showing that some farmers recognised its role beyond soil enrichment.

CHART 30: BENEFITS OF THE ORGANIC CULTURE RECEIVED



Improved Soil Health

A significant majority (72.5%) of respondents experienced improved soil health as a key benefit of organic farming practices. Healthy soil is the foundation of productive farming.

Used for Seed Treatment

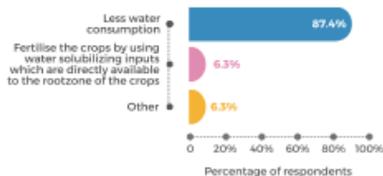
One-fourth of respondents (25.0%) utilised organic culture for seed treatment, demonstrating its role in promoting healthier crop growth from the initial stages.

Organic seed treatments protect crops from pests and diseases naturally, reducing the need for chemical interventions. As awareness grows, more farmers can integrate organic methods to improve seed germination rates and plant resilience.

Better Taste of Produce

A small percentage (2.5%) noted an improvement in the taste of their produce. Organic produce is often associated with richer flavours due to the absence of synthetic additives and improved soil conditions.

CHART 31: BENEFITS OF MICRO IRRIGATION SYSTEM (DRIP, SPRINKLER)



Less Water Consumption

A large majority (87.4%) of respondents found that micro-irrigation systems helped reduce water usage. By delivering water directly to the roots, these systems minimised wastage and ensured efficient water management.

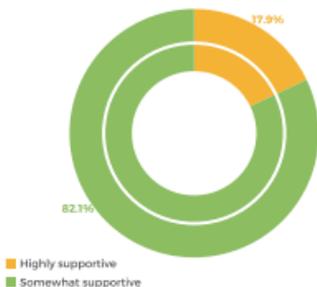
Improved Nutrient Absorption

A smaller percentage (6.3%) highlighted the benefit of applying water-soluble fertilisers directly to the root zone. This method ensured better nutrient absorption, reducing input costs and improving crop health.



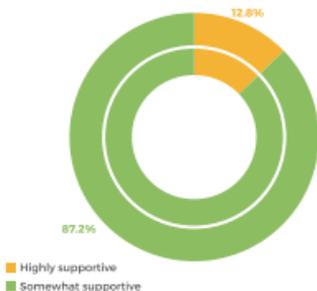
BENEFIT LEVELS

CHART 32: SUPPORTIVENESS OF WATER AVAILABILITY FOR ORGANIC FARM IRRIGATION



Most respondents (82.1%) found water availability to be somewhat supportive of organic farm irrigation, while 17.9% considered it highly supportive. While water resources were accessible, they might not always be sufficient or consistently reliable for organic farming needs. Water availability plays a critical role in the success of organic farming, influencing crop health and yield quality.

CHART 33: EFFECTIVENESS OF ORGANIC SEEDS PROVIDED UNDER THE PROJECT



The effectiveness of organic seeds depends on factors like soil conditions, climate suitability and farming techniques. Most respondents (87.2%) found the organic seeds provided under the project to be somewhat supportive, while 12.8% considered them highly supportive.

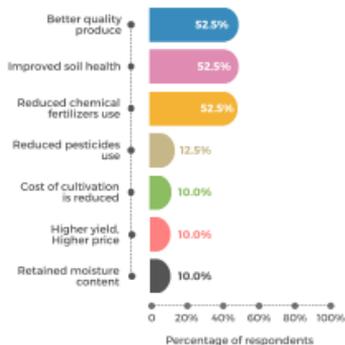


The training on making compost and using natural extracts like neem and panchagavya was very helpful. I have started using these methods on my farm, and they have helped control pests and keep the soil moist. The visits and technical support also helped me understand organic farming better. It has been a good learning experience, and I'm glad to be part of this program.

- Vasanta Champat Irpati, Mohgaon



CHART 34: OBSERVED BENEFITS OF ORGANIC FARMING



Better Quality Produce, Improved Soil Health and Reduced Chemical Fertilizer Use

More than half of the respondents (52.5%) observed that organic farming resulted in better quality produce, improved soil health and reduced dependency on chemical fertilisers.

Reduced Pesticide Use

A smaller proportion (12.5%) of respondents reported a decrease in pesticide use. The transition to organic methods reduced reliance on synthetic pesticides, leading to healthier crops and safer farming conditions.

Lower Cost of Cultivation, Higher Yield, Better Prices, and Improved Soil Moisture Retention

One-tenth (10.0%) of respondents experienced multiple benefits from organic farming, including lower cultivation costs, higher yields, better market prices and improved soil moisture retention. By reducing their reliance on chemical inputs, they saved on farming expenses while maintaining soil fertility.

BENEFIT LEVELS

CHART 35: IMPACT OF SOIL TESTING ON FARMING PRACTICES



Ensured the Right Amount of Nutrients

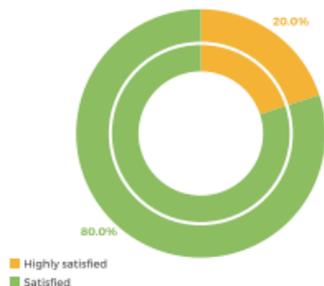
More than half of the respondents (55.0%) reported that soil testing helped them apply the right amount of nutrients to their fields. By understanding the nutrient composition of the soil, farmers could avoid overuse or underuse of fertilisers, leading to balanced soil fertility and healthier crops.

Reduced Chemical Fertiliser Consumption

A significant portion (45.0%) of respondents experienced a reduction in chemical fertiliser consumption through soil testing. The practice allowed them to identify the exact nutrient requirements, minimising the need for synthetic fertilisers.

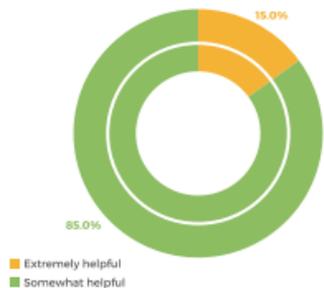
SATISFACTION LEVEL

CHART 36: SATISFACTION WITH THE CERTIFICATION PROCESS



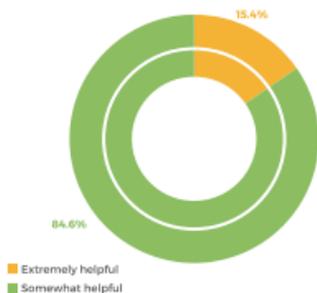
A majority of respondents (80.0%) were satisfied with the certification process, while a considerable number (20.0%) expressed a high level of satisfaction. The overall experience with certification was positive, with no reports of dissatisfaction.

CHART 37: EFFECTIVENESS OF MARKETING SUPPORT RECEIVED



Effective marketing assistance is essential for organic farmers to access better markets, secure fair prices and increase profitability. The vast majority of the respondents (85.0%) found the marketing support somewhat helpful, while 15.0% considered it extremely helpful.



CHART 38: EFFECTIVENESS OF INPUT CENTRES

Accessible and well-equipped input centres play a crucial role in ensuring farmers receive quality seeds, fertilisers, and tools on time. A large majority of the respondents (84.6%) found input centres somewhat helpful, while 15.4% considered them extremely helpful.

CHART 39: SATISFACTION WITH PROJECT ACTIVITIES IMPLEMENTED

A significant majority of respondents (90.0%) were satisfied with the project activities implemented, while 10.0% were highly satisfied. This indicated that the initiatives were well-received.



The training on making compost and using natural extracts like neem and panchagavya was very helpful. I have started using these methods on my farm, and they have helped control pests and keep the soil moist. The visits and technical support also helped me understand organic farming better. It has been a good learning experience, and I'm glad to be part of this program.

- Marotrao Uike, Junewani



Impact Created Across Multiple Levels



AT THE INDIVIDUAL BENEFICIARY LEVEL

- Farmers improved their knowledge of organic farming and sustainable practices.
- Reduced dependency on chemical inputs and lowered cultivation costs.
- The adoption of smart agriculture enhanced efficiency and productivity.



AT HOUSEHOLD LEVEL

- Increased household savings due to lower input costs and organic farming benefits.
- Improved nutrition and food safety with chemical-free produce.
- The use of biodigesters reduced reliance on LPG for cooking.



AT COMMUNITY LEVEL

- Water conservation efforts improved irrigation access for multiple farmers.
- Group training sessions strengthened peer learning and collaboration.
- The adoption of renewable energy solutions promoted sustainable farming communities.



AT STATE LEVEL

- Expanded organic farming contributed to soil and water conservation initiatives.
- Increased adoption of micro-irrigation aligned with state agricultural policies.
- Reduction in agricultural emissions supported state environmental goals.



AT NATIONAL LEVEL

- Organic farming advancements contributed to national food security goals.
- Biochar adoption promoted carbon sequestration and soil enrichment.
- Smart agriculture initiatives aligned with national climate resilience strategies.

Sustainability

ECONOMIC VIABILITY FOR FARMERS



Lower input costs through reduced reliance on chemical fertilisers, better market prices for organic produce, and effective marketing support increased the financial capacity of farmers. This economic benefit has encouraged the long-term adoption of organic farming.

INSTITUTIONAL SUPPORT AND FARMER SATISFACTION



High satisfaction with certification processes, input centres, and project activities indicated strong institutional backing. The accessibility of quality inputs and marketing assistance ensured that organic farming remains a viable and sustainable practice for the future.

LONG-TERM SOIL HEALTH IMPROVEMENT



Organic farming practices, including vermicompost use and organic seed treatment, contributed to improved soil structure and fertility. The reduction in chemical fertilisers and pesticides ensured the long-term health of agricultural land.

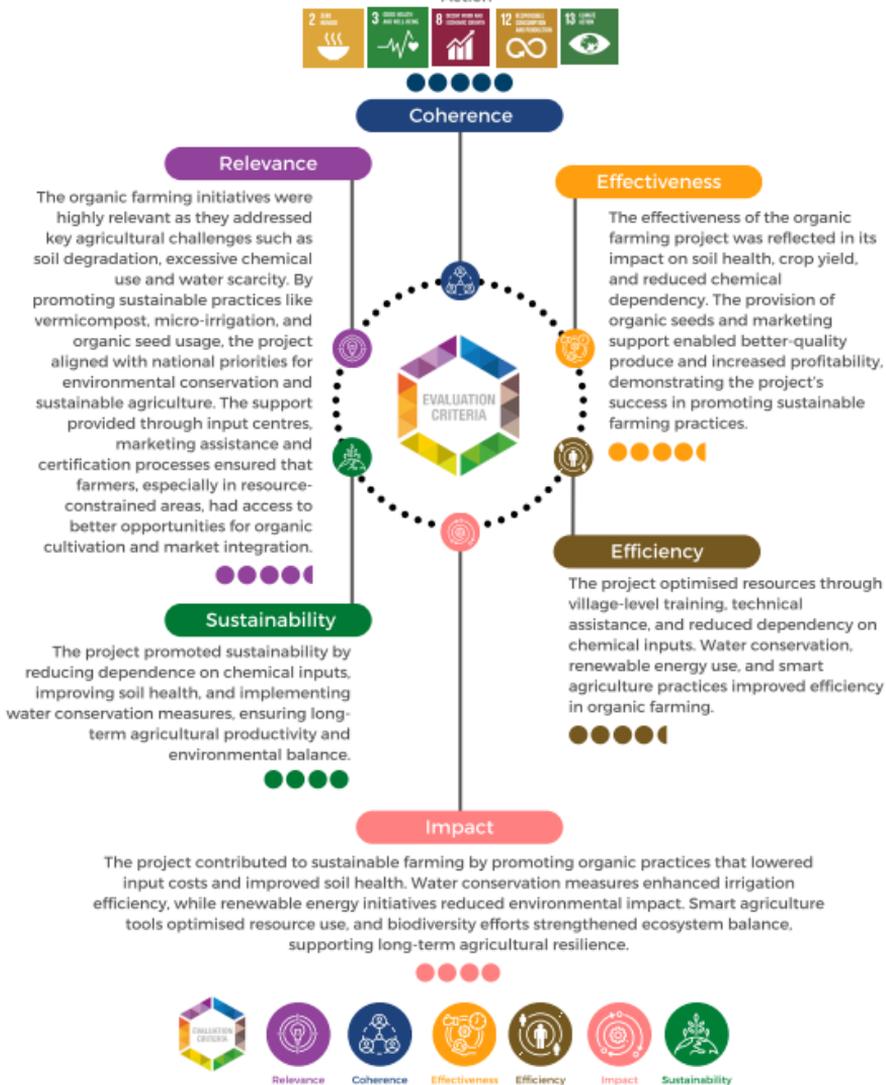
EFFICIENT WATER MANAGEMENT



Micro-irrigation systems minimised water wastage by delivering water directly to the roots, while water availability remained supportive for organic farm irrigation. These measures enhanced water conservation and ensured sustainable farming in regions with limited water resources.

3.1.4 OECD FRAMEWORK & SCORES

The project aligned with the following Sustainable Development Goals (SDGs): SDG 2: Zero Hunger, SDG 3: Good Health and Well-being, SDG 8: Decent Work and Economic Growth, SDG 12: Responsible Consumption and Production, SDG 13: Climate Action



3.1.5 The Way Forward



EXPAND MICRO-IRRIGATION SYSTEMS

To address water scarcity and improve efficiency, the project should scale up the distribution of drip and sprinkler irrigation systems. This will not only conserve water but also reduce weed infestation and optimise nutrient delivery to crops.



PROMOTE RENEWABLE ENERGY SOLUTIONS

Accelerate the distribution of biodigesters to more households to reduce reliance on LPG and utilise methane for cooking. This will also provide nutrient-rich decomposed manure for fields, enhancing soil health and reducing emissions.



STRENGTHEN SOIL HEALTH MANAGEMENT

Increase the frequency of soil testing and provide tailored soil management plans to farmers. This will help improve soil fertility, optimise nutrient use and support long-term regenerative agriculture practices.



SCALE UP SMART AGRICULTURE TECHNOLOGIES

Introduce more automated weather stations, crop sensors, and soil sensors to provide real-time data for better crop monitoring. This will enable farmers to plan farm activities more effectively, reduce input wastage and minimise yield losses due to pests and adverse weather conditions.

3.1.6 CONCLUSION

The organic farming initiative has significantly transformed agricultural practices and livelihoods in the target communities by promoting sustainable farming methods and improving socio-economic conditions. Through comprehensive training, technical support, and access to organic inputs, the project has enabled farmers to adopt eco-friendly practices such as composting, vermicomposting, and soil testing, leading to improved soil health and higher crop yields. The initiative has also enhanced farmers' incomes, with notable increases in the sale prices of crops like cotton, soybean, and Bengal gram. By fostering farmer-producer organisations (FPOs) and providing effective marketing support, the project has empowered farmers to achieve greater self-reliance and economic stability. With a strong commitment to sustainability and continuous improvement, this initiative stands as a model for promoting organic farming and uplifting rural communities.

3.2. SWAYAM WEAVE

3.2.1 EXECUTIVE SUMMARY

Project Background

The weaving training project was designed to empower individuals, particularly homemakers, by providing skill-based training in traditional crafts like hand weaving, dyeing, and hand printing. Conducted in a well-equipped training centre with good infrastructure, the project aimed to enhance participants' technical skills, build their confidence, and enable them to generate sustainable livelihoods. Through hands-on training, access to raw materials, and marketing support, the project sought to create economic self-reliance and foster community engagement. The initiative also emphasised digital adoption, with smartphones playing a key role in enhancing learning and market access.

Project Activities



Conducted training sessions on traditional weaving, dyeing, and hand printing techniques.



Provided hands-on practice with raw material procurement and product quality assessment.



Organised workshops on marketing strategies and digital learning for business expansion.



Facilitated the formation of SHGs and interest groups to promote collective growth and support.

Design Snapshot



Name of the project

Swayam Weave



Research methodology

Mixed Methods (Quantitative and Qualitative)



Qualitative Methods

Focus Group Discussion and Interviews



Sampling Technique

Random Sampling Method



Sample Size 'N'

10



Key Stakeholders

Weaver, Trainer and Program Team



Implementation year

2022-23 & 2023-24



Implementing Partners

RPG Foundation



Project Location

Nagpur District, Maharashtra



Financial Year of Impact Assessment

2024-25



SDG Goals



- SDG 1: No Poverty
- SDG 8: Decent Work and Economic Growth
- SDG 9: Industry, Innovation, and Infrastructure

Key Output



80.0%

of the respondents received training in hand weaving.



100.0%

of the respondents rated the infrastructure at the training centre as good.



50.0%

of the respondents always received sufficient materials for practical training.



70.0%

of the respondents now earn a monthly income between Rs. 10,000-20,000.



90.0%

of the respondents bought a smartphone after joining the project.

Key Impact



100.0%

of the respondents transitioned from being homemakers or daily wage labourers to skilled weavers.



80.0%

of the respondents sell their final products directly in the market.



80.0%

of the respondents enhanced their skills in hand weaving, a key income-generating activity.



100.0%

of the respondents experienced good infrastructure, ensuring a conducive learning environment.



60.0%

of the respondents gained experience in procuring raw materials, enhancing their self-reliance.



60.0%

of the respondents improved their confidence in managing a weaving unit independently.



80.0%

of the respondents increased their market access by selling products directly.



70.0%

of the respondents improved their confidence in marketing their products independently.



100.0%

of the respondents strengthened their collective efforts through SHG or Common Interest Group membership.



70.0%

of the respondents increased their monthly income to Rs. 10,000-20,000.



100.0%

of the respondents reported increased happiness from being part of the training for weaving.

3.2.2 PROJECT INTRODUCTION

BACKGROUND AND NEED OF THE PROGRAM

The weaving training project was initiated to address the growing economic and cultural challenges faced by communities reliant on traditional crafts. With the decline of traditional livelihoods like farming and the lack of accessible skill-based opportunities, there was a pressing need to create sustainable income sources. Hand weaving, a craft deeply rooted in cultural heritage, was at risk of being lost due to insufficient training, limited market access, and a lack of modern tools to adapt to changing demands.

The absence of structured support for artisans to refine their skills, access raw materials, and connect with markets further exacerbated the situation. Additionally, the potential of digital tools to enhance learning and market reach remained untapped. These gaps highlighted the need for an intervention that could revive traditional crafts, integrate modern techniques, and provide a pathway for economic sustainability.

The weaving training project was designed to bridge these gaps, ensuring the preservation of cultural heritage while creating opportunities for growth and self-reliance.

OBJECTIVES OF THE PROJECT



To provide structured training in weaving techniques, enabling participants to produce high-quality, market-ready products.



To enhance income levels by facilitating direct market access and improving independent selling capabilities.



To promote sustainable livelihoods by integrating traditional craftsmanship with modern tools and market-driven approaches.



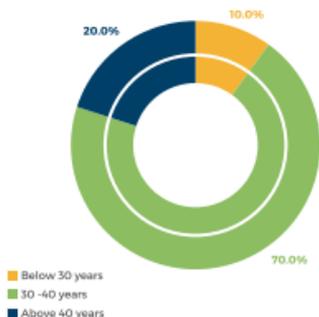
3.2.3 KEY STUDY FINDINGS AND IMPACT

The following section presents a comprehensive overview of the key study findings and impact analysis of the vocational training project in weaving and textile crafts. Through a detailed evaluation and assessment, this report aims to highlight the transformative journey of the project participants and shed light on the tangible outcomes of this innovative initiative in skill development. From examining the acquisition of technical expertise in dyeing, hand printing and hand weaving to exploring the project's influence on income generation, market readiness, and community empowerment, this analysis provides valuable insights into the effectiveness and significance of the project.

MAJOR FINDINGS OF THE WEAVING PROJECT

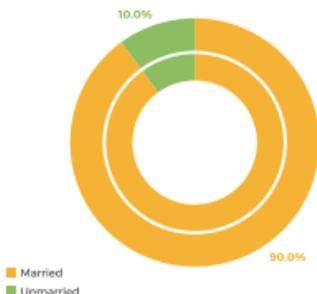
SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 1: AGE GROUP DISTRIBUTION



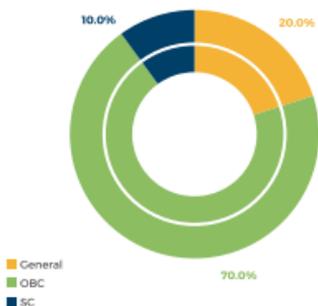
The majority of respondents (70.0%) belonged to the 30-40 years age group, followed by 20.0% above 40 years and a few (10.0%) below 30 years. This showed that participation was highest among individuals in their 30s, with limited representation from younger and older age groups. Engaging individuals in their 30s is beneficial, as they are often at a stage where they actively seek stability and growth in their professional and personal lives.

CHART 2: MARITAL STATUS



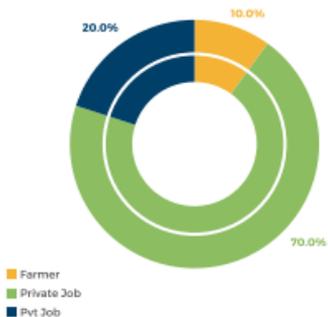
A majority of respondents (90.0%) were married, while only 10.0% were unmarried.

CHART 3: SOCIAL CATEGORY



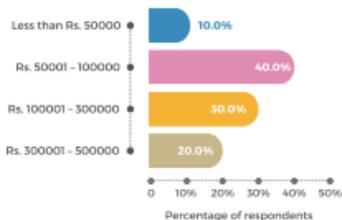
Inclusive participation across different social categories is essential for equitable development. A significant majority of respondents (70.0%) belonged to the OBC category, followed by 20.0% from the General category and a considerable number (10.0%) from the SC category. This indicated that participation was highest among individuals from the OBC group.

CHART 4: PRIMARY OCCUPATION OF FAMILY



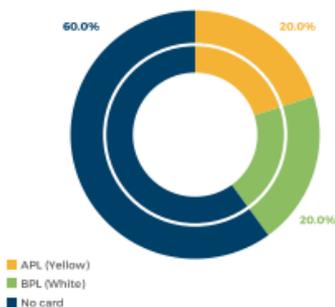
70.0% of respondents' families were engaged in private jobs, while one-fifth (20.0%) also reported private employment under a different classification. Only 10.0% identified farming as their primary occupation. This indicated a shift towards non-agricultural livelihoods among participants.

CHART 5: ANNUAL FAMILY INCOME (IN RS)



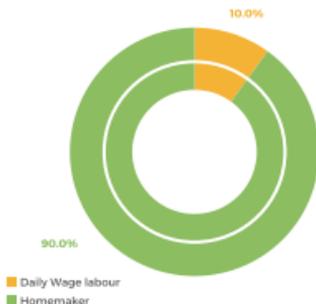
The highest proportion of respondents (40.0%) had an annual family income between ₹50,001 - ₹1,00,000, followed by a small number (30.0%) earning between ₹1,00,001 - ₹3,00,000. While 20.0% reported an income of ₹3,00,001 - ₹5,00,000, and only 10.0% earned less than ₹50,000. This showed that most families had a modest income, with a smaller segment earning higher amounts.

CHART 6: RATION CARD TYPE



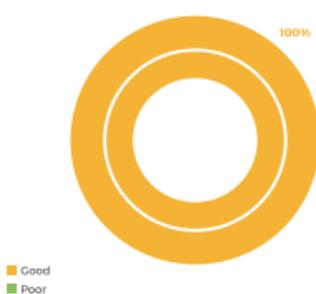
The data showed that 60.0% of respondents did not possess a ration card, while a small fraction (20.0%) each held APL (Yellow) and BPL (White) cards. This indicated that a significant portion of participants lacked access to subsidised food and welfare benefits.

CHART 7: OCCUPATION STATUS BEFORE JOINING THE WEAVING TRAINING



Skill-based training programs like weaving offer homemakers an opportunity to gain financial independence and contribute to household income. A vast majority of respondents (90.0%) were homemakers before joining the weaving training, while only 10.0% were engaged in daily wage labour.

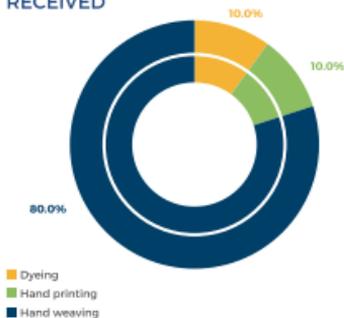
CHART 9: QUALITY OF INFRASTRUCTURE FACILITY AT THE TRAINING CENTRE



100% of the respondents rated the infrastructure facilities at the training centre as good, which is a well-equipped and supportive learning environment. A well-maintained training centre enhances the effectiveness of skill-building projects by providing the necessary tools, space and resources for hands-on learning.

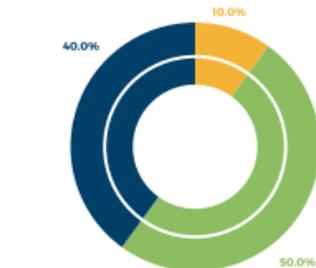
WEAVING TRAINING

CHART 8: TYPE OF TRAINING RECEIVED



Hand weaving plays a crucial role in preserving traditional craftsmanship and generating sustainable livelihoods. A large majority of respondents (80.0%) received training in hand weaving, while 10.0% each were trained in dyeing and hand printing. This indicated a strong preference for hand weaving as the primary skill acquired through the project. The high participation in this skill suggests its economic viability and demand.

CHART 10: AVAILABILITY OF SUFFICIENT MATERIAL FOR PRACTICAL TRAINING



Half of the respondents (50.0%) reported always receiving sufficient material for practical training, while a considerable portion (40.0%) stated they received it most often. Only 10.0% remained neutral on the adequacy of materials. This shows that most participants had access to the necessary resources for hands-on learning.

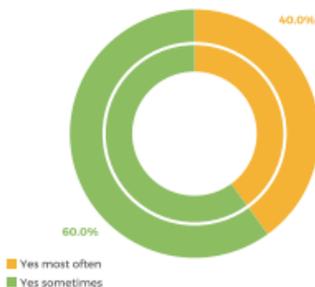


Before this training, I was a homemaker with no experience in weaving. Learning hand weaving has given me a new skill, and I feel more confident about running a weaving unit on my own. I am still learning, but the practical training and materials have been helpful. Being part of an SHG has also been a great support. This program has opened new opportunities for me.

- Add

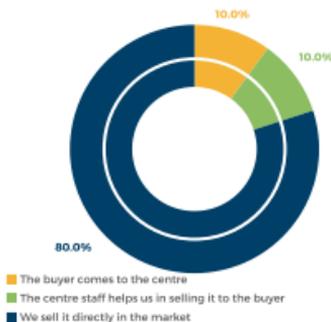


CHART 11: INVOLVEMENT IN PROCURING RAW MATERIALS FOR WEAVING



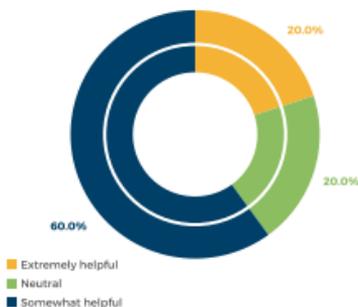
All respondents were involved in procuring raw materials for weaving, with the majority (60.0%) doing so occasionally and 40.0% handling it frequently, signifying the active role of artisans in sourcing materials alongside their weaving activities.

CHART 12: METHOD OF SELLING THE FINAL PRODUCTS



A large majority of respondents (80.0%) sold their final products directly in the market, while 10.0% relied on buyers visiting the centre, and another 10.0% received assistance from centre staff in selling their products, showing a strong inclination toward independent market engagement.

CHART 13: HELPFULNESS OF MARKETING SUPPORT PROVIDED BY THE CENTRE



The majority of respondents (60.0%) found the marketing support provided by the centre to be somewhat helpful, while one-fifth (20.0%) considered it extremely helpful, and another 20.0% remained neutral, shows that while the support had a positive impact, there was room for improvement.

CHART 14: FORMATION OF SHGS OR COMMON INTEREST GROUP

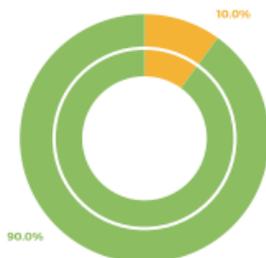
■ Yes
■ No

All respondents (100%) confirmed the formation of a Self-Help Group (SHG) or a Common Interest Group (CIG), indicating full participation in collective efforts.



Learning hand weaving has been a good experience. I feel more confident about my products and how they are accepted in the market. Selling directly in the market has been a new experience for me. The training centre has good facilities, and I have enough materials to practise. I'm still improving my skills because of the support of this program.

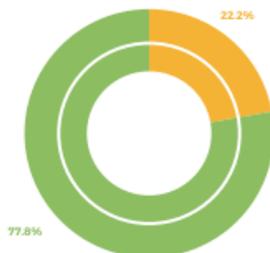
- Moni Prabhakar Kolte, Satgaon

**CHART 15: PURCHASE A SMARTPHONE**

■ No
■ Yes

Smartphone ownership has become essential for accessing information, financial services, and employment opportunities.

Digital connectivity enhances economic participation, particularly for those in rural and semi-urban areas. A vast majority of respondents (90.0%) had purchased a smartphone, while only 10.0% had not, and there was widespread adoption of digital technology among participants.

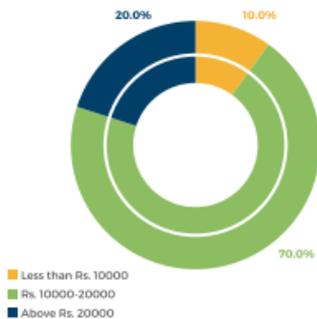
CHART 16: THE EXTENT TO WHICH SMARTPHONE HELPS ENHANCE THE LEARNING OF NEW WEAVING IDEAS

■ Extremely helpful
■ Somewhat helpful

The project's emphasis on digital adoption likely contributed to this positive outcome, enabling weavers to refine their skills and expand their creative potential. A large majority of respondents (77.8%) found smartphones somewhat helpful in learning new weaving ideas, while 22.2% considered them extremely helpful, emphasising the role of enhancing skill development.



CHART 17: CURRENT MONTHLY INCOME



Income growth is a key indicator of economic empowerment, particularly in skill-based industries. A significant majority of respondents (70.0%) reported a monthly income between ₹10,000-₹20,000, while 20.0% earned above ₹20,000 and a small number (10.0%) had an income below ₹10,000 as most participants had achieved a stable income level.

“

After joining the weaving training, I bought a smartphone, which has helped me learn new techniques. The training has also made me more confident in joining community meetings. While I am still working toward full independence, earning my own income has given me a sense of empowerment. This program has been really helpful for me.

- Priyanka Bansod, Pipla

”

3.2.4 KEY IMPACT INDICATORS

TRAINING DELIVERY AND INFRASTRUCTURE



Providing structured training in weaving techniques such as hand weaving, dyeing, and hand printing, supported by adequate infrastructure and access to necessary materials for practical learning.

SKILL ACQUISITION AND CONFIDENCE BUILDING



Enhancing participants' technical skills in weaving and building their confidence to independently manage weaving units and produce market-ready products.

MARKET LINKAGES AND INCOME GENERATION



Facilitating access to markets and enabling participants to sell their products directly, leading to improved income levels and financial self-reliance.

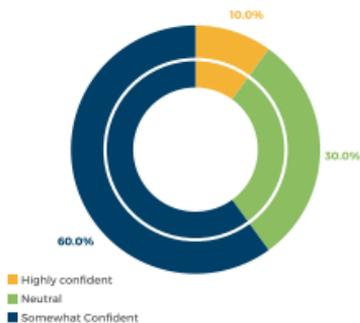
EMPOWERMENT AND COMMUNITY ENGAGEMENT



Empowering participants through skill development and income generation fosters greater confidence in participating in community activities and decision-making processes.

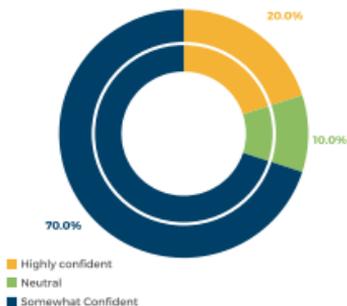
MAJOR IMPACT OF THE SWAYAM WEAVE PROJECT

CHART 18: CONFIDENCE LEVEL OF HAVING SKILLS REQUIRED FOR RUNNING THE WEAVING UNIT



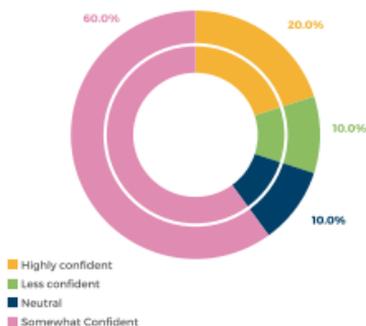
A majority of respondents (60.0%) were somewhat confident in their ability to run a weaving unit independently, while around one-third (30.0%) remained neutral, and only 10.0% felt highly confident, showing that most participants had gained foundational skills: complete self-sufficiency remained a challenge.

CHART 20: CONFIDENCE IN THE SELF-MARKETING ABILITY FOR THE NEAR FUTURE



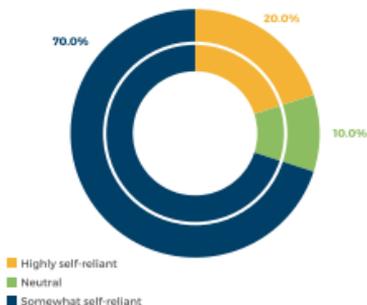
A major percentage of respondents (70.0%) were somewhat confident in their ability to market their products independently, while 20.0% were highly confident and few (10.0%) remained neutral, signifying while most participants had gained some level of self-reliance, there was still room for building greater confidence.

CHART 19: CONFIDENCE IN MARKET ACCEPTANCE OF THE FINAL PRODUCT



60% were somewhat confident about their final product's market readiness, while a small number (20.0%) were highly confident. Meanwhile, 10.0% remained neutral, and another 10.0% were less confident.

CHART 21: EMPOWERMENT AND SELF-RELIANCE GAINED THROUGH PERSONAL INCOME



70% of the respondents felt somewhat self-reliant due to having an income, while 20.0% reported feeling highly self-reliant. Only 10.0% remained neutral about its impact.

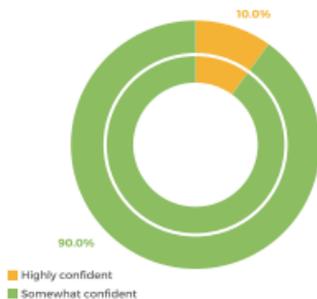


I used to work as a daily wage labourer before joining this program. The weaving training has helped me earn a steady income, which has made a big difference in my life. I now earn between ₹10,000 to ₹20,000 a month and feel more self-reliant. The marketing support has helped me sell my products directly in the market. This has been a positive change for me and my family.

- Surekha Chandrabhushan Singh Chavan, Sukadi

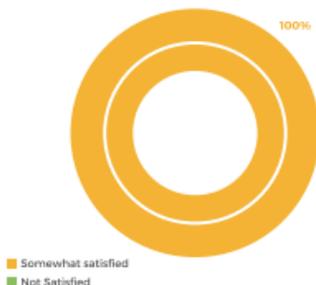


CHART 22: CONFIDENCE IN PARTICIPATING IN COMMUNITY MEETINGS



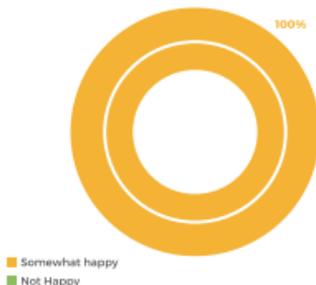
90.0% felt somewhat confident about participating in community meetings, while 10.0% felt highly confident. This indicated a noticeable improvement in their willingness to engage in discussions and decision-making. Community participation is essential for social empowerment and collective problem-solving.

CHART 23: SATISFACTION LEVEL OF LEARNING FROM TRAINING



All respondents (100%) reported being somewhat satisfied with their learning from the training, with none expressing dissatisfaction. This indicated that while participants found value in the training, there might be areas for further improvement.

CHART 24: OVERALL HAPPINESS ON BEING PART OF THE VOCATIONAL TRAINING



Vocational training has been widely recognised for its role in improving employability and economic stability. The respondents' satisfaction suggests that the project successfully provided relevant skills and opportunities. All respondents (100%) reported being somewhat happy with their participation in the vocational training.

Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Participants gained structured training in hand weaving, dyeing, and hand printing, improving their technical skills.
- Confidence in product quality increased, with more participants believing their final products could compete in the market.



HOUSEHOLD LEVEL

- Additional income from weaving reduced financial stress, enabling better household expense management.
- Smartphone usage helped participants explore new weaving ideas, increasing efficiency in production.



COMMUNITY LEVEL

- The training centre provided access to essential facilities, creating a supportive environment for skill development.
- Higher confidence encouraged more participants to engage in community meetings and discussions.



STATE LEVEL

- Weaving-based income opportunities contributed to women's workforce participation, aligning with state employment initiatives.
- Local handloom production increased, strengthening the state's textile sector and market presence.



NATIONAL LEVEL

The project aligned with national efforts to expand vocational training, enhancing employment in traditional crafts. Increased engagement in weaving promoted the preservation and sustainability of India's cultural practices.

Sustainability

LONG-TERM SKILL UTILISATION



Continuous skill development in weaving techniques ensured that participants could independently manage weaving units and produce market-ready products.

SUSTAINED INCOME OPPORTUNITIES

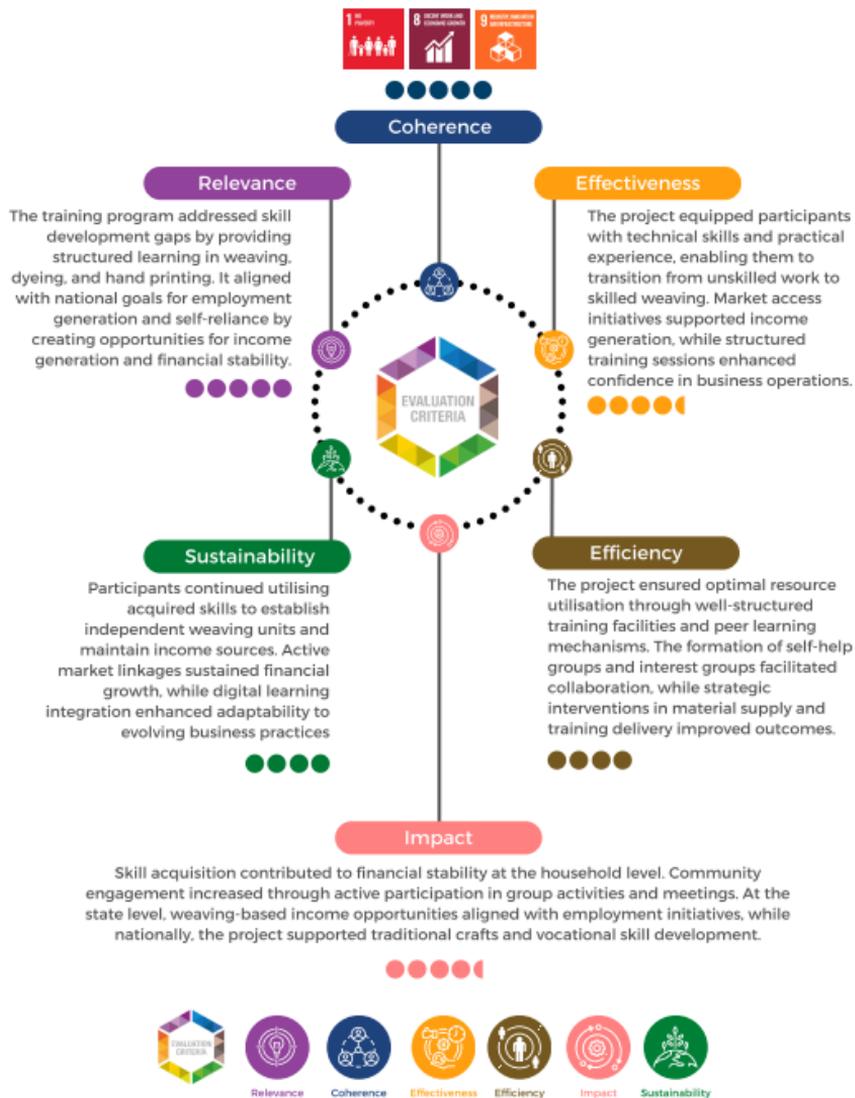


Established market linkages and income generation opportunities enabled participants to sustain their earnings and financial self-reliance beyond the training program.



3.2.4 OECD FRAMEWORK

The project is aligned with the following Sustainable Development Goals (SDGs):
SDG 1 – No Poverty, SDG 8 – Decent Work and Economic Growth, SDG 9 – Industry,
Innovation, and Infrastructure



3.3 VOCATIONAL TRAINING (GENERAL DUTY ASSISTANTS)

3.3.1 EXECUTIVE SUMMARY

Project Background

The General Duty Assistant (GDA) training project, initiated in collaboration with KEC and the RPG Group, aims to equip individuals with essential healthcare skills to meet the growing demand for trained professionals in hospitals and home care services. With a focus on employability, the project also includes supplementary training in English communication and computer literacy to enhance participants' readiness for the healthcare sector. Over the years, the project has trained thousands of students, achieving a placement rate of 78.3% and contributing significantly to the healthcare workforce.

Project Activities



To conduct theoretical, practical, and soft skills training, including life skills and work readiness.



To facilitate On-the-Job Training (OJT) in hospitals, home care services and clinics.



To assess candidates through a structured evaluation process and provide certifications.



To support job placements, track candidate progress for three months, and connect them to government welfare schemes.

Study Design Snapshot



Implementation year

2022-23



Implementing partners

RPG with external partners Saraswati Swarojgar EVM Prashikhan Sansthan



Financial Year of Impact Assessment

2024-25



Project location

Nagpur, Jaipur, Jabalpur, Delhi NCR, Vadodara, Mysuru, Aurangabad



Name of the project

Swayam Health



Research methodology used

Mixed Methods (Quantitative and Qualitative)



Qualitative Methods Used

Testimonials & Focus Group discussions



Sampling Technique

Random Sampling Method



Sample Size 'N'

50



Key Stakeholders

Project Team and Implementing partners, Trainers, Trainees and Employers



SDG Goals



Key Output



96.0%

of the respondents always had enough scope to interact with the teacher for doubt-clearing.



90.0%

of the respondents never faced difficulties in understanding the lesson.



72.0%

of the respondents got training sessions on mock interview skills during the mid-session (once or twice).



32.0%

of the respondents got a job with the support of the skill development centre.



56.2%

of the respondents who got a job through the centre waited two to three months for placement after completing the course.



84.6%

of the respondents who accepted the job through the centre had a salary of ₹10,000 when they obtained the job.



59.1%

of the respondents who are presently employed have been employed in the present job for six to one year.

Key Impact



100.0%

of the respondents were able to bear the medical and education costs of family members.



81.8%

of the respondents were able to contribute to the new construction or repair of the house/ toilets/ others.



68.2%

of the respondents were able to bring drinking water connections at home.



59.1%

of the respondents were able to create assets (land purchase/ ornaments/ vehicle/ TV/ Gas connection/ Refrigerator/ others).

3.3.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The need for the GDA project emerged from the increasing demand for skilled healthcare assistants in hospitals and home care settings. With the healthcare industry expanding rapidly, there was a gap in the availability of trained professionals to support nurses and doctors in patient care. Many individuals, particularly those from underprivileged backgrounds, lacked access to formal training and employment opportunities in this sector. The project was designed to address this gap by providing free, accessible training to candidates, enabling them to secure stable jobs and improve their livelihoods. Additionally, the project aimed to standardise the skills of healthcare assistants, ensuring quality care delivery and addressing misconceptions about the role of GDAs compared to housekeeping staff.

OBJECTIVES OF THE PROJECT



To equip candidates with industry-relevant skills for better employment opportunities.



To ensure practical exposure through hands-on training in real work environments.



To provide certified training that enhances credibility and job prospects through on-job trainings sessions.



To establish a structured placement and post-placement tracking system for long-term career support.

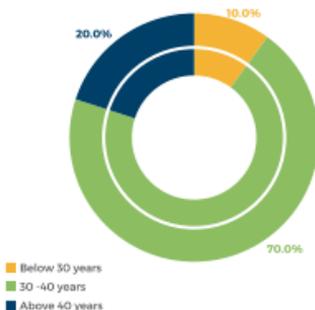
3.3.3 KEY STUDY FINDINGS AND IMPACT

The following section presents a comprehensive overview of the key study findings and impact analysis of the General Duty Assistant (GDA) training program. This skill development initiative, designed to address the growing demand for trained healthcare professionals, has successfully equipped individuals with the necessary skills to support nurses and doctors in hospitals and home care settings. Through a structured curriculum, practical training, and on-the-job experience, the project has not only enhanced participants' employability but also contributed to the overall strengthening of the healthcare workforce. This report delves into the project's implementation, its impact on participants, the challenges faced, and recommendations for further improvement, highlighting its role in empowering individuals and meeting the needs of the healthcare industry.

KEY FINDINGS

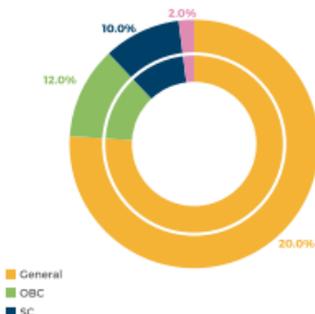
SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 1: AGE GROUP DISTRIBUTION



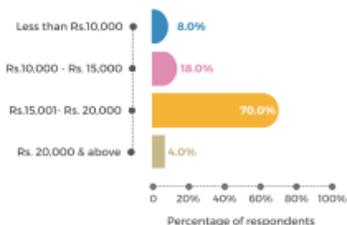
Youth participation in skill development and employment programs is crucial for economic growth. 70.0% were below the age of 25, followed by a small number (20.0%) in the 25-35 age group, and 10.0% were above 35 years of age. This showed that the project primarily engaged younger individuals.

CHART 2: MONTHLY INCOME



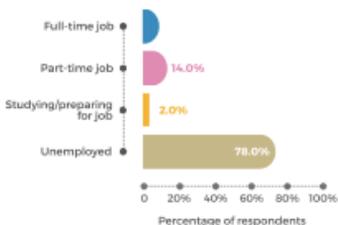
Access to skill development and livelihood programs varies across social groups, with marginalised communities often facing barriers to education and employment. A significant majority of respondents (76.0%) belonged to the General category, followed by 12.0% from OBC, 10.0% from SC, and a few (2.0%) from ST. This distribution highlighted the diverse social backgrounds of participants.

CHART 3: MONTHLY FAMILY INCOME



A substantial majority of respondents (70.0%) had a monthly family income between ₹15,001-₹20,000, while 18.0% earned between ₹10,000-₹15,000. A smaller proportion (8.0%) reported earning less than ₹10,000, and only 4.0% had an income above ₹20,000.

CHART 4: OCCUPATIONAL STATUS BEFORE JOINING THE COURSE



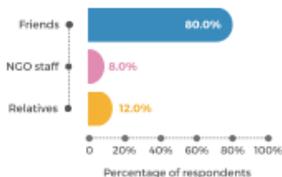
78.0% were unemployed before joining the course, while 14.0% were engaged in part-time jobs. A smaller number (6.0%) had full-time jobs, and few were studying or preparing for employment. High unemployment rates highlight the challenges faced by individuals in securing stable livelihoods.

CHART 5: INCOME BEFORE JOINING THE PROGRAM

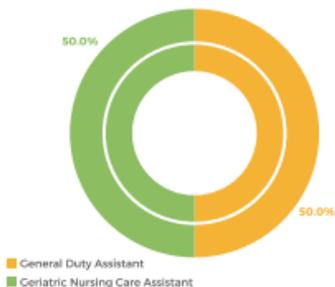


In India, low-income workers, particularly in informal sectors, often struggle with financial instability and limited career growth. Vocational training programs can play a crucial role in improving income levels by equipping individuals with specialised skills that enhance employability. The majority of previously employed respondents (60.0%) earned between ₹3,000-₹5,000 per month, while one-fifth (20.0%) had an income of less than ₹3,000, and another 20.0% earned more than ₹5,000. This indicated that most individuals had low earnings before joining the program.

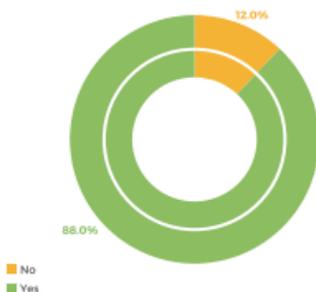
CHART 6: SOURCE OF INFORMATION ABOUT THE SKILL DEVELOPMENT PROGRAM



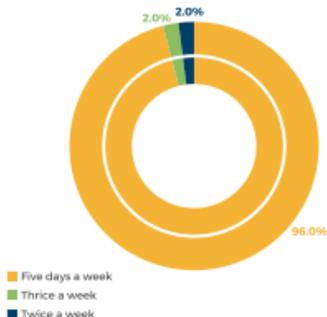
In India, word-of-mouth remains a powerful medium for disseminating information, especially in rural and semi-urban areas where digital outreach is limited. A vast majority of respondents (80.0%) learned about the skill development program through friends, while 12.0% received information from relatives, and 8.0% were informed by NGO staff. This showed that personal networks played a crucial role in spreading awareness about the initiative.

CHART 7: NAME OF THE COURSE ATTENDED

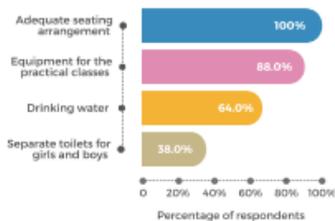
Half of the respondents attended the General Duty Assistant course, while the remaining 50.0% participated in the Geriatric Nursing Care Assistant course. This equal distribution suggested that both training programs were equally valued and attracted an equal number of participants.

CHART 8: RECEIVED ANY BOOKS OR TUTORIAL MATERIAL

Providing books and tutorials is crucial in skill development programs, as they reinforce classroom learning and offer reference materials for continued practice. A larger majority (88.0%) of the respondents received books or tutorial materials, while 12.0% did not. The widespread availability of learning resources indicated that most participants had access to structured study materials to support their training.

CHART 9: FREQUENCY TO ATTEND CLASSES

An overwhelming majority (96.0%) of the respondents attended classes five days a week, while a very small proportion attended either thrice (2.0%) or twice (2.0%) a week. The high attendance rate suggested strong commitment among participants toward completing their training.

CHART 10: FACILITIES OFFERED IN THE CENTRE

All respondents (100%) reported the availability of adequate seating arrangements, while 88.0% had access to equipment for practical classes. Drinking water facilities were available to 64.0% of the respondents, and separate toilets for girls and boys were accessible to 38.0% of the respondents. The provision of essential infrastructure contributed to a conducive learning environment, though gaps in sanitation facilities indicated areas for improvement.



INTERVIEW - ATAL DHADHICH, GDA TRAINER

Atal Dhadhich, a full-time GDA Trainer at SSEPS with a BSc in Nursing, has been associated with the program since 2017. He initially discussed the project with KEC and later joined the course in 2018, when it was managed by Lemon Aid. In 2020-21, he transitioned to Saraswati Agency, where he continued his role. With four to five years of experience, including two years in hospital settings, Atal has played a significant role in training students in the GDA program.

According to Atal, the overall impact of the program has been highly positive. Many students, particularly those interested in nursing, have benefited from the course as it serves as a foundational step for pursuing careers in the hospital industry. Several students have secured placements in hospitals and home care services, earning salaries ranging from ₹20,000 to ₹25,000. He noted that a significant number of students, especially those in need, have successfully established themselves in the healthcare sector, working in rotational shifts and 24-hour home care services.

Regarding funding, Atal mentioned that the program was initially supported by KEC and the RPG Group and was approved through NSDC. He emphasised that the course curriculum should be updated to align better with market demands. While there is a high demand for GDA courses, the existing curriculum is outdated and lacks essential medical training. He pointed out that topics such as patient vital sign monitoring, injection administration, sampling, CPR, and first aid are missing from the curriculum. Instead, it includes unnecessary details on basic tasks such as patient transfer, dusting, and mopping. Atal suggested that the curriculum should focus more on practical training and include English proficiency and basic computer skills to help students manage online documentation tasks effectively. Atal expressed satisfaction with his job role, highlighting his passion for teaching and mentoring students. However, he identified challenges in training students from non-medical backgrounds, as they often struggle with medical terminology. He believes that simplifying explanations and providing hands-on training can help students adapt more easily. Another challenge he highlighted is the misconception that GDA staff and housekeeping staff are the same. He emphasised that GDA staff assist nurses and doctors, whereas housekeeping staff handle cleaning and laundry duties. To improve the training, Atal recommended revising the curriculum to include practical hospital visits, hands-on training in vital signs monitoring, injections, catheterisation, CPR, first aid, and the use of feeding tubes. He stressed the importance of setting up a dedicated lab for students to gain real-world experience. While he acknowledged that an overview of the training program was provided beforehand, he criticised the current curriculum for including irrelevant content while omitting crucial medical skills.



CHART 11: FREQUENCY OF EXPOSURE VISITS DURING THE COURSE TENURE

Industry visits play a crucial role in bridging the gap between theoretical learning and real-world application. A vast majority of respondents (92.0%) participated in exposure visits twice during their course tenure, while 4.0% attended more than twice, and another 4.0% went for a visit once. This showed that almost all trainees had the opportunity to gain industry exposure as part of their training.

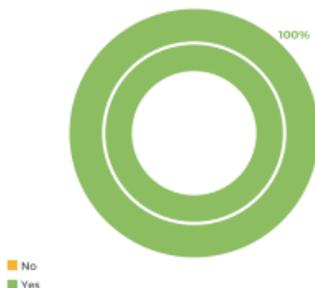
CHART 12: COMPLETE THE TERM OF THE COURSE

All respondents (100%) completed the full term of the course, indicating strong commitment and engagement in the training program.

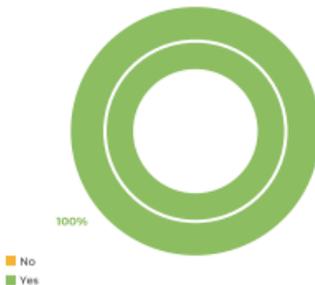


I completed the Geriatric Nursing Care Assistant course and got a job through the centre, but I faced some challenges initially. The centre supported me by trying to place me in a different job, which I appreciated. The training has helped me in learning valuable skills. I have noticed positive changes in my living standards, and now I am able to bear my family's medical and education costs.

- Sarla Ramu Wagh, Mukundwadi
Aurangabad

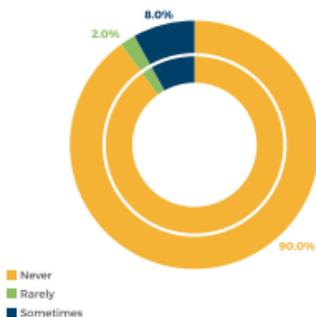
**CHART 13: ASSESSMENT AFTER COMPLETING THE COURSE**

A structured assessment process plays a crucial role in measuring the effectiveness of vocational training, identifying competency levels and preparing trainees for real-world applications. All respondents (100%) underwent an assessment after completing the course, ensuring that their skills and knowledge were evaluated before certification.

CHART 14: RECEIVED THE CERTIFICATE

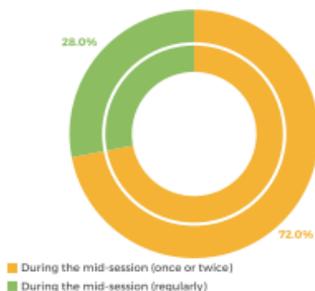
Receiving a certificate increases job prospects, as many employers prioritise certified candidates. All the respondents received their certificates after completing the course, formally recognising their skills and training. Certification plays a key role in enhancing employability, as it provides credibility and validation of acquired competencies.

CHART 15: FREQUENCY OF FACING DIFFICULTIES IN UNDERSTANDING THE LESSON



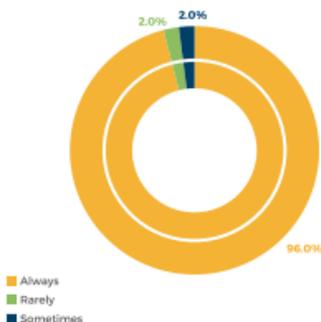
A vast majority (90.0%) never faced difficulties in understanding the lessons, while a small percentage (8.0%) sometimes experienced challenges. Clear instruction methods and structured lesson plans likely contributed to effective learning.

CHART 17: FREQUENCY OF TRAINING SESSIONS ON MOCK INTERVIEW SKILLS



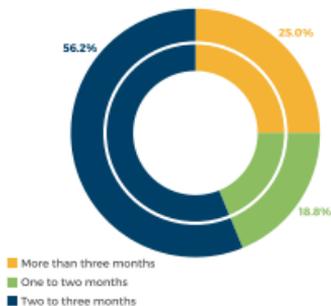
Most of the respondents (72.0%) received mock interview training once or twice during the mid-session, while 28.0% had regular sessions. This indicates that interview preparation was incorporated into the training, though the frequency varied.

CHART 16: SCOPE TO INTERACT WITH THE TEACHER FOR DOUBT-CLEARING



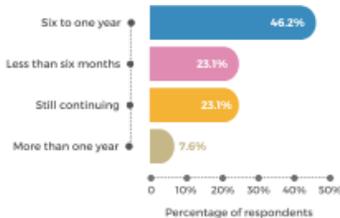
Nearly all respondents (96.0%) always had enough scope to interact with the teacher for doubt-clearing, while a minimal percentage (4.0%) faced occasional limitations.

CHART 18: WAITING PERIOD FOR THE PLACEMENT



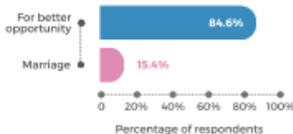
Among those who secured a job through the centre's support, 56.2% found employment within two to three months, 18.8% within one to two months, and one-fourth, 25.0%, had to wait for more than three months. This shows that most candidates experienced a moderate waiting period before securing their first job.

CHART 19: DURATION OF CONTINUING WITH THE JOB GOT THROUGH THE CENTRE'S SUPPORT



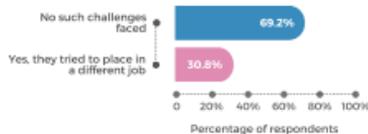
Among those who accepted a job through the centre, 46.2% continued for six months to a year, while 23.1% left within six months. Another 23.1% were still employed, and 7.6% remained on the job for more than a year. This indicates that while a significant portion retained their positions for a moderate duration, early attrition was also present.

CHART 20: REASONS FOR DISCONTINUING OR NOT ACCEPTING THE JOB



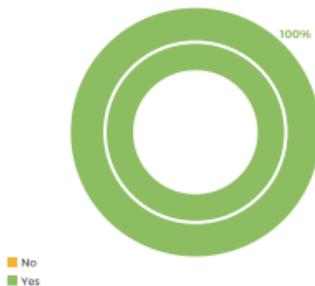
Among those who discontinued or did not accept the job, 84.6% left for better opportunities, while 15.4% cited marriage as the reason. This suggests that career advancement played a key role in job transitions, with individuals seeking positions that offered improved prospects in terms of salary, work environment, or career growth.

CHART 21: SUPPORT RECEIVED THROUGH THE CENTRE AFTER THE PLACEMENT IN CASE OF FACING CHALLENGES



Among those who accepted jobs through the centre, a majority (69.2%) did not face challenges, while a considerable number of respondents (30.8%) received assistance in finding alternative employment. This indicates that while a majority adapted well to their roles, a significant portion required further support.

CHART 22: RELATE THE LESSONS TO THE ACTUAL PRACTICAL WORK IN THE WORKPLACE



A well-structured vocational program bridges the gap between theoretical knowledge and real-world tasks, enhancing job readiness and performance. All respondents (100%) who accepted jobs through the centre found the lessons relevant to their practical work.



INTERVIEW – RAJAN SINGH, SUPERVISOR, GTFM COMPANY

Rajan Singh, a Supervisor at GTFM Company, shared insights about the General Duty Assistant (GDA) training program and its implementation. He mentioned that around 400-500 trainees join through the Saraswati Agency and are placed in various hospitals. These trainees primarily work as assistants to nursing staff in ICUs, OTs, and general wards, taking care of patients. The average salary for trainees is between ₹10,000-₹13,000 for a standard 12-hour shift. Some trainees choose to work overtime and earn additional incentives, ranging from ₹250 to ₹300 per shift, depending on the hours worked. In most hospitals, the duty hours are 12 hours, but in some cases, there are split shifts of 6 hours each in the morning and evening. Night shifts are fixed at 12 hours.

All trainees are initially hired on a company payroll, and those who perform well have opportunities to secure permanent positions. Some are even promoted to the role of Nursing Assistants. Retention rates vary, with around 60-70% of trainees continuing for more than six months, while some leave due to family restrictions, particularly regarding night shifts. Rajan Singh expressed satisfaction with the skills of the trainees, stating that they are well-trained in essential tasks such as checking vital signs, shifting patients, administering injections, and handling patient mobility. Their professional attitude, especially those trained by the Saraswati Agency, is commendable.

Minimal effort is required to groom these trainees further as they are already well-prepared. However, hospitals do organise workshops to enhance their skills, focusing on patient interaction, mobility assistance, and professional conduct. The hiring process continues regularly through the implementation agency. While there are no major challenges, he noted that some trainees are hesitant to handle tasks like diaper changing and may need to be reassigned. Once a trainee leaves their assigned job, there is no monitoring of their subsequent employment. He suggested that the program could be improved by enrolling more trainees with good English proficiency, which would help in better communication and documentation in hospitals.



MAJOR IMPACTS OF THE VOCATIONAL TRAINING (GDA) PROJECT

3.3.4 KEY IMPACT INDICATORS

STRENGTHENED FINANCIAL INDEPENDENCE



Participants have gained the ability to manage essential family expenses, such as medical and educational costs, without relying on external assistance. This financial stability has empowered households and improved their overall economic resilience.

UPGRADED LIVING STANDARDS



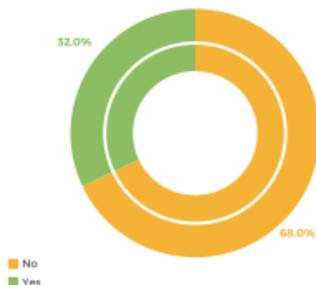
Many participants have contributed to improving their living conditions by investing in home repairs, toilet construction, and securing drinking water connections. These changes have enhanced access to basic amenities and created healthier, more comfortable living environments.

LONG-TERM ASSET BUILDING



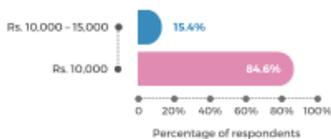
A significant number of participants have been able to invest in assets such as land, vehicles, and household appliances. This shift towards asset creation reflects improved financial security and a foundation for sustained economic growth within their families.

CHART 23: GOT A JOB WITH THE SUPPORT OF THE SKILL DEVELOPMENT CENTRE

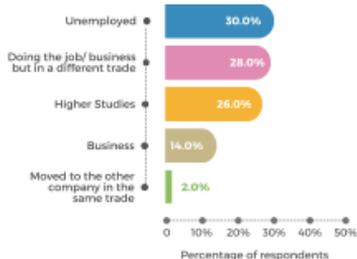


A significant portion of respondents did not secure employment through the skill development centre, indicating potential challenges in job placement despite completing the training. However, 32% of those who did find jobs suggested that the program provided some level of support for workforce integration.

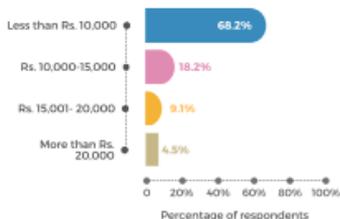
CHART 24: SALARY OF FIRST JOB AFTER COURSE



The majority of respondents (84.6%) who secured jobs through the skill development centre earned ₹10,000 per month, with only a small proportion receiving a slightly higher salary range of ₹10,000-15,000.

CHART 25: PRESENT EMPLOYMENT STATUS


Around one-third of the respondents (30.0%) remained unemployed, while 28.0% engaged in jobs or businesses outside their trained field. Additionally, 26.0% pursued higher studies, and 14.0% started businesses. Only a few 2.0% transitioned to another company within the same trade.

CHART 26: PRESENT SALARY/ INCOME


A notable majority (68.2%) of employed respondents earned less than ₹10,000 per month, while 18.2% had salaries between ₹10,000 and ₹15,000. A smaller percentage (9.1%) earned between ₹15,001 and ₹20,000, and only 4.5% reported earning more than ₹20,000.





INTERVIEW – PROGRAM HEAD, KEC GDA

Ankita Gupta, Program Head of KEC GDA, shared insights about the training programs offered by the organisation, focusing on the GDA course along with other healthcare courses like Lab Assistant and Nursing Assistant. She mentioned that they have trained approximately 1500-2000 students, with a placement rate of 78.3% and a greater emphasis on GDA compared to the Lab Technician Assistant (LTA) course.

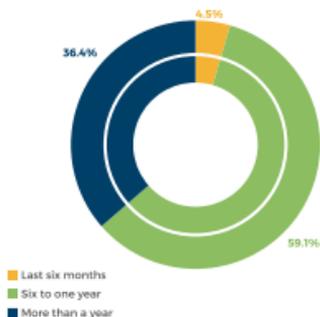
Ankita explained that the GDA course runs for three months, with 2.5 months of theoretical and practical training followed by 15 to 30 days of on-the-job training in hospitals. Classes are conducted six days a week in two shifts—morning from 9 AM to 1 PM and evening from 1 PM to 5 PM—each session lasting four hours. In addition to GDA training, students receive weekly English communication and computer literacy sessions to enhance employability, as hospitals require basic computer and English skills for handling reports and reception duties. The attendance requirement is set at 70% for both theory and practical classes. Speaking about faculty and administration, Ankita shared that there are two trainers for the LTA course and three for GDA, supported by a seven-to-eight-member administrative team, including mobilisers, trainers, placement officers, a receptionist, and a project coordinator. She emphasised that all trainers must be TOT (Trainer of Training) certified as per PMKY guidelines, with a mandatory B.Sc. in Nursing and relevant hospital experience. Discussing student mobilisation, Ankita stated that various methods are used, including leaflet distribution, marketing camps, door-to-door outreach, and social media promotion. However, she highlighted that word-of-mouth has been the most effective method, as students from previous batches wearing aprons and carrying their kits often attract curiosity and encourage enrolments. She recalled that one batch helped create two additional batches purely through word-of-mouth.

Ankita explained that the eligibility criteria require students to be between 18 and 30 years old with a minimum qualification of 10th grade. The enrollment process includes pre-counselling, where students are informed about course details, responsibilities, and job expectations. A six-day “zero-week session” provides further insights into learning objectives, job roles, and salary expectations. She pointed out that students who feel uncomfortable with tasks like diaper changing can opt-out during this period, but after six days, no withdrawals are allowed. She noted that this strategy has successfully reduced dropout rates to zero. She emphasised that the entire training is free, and neither students nor employers are charged any fees. While discussing challenges, Ankita shared that some students from the Muslim community were hesitant about certain caregiving tasks due to religious beliefs, and some had concerns about prayer timings. However, clear communication about hospital work and role-specific requirements helped address these issues. She noted that the demand for GDA professionals was high during COVID-19 and continues to remain strong.

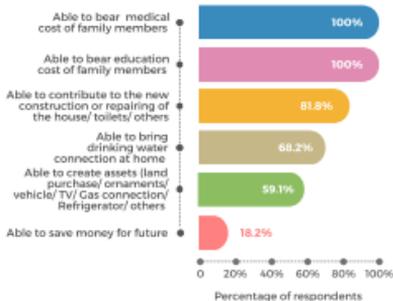
Ankita elaborated on the assessment process, stating that students undergo a pre-assessment during the zero-week session to evaluate their general knowledge, math, and reasoning skills. Midterm and final assessments are conducted internally, followed by an external exam through the Skill Sector Council (SSC), which includes both a theory and a viva exam. The minimum passing percentage is 65%, and students take the final test either online or offline. She mentioned that while internal exams are designed by trainers, the final assessment is coordinated with SSC, which assigns an external assessment agency.

Regarding student retention and placements, Ankita estimated that out of 1500-2000 enrolled students, about 95% completed their training, with a retention rate of 70-75% for those who remained employed for at least six months. She confirmed that proper follow-ups were conducted at PHCs and that all students received course completion certificates. Additionally, certificates were provided for completing OCT, which lasted between 15 to 30 days at hospitals. She highlighted that around 90% of students secured jobs in the hospitals where they trained, with approximately 15-18 students from a batch of 30 getting placed at the same hospital. She clarified that students did not receive salaries during on-the-job training, but once they started full-time employment, they earned regular wages.

”

CHART 27: DURATION OF EMPLOYMENT IN THE PRESENT JOB

The majority (59.1%) of employed respondents had been in their current jobs for six months to a year, while 36.4% had been working for more than a year. A small portion (4.5%) had joined within the last six months.

CHART 28: POSITIVE CHANGES NOTICED IN THE LIVING STANDARD

a. Improved Access to Healthcare and Education

All respondents (100.0%) reported being able to bear the medical and educational costs of family members. This indicates financial stability gained through the skill development program, allowing them to afford essential services for their families.

b. Contribution to Household Infrastructure

A significant portion (81.8%) reported being able to contribute to the new construction or repair of the house/ toilets/ others. This suggests that the program not only improved individual incomes but also had a direct impact on housing conditions.

c. Access to Basic Amenities

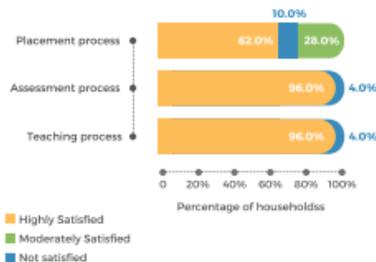
More than two-thirds (68.2%) reported being able to bring drinking water connections at home. This reflects an improvement in quality of life, as access to clean water is essential for health and hygiene.

d. Asset Creation and Financial Growth

Over half (59.1%) reported being able to create assets (land purchase/ ornaments/ vehicle/ TV/ Gas connection/ Refrigerator/ others). This indicates increased disposable income and investment in long-term assets that improve living standards.

e. Economic Stability and Future Prospects

Only 18.2% reported being able to save money for the future. While many experienced economic growth, the low percentage of savings suggests a focus on immediate needs rather than long-term financial security. Future interventions could incorporate savings programs and financial planning workshops.

CHART 29: SATISFACTION LEVEL OF BENEFICIARY RELATED

Teaching Process

A vast majority (96.0%) of the respondents were highly satisfied with the teaching process, while 4.0% were moderately satisfied. No respondents reported dissatisfaction, indicating that the training sessions were well-structured and met the learning expectations of the beneficiaries.

Assessment Process

Similar to the teaching process, 96.0% of respondents were highly satisfied with the assessment process, and 4.0% were moderately satisfied. No dissatisfaction was reported, reflecting that the evaluation methods were perceived as fair and effective in measuring the participants' skills and knowledge.

Placement Process

Satisfaction with the placement process was lower compared to teaching and assessment. While 62.0% of respondents were highly satisfied and 10.0% were moderately satisfied, 28.0% reported being not satisfied. This suggests challenges in job placements, possibly due to job availability, salary expectations or alignment with acquired skills.

“

I joined the General Duty Assistant course, and it was a good experience. The centre had proper seating and equipment for practice, which made learning easier. I did not have much problem understanding the lessons, and the teachers were always there to help. Also, the mock interviews and exposure visits have made me feel more confident.

- Navaratni Sharma, Jaipur

”



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Improved employability through certified training and skill development.
- Gained hands-on experience via On-the-Job Training in relevant industries.
- Received job placements with minimum salary as per state guidelines.



FAMILY LEVEL

- Contributed to household income through stable employment opportunities.
- Reduced financial dependency by securing paid job placements.
- Enhanced social mobility by accessing structured career pathways.



COMMUNITY LEVEL

- Increased access to skilled workers in hospitals, home care services, and clinics.
- Strengthened workforce participation through structured training programs.
- Created awareness about government welfare schemes for employment support.



INSTITUTIONAL LEVEL

- Established structured certification and placement processes for trained candidates.
- Strengthened employer engagement through post-placement tracking and feedback.
- Integrated digital platforms for job placement and candidate monitoring.



STATE LEVEL

- Increased workforce availability in key service sectors like healthcare.
- Improved alignment of vocational training with state employment policies.
- Strengthened collaboration between training institutions and state authorities.



NATIONAL LEVEL

- Contributed to economic growth by expanding the skilled labour force.
- Supported government initiatives promoting job-oriented skill development.
- Enhanced utilisation of digital platforms for large-scale employment facilitation.

Sustainability

EMPLOYMENT STABILITY AND RETENTION



A considerable number of employed beneficiaries remained in their jobs for an extended period, indicating the program's role in facilitating sustained workforce participation. However, a portion of participants transitioned to different sectors, highlighting the need for continuous skill alignment with market demands.

LONG-TERM IMPROVEMENT IN LIVING CONDITIONS



Many beneficiaries reported using their earnings for home repairs, new construction, and access to essential utilities such as drinking water. This suggests that the program contributed to enhancing living standards beyond immediate employment outcomes.

ECONOMIC GROWTH WITH LIMITED FINANCIAL SECURITY



While beneficiaries invested in household assets such as land, vehicles, and appliances, a relatively smaller group managed to set aside savings for the future. This indicates a positive economic impact but also underscores the necessity of integrating financial literacy and savings mechanisms into the program.



CHALLENGES

TRANSITION TO ONLINE LEARNING



During the COVID-19 period, the sudden shift to online learning created challenges for both students and trainers. Many students lacked access to mobile phones, and trainers had to guide them in using applications like Zoom. The transition to online classes, assessments, and content management through the LMS portal took time and effort.

LIMITED CURRICULUM SCOPE



The existing curriculum does not cover essential medical procedures such as vital signs monitoring, CPR, first aid, injection administration, cannula and catheter placement, and basic pharmaceutical knowledge. This lack of advanced training makes it difficult to differentiate GDA staff from general housekeeping workers.

LACK OF AWARENESS ABOUT GDA



Many hospitals and HR teams were unfamiliar with the GDA role and often confused it with ward boys or general staff. This lack of recognition affected job placement opportunities and led to misunderstandings about the nature of GDA responsibilities.

DIFFICULTY IN UNDERSTANDING MEDICAL TERMINOLOGY



Many students come from non-medical backgrounds, such as arts and commerce, making it difficult for them to grasp complex medical terminology. The curriculum does not include strategies to simplify medical terms or provide additional support for such students.

LIMITED PRACTICAL EXPOSURE



The training program lacks sufficient hands-on experience. There are inadequate hospital visits, practical sessions, and real-life exposure, affecting the confidence and competence of students in dealing with medical procedures.

POOR ENGLISH PROFICIENCY AMONG TRAINEES



Employers prefer GDA staff with good English communication skills for documentation and patient interaction. However, the training program does not place enough emphasis on improving English proficiency, which limits employment opportunities for some students.

CULTURAL AND RELIGIOUS BARRIERS



Some trainees, particularly from the Muslim community, were reluctant to perform tasks like diaper changing and patient hygiene due to religious beliefs. This created workforce management challenges in hospitals where such tasks are essential.

3.3.5 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 1: No Poverty, SDG 3: Good Health and Well-being, SDG 4: Quality Education
SDG 8: Decent Work and Economic Growth



Coherence

Relevance

The program incorporated structured training, industry visits, and hands-on learning opportunities, ensuring alignment with employment requirements. Essential facilities such as seating arrangements, drinking water, and separate toilets contributed to a conducive learning environment. Certification and assessments reinforced the program's objective of enhancing workforce readiness.



Sustainability

Sustained employment and career advancement reflected the long-term effectiveness of the program. Placement support mechanisms assisted in addressing initial job-related challenges. The adaptability of training ensured continuity in career growth across different sectors.



Effectiveness

Regular class attendance and course completion demonstrated the program's structured approach to engagement. Certification and assessments strengthened the learning process, while mock interview training and doubt-clearing sessions supported skill development. Exposure to industry practices helped bridge the gap between training and employment requirements.



Efficiency

The program streamlined the transition from training to employment by facilitating timely job placements. Industry-standard equipment, structured coursework, and exposure visits optimised learning outcomes. Placement assistance and support mechanisms contributed to smooth workforce integration.



Impact

The program contributed to financial stability by enabling access to employment with structured salaries. Improved income levels supported essential expenditures, asset creation, and household improvements. Opportunities for career progression, entrepreneurship, and higher education reflected the broader impact of skill development efforts.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

3.3.6 THE WAY FORWARD



CURRICULUM ENHANCEMENT

The program should include essential medical training such as vital signs monitoring, CPR, first aid, injection techniques, catheter management, and basic pharmaceutical knowledge. This will help students gain relevant skills and differentiate GDA staff from ward boys.



STRENGTHENING PRACTICAL TRAINING

Dedicated labs should be set up for hands-on training in medical procedures. Additionally, regular hospital visits should be arranged to provide real-world exposure, improving students' confidence and competence.



INCREASING AWARENESS ABOUT GDA

Hospitals and HR teams should be educated about the GDA role to prevent confusion. The term "Nursing Assistant" can be used alongside GDA to improve recognition and job placement opportunities.



SIMPLIFYING MEDICAL TERMINOLOGY

Bilingual training materials and interactive learning modules should be introduced to help students from non-medical backgrounds understand medical terms more effectively.



IMPROVING ENGLISH PROFICIENCY

An English language module focused on healthcare communication and documentation should be included in the curriculum. Additional resources should be provided to enhance spoken and written English skills.



ADDRESSING CULTURAL SENSITIVITIES

Guidance should be provided on alternative role allocations for students who have religious concerns about certain tasks. At the same time, trainees should be educated on the importance of holistic patient care.



BLENDED LEARNING APPROACH

A combination of online and offline learning methods should be implemented to provide greater flexibility. This approach will help students adapt to modern training techniques while ensuring effective skill development.



CONTINUOUS CURRICULUM UPGRADATION

New chapters should be added on modern medical equipment and basic disease management, such as fever and allergies. This will ensure that students are better prepared for hospital duties and can meet evolving industry requirements.

3.3.7 CONCLUSION

The GDA training program has successfully addressed the need for skilled healthcare assistants, providing thousands of individuals with the knowledge and skills required to excel in the healthcare sector. By offering free training, practical experience, and placement support, the program has empowered participants to secure stable jobs and improve their livelihoods. However, challenges such as curriculum updates, retention rates, and addressing misconceptions about the role of GDAs remain areas for improvement. With targeted enhancements, including revised curriculum content, increased practical training, and better retention strategies, the program can further strengthen its impact and continue to contribute to the growing demand for skilled healthcare professionals.

04. THE HERITAGE PROJECT



4.1. HERITAGE

4.1.1 EXECUTIVE SUMMARY

Project Background

The Worli Koliwada Transformation Project, along with the Gora Dapkal Ground Refurbishment and Illumination initiatives, was launched to revitalise and preserve the cultural and historical heritage of the local community. These projects aimed to transform neglected public spaces into vibrant, safe, and culturally enriched areas. Through artistic interventions, infrastructure upgrades, and community engagement, the initiatives sought to enhance the aesthetic appeal, safety, and socio-economic opportunities for residents while celebrating the unique identity of the fisherman community.

Design Snapshot



Name of the project
Heritage



Research methodology
Qualitative Research



Qualitative Methods
FGD and Interviews



Key Stakeholders
Program team, Community members and Tourists



Implementation year
2022-23 & 2023-24



Implementing Partners
RPG Foundation



Project Location
Worli Koliwada, Mumbai



Financial Year of Impact Assessment
2024-25



SDG Goals



- SDG 5: Gender Equality
- SDG 8: Decent Work and Economic Growth
- SDG 11: Sustainable Cities and Communities

Project Activities



To create local landmarks through art paint murals depicting the life and culture of the fisherman community, install street signages, and train local children to conduct community walks.



To construct footpaths, install an underground sewage system, plant grass and decorative plants, and add seating arrangements for improved accessibility and usability by leveraging govt. funds and partnerships.



To install enhanced lighting systems to improve safety, highlight cultural landmarks, and enhance the area's attractiveness at night.



To provide training and support for SHG women to start food businesses using food trucks, particularly during community walks and events.

Key Output



Installed an underground drainage system at Gora Dapkal Ground to prevent waterlogging and developed a walking path, play area, and seating arrangements.



Enhanced the ground for sports tournaments, community events, and revenue generation through event rentals.



Created murals showcasing Koli fisherman culture, increasing community pride and attracting visitors for heritage walks.



Installed better street lighting, improved safety, especially for women, and enhanced the visibility of cultural landmarks.



Facilitated overall accessibility to the interior areas of Koliwada, improving emergency response.



Provided training and support to SHG women for food businesses and set up food trucks for income generation.



Installed clear street signages (nomenclature and information signages) making navigation easier for visitors.

Key Impact



Improved safety and accessibility, making streets well-lit and enabling ambulance access to inner areas.



Revitalised public spaces, turning Gora Dapkal Ground into a hub for sports, events, and community gatherings.



Strengthened cultural identity through murals and community-led heritage walks.



Increased night-time footfall, boosting community interactions and local engagement.



Enhanced economic growth by creating livelihood opportunities for SHG women and increasing visitor footfall.



Promoted tourism, culture & community and awareness on the rich heritage of Worli Koliwada.

4.1.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

Worli Koliwada is one of Mumbai's oldest fishing communities, home to generations of Koli fishermen who have preserved their traditions despite urbanisation. Over time, the area faced several challenges, including deteriorating public spaces, poor infrastructure, and a lack of efforts to showcase its rich cultural heritage. The absence of well-maintained community spaces limited social interactions, while poor street lighting raised safety concerns, especially for women at night. Additionally, the cultural significance of the area remained largely unnoticed due to the lack of visual storytelling or heritage conservation efforts. Residents felt the need for improvements to enhance their surroundings while preserving their identity.

The KEC Heritage Project was launched to address these issues and bring positive change to the community. The Gora Dapkal Ground refurbishment transformed an underutilised space into a well-maintained area for sports, events, and social gatherings, promoting community engagement.

The Art District project introduced murals and paintings that highlight the traditions, stories, and lifestyles of the fisherman community, ensuring their cultural heritage is visually represented. The illumination project improved street lighting, making the area safer and more accessible at night. Additionally, the project created economic opportunities, particularly for women-led self-help groups (SHGs), promoting traditions & expertise of the community by forming Chefs of Koliwada, also increasing footfall and supporting small businesses. Through efforts for Worli Fort adoption, various events & experiences, sharing of collaterals like books, maps etc., the project has revitalised Worli Koliwada, making it cleaner, safer, and more vibrant while preserving its historical and cultural significance.

OBJECTIVES OF THE PROGRAM



To celebrate and showcase the cultural heritage of the fisherman community through art and illumination.



To upgrade public spaces like Gora Dapkal Ground with better facilities, making them accessible and functional for the community.



To enhance safety, particularly for women, through improved lighting and visually appealing public spaces.



To create livelihood opportunities for SHG women through training and support for food businesses.



To foster pride and responsibility among residents by involving them in maintaining and utilising the transformed spaces.

4.1.3 KEY STUDY FINDINGS AND IMPACT

This section of the assessment report focuses on the transformation of Worli Koliwada through various heritage projects, including the refurbishment of Gora Dapkal Ground, the creation of the Art District, and the illumination initiative. These efforts have not only beautified the area but also improved its functionality, safety, and cultural significance. Through these projects, the rich history and traditions of the local fisherman community have been highlighted while also enhancing public spaces for community gatherings, livelihood opportunities, and tourism. The following sections present insights through qualitative findings from local residents on the impact of these initiatives.



FOCUS GROUP DISCUSSION ON THE KEC HERITAGE ART DISTRICT PROJECT

The focus group discussion (FGD) was conducted with local residents to understand their perspectives on the changes brought about by the KEC Heritage Art District Project. Most of the participants, who had been living in the area for 30 to 50 years or more, shared their insights on the transformation of the locality.



STATUS OF THE AREA BEFORE THE ART DISTRICT WORK

Group members mentioned that before the painting work, the area was in poor condition, appearing dirty and neglected. Some participants, especially women, pointed out that places like the Cleveland Jetty were unsafe at night due to issues such as public drinking and foul smells. When asked about past efforts for improvement, participants stated that they had raised concerns with the local corporator, which resulted in some development work, but it was not substantial.



CHANGES AFTER THE ART DISTRICT WORK

Participants unanimously agreed that the renovation and painting work had significantly improved the ambience. They mentioned that the murals not only enhanced the aesthetics of the area but also illuminated beautifully at night, reflecting the life and culture of the fisherman community. Several group members noted that the number of visitors had increased due to the community walks introduced by the RPG Foundation. They mentioned that local children were trained to guide visitors through important sites, sharing insights into the area's history and culture. This has not only created awareness but also added a new dimension to exploring the neighbourhood. When asked about the feel-good factor, the participants agreed that the overall atmosphere had become more positive. Residents mentioned that they now take pride in their surroundings and enjoy the vibrancy brought in by the artwork. Some group members, however, suggested that since people from other communities also reside in the area, the murals should represent a broader cultural spectrum rather than focusing solely on the fisherman community.



SOCIO-ECONOMIC IMPACT

Many group members acknowledged that the project had positively impacted livelihoods in the area. They highlighted that the RPG Foundation provided training and support to women from a Self-Help Group (SHG) to start food businesses. With food trucks and hygiene training, these women are now selling fast food and seafood, particularly during weekends when community walks take place, thus improving their income opportunities. Participants also mentioned that the renovation work had helped highlight important landmarks. The illumination and artistic enhancements have made these landmarks more recognisable to both locals and visitors. Additionally, they agreed that the street signages were helpful, especially for first-time visitors. However, some suggested that the background colour of the signage should be darker for better visibility at night.



CULTURAL AND ARTISTIC ENGAGEMENT

Several group members expressed that the project had encouraged new ways of exploring and interacting with heritage stories. They mentioned that children now take pride in conducting community walks and narrating the history of key locations. Additionally, the discussion highlighted that the initiative had fostered conversations about art. Participants mentioned that children have developed an interest in different painting styles and artistic research as they are now exposed to diverse perspectives on art, people, and communities.



SENSE OF PRIDE AND RESPONSIBILITY

The group members emphasised that the project had instilled a sense of pride and responsibility towards maintaining the area. They shared that both adults and children actively participate in keeping places like Gora Dapkal Ground clean. Many felt that the transformation had strengthened community spirit and made them more appreciative of their surroundings.

Overall, the participants agreed that the painting work had significantly improved the ambience, making the area more visually appealing and culturally enriched. They acknowledged that the project successfully highlighted the legacy of the fisherman community while also suggesting that future initiatives should be more inclusive of the area's diverse cultural heritage.



I have been living in Worli Koliwada for a long time, and I have seen many changes, but this project has brought a significant change. Earlier, some areas were dark, dirty, and unsafe, but now, with the beautiful paintings, bright lights, and clean surroundings, everything feels different. The illumination has made it safer for women to walk at night, and the paintings reflect the culture of the fishing community. More visitors are coming, and some women have even started small food businesses.

- Lata Ganesh Patil, Worli Koliwada, Mumbai



FOCUS GROUP DISCUSSION ON KEC HERITAGE REFURBISHMENT OF GORA DAPKAL GROUND PROJECT

A focus group discussion (FGD) was conducted with local residents to gather their views on the transformation of Gora Dapkal Ground following its refurbishment under the KEC Heritage Project. Most participants had been living in the area for 30 to 50 years or more, witnessing the condition of the ground before and after the renovation.

Before the refurbishment, group members recalled that the ground lacked proper lighting and seating arrangements, making it inconvenient for public use. During the rainy season, waterlogging and muddy conditions made the area almost unusable. Additionally, there were no plants or footpaths around the ground, further limiting its accessibility and aesthetic appeal. While some residents had raised concerns about the condition of the ground in the past, most were unsure whether any formal complaints had been made to the municipality for improvement.

After the refurbishment, the residents noted a significant transformation in the ground's infrastructure and usability. The installation of an underground sewage system has effectively resolved the issue of waterlogging, and the addition of a well-constructed footpath has made the space more accessible. The planting of grass and decorative plants around the ground has enhanced its beauty, while new seating arrangements have provided a comfortable space for visitors. Group members highlighted that the renovated ground is now being utilised for various purposes, including sports tournaments, family gatherings, and even wedding functions, which has also created a source of revenue for the ground authority. Many residents shared that they frequently visit the ground for morning and night walks, contributing to both their physical health and social interactions. Children also make active use of the space, ensuring that the ground remains well-maintained.

With the refurbishment, the footfall in the area has increased significantly, indicating its growing popularity among residents. Participants expressed that the overall feel-good factor of the ground has improved, as it now serves multiple purposes and provides a welcoming atmosphere for the community. The creation of ample playing space has been particularly beneficial for children, offering them a safe and dedicated area for recreational activities.

When discussing the economic impact, group members mentioned that while the refurbishment has attracted more visitors, there are currently no vendors operating near the ground, meaning there has been no direct increase in livelihood opportunities. However, the ground has gained prominence as an important landmark in the locality due to its increased usage and improved infrastructure. Residents agreed that the refurbished ground has provided a valuable space for families to bond, particularly through evening walks and social gatherings. While it is not commonly used as a picnic spot, it has become a popular venue for weddings, cultural events, and religious functions, strengthening community ties. Several participants shared that the transformation has instilled a sense of pride and responsibility among locals, with both adults and children taking active steps to maintain the ground and its surroundings.



The KEC Heritage Project has improved our neighbourhood in so many ways. Earlier, the Gora Dapkal Ground was just an empty, muddy space, but now it has proper seating, a clean walking path, and even grass and plants. People now use it for morning and evening walks, children play there, and it is even rented out for weddings and events. The new street lights have made it safer at night, and visitors are coming to see the heritage sites.

- Vijay Bharakale, Worli Koliwada



FOCUS GROUP DISCUSSION ON THE KEC HERITAGE ILLUMINATION PROJECT

The assessment team conducted an FGD with local residents to understand their views on the impact of the KEC Heritage Illumination Project in their community. Most participants had been living in the area for 30 to 50 years or more and had witnessed the transformation brought about by the illumination project.

Before the illumination, residents mentioned that the area did not appear as attractive or well-lit as it does now. While there were some lights, they were not sufficient to highlight the cultural and historical significance of the surroundings. The lack of proper illumination made some areas, particularly Cleveland Jetty, unsafe for women at night. However, no specific efforts were made by the residents to request the municipality for additional lighting in the area.

Since the illumination project, residents have noticed a significant improvement in safety, particularly for women at night. They shared that everything is now clearly visible, making it easier for people to move around without fear. The improved lighting, along with the road construction by BMC, has also enhanced accessibility, allowing ambulances to enter the Koliwada area more easily, which is crucial for medical emergencies.

The visual appeal of the area has improved considerably, and residents described the illumination as making their locality look “very beautiful.” The enhanced lighting has not only made roads and pathways more accessible but has also highlighted the cultural paintings in the area, making them more prominent at night. This has contributed to an increase in visitors, particularly during weekend community visits, which were previously uncommon at night.

The illumination has created a strong feel-good factor among residents. Many group members emphasised that the transformation has encouraged women to visit places they previously avoided, such as Cleveland Jetty, making them feel safer and more comfortable in their surroundings. Additionally, the illumination has played a significant role in promoting local culture. As the paintings are now illuminated at night, they attract visitors and effectively showcase the life and traditions of the fisherman community, helping preserve and share their heritage.

Regarding economic impact, the group discussed that while general shopkeepers and vendors have not seen a direct increase in sales, some livelihood opportunities have improved. Due to a combination of painting, renovation, illumination, street signage, and community walk training for children, SHG women have benefited the most. The livelihood training and food truck support provided to these women has allowed them to sell food during community walks and local events, contributing to their income.

The illumination has also helped in highlighting important landmarks in the area. Residents noted that key sites now appear more attractive at night, drawing more attention from both visitors and locals, who have gained a renewed appreciation for their significance. Additionally, the installation of street signages has proven extremely beneficial, particularly for first-time visitors, as they no longer need to ask for directions. The multiple signages placed across the streets make navigation much easier.



Before the project, our streets and landmarks were not as noticeable, and some places felt unsafe. Now, with the illumination and paintings, everything looks bright and welcoming. The community walks have also helped more people learn about our culture and history. The street signs make it easier for visitors to find their way, and the improved roads allow ambulances to reach inside the Koliwada, which is very important for us. This project has not only beautified our area but also made life easier for the people living here.

- Sangita Suresh Sondkar, Worli Koliwada, Mumbai



4.1.4 KEY IMPACT INDICATORS

IMPROVED SAFETY AND ACCESSIBILITY



The installation of street lighting has enhanced visibility, making the area safer, especially for women at night. Improved road infrastructure allows ambulances to access inner parts of the community, ensuring better emergency response.

REVITALISATION OF PUBLIC SPACES



Gora Dapkal Ground has transformed into a hub for sports tournaments, weddings, and cultural events. This multipurpose use has strengthened community interactions and provided recreational space for children and families.

INCREASED COMMUNITY ENGAGEMENT



The refurbished ground and mural projects have encouraged local participation in cultural preservation and public space maintenance. More residents now take pride in their heritage and contribute to keeping the area clean and functional.

ENHANCED CULTURAL PRESERVATION



The art intervention project has visually represented the Koli fisherman community's heritage, instilling cultural pride. The artworks have become an identity marker for the area, fostering awareness of local traditions and history.

GROWTH IN VISITOR FOOTFALL



The revival efforts, including murals and illumination, have attracted more visitors, researchers, and tourists. Community walks and events have become more frequent, boosting local tourism.

STRENGTHENED SENSE OF COMMUNITY OWNERSHIP



Residents actively maintain the refurbished spaces, ensuring their sustainability. Children and local members are more involved in guiding heritage walks, reinforcing their connection to the community's cultural roots.

EXPANSION OF LIVELIHOOD OPPORTUNITIES



Training and support for SHG women have enabled them to sell food during community walks and events, creating new income sources. The ground refurbishment has also allowed event rentals, generating revenue for local authorities.

Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Increased sense of safety and confidence, especially among women, due to better lighting.
- Enhanced awareness and pride in local heritage through murals and guided community walks.
- Improved physical and mental well-being through access to recreational spaces like the refurbished ground.



HOUSEHOLD LEVEL

- Families have new spaces for social gatherings, events, and recreational activities.
- Increased economic opportunities for SHG women, leading to better household income.
- Improved accessibility to healthcare with ambulances reaching inner community areas.



COLLECTIVE LEVEL

- Strengthened social bonds as people engage in maintaining public spaces together.
- More participation in cultural events and sports tournaments, fostering unity.
- Greater involvement of local youth in heritage conservation and tourism activities.



COMMUNITY LEVEL

- Worli Koliwada has become a more attractive and safer place for residents and visitors.
- Local businesses and vendors benefit from increased footfall due to tourism and events.
- Greater responsibility among residents to maintain and sustain public spaces.



STATE LEVEL

- Recognition of heritage conservation as a tool for sustainable urban development.
- Increased tourism potential, contributing to the local economy.
- Strengthened cultural identity and promotion of indigenous traditions in urban planning.



NATIONAL LEVEL

- Contributes to India's heritage preservation efforts and sustainable urban renewal models.
- Showcases community-led development as a best practice for urban regeneration.
- Encourages similar initiatives across other heritage-rich localities in the country.

Sustainability

COMMUNITY OWNERSHIP AND ENGAGEMENT



Local residents are actively involved in maintaining the refurbished ground and murals. Heritage walks conducted by trained local children help sustain interest and awareness about cultural preservation.

ECONOMIC SUSTAINABILITY



The project has created income-generating opportunities through SHG women-led food businesses, rental income from event spaces, and increased visitor footfall. These revenue sources support long-term sustainability.

ENVIRONMENTAL SUSTAINABILITY



The project integrated sustainable measures such as an underground drainage system to prevent waterlogging and tree plantations for beautification. Regular cleaning and upkeep by the community ensures the spaces remain well-maintained.

INSTITUTIONAL SUPPORT AND POLICY ALIGNMENT



The initiative aligns with local government policies on heritage conservation and urban development. Partnerships with municipal bodies have facilitated infrastructure improvements and long-term support for maintenance.

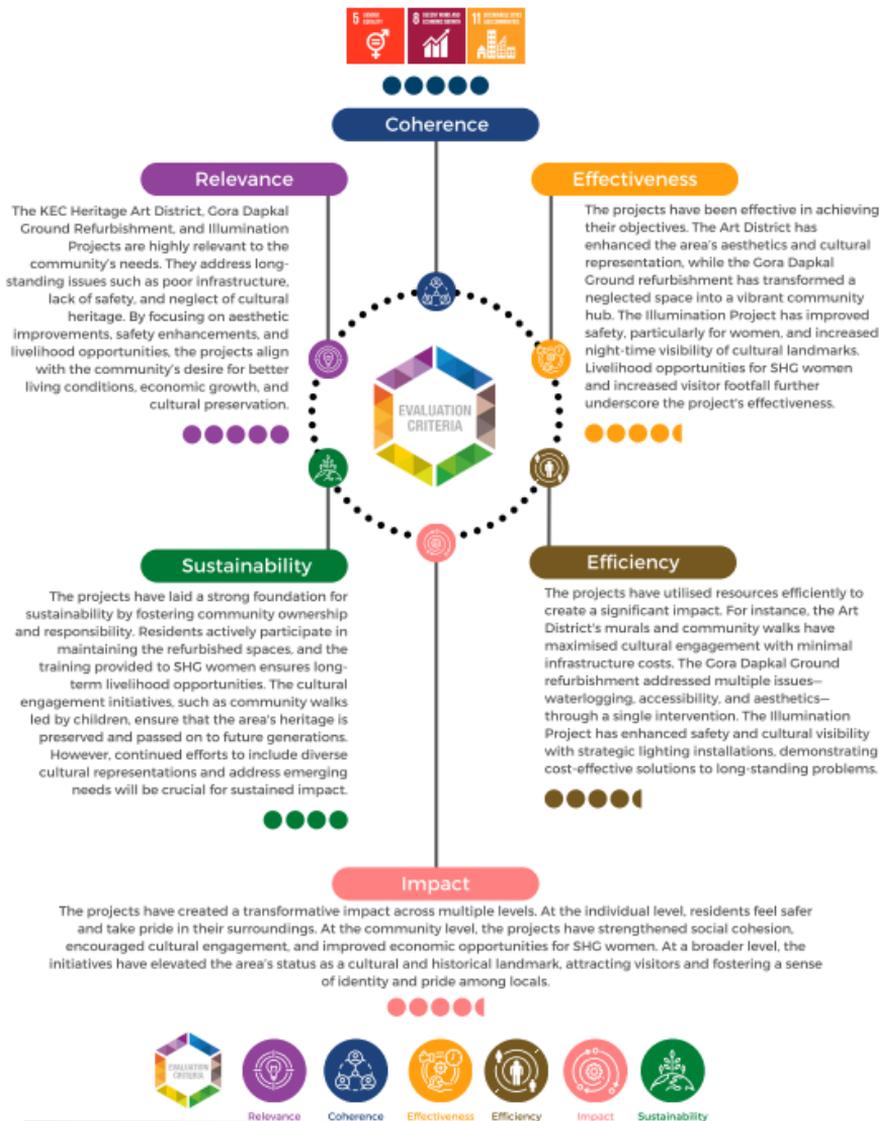
LONG-TERM MAINTENANCE AND UPKEEP



The local community, in collaboration with authorities, is responsible for the upkeep of lighting, murals, and public spaces. Regular engagement and monitoring ensure the sustainability of the interventions.

4.1.5 OECD FRAMEWORK

The project aligned with the following Sustainable Development Goals (SDGs):
SDG 5: Gender Equality, SDG 8: Decent Work and Economic Growth
SDG 11: Sustainable Cities and Communities



Index: 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

4.1.6 The Way Forward



PROMOTE CULTURAL DIVERSITY IN ART INITIATIVES

Future projects should incorporate a broader cultural spectrum in murals and artistic interventions to ensure all communities feel represented and celebrated.



EXPAND ECONOMIC OPPORTUNITIES FOR RESIDENTS

Livelihood training programs should be expanded to include more residents, particularly youth, and explore diverse income-generating activities beyond food businesses.



STRENGTHEN COMMUNITY-LED MAINTENANCE EFFORTS

A community-driven maintenance system should be established to ensure the long-term preservation and upkeep of refurbished spaces and illuminated landmarks.



ENHANCE NIGHT-TIME SAFETY AND NAVIGATION

Visibility concerns should be addressed by using darker backgrounds for street signages and ensuring consistent lighting across all areas for improved safety and navigation.

4.1.7 CONCLUSION

The KEC Heritage Art District, Gora Dapkal Ground Refurbishment, and Illumination Projects have successfully transformed neglected public spaces into vibrant, safe, and culturally rich areas. These initiatives have not only improved the aesthetic appeal and functionality of the community but also fostered a sense of pride and responsibility among residents. By creating livelihood opportunities and enhancing safety, the projects have contributed to the socio-economic well-being of the community. While the outcomes have been largely positive, there is scope for further inclusivity and cultural representation to ensure all residents feel equally represented and benefited.

05. COMMUNITY DEVELOPMENT PROJECT



5.1. VERMICOMPOSTING

5.1.1 EXECUTIVE SUMMARY

Project Background

In collaboration with local farmers, the Vermicompost Initiative in 10 villages of Nagpur aimed to enhance agricultural sustainability by introducing organic composting methods. The project focused on hands-on training, enabling farmers to set up and maintain vermicompost units effectively. As a result, participants observed significant improvements in soil health, crop yield, and the quality of their produce. The initiative also helped in reducing weed growth and decreasing reliance on chemical fertilisers. While the farmers faced initial challenges in maintaining vermicompost units, they found the training highly beneficial and adapted to the best practices for vermicompost production. Moving forward, strengthening market opportunities for organic produce remains a key priority to ensure continued adoption and financial benefits for farmers.

Design Snapshot



Name of the project

Vermicomposting



Research methodology

Mixed Methods Approach
(Quantitative and Qualitative)



Qualitative Methods

FGD and Structured Interviews



Sampling Technique

Random Sampling Method



Sample Size 'N'

15



Key Stakeholders

Farmers and Program Team



Implementation year

2022-23



Implementing Partners

RPG Foundation



Project Location

Katol, Nagpur District, Maharashtra



Financial Year of Impact Assessment

2024-25



SDG Goals



- SDG 2: Zero Hunger
- SDG 12: Responsible Consumption and Production
- SDG 13: Climate Action

Project Activities



To promote vermicomposting adoption, farmers in Fetari village were trained and equipped to integrate organic composting into their farming practices.



To enhance soil fertility and crop yields, vermicompost was introduced, improving soil health, water retention and agricultural productivity.



To reduce chemical fertiliser dependency, farmers were trained in vermicompost production, leading to cost savings and sustainable farming.



To foster community and environmental sustainability, peer learning and organic practices were encouraged, promoting ecological balance and communal growth.



Key Outputs



Farmers in Fetari village successfully adopted vermicomposting techniques.



Improved soil fertility and crop yields were observed due to the use of vermicompost.



Reduction in chemical fertiliser usage, leading to cost savings for farmers.



Training sessions enhanced the technical knowledge of farmers on vermicompost production and maintenance.



Established vermi-beds and demonstration plots for hands-on learning.

Key Impacts



Improved soil health with enhanced organic matter content, better water retention, and fertility.



Higher agricultural productivity with healthier plant growth, better taste in produce, and increased vegetable production.



Economic benefits through reduced dependency on expensive chemical fertilisers, resulting in cost savings.



Sustainable farming practices are encouraged, leading to long-term adoption of organic methods.



Strengthened community development through peer-to-peer learning and knowledge sharing.



Environmental benefits are achieved by decreasing chemical runoff and promoting ecological balance through natural composting methods.

5.1.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The Vermicompost Initiative in Fetari village was introduced to promote sustainable farming practices by improving soil health and reducing dependence on chemical fertilisers. Farmers in the region have traditionally relied on conventional fertilisers, which have led to soil degradation and declining crop productivity over time. To address these challenges, the initiative focused on promoting the use of vermicompost as a natural and cost-effective alternative. Through technical training and hands-on demonstrations, farmers were equipped with the knowledge to produce and apply vermicompost efficiently. The need for this project emerged from farmers' growing interest in organic farming and their struggle to maintain soil fertility while ensuring good crop yields. Additionally, the initiative aimed to create awareness about the economic benefits of vermicompost, including reduced input costs and better market opportunities for organic produce.

OBJECTIVES OF THE PROGRAM



To promote the use of vermicompost for improving soil health and increasing crop yields.



To train farmers in the proper techniques of vermicomposting, including setup, maintenance, and application.



To reduce dependence on chemical fertilisers and encourage sustainable, organic farming practices.



To enhance farmers' income by supporting market linkages for organically grown produce.



To foster long-term environmental benefits by improving soil fertility and reducing chemical runoff.

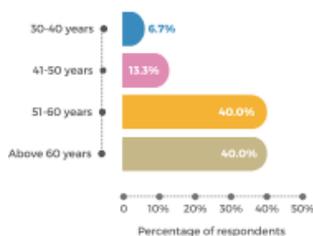
5.1.3 KEY STUDY FINDINGS AND IMPACT

The following section presents a comprehensive overview of the key study findings and impact analysis of the project, focusing on the adoption of organic farming practices, particularly vermicompost usage, among farmers. It highlights the demographic profile of participants, their transition to sustainable agricultural methods and the tangible benefits observed in crop productivity, soil health and income levels.

MAJOR FINDINGS OF THE VERMICOMPOSTING PROJECT

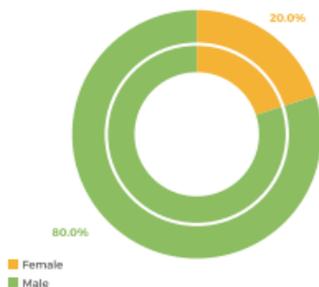
SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 1: AGE GROUP DISTRIBUTION



A larger proportion (80.0%) of respondents were aged 51 years and above, with equal representation in the 51-60 and above 60 age groups. The remaining respondents (20.0%) were between 30 to 50 years old.

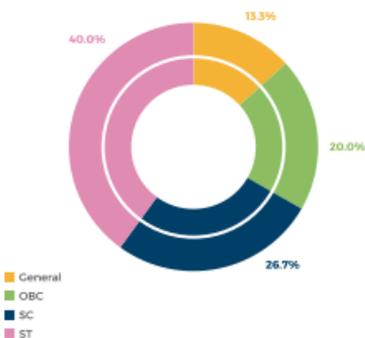
CHART 2: GENDER-WISE DISTRIBUTION



The data shows that a vast majority (80.0%) of the respondents were male, while only a small proportion (20.0%) were female. The predominance of male participants suggests that societal norms, traditional gender roles, or occupational preferences may have influenced program enrollment.

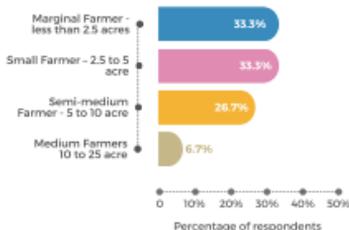


CHART 3: SOCIAL CATEGORY



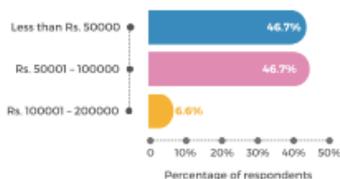
A significant number (40.0%) of respondents belonged to the ST category, followed by those from the SC (26.7%). Respondents from the OBC made up 20.0%, while the smallest group (13.3%) belonged to the General category. The higher representation of ST and SC respondents highlights the program's reach among marginalised communities, suggesting efforts toward social inclusion.

CHART 4: LAND OWNERSHIP



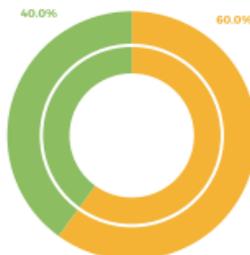
The data shows that a majority of respondents were either marginal (33.3%) or small farmers (33.3%), owning less than 5 acres of land. Semi-medium farmers, with land holdings between 5 to 10 acres, accounted for 26.7%, while only a small proportion (6.7%) belonged to the medium farmer category, owning 10 to 25 acres of land.

CHART 5: ANNUAL FAMILY INCOME



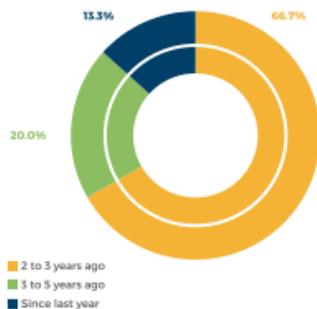
Around half of the respondents (46.7%) reported an annual family income of less than ₹50,000, while an equal percentage fell within the ₹50,001-₹1,00,000 range. A smaller section (6.6%) had an annual income between ₹1,00,001-₹2,00,000.

CHART 6: TYPE OF RATION CARD

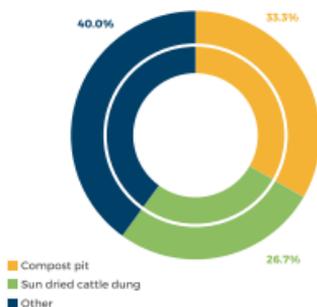


The data indicates that a majority of respondents (60.0%) held an Above Poverty Line (APL) yellow ration card, while the remaining 40.0% possessed a Below Poverty Line (BPL) white ration card.

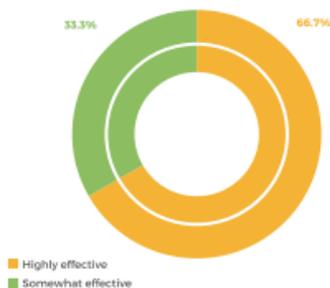


CHART 7: DURATION OF ORGANIC MANURE USAGE


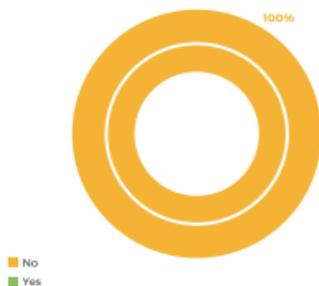
A significant majority of respondents (66.7%) started using organic manure 2 to 3 years ago, while 20.0% have been using it for 3 to 5 years. A smaller segment (13.3%) began using it in the past year.

CHART 8: METHODS USED EARLIER FOR MAKING COMPOST


The data indicates that respondents previously used various composting methods, with 33.3% relying on compost pits and 26.7% using sun-dried cattle dung. A substantial portion (40.0%) employed other techniques for compost preparation. The diverse composting methods highlight the traditional knowledge and varied approaches to organic waste management among respondents.

CHART 9: LEVEL OF EFFECTIVENESS OF THE TRAINING


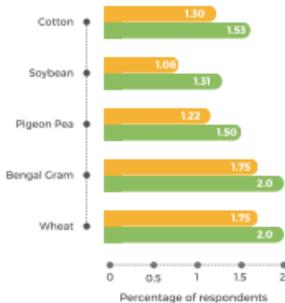
66.7% of respondents found the training highly effective, while a small number (33.3%) considered it somewhat effective. The high effectiveness rating reflects the positive impact of the training on participants. The significant majority who found it highly effective suggests that the program successfully equipped them with relevant skills and knowledge.

CHART 10: PROVISION OF SHADE FOR VERMICOMPOST BED


All of the respondents (100%) reported having a provision of shade for their vermicompost beds, with no cases of beds being left without shade. The universal provision of shade for vermicompost beds highlights the adherence to best practices in composting.

KEY IMPACT FINDINGS OF THE VERMICOMPOSTING PROJECT

CHART 11: AREA COVERED UNDER DIFFERENT CROPS



Before Using Vermicompost

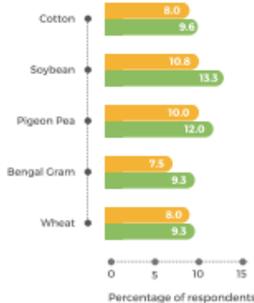
The area covered under different crops was relatively lower before the introduction of vermicompost. Cotton cultivation covered 1.30 acres, soybean 1.08 acres, and pigeon pea 1.22 acres. Bengal gram and wheat had a slightly larger area of 1.75 acres each.

After Using Vermicompost

A noticeable increase in the cultivated area was observed across all crops after using vermicompost. Cotton cultivation expanded to 1.53 acres, soybean to 1.31 acres, and pigeon pea to 1.50 acres. Bengal gram and wheat areas increased to 2.00 acres each.

The data shows a consistent rise in the area covered under all crops, indicating that the use of vermicompost contributed to better soil fertility and productivity. The improved soil health might have supported higher yields, encouraging farmers to expand cultivation, thus highlighting the significant role of vermicompost in sustainable agriculture.

CHART 12: PRODUCTION OF DIFFERENT CROPS



Before Using Vermicompost

The yield of different crops was relatively lower before the introduction of vermicompost. Cotton production stood at 8.0 quintals per acre, soybean at 10.8 quintals, and pigeon pea at 10.0 quintals. Bengal gram and wheat had lower yields of 7.5 and 8.0 quintals per acre, respectively.

After Using Vermicompost

A significant improvement in crop production was observed after using vermicompost. Cotton yield increased to 9.6 quintals per acre, soybean to 13.3 quintals, and pigeon pea to 12.0 quintals. Bengal gram and wheat also recorded higher yields of 9.3 quintals per acre each.

The data highlights a consistent increase in crop productivity across all varieties, demonstrating the positive impact of vermicompost on soil fertility and plant growth.

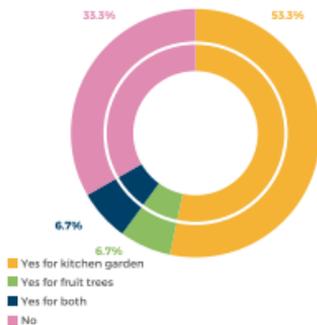


Using vermicompost made a big difference in my kitchen garden. The vegetables tasted better, and the yield increased. I also saw fewer weeds after switching from sun-dried manure, which made weed management easier. The training given during the project was very useful, and I am happy with the program.

- Nandakishor Ughade, Mohagaon Dhole

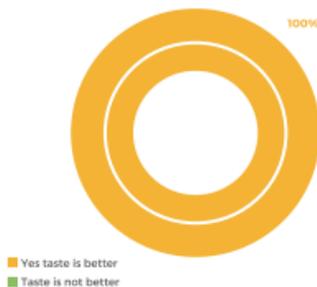


CHART 13: USAGE OF VERMICOMPOST IN KITCHEN GARDEN AND FRUIT TREES



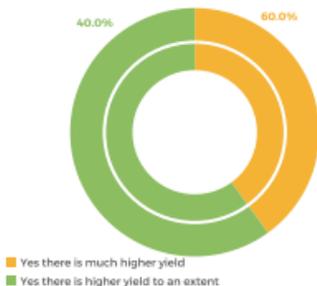
More than half of the respondents (53.3%) used vermicompost in their kitchen gardens, while a considerable number (33.3%) did not use it for any purpose. A smaller section (6.7%) applied vermicompost to fruit trees, and a similar percentage (6.7%) used it for both kitchen gardens and fruit trees. The data highlights that kitchen gardens were the most common area where vermicompost was used, reflecting its acceptance in household farming.

CHART 14: IMPROVEMENT IN THE TASTE OF VEGETABLES AND FRUITS WITH VERMICOMPOST



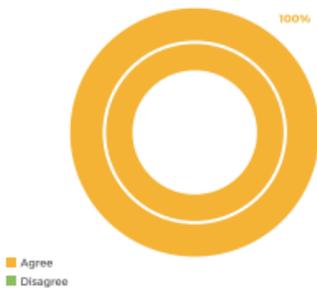
All respondents (100%) who used vermicompost in their kitchen gardens or fruit trees reported an improvement in the taste of vegetables and fruits. The data underscores the positive impact of vermicompost on crop quality, as all users experienced better taste in their produce.

CHART 15: INCREASED VEGETABLE PRODUCTION WITH VERMICOMPOST



60.0% of respondents who used vermicompost in their kitchen gardens or fruit trees observed a higher yield to an extent, while a significant number (40.0%) reported a significantly higher yield. All respondents noted an increase in vegetable production.

CHART 16: EASE OF APPLYING VERMICOMPOST IN GRANULAR FORM



“

After using vermicompost, my vegetable yield improved, and the taste was much better. I also noticed fewer weeds, which reduced my effort in managing them. The training under the project was helpful, and I found the program very useful for my farming.

- Pradip Punjaram Taywade, Ambada

”

FOCUS GROUP DISCUSSION, FETARI VILLAGE

The Focus Group Discussion on Vermicompost in Village Fetari brought together local farmers to discuss their experiences, benefits, and challenges of using vermicompost in their agricultural practices. The participants agreed that vermicompost has significantly improved soil health, leading to better crop yield and reduced dependence on chemical fertilisers. They observed that the taste of fruits and vegetables has enhanced, plant growth is healthier, and the overall production of vegetables has increased. Additionally, they found vermicompost easy to apply in the field, particularly in its granular form, which can be directly applied to plant roots. A notable advantage they highlighted was the reduction in weed growth compared to traditional sun-dried manure.

While the benefits are evident, the farmers also shared some challenges in maintaining vermicompost units. They emphasised the need for careful monitoring of temperature and water levels to ensure the survival of earthworms and the effective decomposition of organic matter. Despite these challenges, they found the training on vermicomposting extremely valuable as it provided them with technical knowledge on setting up and maintaining vermi-beds and the correct processes for producing high-quality compost.

Overall, the farmers in Village Fetari expressed high satisfaction with the vermicompost initiative and all related activities under the program. They acknowledged its positive impact on soil fertility, crop production, and sustainability in farming. However, they suggested that efforts should be made to create better market demand for organic produce, ensuring that they receive fair prices for their crops and are further encouraged to continue organic farming practices.

5.1.4 KEY IMPACT INDICATORS

ADOPTION OF ORGANIC MANURE PRACTICES



Farmers have integrated organic manure, particularly vermicompost, into their farming systems, with many adopting these practices for several years, demonstrating long-term commitment to sustainable agriculture.

ENHANCED CROP YIELD AND EXPANDED CULTIVATION AREA



The application of vermicompost has resulted in noticeable increases in crop yields and the expansion of cultivated areas for key crops, contributing to improved agricultural productivity.

EFFECTIVE TRAINING AND CAPACITY BUILDING



Comprehensive training programs on vermicompost management, aligned with organic farming standards, have successfully equipped farmers with the knowledge and skills needed for effective composting and soil enrichment.

TRANSITION TO ORGANIC INPUTS AND REDUCED CHEMICAL DEPENDENCY



Farmers have shifted entirely to organic inputs like vermicompost, eliminating the use of chemical fertilisers in kitchen gardens and fruit orchards, thereby promoting eco-friendly farming practices.

IMPROVED SOIL HEALTH AND WEED MANAGEMENT



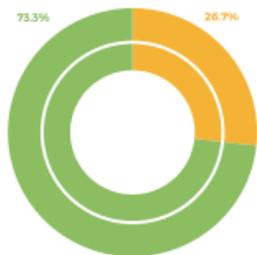
The use of vermicompost has led to better soil health, reduced weed proliferation and easier application in granular form, enhancing overall farm management efficiency.

HIGH LEVELS OF FARMER SATISFACTION



Farmers have expressed significant satisfaction with the vermicompost units and the project's activities, highlighting the positive impact on their farming practices and livelihoods.

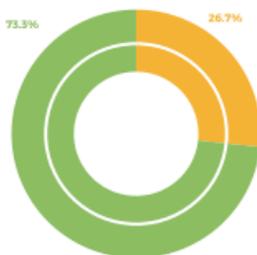
CHART 17: SATISFACTION WITH THE VERMICOMPOST UNIT



■ Highly satisfied
■ Satisfied

A large majority (73.3%) of respondents reported being satisfied with the vermicompost unit, while 26.7% expressed high satisfaction.

CHART 18: OVERALL SATISFACTION WITH PROJECT ACTIVITIES



■ Highly satisfied
■ Satisfied

73.3% reported being satisfied with the project activities, while a small number (26.7%) expressed a high level of satisfaction.



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Farmers gained technical knowledge on vermicomposting, leading to improved compost production.
- Participants reported better crop yield and enhanced produce quality.
- Reduced dependency on chemical fertilisers lowered input costs for farmers.



HOUSEHOLD LEVEL

- Families benefited from increased vegetable production for self-consumption and sale.
- Healthier food choices with reduced chemical exposure were made available to households.
- Economic savings were realised due to lower expenditure on fertilisers.



COLLECTIVE LEVEL

- Community members engaged in shared learning and exchanged best practices in vermicomposting.
- Farmers worked together to improve soil health and agricultural sustainability.
- The initiative encouraged peer learning, leading to wider adoption of organic farming.



COMMUNITY LEVEL

- Increased awareness about organic farming practices and environmental sustainability.
- More farmers showed interest in setting up vermicompost units.
- Strengthened farmer networks advocating for organic produce and better market access.



STATE LEVEL

- Encouragement of eco-friendly farming practices aligned with sustainable agricultural policies.
- Potential to replicate the model in other villages for larger-scale impact.
- Increased contribution to organic farming movements supported by government schemes.



NATIONAL LEVEL

- Supports India's mission to promote sustainable and organic farming practices.
- Contributes to food security through improved soil fertility and productivity.
- Aligns with national policies encouraging chemical-free agriculture and environmental conservation.

Sustainability

OPERATIONAL SUSTAINABILITY



- Farmers were trained in maintaining vermicompost units to ensure long-term use.
- Regular monitoring of vermi-beds was encouraged to maintain productivity.
- Localised solutions were introduced to address common challenges like temperature control and moisture balance.

COMMUNITY ENGAGEMENT AND SUPPORT



- Knowledge-sharing among farmers promoted the continued adoption of vermicomposting.
- Village-based training programs ensured widespread participation and skill development.
- Encouraging organic produce sales strengthened community support for sustainable agriculture.

SCALING AND REPLICATION



- The success of the initiative sets the stage for its expansion to other villages.
- Farmers can act as trainers to support new adopters in the community.
- Collaborations with agricultural bodies and government schemes can enhance program outreach.

5.1.5 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 2: Zero Hunger, SDG 12: Responsible Consumption and Production,
SDG 13: Climate Action



Coherence

Relevance

The vermicompost initiative directly addressed the need for sustainable farming practices by improving soil health and reducing dependence on chemical fertilisers. It aligned with local farmers' concerns about soil degradation, declining crop yields, and increasing input costs. The program was relevant to the broader goal of promoting organic farming and ensuring long-term agricultural sustainability.



Effectiveness

The program effectively enhanced farmers' knowledge and skills in vermicomposting through training sessions and practical demonstrations. Farmers successfully adopted vermicomposting, which led to improved soil fertility, better crop yields, and reduced weed growth. The initiative also encouraged a shift toward organic farming, demonstrating its effectiveness in promoting sustainable agricultural practices.



Sustainability

The long-term sustainability of the initiative was supported by farmers' willingness to continue using vermicompost due to its benefits. Ongoing community engagement and peer learning ensured the continuation of best practices. The initiative also laid the foundation for scaling up organic farming efforts, encouraging market demand for chemical-free produce and fostering a shift toward sustainable agricultural practices.



Efficiency

The initiative was implemented using locally available resources, minimising costs while maximising impact. Training and knowledge-sharing sessions ensured that farmers could set up and maintain vermicompost units with minimal external assistance. The use of demonstration plots further optimised learning and adoption, making the initiative a cost-effective approach to improving soil health and productivity.



Impact

The program led to significant improvements in soil fertility, crop quality, and farmers' economic well-being. Reduced chemical fertiliser use lowered input costs and minimised environmental harm. Farmers reported better-quality produce, which contributed to improved nutrition and market value. Additionally, knowledge-sharing within the community strengthened collective engagement in sustainable farming practices.



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

Index: 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

5.1.6 The Way Forward



EXPAND TRAINING PROGRAMS ON ADVANCED ORGANIC PRACTICES

To further enhance farmers' knowledge and skills, the program should introduce advanced training modules on organic farming techniques, such as biochar application, natural pest management, and crop rotation. This will help farmers diversify their organic practices and improve long-term soil fertility and crop productivity.



PROMOTE SCALING-UP OF VERMICOMPOST UNITS

Encourage more farmers to adopt vermicomposting by providing additional support for setting up and maintaining vermicompost units. This could include subsidies, technical assistance, and access to quality earthworms and raw materials, ensuring wider adoption and sustainability of organic practices.



STRENGTHEN MARKET LINKAGES FOR ORGANIC PRODUCE

Develop stronger market linkages to help farmers sell their organic produce at premium prices. Establishing partnerships with organic markets, cooperatives, and certification bodies can increase farmers' income and incentivise further adoption of organic farming practices.



MONITOR AND EVALUATE SOIL HEALTH REGULARLY

Implement a systematic soil health monitoring program to track the long-term impact of organic manure practices. Providing farmers with regular soil testing and tailored recommendations will help optimise nutrient management and ensure sustained improvements in soil health and crop yields.

5.1.7 CONCLUSION

The Vermicompost Initiative helped farmers adopt organic methods that improved soil quality and crop production. By learning to produce and use vermicompost, they reduced reliance on chemical fertilisers, lowering costs and supporting healthier farming practices. The program also created better market opportunities for organic produce while promoting long-term environmental benefits. Through practical training and shared learning, farmers gained the skills needed to sustain these changes, making organic farming a more viable and effective approach in the region.

5.2. CLEAN COOKSTOVE

5.2.1 EXECUTIVE SUMMARY

Project Background

In collaboration with the RPG Foundation, KEC implemented an initiative to improve household air quality and reduce firewood dependency in rural communities. As part of this effort, energy-efficient cookstoves were distributed across multiple villages, helping families reduce indoor smoke pollution and cook more efficiently. Training sessions were conducted to ensure beneficiaries understood proper usage and maintenance, leading to widespread adoption. The initiative significantly decreased firewood consumption and cooking time, improving the overall well-being of women and their families. Additionally, the project strengthened community engagement by working closely with local partners to ensure long-term impact.

Design Snapshot



Name of the project

Clean Cookstove



Research methodology

Mixed Methods Approach
(Quantitative and Qualitative)



Qualitative Methods

FGD, Interviews, Case Studies and Testimonials



Sampling Technique

Random Sampling Method



Sample Size 'N'

100



Key Stakeholders

Program Team, Panchayat Members and Consultants



Implementation Year

2023 - 24



Implementing Partners

RPG Foundation and Asvata



Project Location

Raigad and Palgarh



Financial year of Impact Assessment

2024-25



SDG Goals



- SDG 3: Good Health and Well-being
- SDG 5: Gender Equality
- SDG 7: Affordable and Clean Energy
- SDG 13: Climate Action

Project Activities



To distribute clean cookstoves to low-income households dependent on traditional stoves.



To conduct awareness sessions and training on the usage and benefits of clean cookstoves.



To monitor stove usage through follow-up visits and provide technical support.



To conduct performance tests to measure firewood reduction and efficiency.

Key Outputs



Distributed clean cookstoves to targeted households.



Trained beneficiaries on proper usage and maintenance of cookstoves.



Conducted follow-up visits to ensure continued adoption and address challenges.



Reduced firewood consumption through efficient cooking technology.



Engaged CRPs for local support and monitoring.

Key Impacts



Improved indoor air quality, leading to better respiratory health among women and children.



Reduced firewood collection time, allowing women to engage in other productive activities.



Lower household expenses on firewood, providing financial relief to families.



Enhanced awareness and adoption of clean cooking technology in rural communities.



Contributed to environmental conservation by decreasing deforestation and carbon emissions.

5.2.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

In many rural households, traditional cookstoves are the primary method of cooking, but they produce harmful indoor air pollution due to inefficient combustion. Women and children are the most affected, suffering from respiratory illnesses, eye irritation, and other health issues caused by prolonged smoke exposure. Additionally, the high dependence on firewood leads to deforestation and increases the burden on women, who spend hours collecting wood. The inefficient cooking process also consumes more time, limiting opportunities for economic and personal growth.

To address these challenges, the program was launched in 2 district - Palghar and Raigad, covering 307 villages in 6 blocks, to promote the use of clean cookstoves, which provide a safer, healthier, and more efficient alternative. By reducing smoke emissions and firewood consumption, the initiative aims to improve household air quality, ease the physical workload on women, and support environmental conservation.

OBJECTIVES OF THE PROGRAM



To improve respiratory health by reducing indoor smoke pollution.



To decrease firewood consumption and promote environmental sustainability.



To reduce the time and effort spent by women on firewood collection and cooking.



To encourage the adoption of clean cooking technologies for long-term benefits.

5.2.3 KEY STUDY FINDINGS AND IMPACT

This chapter presents the key findings and impact of the clean cookstove initiative based on responses from beneficiaries. It highlights changes in cooking practices, firewood consumption, health benefits, time savings, and overall satisfaction. The findings demonstrate significant improvements in kitchen conditions, reduced drudgery, and enhanced well-being, reflecting the positive outcomes of adopting clean cookstoves.

MAJOR FINDINGS OF THE CLEAN COOKSTOVE PROJECT

SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 1: SOCIAL CATEGORY

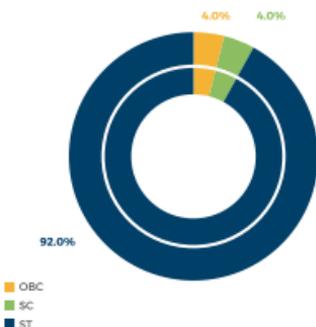


CHART 2: PRIMARY FAMILY OCCUPATION

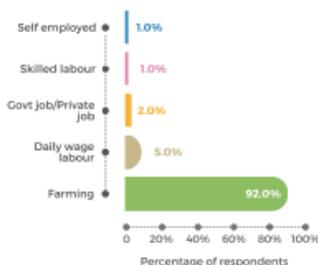
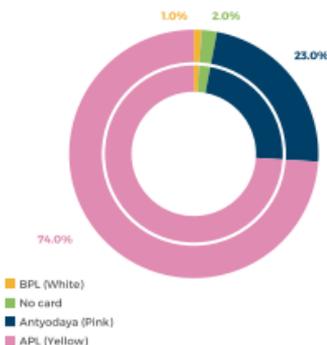
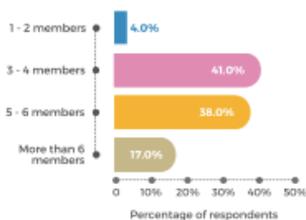


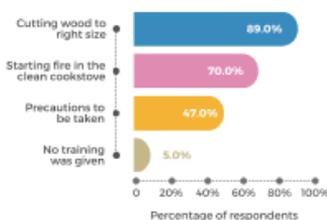
CHART 3: TYPE OF RATION CARD



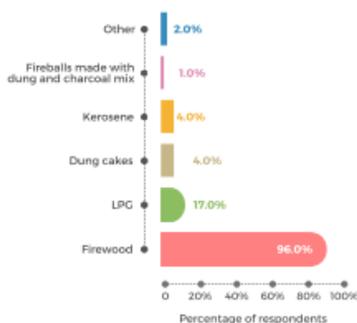
The data indicates that 92% of respondents belong to the Scheduled Tribe (ST) category, with the majority (91%) engaged in farming, while a small percentage is involved in daily wage labour (5%) or other occupations. Ration card distribution shows that 74% hold Above Poverty Line (APL) cards, 23% have Antyodaya (Pink) cards, 1% have Below Poverty Line (BPL) cards, and 2% do not possess any cards. The triangulation of social category, occupation, and ration card data reflects a predominantly agrarian community where farming is the primary source of income, with varying levels of economic status.

CHART 4: TOTAL NUMBER OF FAMILY MEMBERS

The age distribution of respondents shows that the majority (39%) fall within the 21-30 years age group, followed by 26% in the 31-40 years range. The proportion gradually decreases with age, with 22% in the 41-50 years category, 10% in the 51-60 years group, and only 3% above 60 years. This indicates a relatively young population, with a significant portion in the working-age group. In terms of family size, most households consist of 3-4 members (41%) or 5-6 members (38%), while 17% have more than six members, and only 4% have 1-2 members. This suggests that joint or medium-sized families are common in the community.

CHART 5: TRAINING RECEIVED TO USE THE CLEAN COOKSTOVE

The majority of respondents (89%) received training on cutting wood to the right size, highlighting a strong focus on proper fuel preparation for efficient stove usage. A significant portion (70%) was trained in starting a fire in the clean cookstove, ensuring ease of operation. Nearly half (47%) were trained on precautions to be taken, contributing to safety awareness among users. Only a small percentage (5%) reported receiving no training, indicating that most users had access to some level of guidance. The data suggests that training efforts were well-directed toward technical aspects like fuel preparation and fire-starting, with a considerable focus on safety measures as well.

CHART 6: COOKING FUEL USED

The data shows that firewood is the primary cooking fuel used by 96% of respondents, indicating a strong dependence on traditional biomass fuel. LPG is used by 17% of respondents, suggesting that some households have access to cleaner fuel alternatives. A smaller proportion uses dung cakes (4%), kerosene (4%), and fireballs made with a dung and charcoal mix (1%), reflecting the use of alternative fuels in certain households. Additionally, 2% reported using other types of fuel. The data suggests that while firewood remains the dominant fuel source, there is some diversification in fuel usage, with a segment of the population adopting LPG and other alternatives.

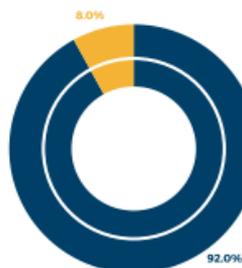
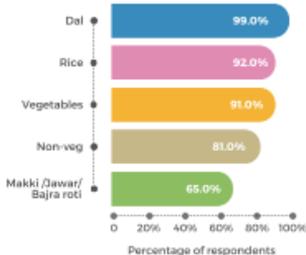
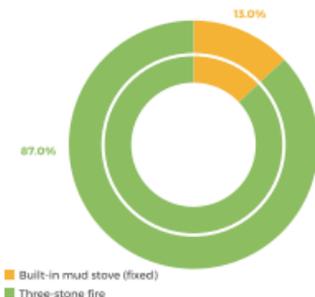
CHART 7: FIREWOOD AS PRIMARY COOKING FUEL

CHART 8: FOOD ITEMS COOKED



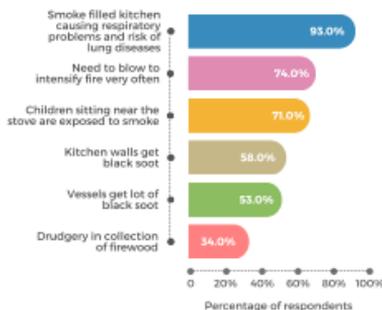
- 91% of respondents did most of their cooking on firewood, confirming its role as the primary cooking fuel in the community. Only 8% reported that they did not rely on firewood, indicating that alternative fuels were used by a small portion of the population. This highlighted a continued dependence on traditional biomass fuel for daily cooking needs.
- The data on food consumption revealed that dal (99%) and rice (92%) were the most commonly cooked food items, indicating their staple status in daily meals. A high percentage (91%) of cooked vegetables suggests a preference for balanced meals. Non-vegetarian food was prepared by 81% of respondents, showing dietary diversity. Additionally, 65% of respondents cooked Makkhi, Jowar, or Bajra roti, reflecting the inclusion of traditional grains in their diet. This suggested that while staple foods formed the core of meals, traditional and locally available grains remained an important part of the food culture.

CHART 9: TYPE OF COOKSTOVE (CHULHA) USED BEFORE CLEAN COOKSTOVE



87% of respondents used a three-stone fire for cooking on firewood before receiving the clean cookstove, indicating that traditional open-fire cooking was the most common practice. Only 13% used a built-in mud stove, suggesting that fixed cooking structures were less prevalent. This highlighted a strong reliance on basic and traditional cooking methods, which likely influenced cooking efficiency, fuel consumption, and household smoke exposure.

CHART 10: PROBLEMS FACED USING TRADITIONAL COOKSTOVE (CHULHA) BEFORE CLEAN COOKSTOVES



Smoke-Related Health Issues

93% of respondents reported that their kitchens were filled with smoke, causing respiratory problems and increasing the risk of lung diseases. This highlights the significant health impact of traditional cookstoves on users, especially those exposed to smoke for extended periods.

Fire Maintenance Challenges

74% of respondents faced the difficulty of frequently blowing on the fire to intensify it, indicating that maintaining a steady flame required continuous effort. This suggests inefficiency in the traditional cooking process, leading to inconvenience and additional physical strain.

Exposure to Smoke

71% of respondents mentioned that children sitting near the stove were exposed to smoke, raising concerns about the health and well-being of young family members. This suggests that traditional cookstoves not only affected the primary cook but also had an impact on other household members.

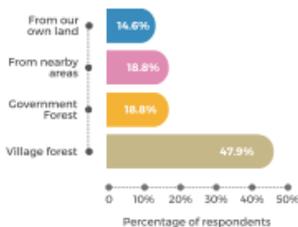
Soot-Related Issues

58% of respondents reported that kitchen walls were covered in black soot, while 53% mentioned that their cooking vessels also accumulated a lot of soot. This indicates that traditional cookstoves contributed to unclean cooking environments and increased the need for frequent cleaning.

Firewood Collection Effort

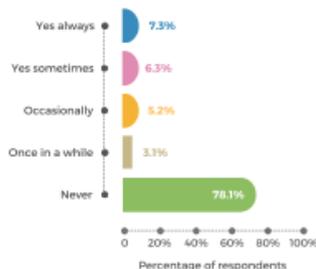
34% of respondents faced difficulties in collecting firewood, highlighting the physical effort and time required to gather fuel for cooking. This suggests that traditional cookstoves not only had health and hygiene concerns but also added to the workload of households.

CHART 11: PLACE OF COLLECTING FIREWOOD



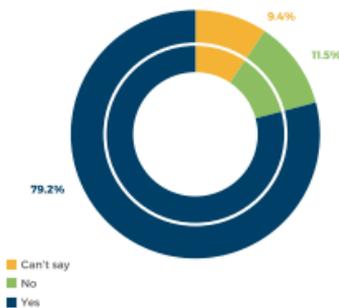
47.9% of respondents sourced firewood from the village forest, making it the primary supply, while others gathered it from their own land (14.6%), nearby areas (18.8%), and government forests (18.8%), reflecting a combination of personal, communal, and public resource utilisation.

CHART 12: FREQUENCY OF FIREWOOD PURCHASE FOR COOKING



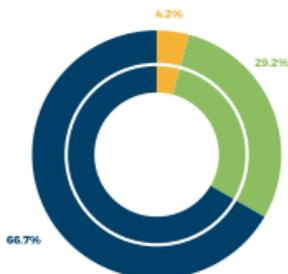
78.1% of respondents never purchased firewood, demonstrating a strong reliance on collected fuel, whereas a smaller proportion had to buy it occasionally (5.2%), sometimes (6.3%), or always (7.3%), highlighting differences in accessibility and availability of firewood.

CHART 13: FIREWOOD SCARCITY



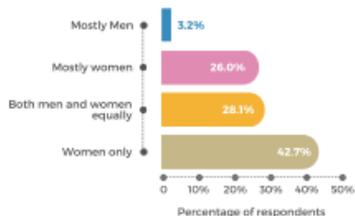
79.2% of respondents felt there was a shortage of firewood, while 11.5% did not face any difficulty, and 9.4% were unsure. The data suggests that a majority experienced limitations in firewood availability, which may influence their fuel choices.



CHART 14: ACCESSIBILITY OF THE FOREST

■ Can't say
■ No
■ Yes

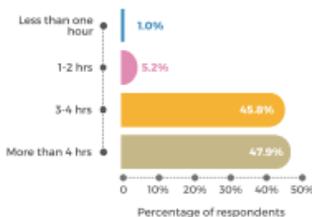
66.7% of respondents found the forest easily accessible, while 29.2% faced some challenges, and 4.2% were uncertain. This suggests that most respondents had convenient access to firewood sources, though some of the respondents faced difficulties.

CHART 15: PRIMARY FIREWOOD COLLECTOR IN THE FAMILY

42.7% of respondents reported that women alone collected firewood, while 26% stated that it was mostly women's responsibility. Additionally, 28.1% mentioned that both men and women shared the task, whereas only 3.2% said men were primarily responsible. This suggests that firewood collection was largely carried out by women, with some participation from men.

CHART 16: DISTANCE TRAVELLED TO COLLECT FIREWOOD

The majority of respondents (53.1%) travelled more than 5 km to collect firewood, while 38.5% covered a distance of around 4-5 km. A smaller portion (7.4%) gathered firewood from 2-3 km away, and only 1% had access within 1 km. This indicates that most households had to go considerable distances to secure firewood.

CHART 17: TIME TAKEN TO COLLECT FIREWOOD IN A DAY

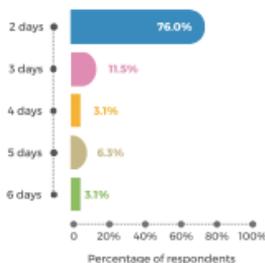
Nearly half of the respondents (47.9%) spent more than 4 hours daily collecting firewood, while 45.8% dedicated 3-4 hours. A small proportion (5.2%) spent 1-2 hours, and only 1% completed the task in less than an hour. The data reflects the significant time investment required for firewood collection.

MAJOR IMPACTS OF THE CLEAN COOKSTOVE PROJECT

CHART 18: FREQUENCY OF FIREWOOD COLLECTION PER WEEK BEFORE USING THE CLEAN COOKSTOVE



CHART 19: FREQUENCY OF FIREWOOD COLLECTION PER WEEK AFTER USING THE CLEAN COOKSTOVE



Firewood collection before the clean cookstove

Before adopting the clean cookstove, firewood collection was a frequent activity for most households. 24% of respondents reported collecting firewood daily, while 31.3% collected it three days a week, and 28.1% did so four days a week. A smaller proportion collected firewood twice a week (12.5%), five days a week (3.1%), or six days a week (1%). The data suggests that firewood collection was a regular and time-consuming task for many households.

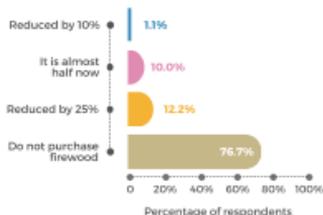
Firewood collection after the clean cookstove

Following the introduction of the clean cookstove, firewood collection frequency significantly decreased.

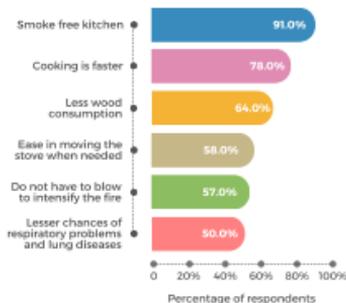
A large majority (76%) of respondents now collect firewood only two days a week, compared to just 12.5% before. Additionally, only 11.5% collect firewood three days a week, compared to 31.3% earlier. The number of respondents collecting firewood four or more days a week has also decreased considerably.

The shift from frequent firewood collection to fewer collection days suggests a significant reduction in fuel dependency. Households that previously needed to gather firewood almost every day now manage with fewer trips, indicating better fuel efficiency. The reduced burden of firewood collection may have contributed to time savings, allowing families to focus on other activities. The clean cookstove appears to have made firewood usage more efficient, leading to a positive change in daily routines.

CHART 20: REDUCTION IN FIREWOOD CONSUMPTION BY PURCHASING AFTER ADOPTING THE CLEAN COOKSTOVE



A large majority (76.7%) of respondents who previously purchased firewood reported that they no longer need to do so after adopting the clean cookstove. Among those who still purchase firewood, 10% experienced nearly a 50% reduction in consumption, while 12.2% reported a 25% decrease. A small fraction (1.1%) saw only a minimal reduction of 10%. The data suggests that the clean cookstove has significantly reduced firewood dependency, leading to substantial cost savings for most households.

CHART 21: BENEFITS OF CLEAN COOKSTOVES


Smoke-Free Kitchen

A vast majority of respondents (91%) reported that the clean cookstove helped maintain a smoke-free kitchen. This indicates a significant improvement in indoor air quality, making the cooking environment more comfortable.

Faster Cooking

More than three-fourths of the respondents (78%) found that cooking became faster with the clean cookstove. This suggests increased efficiency, allowing users to spend less time preparing meals.

Reduced Firewood Consumption

A substantial portion (64%) of respondents noted a reduction in firewood consumption. This indicates that the clean cookstove is more fuel-efficient, helping households conserve resources.

Ease of Movement

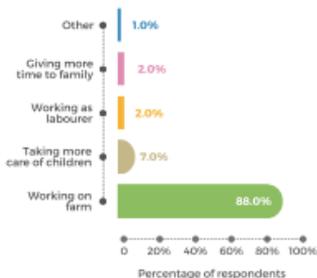
More than half (58%) of respondents highlighted that the stove is easier to move when needed. This suggests improved flexibility and convenience in kitchen arrangements.

No Need to Blow Air for Fire

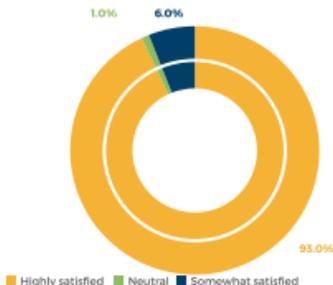
A notable 57% of respondents reported that they no longer had to blow air to intensify the fire. This highlights the improved combustion efficiency of the clean cookstove, reducing effort during cooking.

Lower Health Risks

Half of the respondents (50%) believed that using a clean cookstove reduced the chances of respiratory problems and lung diseases. This suggests a positive impact on household health by minimising smoke exposure.

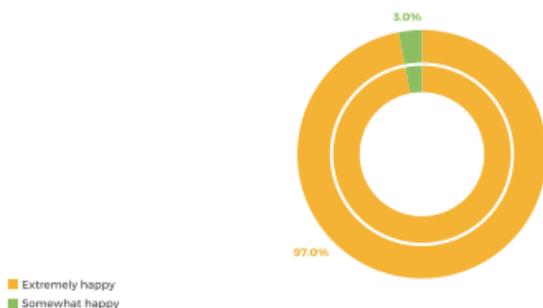
CHART 22: UTILISATION OF TIME SAVED AFTER USING THE CLEAN COOKSTOVE


A significant majority of respondents (88%) utilised the time saved from using the clean cookstove to work on their farms, indicating that the intervention contributed to increased agricultural productivity. A smaller proportion (7%) dedicated more time to childcare, suggesting an improvement in family well-being. A few respondents (2%) engaged in labour work, showing that some individuals could use the extra time for additional income opportunities. A minimal percentage (2%) spent more time with family, and a very small number of respondents engaged in other activities, reflecting diverse ways in which saved time was utilised based on individual priorities.

CHART 23: LEVEL OF SATISFACTION WITH THE REDUCED DRUDGERY BECAUSE OF THE CLEAN COOKSTOVE


A vast majority of respondents (93%) expressed high satisfaction with the reduction in drudgery brought by the clean cookstove, highlighting its role in making cooking more convenient and less labour-intensive. The overall response was overwhelmingly positive, demonstrating the significant ease it added to daily household tasks.

CHART 24: THE EXTENT TO WHICH HAPPY WITH USING THE CLEAN COOKSTOVE



97% of respondents reported feeling extremely happy using the clean cookstove, emphasising its positive impact on their cooking experience. The widespread happiness among users reflects the stove's effectiveness in improving both efficiency and comfort in their daily lives.



FOCUS GROUP DISCUSSION ON CLEAN COOKSTOVE

The assessment team conducted a focus group discussion to understand the impact of the clean cookstove initiative and gather feedback from the community. Participants highlighted that the clean cookstove has significantly improved their daily lives by reducing smoke, leading to fewer respiratory illnesses, especially among women who cook regularly. With less firewood consumption, cooking has become more efficient, convenient, and time-saving. The initiative was introduced to the community through awareness sessions where the project team demonstrated the benefits and proper usage of the cookstove. Each household contributed a small amount for the cookstove, making it accessible while fostering a sense of ownership.

During distribution, users received a live demonstration of how to operate and maintain the stove. However, participants noted that follow-up visits by trained personnel have been infrequent, and they recommended periodic check-ins to ensure optimal usage. The clean cookstove is easy to use, cooks food faster, and requires significantly less firewood compared to traditional stoves. Although most villagers collect firewood from nearby forests, they acknowledged a decline in tree cover over the past 50 years, making firewood collection more challenging. With about 50% of households having LPG connections under the Ujjwala Scheme, financial constraints prevent some families from refilling cylinders regularly, leading them to rely on alternative fuels like dung cakes and kerosene.

One of the most significant benefits reported was the drastic reduction in kitchen smoke, improving overall health conditions. Women and children experience fewer respiratory issues, and the kitchen remains cleaner, with less black soot accumulating on utensils and walls. The convenience of the clean cookstove has allowed women to save time, which they now utilise for farming, childcare, and household chores. Additionally, cooking has become more comfortable as the need to constantly blow on the fire has been eliminated, and family members can now sit together in the kitchen without discomfort.

While most families have adopted the clean cookstove, around 30–40% of those who did not receive one still rely on traditional stoves. Some continue using them for specific cooking needs. Participants expressed overall satisfaction with the program but pointed out gaps in coverage, requesting that the remaining households also receive cookstoves. They also recommended periodic follow-up visits and additional training sessions to maximise the benefits of the initiative. Expanding the distribution to all households would further enhance the impact and sustainability of the program.



CASE STUDY 1

Harshala Digha, a 22-year-old farmer from Vinval village in Palghar District, Maharashtra, has always been responsible for managing her household, including cooking for her family of six. Using a traditional stove meant enduring long hours of exposure to thick smoke, resulting in persistent coughing, eye irritation, and discomfort. Additionally, she had to spend significant time collecting firewood from the nearby forest, a physically demanding task that took away hours she could have used for farming or other productive activities.

The introduction of a clean cookstove brought a noticeable transformation to her daily life. The reduced smoke made cooking more comfortable, and her kitchen remained cleaner without the constant buildup of soot. Her health improved significantly as her cough subsided and eye irritation disappeared. The new stove's efficiency also reduced firewood consumption, cutting down collection time by half. With the extra time, Harshala started working as a farm labourer, providing additional income for her family. The clean cookstove not only enhanced her well-being but also created an opportunity for financial empowerment



It was heartbreaking to see my wife constantly coughing due to the smoke in our kitchen. Ever since we started using the clean cookstove, her health has improved, and cooking has become much quicker. We also use less firewood, which helps us save money. This has truly been a blessing for our family.

- Raghunath Digha, Vinval village





INTERVIEW - MOHEDDEN SHAIKH, PROJECT COORDINATOR, KEC CLEAN COOKSTOVE PROGRAM

Mohedden Shaikh, the Project Coordinator of the KEC Clean Cookstove Program, has been associated with the initiative for one year. With one year of experience in project implementation, he has played a crucial role in conducting the Kitchen Performance Test (KPT), monitoring the program, providing technical support, and assessing the needs of beneficiaries. His contributions have been instrumental in ensuring the success of the program, which has distributed 15,000 clean cookstoves across Poladpur, Sudhagad-Pali, Karjat, Jawahar, Mahad, and Pen. According to Mohedden, the program has significantly impacted households, particularly in Jawahar, where around 90% of families, and in Mahad, where 80-90% of families are efficiently using clean cookstoves. He observed a notable reduction in respiratory illnesses, especially among women, and an overall improvement in health conditions. Additionally, he noted that the reduced cooking time has allowed women to engage in other productive activities.

Mohedden explained that the beneficiaries were mobilised through the involvement of CRPs, who were local NGO workers familiar with the area. Villages were selected based on past experiences and recommendations from CRPs, followed by surveys to assess demand. To raise awareness, demonstrations were conducted in selected villages to teach women how to use the clean cookstove. The community-level workshops received a positive response, with many women expressing interest in purchasing the cookstove. The selection criteria for beneficiaries included households that previously used traditional cookstoves and had less than ten family members due to the limited capacity of the new stoves. The selection of project villages involved discussions with the Sarpanch and local community leaders, with priority given to low-income families who relied on traditional stoves. He mentioned that most beneficiaries previously used three-brick layered stoves for cooking. He mentioned that kerosene was not available in most villages, and although around 50% of households had LPG connections, many continued to rely on firewood due to the high cost of refilling gas cylinders. Efficiency checks were conducted through monitoring visits six months after distribution, but systematic trials were not performed unless issues were reported. However, he confirmed that the clean cookstoves reduced firewood consumption by 60-70% and significantly decreased cooking time.

Describing the distribution process, Mohedden explained that surveys were conducted to identify interested families, followed by demonstration sessions and registration of beneficiaries. The cookstoves were then delivered to the selected households. Each beneficiary initially paid ₹300, with an additional ₹100 collected after one year. He stated that the collected funds were maintained in a separate account and planned to be used for community health initiatives and cooking competitions. Since the clean cookstove required smaller firewood pieces, beneficiaries had to cut them into 2-inch sizes for proper usage.

The project team provided training to beneficiaries at the beginning of the project and visited villages regularly to address any concerns. If a cookstove had functional problems, technical support was provided. CRPs were equipped with a mobile app to record beneficiary data and received one demonstration unit per block to aid in awareness sessions.

Regarding stove efficiency, the project team conducted Water Boiling Tests (WBT), Kitchen Performance Tests (KPT), and Controlled Cooking Tests (CCT) to measure firewood consumption. In Karjat and Mahad, 20 households participated in these tests over five days, with data recorded on household size, cooking patterns, and firewood usage. He confirmed that beneficiaries primarily collected firewood from nearby forests, which was freely available. Measurements showed that clean cookstoves reduced firewood consumption by 60-70% compared to traditional stoves. While no official data on forest depletion was available, locals had not reported major concerns. Mohedden also stated that there was no concrete evidence of reduced forest movement due to the program and that no threats from wild animals were reported while collecting firewood.

Although women reported fewer respiratory issues, Mohedden noted that there was no official medical data to confirm this improvement. He explained that the program was monitored by Anubhav Pratishthan Trust under the guidance of RFG Consultants, with field-level support provided by Anubhav's team. If a cookstove was not functioning properly, technical support was offered to ensure continued use. However, he acknowledged that some women found the single-burner design insufficient for cooking full meals, leading to the continued use of traditional stoves for certain dishes. He suggested that a dual-burner cookstove would better meet their cooking needs.

Despite the program's success, Mohedden identified gaps in field-level monitoring due to a shortage of staff and emphasised the need for more follow-up visits to ensure sustained usage. He recommended increasing manpower and funding to improve monitoring, expanding the program to nearby tribal areas where firewood dependence remained high, and upgrading the cookstove design to include a dual-burner model for greater efficiency.

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CASE STUDY 2

Shidi Kiran Digha, a 24-year-old resident of Vinval village in Palghar District, Maharashtra, was deeply concerned about the health of her two young children, who often stayed near the kitchen while she cooked. The traditional mud stove filled their small home with thick smoke, causing frequent coughing and sneezing among family members. Prolonged exposure to the smoke also led to breathing difficulties and persistent headaches for Shidi herself.

The introduction of a clean cookstove brought a significant change to her household. With improved air quality, her children can now sit and play near the kitchen without being affected by smoke. Cooking has become faster and more convenient, allowing her to spend more quality time with her family. Additionally, the reduced firewood consumption has eased the financial burden of purchasing wood, especially during the monsoon season. Cooking, once a daily struggle, has now become a healthier and more enjoyable experience for her.



I used to go to the forest every week to collect firewood, often returning with cuts and bruises from thorny bushes. The clean cookstove has reduced our dependence on firewood, sparing me from those exhausting trips. My family is much more at ease now.

- Matthi Ramji Morgha, Gyaneshwar village





INTERVIEW WITH DR. KARABI DUTTA, CONSULTANT – RPG

Dr. Karabi Dutta highlighted the significant health benefits of the clean cookstove program, particularly for women, which reduces indoor air pollution and respiratory issues. She noted that adoption rates were high, with most beneficiaries using the stoves efficiently. The reduction in firewood collection has also freed up time for women to engage in other productive activities.

She explained that villages were selected based on field experience and inputs from CRPs, ensuring the program reached the most suitable areas. Beneficiaries were chosen based on their dependence on traditional stoves and economic needs.

The program distributed the T-Energy Cookstove by Gobber Tesco, which is known for its efficiency and faster cooking. Performance was assessed through standardised tests like KPT and WBT, which confirmed reduced firewood consumption. Dr. Dutta emphasised that while training was provided and follow-up visits were conducted, some women found a single cookstove insufficient, occasionally reverting to traditional stoves. She identified manpower limitations as a key challenge in monitoring stove usage.

To improve the program, she recommended increasing field staff, expanding to tribal areas, and providing two stoves per household to better suit cooking needs. Strengthening monitoring mechanisms would also ensure long-term adoption and sustained benefits.



My wife struggled with breathing while cooking, and I felt powerless to help. Now, our kitchen is free from thick smoke, and her coughing has reduced significantly. It may seem like a small change, but it has made a huge difference in our daily lives.

- Rahe Gangaram Khutade, Vinval village





CASE STUDY 3

Gangi Raghu Khutade, a 50-year-old widow from Vinval village in Palghar District, Maharashtra, has long shouldered the responsibility of managing a household of eight on her own. Cooking on a traditional stove was time-consuming and physically demanding, requiring her to spend hours preparing meals. Collecting firewood added to her challenges, as carrying heavy bundles from the forest often left her with persistent back pain and sore arms.

The introduction of a clean cookstove has significantly eased her daily struggles. With reduced firewood consumption, she now makes fewer trips to collect wood, saving both time and effort. Cooking has become faster, allowing her to focus more on household chores and caring for her grandchildren. The improvement in air quality has also relieved her from frequent coughing caused by smoke exposure. Although she initially faced minor issues with the stove's net breaking, she finds the overall change beneficial, making her daily routine much easier and more manageable.



Earlier, soot from our stove would cover everything—walls, utensils, even our clothes. Now, my kitchen remains clean, and I no longer spend extra time scrubbing everything. I finally feel proud when guests visit my home.

- Manisha Thetre, Cyaneshwar village



5.2.4 KEY IMPACT INDICATORS

IMPROVED HEALTH AND REDUCED RESPIRATORY ISSUES



The clean cookstove initiative has significantly reduced indoor air pollution, leading to fewer respiratory illnesses, particularly among women and children. This improvement in health conditions has enhanced the overall well-being of households.

INCREASED ADOPTION AND COMMUNITY ENGAGEMENT



The program has achieved high adoption rates, with 80-90% of households in some areas using the cookstoves efficiently. Community engagement through demonstrations and training has fostered a sense of ownership and awareness about the benefits of clean cooking.

REDUCED FIREWOOD CONSUMPTION AND TIME SAVINGS



The clean cookstove has decreased firewood usage by 60-70%, making cooking more efficient and reducing the time spent on firewood collection and meal preparation. This has allowed women to engage in other productive activities.

CARBON CREDIT GENERATION



The program significantly reduces firewood consumption and carbon emissions, contributing to climate mitigation. This reduction supports carbon credit generation, creating opportunities for households to benefit from carbon financing mechanisms.

ENHANCED CONVENIENCE AND CLEANLINESS



The cookstove has made cooking more convenient by eliminating the need to constantly blow on the fire and reducing soot accumulation in kitchens. Families can now sit together in the kitchen without discomfort, improving the cooking experience.

Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Improved respiratory health due to reduced indoor smoke.
- Reduced physical strain from firewood collection.
- Increased time availability for income-generating activities.



HOUSEHOLD LEVEL

- Decreased firewood consumption, leading to cost savings.
- Faster cooking time, allowing women to engage in other activities.
- Cleaner kitchens with reduced soot accumulation.



COLLECTIVE LEVEL

- Enhanced awareness of clean cooking practices among multiple households.
- Strengthened decision-making power of women in adopting sustainable solutions.
- Encouraged behavioural change towards cleaner cooking technologies.



COMMUNITY LEVEL

- Lower dependence on forest resources, reducing environmental degradation.
- Greater community participation in clean energy adoption.
- Improved overall air quality in rural areas.



STATELEVEL

- Contributed to policy discussions on clean cooking solutions.
- Demonstrated a scalable model for rural energy efficiency initiatives.
- Strengthened collaboration between NGOs, government agencies, and private sector stakeholders.



NATIONAL LEVEL

- Aligned with India's clean energy and sustainability goals.
- Supported the government's mission to promote clean cooking solutions.
- Contributed to national efforts in reducing carbon emissions and deforestation.

Sustainability

OPERATIONAL SUSTAINABILITY



- Ensured the durability and efficiency of clean cookstoves through regular maintenance and support.
- Provided training to users on proper stove usage and minor troubleshooting.
- Established a local supply chain for stove parts and replacements.
- Trained personnel for frequent home visits regarding cookstove maintenance issues.

COMMUNITY ENGAGEMENT AND SUPPORT



- Conducted awareness sessions to reinforce the benefits of clean cooking solutions.
- Encouraged local leaders and self-help groups to advocate for the adoption of clean cookstoves.
- Created a support network for continued knowledge sharing and feedback.

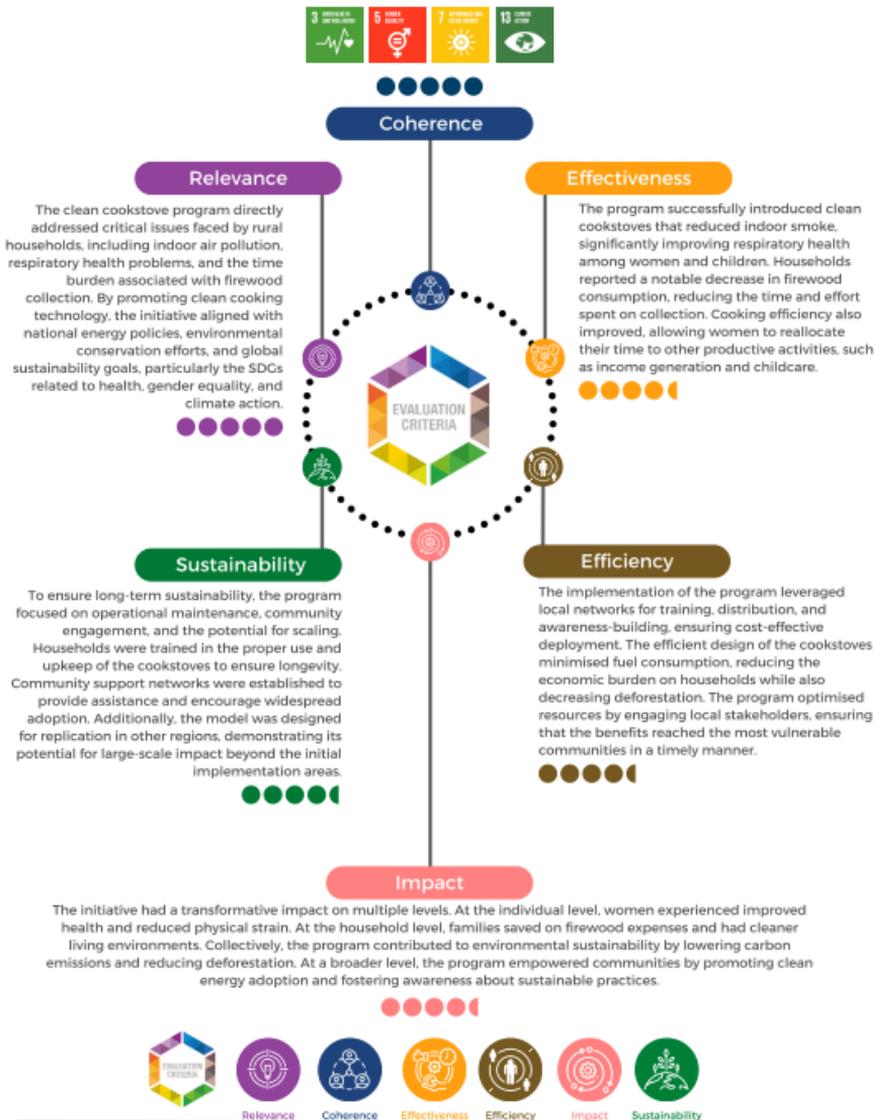
SCALING AND REPLICATION



- Developed a model that can be replicated in other rural communities.
- Partnered with stakeholders to expand clean cooking initiatives across regions.
- Integrated learnings from the project into broader sustainable development programs.

5.2.5 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 3: Good Health and Well-being, SDG 5: Gender Equality, SDG 7: Affordable and Clean Energy
SDG 13: Climate Action



Index: 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

5.2.6 THE WAY FORWARD



EXPAND DISTRIBUTION TO UNCOVERED HOUSEHOLDS

Extend the program to reach the remaining 30-40% of households still using traditional stoves. This will ensure equitable access to clean cooking solutions and maximise the program's impact.



INTRODUCE DUAL-BURNER COOKSTOVES

To address the limitations of single-burner stoves, introduce dual-burner models that can better meet the cooking needs of families, especially for preparing larger meals.



STRENGTHEN MONITORING AND FOLLOW-UP MECHANISMS

Increase field staff and conduct regular follow-up visits to ensure sustained usage and address any technical issues. This will help maintain the efficiency and longevity of the cookstoves.



PROVIDE ADDITIONAL TRAINING AND AWARENESS SESSIONS

Organise periodic training sessions to reinforce proper usage and maintenance of the cookstoves. This will help beneficiaries maximise the benefits and address any challenges they face.



FOCUS ON TRIBAL AND HIGH-DEPENDENCY AREAS

Expand the program to tribal areas and regions with high dependence on traditional stoves. This will further reduce firewood consumption and improve health outcomes in underserved communities.

5.2.7 CONCLUSION

The Clean Cookstove Program has made a significant impact on the lives of beneficiaries, particularly women, by reducing indoor air pollution, improving health conditions, and saving time and resources. It significantly reduces smoke and wood usage, making cooking more efficient and less labor-intensive. Women now save time, which they are using for income-generating activities like tailoring and agriculture, as well as for childcare and relaxation. The stove's portability eliminates indoor smoke and allows multitasking without the worry of food burning. The adoption of clean cookstoves has led to a noticeable decline in respiratory illnesses and a cleaner cooking environment, while reduced firewood consumption has eased the burden of fuel collection. However, challenges such as limited follow-up visits, insufficient stove capacity for some households, and gaps in monitoring have been identified. To enhance the program's effectiveness, recommendations include increasing field staff for better monitoring, expanding distribution to underserved tribal areas, and introducing dual-burner cookstoves to meet diverse cooking needs. With these improvements, the program can further strengthen its impact, ensuring sustained health and environmental and economic benefits for communities.

5.3. FEVER CLINIC

5.3.1 EXECUTIVE SUMMARY

Project Background

KEC, in collaboration with the RPG Foundation, established fever clinics as independent facilities to screen and manage patients with fever or respiratory symptoms, including potential COVID-19 cases, in line with the National Health Mission (NHM). Located away from main hospitals to prevent cross-contamination, the clinics followed strict infection control measures, including PPE use and biomedical waste management. Clear protocols and roles ensured efficient operations.

Project Activities



To screen and categorise patients into mild, moderate, and severe cases based on symptoms and vital signs.



To conduct COVID-19 testing, manage test positivity rates, and provide immediate medical treatment, including symptomatic relief, oxygen support, and essential medicines.



To prescribe home isolation for mild cases and hospitalisation for moderate to severe cases while offering continuous medical support through telephonic consultations, follow-up calls and home visits.



To refer severe cases to district hospitals, COVID-designated hospitals, or tertiary care centres and conduct contact tracing and awareness campaigns for disease prevention and recovery.

Design Snapshot



Name of the project

Fever Clinic



Research methodology

Descriptive



Qualitative Methods

Structured Interviews



Key Stakeholders

Doctors, NHM members and Program Team



Implementation year

2022-23



Implementing Partners

RPG Foundation



Project Location

Maharashtra



Financial Year of Impact Assessment

2024-25



SDG Goals



- SDG 3: Good Health and Well-being
- SDG 10: Reduced Inequalities
- SDG 17: Partnerships for the Goals

Key Outputs



Early detection and timely treatment of infectious diseases through screening, testing, and patient categorisation.



Effective management of home isolation and hospitalisation with continuous medical follow-ups.



Increased community awareness and strengthened referral systems for severe cases.

Key Impacts



Reduced mortality rates and prevention of disease outbreaks through timely intervention.



Decreased hospital burden by managing mild to moderate cases at fever clinics.



Improved healthcare accessibility for economically disadvantaged populations.



Enhanced community awareness and compliance with preventive measures.



Strengthened healthcare systems through efficient patient management and referrals.

5.3.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The Fever Clinic program evolved to address the ongoing challenges of infectious disease management post-pandemic. While initially established for COVID-19 response, it expanded to cover other acute diseases, ensuring sustained healthcare support in vulnerable communities. The program bridged healthcare gaps, particularly in densely populated and economically weaker areas with limited awareness and infrastructure. By decentralising care, it reduced hospital burden, enabled early detection, and prevented outbreaks. It also played a crucial role in strengthening disease surveillance, providing timely medical intervention, and ensuring equitable healthcare access, including free treatment for marginalised populations.

OBJECTIVES OF THE PROGRAM



Ensure early detection, timely treatment, and prevention of COVID-19 and other acute infectious diseases to reduce mortality and outbreaks.



Enhance healthcare accessibility by decentralising care, supporting home-isolated patients, and strengthening referral systems for severe cases.



Conduct post-COVID screenings, improve disease awareness, and strengthen community preparedness for future health risks.



INTERVIEW - DR. HEMANT MUNDE , SUB DISTRICT HOSPITAL, GANGAKHED

Dr. Hemant Munde, who has been serving at the Fever Clinic for 1 year and 6 months, shared his insights on the initiative. He emphasised that the Fever Clinic program has been transformative in managing infectious diseases, particularly during the COVID-19 pandemic. The clinic's focus on early detection, timely treatment, and prevention of outbreaks has significantly reduced mortality rates and eased the burden on larger hospitals. He highlighted how the program has improved healthcare accessibility, especially for underserved communities, and raised awareness about disease prevention. During the pandemic, the clinic saw an average of 80-120 patients daily, which has now reduced to 30-50 patients post-COVID.

He noted that the COVID test positivity rate in the clinic was similar to other areas in the state, but higher rates were observed in densely populated and economically weaker sections, likely due to limited healthcare access and awareness. Patients were categorised into mild, moderate, and severe cases based on symptoms and vital signs. Mild cases included fever and cough without breathing difficulties, while severe cases involved respiratory distress and low oxygen levels. Immediate actions for positive cases included isolation, symptomatic treatment, contact tracing, and patient education.

However, he acknowledged the challenges, such as high patient loads, space constraints, PPE shortages, and staff fatigue. He recommended increasing staff and space, improving test result turnaround times, and strengthening follow-up mechanisms for home-isolated patients. He also stressed the importance of community awareness for early testing and prevention. He believes the Fever Clinic should continue as a permanent initiative, serving as a model for community healthcare delivery.





INTERVIEW - SUMEDHA JI, NURSE, FEVER CLINIC, GANGAKHED

Sumedha Ji, a dedicated nurse at the Fever Clinic, shared her experiences and reflections on the program. She described her role as both challenging and rewarding, particularly during the pandemic. The Fever Clinic, she explained, has been a lifeline for many, providing early care and reducing the burden on larger hospitals. Sumedha Ji highlighted how the clinic has been especially beneficial for the poor, who often receive free treatment. During the pandemic, the clinic saw 80-120 patients daily, a number that has since dropped to 30-50 patients per day, making it more manageable.

As a nurse, she played a key role in categorising patients based on symptoms and vital signs. Most patients had mild symptoms like fever and cough, but some required closer monitoring for moderate symptoms such as breathlessness. For positive cases, mild patients were advised home isolation with clear instructions, while moderate to severe cases were referred to higher healthcare centres. The clinic also provided continuous support through telephonic consultations and home visits, ensuring patients recovered well.

She mentioned that the porta cabins, though functional, had space constraints, making it challenging to maintain comfort during peak times. She also pointed out the challenges of high patient loads, PPE shortages, and ensuring compliance with COVID protocols. Despite these hurdles, she felt the clinic was well-equipped with essential medicines and medical supplies.

Looking ahead, Sumedha Ji recommended increasing staff and infrastructure to handle patient loads more effectively. She also emphasised the need for better community awareness about early testing and prevention. Sumedha Ji expressed her hope that the Fever Clinic program would continue, as it has proven to be a vital tool in managing infectious diseases and serving the community.



5.3.3 KEY IMPACT INDICATORS

EFFECTIVE DISEASE MANAGEMENT



Focusing on prevention, early detection, personalized care, and continuous monitoring to improve health outcomes and quality of life.

IMPROVED HEALTHCARE ACCESSIBILITY



Enhanced access to healthcare services, ensuring timely detection and management of COVID-19 cases.



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Patients received early detection and timely treatment for infectious diseases, improving health outcomes.
- Free medical services for economically weaker sections ensured equitable access to healthcare.
- Increased awareness about disease prevention and hygiene practices empowered individuals to take proactive health measures.



HOUSEHOLD LEVEL

- Families benefited from reduced healthcare costs due to free services and early intervention.
- Home isolation support and teleconsultations minimised disruptions to household routines.
- Improved health literacy led to better disease management and prevention within families.



COMMUNITY LEVEL

- The Fever Clinic reduced the burden on larger hospitals, ensuring better resource allocation for critical cases.
- Community awareness programs enhanced collective understanding of infectious disease prevention.
- Targeted interventions in densely populated areas improved healthcare access for vulnerable groups.



STATE LEVEL

- The program contributed to lower mortality rates and controlled outbreaks, supporting public health goals.
- Effective triaging and referral systems streamlined patient management across healthcare facilities.
- Increased testing and contact tracing aligned with state-level pandemic response strategies.



NATIONAL LEVEL

- The Fever Clinic model demonstrated the effectiveness of decentralised healthcare in managing infectious diseases.
- Early detection and containment efforts supported national goals to reduce disease transmission.
- The program's success highlighted the importance of community-based healthcare in strengthening national health systems.

Sustainability

SCALABLE MODEL FOR FUTURE OUTBREAKS



The Fever Clinic program has established a scalable and replicable framework for managing infectious diseases, ensuring preparedness for future outbreaks. Its decentralised approach can be adapted to other regions, promoting long-term healthcare resilience.

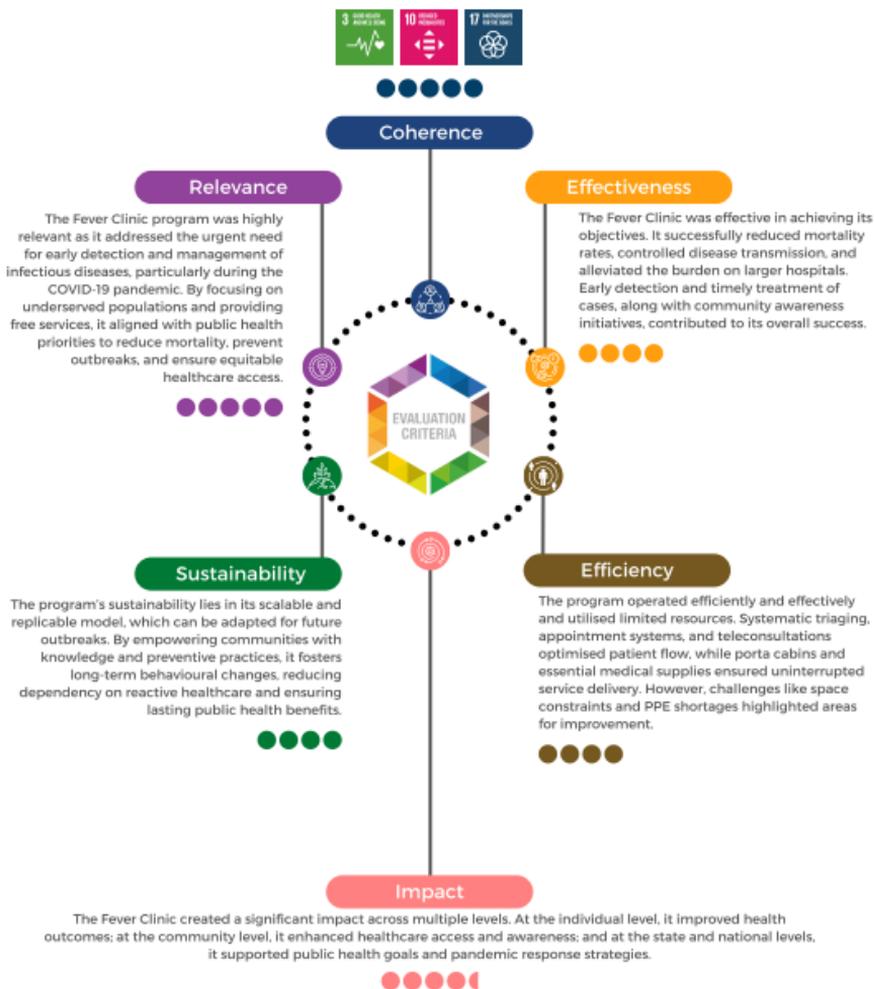
COMMUNITY EMPOWERMENT AND AWARENESS



By integrating community education and preventive measures, the program fosters sustainable behavioural changes. This reduces dependency on reactive healthcare and encourages proactive health management, ensuring long-term public health benefits.

5.3.4 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 3: Good Health and Well-being, SDG 10: Reduced Inequalities, SDG 17: Partnerships for the Goals



5.3.5 The Way Forward



STRENGTHEN FOLLOW-UP MECHANISMS

Improving follow-up systems for home-isolated patients through regular teleconsultations and home visits is crucial. This will ensure continuous care, monitor recovery, and prevent complications, especially for vulnerable populations.



INCREASE COMMUNITY AWARENESS AND TESTING

Raising awareness about early testing and preventive measures through targeted campaigns will encourage timely healthcare-seeking behaviour. This will help in early detection, reduce transmission, and align with public health goals.

5.3.6 CONCLUSION

The Fever Clinic program has been a critical intervention in managing infectious diseases, offering early detection, timely treatment, and community awareness. Despite challenges like space and workforce limitations, its impact on reducing mortality and healthcare burdens is undeniable. With strategic improvements, this scalable model can continue to strengthen public health systems and ensure preparedness for future outbreaks.

5.4. HEALTH CHECK-UP

5.4.1 EXECUTIVE SUMMARY

Project Background

This comprehensive healthcare initiative was implemented across multiple locations in India, including Madhya Pradesh, Jaipur, New Delhi, and other project sites, with the primary goal of improving access to quality healthcare for underserved populations, particularly women and children. In Madhya Pradesh, Suvidha Polyclinic and Research Centre Pvt. Limited organised health camps targeting 2,000 women, offering services such as gynaecological check-ups, general health consultations, and diagnostic tests, followed by detailed reports and follow-ups. In Jaipur, Saraswati Swarojgar Evam Prashikshan Sansthan (SSEPS) conducted 10 health camps, benefiting 3,350 women through general health services, diagnostic tests, and awareness campaigns on issues like anaemia and gynaecological health. In New Delhi, the School Health Annual Report Programmes (SHARP) focused on children from Anganwadi centres and schools, conducting general health screenings, dental and ENT check-ups, and growth monitoring (height, weight, BMI) for a target of 9,500 screenings, with each camp serving 180-200 children. Additionally, K. B. Haji Bacchooli Charitable Ophthalmic and ENT Hospital organised eye examination camps, serving 100-200 individuals per camp, addressing vision-related issues such as refractive errors and cataracts, and providing free spectacles and referrals for further treatment. The project emphasised preventive care, health education, and awareness, particularly for women and children, while ensuring follow-up care and referrals to primary health centres or specialised hospitals. By collaborating with local authorities, schools, and community organisations, the initiative successfully reached thousands of beneficiaries, significantly improving healthcare access and awareness in rural and urban areas.

Project Activities



To organise general health, women's health, and eye care camps offering services such as gynaecological check-ups, orthopaedic consultations, general physician services, blood sugar tests, ECGs, X-rays, and eye examinations.



To conduct health education sessions on topics like menstrual hygiene, anaemia prevention, nutrition, immunisation, and safe delivery practices for women and adolescent girls.



To provide free diagnostic tests, including blood sugar, haemoglobin, thyroid, and eye check-ups.



To distribute free medicines, including iron, calcium, and multivitamin tablets, to patients.



To refer patients requiring advanced care to nearby Primary Health Centres (PHCs) or private hospitals for further treatment.



To conduct regular follow-ups to ensure continuity of care and monitor patient progress.

Design Snapshot



Name of the project

Health camps



Research methodology

Descriptive



Qualitative Methods

Structured Interviews



Key Stakeholders

Camp manager, doctors, nurses,
Directors, CNMs



Implementing Partners

RPC with Implementing Partners -
Saraswati Swarojgar EVM Prashikhan
Sansthan, School Health annual report
Programme, Suvidha Polyclinic and
Research Centre Pvt Limited



Project Location

All KEC locations



Financial Year of Impact Assessment

2024-25



SDG Goals



- SDG 3: Good Health and Well-Being
- SDG 5: Gender Equality
- SDG 17: Partnerships for the Goals



Key Outputs



Over 10 health camps were conducted in various locations, including schools, Gram Panchayat buildings, and community centres, reaching a wide range of beneficiaries.



Approximately 500 women benefited directly from women's health camps, with 50 referred to PHCs or private hospitals for advanced care.



Over 700-800 individuals received services in general health camps, with 200-250 referred for further treatment.



Around 1,200-1,300 spectacles were distributed, and 3,340 individuals received eye care services during eye camps.



Diagnostic services such as blood sugar tests, haemoglobin checks, ECGs, X-rays, and eye examinations were provided to address critical health issues.



Awareness campaigns on menstrual hygiene, anaemia prevention, nutrition, and safe delivery practices were conducted, benefiting women and adolescent girls.

Key Impacts



Increased awareness about preventive healthcare, hygiene, and nutrition led to healthier lifestyle choices among women, children, and community members.



Early diagnosis and timely treatment of gynaecological issues, anaemia, and chronic diseases like diabetes and hypertension improved overall health outcomes.



The reduced stigma around gynaecological issues encouraged more women to seek medical help and openly discuss their health concerns.



Empowerment through knowledge of menstrual hygiene, nutrition, and safe delivery practices enabled women and adolescent girls to make informed health decisions.



Free healthcare services provided rural communities with easier access to medical treatment, alleviating financial burdens.



Distribution of over 1,200 free spectacles significantly improved vision and enhanced the quality of life for beneficiaries.

5.4.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The program was initiated to address the significant healthcare gaps in rural and underserved areas, where access to quality medical services is limited. Many women, children, and community members in these regions suffer from preventable health issues such as anaemia, gynaecological disorders, vision problems, and chronic diseases like diabetes and hypertension. Lack of awareness, stigma, and financial constraints further exacerbate these challenges. The program aimed to bridge this gap by providing free healthcare services, raising awareness, and empowering communities to take charge of their health. The collaboration with local authorities, schools, and organisations like KEC RPC ensured the program's success and sustainability.

OBJECTIVES OF THE PROGRAM



To improve access to quality healthcare services for underserved populations, particularly women and children.



To raise awareness about preventive healthcare, hygiene and nutrition.



To provide free diagnostic services, medicines and referrals for advanced treatment.



To address specific health issues such as anaemia, gynaecological disorders, vision problems and chronic diseases.



To empower communities through health education and awareness campaigns.



To reduce the stigma associated with certain health conditions, particularly gynaecological issues.

5.4.3 KEY STUDY FINDINGS AND IMPACT

The project findings revealed significant health issues among rural and underserved communities, including a high prevalence of anaemia, gynaecological disorders, vision problems, and chronic diseases like diabetes and hypertension. Many women and adolescent girls lacked awareness about menstrual hygiene, nutrition, and safe delivery practices, while others avoided seeking medical help due to stigma or financial constraints. The impact of the project was substantial, with improved health awareness, early diagnosis, and timely treatment for numerous beneficiaries. Over 500 women directly benefited from women's health camps, while 700-800 individuals received care in general health camps, and 1,200-1,300 spectacles were distributed during eye camps. The initiative empowered communities through health education, reduced stigma around gynaecological issues, and provided free diagnostic services, medicines and referrals, significantly improving health outcomes and quality of life for thousands of individuals.





INTERVIEW - PREM GOLHANI , CAMP MANAGER, SUKHADA HOSPITAL

Prem Golhani, the Camp Manager at Sukhada Hospital, shared his experience of organising medical camps in rural areas near the KEC Panagar Plant in Madhya Pradesh. Camps were conducted with the support of local authorities, including the Sarpanch and Gram Panchayat members, to decide the location. Publicity was done using pamphlets, loudspeakers to spread awareness about the services available at the camp, which included consultations with gynaecologists, general physicians, and orthopaedic surgeons. He emphasised the importance of gynaecologists in women's health camps but also mentioned that additional specialists were provided when needed. A team of 10-12 staff members, including doctors, nurses, technicians, and medicine distributors, worked together to ensure smooth operations. He recalled that the camps were held in schools or Gram Panchayat Bhavans, with necessary permissions obtained through the local administration. These camps were supported by KEC RPG, which aimed to provide healthcare services to communities near their industrial plants. Medicines were distributed free of cost.

Speaking about the impact, he mentioned that around 150-200 women attended the women's health camps, while general health camps attracted 200-250 people. Many women, especially those hesitant to discuss their health concerns, benefited from gynaecological consultations. He pointed out that conditions like white discharge, cervical infections, and anaemia were common, with many pregnant women having alarmingly low haemoglobin levels. Patients with suspected complications were referred to the nearest PHC for further diagnosis and treatment.

Prem highlighted that in addition to medical services, awareness sessions were conducted on menstrual hygiene, safe drinking water, nutrition, immunisation, and pregnancy care. Adolescent girls were educated on menstrual health and pad disposal. Pregnant women were encouraged to seek regular check-ups at PHCs, get blood tests done, and take necessary precautions for safe delivery. He observed that many women, particularly older ones with chronic pain, found relief through orthopaedic consultations, as they often avoided travelling to cities for treatment. He estimated that around 500 women benefited from women's health camps, while 700-800 women availed services at general health camps. Of these, about 50 women from gynaecology camps and 200-250 from general camps were referred for further medical assistance, including X-rays and specialised tests at PHCs or private hospitals. He believed that these camps played a crucial role in making healthcare accessible to rural populations, spreading awareness, and encouraging people to seek timely medical attention.





INTERVIEW - DR. B.K. DANG, DIRECTOR, SUVIDHA POLICLINIC RESEARCH CENTRE, JABALPUR

Dr. B.K. Dang, Director of Suvidha Polyclinic Research Centre, shared his experience of conducting medical camps in rural areas near Jabalpur. He explained that the camps were organised at Gram Panchayats, where a team of six doctors, four paramedical staff, and three to four helpers worked together to provide healthcare services. The camps were well-equipped with an X-ray machine, facilities for blood sugar tests, and a dedicated team to record patients' clinical history. Medicines were distributed based on individual needs, ensuring that every patient received appropriate treatment.

He mentioned that around 150 people attended each camp, with nearly 60-70 undergoing X-rays and about 80-85 getting blood sugar tests. Every patient had their blood pressure and pulse checked, and those requiring further medical attention were advised accordingly. He emphasised that proper records were maintained, including the names and contact details of the patients. He believed that the camps had a significant impact, as all those who consulted doctors received medicines and medical guidance.

Speaking about the women's health camps, he noted that many women were diagnosed with serious conditions, including cancer. These women were counselled and advised on the urgency of seeking treatment. He expressed concern over the lack of medical awareness in rural areas, where many people relied on superstitions rather than seeking professional healthcare. He recalled that during a camp in Firodi near Sihora village, 180 patients were examined, and nearly 20-22 individuals were diagnosed with diabetes for the first time. Many others who visited for back pain issues were found to have dangerously high blood pressure levels, yet they had never undergone a check-up before.

Dr. Dang highlighted that these camps played a crucial role in bringing medical services closer to rural communities and encouraging people to prioritise their health. He believed that increasing awareness and accessibility to medical care could help prevent severe health complications in the future.





INTERVIEW - JAGRUTI SINGH, NURSE, SUVIDHA HOSPITAL, GORAKHPUR

Jagruti Singh, a nurse at Suvidha Hospital in Gorakhpur with six years of experience, shared insights about the medical camps organised in rural areas. She mentioned that each camp consists of a team, including doctors from different specialities, nursing staff, pharmacists, and helpers. Camps are typically held at schools, gram panchayats, or Anganwadi centres to ensure accessibility for villagers. Women's health camps are organised frequently, as many women hesitate to discuss their health concerns openly. The camps usually run from 10 AM to 4 PM, with travel time extending the workday to nearly 10 hours.

Jagruti observed that while both general and women's health camps attract similar numbers, many women remain reluctant to seek gynaecological consultations. Common health issues among women include white discharge, anaemia, and orthopaedic concerns, particularly in those aged 30 and above. She noted that adolescent girls rarely visit the camps due to hesitation. The camps also provide health awareness on diet, diabetes, blood pressure, and menstrual hygiene. While basic tests like haemoglobin checks are conducted, patients requiring further diagnosis are advised to visit government hospitals.

According to Jagruti, the camps have had a positive impact by increasing health awareness and access to medical services, though challenges remain in encouraging women to prioritise their reproductive health. She emphasised the need for continued efforts in health education to improve community well-being.





INTERVIEW - ANKITA GUPTA, PROJECT COORDINATOR

Ankita Gupta worked as the Project Coordinator for the KEC Eye Camp, implemented by Saraswati Swarojgar Evam Prashikshan Sansthan in Jaipur, Jhotwara. She had previously worked at ICICI Securities for a few years before joining the organisation in 2016. Under her coordination, multiple health camps, including eye camps, were organised at different locations, mainly in temple gardens where footfall was high. The camps were held at six external locations, apart from two conducted at the centre itself. Each camp had a structured system with designated teams handling registration, organising patient flow, and managing token distribution for various tests such as blood sugar, cholesterol, calcium, uric acid, thyroid, and eye check-ups. The camps operated from 9 AM to 5 PM on a first-come, first-served basis, ensuring patients saw the appropriate specialists, which included general physicians, gynaecologists, and ophthalmologists. Around 12 to 15 staff members managed the camps, with four doctors present at each event, depending on availability. The eye camps screened for refractive errors provided vision check-ups and distributed around 1200-1300 free spectacles to those in need. Although no specific treatments for cataracts or glaucoma were provided, patients received guidance on where to seek further medical care, with some referred to Kalawati Hospital in Shastri Nagar for follow-ups. The awareness campaigns included leaflet distribution, social media promotions, and auto announcements, with efforts made to educate people about eye health and preventive measures, such as dietary changes and limiting mobile screen usage. The camps significantly impacted the community, with high demand leading to additional eye camps being arranged. Patients, especially children, eagerly awaited the distribution of their spectacles, and many inquired about future camps. However, challenges included managing large crowds, particularly around midday, and addressing senior citizens' requests for priority testing. Ankita suggested extending the camps to schools and colleges to address vision issues among students caused by excessive screen time. Despite the challenges, she considered the camps a success, with strong community engagement and positive outcomes for eye health awareness and treatment.



5.4.4 KEY IMPACT INDICATORS

MOBILISATION AND ENROLLMENT OF BENEFICIARIES



Identifying and enrolling individuals, particularly women and children, from underserved rural areas, ensuring they meet eligibility criteria and are motivated to participate in health camps for improved healthcare access.

REFERRAL AND FOLLOW-UP CARE



Ensuring compliance with healthcare standards by referring patients to primary health centres or specialised hospitals for advanced diagnostics and treatment, with continuous follow-up to monitor progress and adherence.

SCREENING AND DIAGNOSIS



Conducting comprehensive health screenings, including gynaecological check-ups, blood sugar tests, and eye examinations, to detect chronic and life-threatening conditions early and provide timely interventions.

IMPROVED HEALTH OUTCOMES AND AWARENESS



Enabling participants to achieve better health outcomes through early detection, treatment, and awareness campaigns, leading to reduced stigma around gynaecological issues and improved overall community health.



Sustainability

POST-CAMP SUPPORT



Providing continuous support through access to free medicines, iron and calcium tablets, and guidance on hygiene and nutrition, ensuring long-term health benefits and sustainability of the initiative.

COMMUNITY OWNERSHIP AND LOCAL PARTNERSHIPS



The program's collaboration with local authorities, such as Sarpanchs and Gram Panchayats, ensures community ownership and long-term sustainability. By involving local leaders and leveraging existing community structures, the program builds trust and encourages continued participation, even after the camps conclude.

CAPACITY BUILDING AND AWARENESS



The focus on health education and awareness campaigns, particularly for women and adolescent girls, creates a lasting impact. By equipping participants with knowledge about menstrual hygiene, nutrition, and preventive care, the program empowers communities to sustain healthy practices independently.

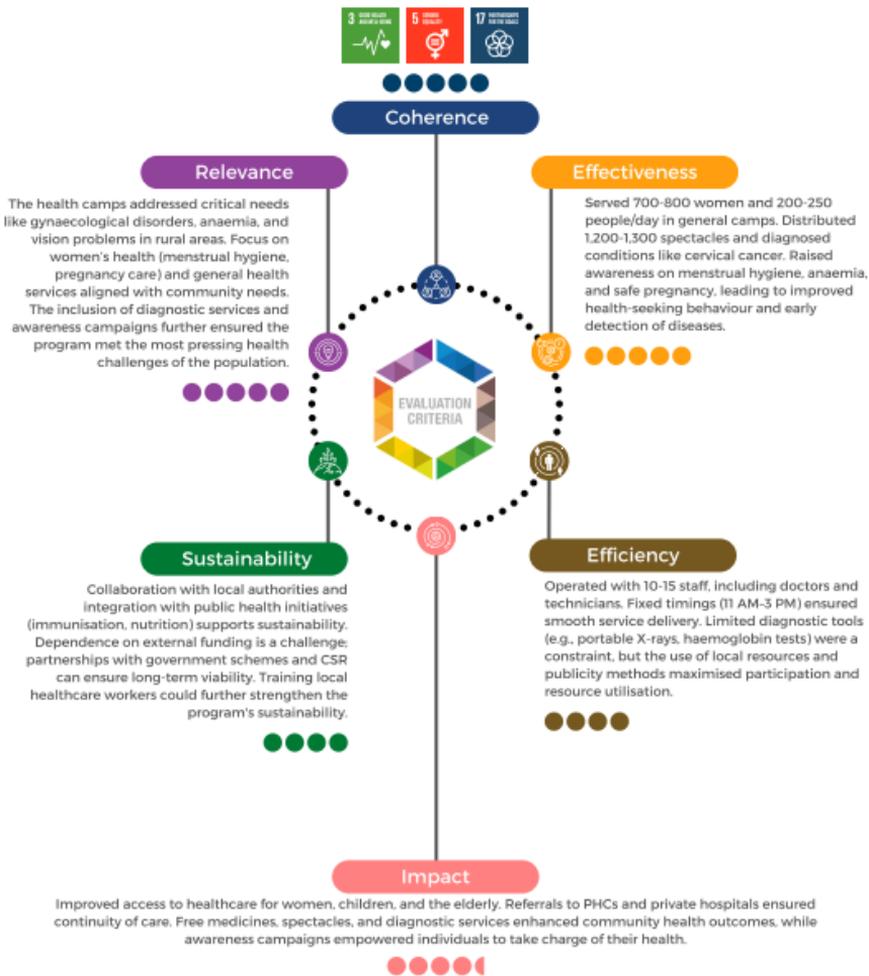
REFERRAL NETWORKS AND FOLLOW-UP SYSTEMS



The establishment of robust referral systems to primary health centres (PHCs) and private hospitals ensures continuity of care. Follow-up mechanisms, including guidance on medication adherence and lifestyle modifications, help maintain the health improvements achieved during the camps, ensuring long-term benefits.

5.4.5 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 3: Good Health and Well-Being, SDG 5: Gender Equality
SDG 17: Partnerships for the Goals



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

5.4.6 The Way Forward



EXPAND DIAGNOSTIC FACILITIES AT CAMPS

Introduce portable X-ray machines and haemoglobin testing kits at health camps to provide immediate diagnostic services. This will reduce the need for referrals and improve the efficiency of the camps, especially in rural areas where access to such facilities is limited.



STRENGTHEN AWARENESS CAMPAIGNS ON WOMEN'S HEALTH

Increase focus on menstrual hygiene, anaemia prevention, and prenatal care through targeted awareness programs in schools and communities. This will help address the stigma around gynaecological issues and encourage more women to seek timely medical care.



IMPROVE FOLLOW-UP MECHANISMS FOR PATIENTS

Establish a digital tracking system to monitor patients referred to PHCs or private hospitals. This will ensure continuity of care and treatment compliance, especially for chronic conditions like cervical cancer and anaemia.



ENHANCE PUBLICITY AND OUTREACH EFFORTS

Use social media, local influencers, and community networks to amplify publicity for health camps. This will help increase participation, especially in areas where turnout is low due to inadequate awareness.



CONDUCT REGULAR EYE HEALTH CAMPS IN SCHOOLS

Organise eye health camps in schools and colleges to address vision-related issues among students. This will help detect and treat refractive errors early and promote awareness about eye care, such as reducing screen time and maintaining a healthy diet.

5.4.7 CONCLUSION

The health camps organised under this initiative have made a profound impact on the health and well-being of rural and underserved communities, particularly women and children. By providing accessible and quality healthcare services, the program addressed critical health issues such as gynaecological disorders, anaemia, vision problems and chronic diseases. The camps also played a pivotal role in raising awareness about preventive care, menstrual hygiene, and safe pregnancy practices, empowering communities to take charge of their health.

Despite challenges such as limited diagnostic facilities and occasional low turnout due to inadequate publicity, the program demonstrated remarkable effectiveness and efficiency. The collaboration with local authorities, schools, and Gram Panchayats ensured community participation and trust. Moving forward, expanding diagnostic capabilities, strengthening awareness campaigns, and improving follow-up mechanisms will further enhance the program's impact and sustainability. Overall, the initiative has set a strong foundation for improving healthcare access and outcomes in underserved areas, aligning with the broader goals of public health and community development.

5.5. PLANTATION

5.5.1 EXECUTIVE SUMMARY

Project Background

The tree plantation initiative was undertaken in two key locations—Bade Aarapur village in Bastar district, Chhattisgarh, and Karwahi Gram Panchayat near the Pench Tiger Reserve in Maharashtra. In Bastar, a region predominantly inhabited by tribal communities, the project aimed to address ecological challenges such as soil erosion, forest depletion, and water scarcity caused by heavy rainfall and deforestation. By planting trees, the initiative sought to restore soil health, enhance water cycles, and provide sustainable forest resources for tribal livelihoods. In Karwahi, the focus was on reclaiming degraded lands, protecting endangered species, and reducing human-animal conflicts while generating 6,000 workdays for local communities. The project emphasises ecological restoration, community participation and long-term environmental and economic benefits.

Project Activities



To train and sensitise rural communities on the importance of tree plantation and sustainable forest management.



To prepare the land and develop nurseries for cultivating saplings of native and ecologically beneficial tree species.



To transport and plant saplings at designated sites, followed by one year of maintenance to ensure survival and growth.

Study Design Snapshot



Name of the project
Plantations



Research methodology used
Descriptive



Sampling Technique
Purposive and random sampling



Implementation year
2022-2023 & 2023-2024



Implementing Partners
RPG Foundation



Project Location
Bastar, Chhattisgarh & Nagpur



Financial Year of Impact Assessment
2024-25



SDG Goals



- SDG 1: No Poverty
- SDG 10: Reduced Inequalities
- SDG 13: Climate Action
- SDG 15: Life on Land
- SDG 17: Partnerships for the Goals

Key Outputs



The plantation is projected to absorb -500,000 kgs of carbon dioxide, improving air quality and soil health.



Local communities actively monitor, replace dead saplings, and manage weeds, ensuring high survival rates.



Favourable monsoon conditions in Bastar have enhanced soil fertility and supported healthy sapling growth.



Awareness programs and reduced grazing activities demonstrate strengthened conservation efforts and community involvement.

Key Impacts



Enhanced biodiversity by providing food sources for wildlife, reducing human-wildlife conflict and crop degradation.



Improved soil quality and reduced erosion through increased tree cover, protecting topsoil and promoting land fertility.



Boosted groundwater recharge and water availability, ensuring sustainable water resources for communities and ecosystems.



Strengthened livelihoods of indigenous tribes by providing fruits, fodder, and non-timber forest products, enhancing food security and income.



Created local employment opportunities, fostering community ownership and environmental stewardship.

5.5.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The tree plantation program was initiated to address critical environmental and socio-economic challenges in regions like Bastar, Chhattisgarh, and Karwahi, Maharashtra. Heavy rainfall, deforestation, and soil erosion have degraded forest ecosystems, impacting biodiversity and water availability. Indigenous tribal communities, such as the Gond, Maria, and Muria, heavily depend on forests for their livelihoods, including food, fodder, and income from non-timber forest products. The program aims to restore ecological balance, enhance biodiversity, and provide sustainable resources to uplift local communities while mitigating human-wildlife conflicts and improving soil and water conservation.

OBJECTIVES OF THE PROGRAM



To restore degraded lands and enhance biodiversity by planting native tree species that support wildlife and improve soil health.



To mitigate human-wildlife conflicts by providing food sources for herbivores and omnivores within forest ranges.



To improve water cycles and groundwater recharge through increased tree cover, ensuring better water availability for communities and ecosystems.



To support the livelihoods of indigenous tribes by providing fruits, fodder, and non-timber forest products, enhancing food security and income generation.



To create local employment opportunities through community involvement in plantation and maintenance activities, fostering environmental stewardship.

5.5.3 KEY IMPACT INDICATORS

ECOLOGICAL RESTORATION AND BIODIVERSITY ENHANCEMENT



The project has restored degraded lands, creating habitats for endangered species and enhancing biodiversity. Native tree species provide food and shelter, strengthening the ecological corridor between Pench and Kanha Tiger Reserves.

IMPROVED LIVELIHOODS FOR LOCAL COMMUNITIES



Generating 6,000 workdays, the project directly employed 150 individuals, 60% of whom were women. Indirectly, it supports ~446 individuals through non-timber forest products, ensuring long-term economic benefits.

CARBON SEQUESTRATION AND SOIL HEALTH IMPROVEMENT



The plantation will absorb ~1,500,000 kgs of CO₂, mitigating climate change. It also improves soil quality, prevents erosion, and enhances water retention for sustainable land use.

REDUCTION IN HUMAN-WILDLIFE CONFLICT



By restoring forest cover and providing natural food sources, the project reduces wildlife movement into human settlements, minimising conflicts and protecting both communities and animals.

COMMUNITY EMPOWERMENT AND WOMEN'S PARTICIPATION



Women's active involvement in plantation activities has empowered them economically, strengthening their role in household income generation and decision-making.

HABITAT CONNECTIVITY FOR ENDANGERED SPECIES



The project strengthens habitat connectivity between Pench and Kanha Tiger Reserves, ensuring the survival of tiger populations and other wildlife through a contiguous forest corridor.

SUSTAINABLE RESOURCE MANAGEMENT



By providing sustainable access to forest resources like fuelwood and NTFPs, the project reduces dependency on unsustainable practices and promotes ecosystem conservation.



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Local community members gained skills in nursery development, sapling transportation, and plantation maintenance.
- Direct employment opportunities empowered women, with 45% of beneficiaries contributing to household incomes.



HOUSEHOLD LEVEL

- Increased income from direct employment and access to non-timber forest products (NTFPs) enhanced food security.
- Improved access to forest resources like fruits and fodder reduced dependency on unsustainable practices.



COMMUNITY LEVEL

- Collective participation in plantation activities fostered a sense of ownership and environmental stewardship.
- Reduced human-wildlife conflicts improved the safety and well-being of the community.



ENVIRONMENTAL LEVEL

- Native tree species enhanced biodiversity by providing food and shelter for wildlife.
- Plantation improved soil quality, prevented erosion, and promoted groundwater recharge.



REGIONAL LEVEL

- Restoration of degraded lands strengthened habitat connectivity for endangered species like tigers.
- Increased forest cover contributed to climate change mitigation by absorbing -1,500,000 kgs of CO₂.

Sustainability

COMMUNITY INVOLVEMENT AND OWNERSHIP



The plantation project actively engages local communities, including indigenous tribes, in activities like nursery development, planting, and maintenance. This fosters a sense of ownership and ensures long-term care for the saplings, promoting sustainable forest management.

ECONOMIC EMPOWERMENT AND LIVELIHOOD SUPPORT



By generating 2,000 workdays and employing ~150 individuals (45% women), the project provides immediate income opportunities. Long-term benefits include access to NTFPs, enhancing food security and income for ~2,700 indirect beneficiaries, and ensuring economic sustainability.

ENVIRONMENTAL RESILIENCE AND ECOSYSTEM RESTORATION

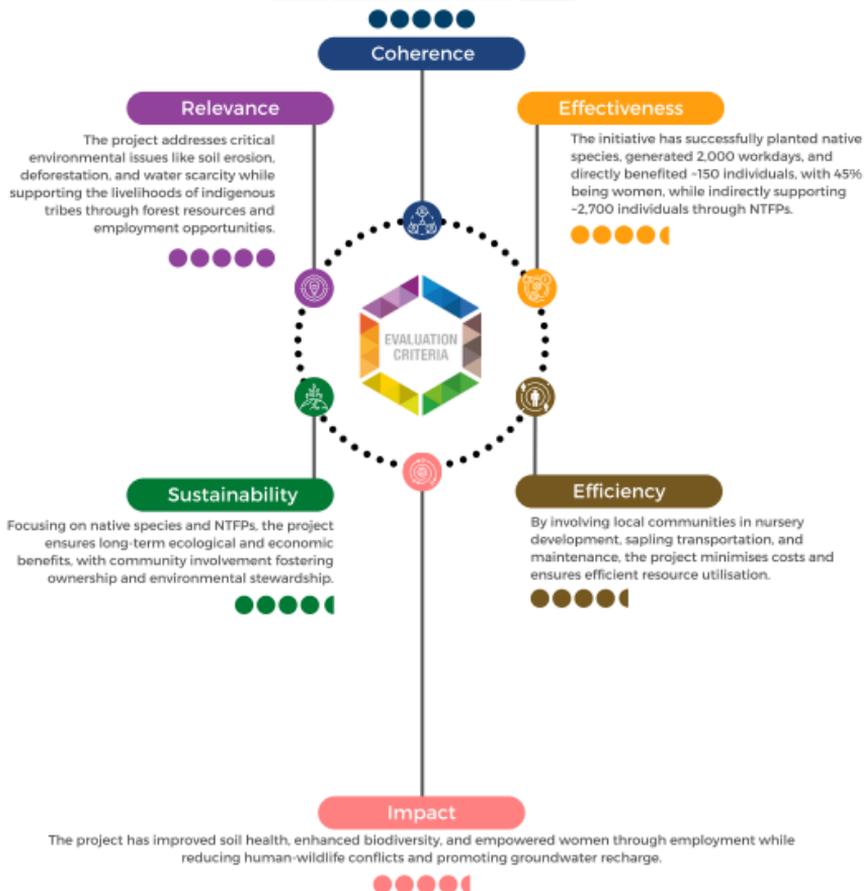


The project addresses soil erosion, improves water cycles, and enhances biodiversity by planting native species. These efforts restore degraded lands, mitigate human-wildlife conflict, and ensure long-term ecological sustainability for both wildlife and local communities.



5.5.5 OECD FRAMEWORK

The program aligned with the following Sustainable Development Goals (SDGs):
SDG 1: No Poverty, SDG 10: Reduced Inequalities
SDG 13: Climate action, SDG 15: Life on Land, SDG 17: Partnerships for the Goals



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

Index : 5 Points - Very High ; 4 Points - High ; 3 Points - Moderate ; 2 Points - Low ; 1 Point - Very Low

5.5.6 The Way Forward



STRENGTHEN COMMUNITY MONITORING AND AWARENESS

Expand awareness programs and community-led monitoring initiatives to further reduce grazing and ensure the survival of saplings. Regular training sessions can empower villagers with advanced techniques for weed management and gap filling, enhancing the overall health of the plantation.



ENHANCE WEATHER-RESILIENT PRACTICES

Develop strategies to ensure sapling resilience during adverse weather conditions. This could include introducing drought-resistant native species and providing additional support during dry spells to maintain soil moisture and nutrient levels.



SCALE UP COMMUNITY ENGAGEMENT AND OWNERSHIP

Encourage broader community participation by organising workshops and recognition programs for active contributors. Installing more branding boards and sharing success stories can further motivate communities and reinforce their commitment to environmental conservation.

5.5.7 CONCLUSION

The tree plantation project was initiated in Karwahi Gram Panchayat and Bade Aarapur village to address ecological degradation, restore forest cover, and support local communities. In Karwahi, situated near the Pench Tiger Reserve, 75,000 saplings were planted to strengthen habitat connectivity between Pench and Kanha Tiger Reserves, ensuring the survival of endangered species. In Bade Aarapur, Bastar, 25,000 trees were planted to combat soil erosion, improve water cycles, and provide sustainable forest resources for tribal communities like the Gond and Maria. The strategy involved active community participation, with locals engaged in nursery development, sapling transportation, and maintenance, generating over 6,000 workdays. The project successfully improved biodiversity, reduced human-wildlife conflicts, and enhanced livelihoods through non-timber forest products. With favourable monsoon conditions and community dedication, the saplings are thriving, marking the project's success in achieving its ecological and socio-economic goals.

5.6. WATER PURIFICATION PLANT

5.6.1 EXECUTIVE SUMMARY

Project Background

The water purification program was initiated to address the critical need for access to safe and clean drinking water in schools, particularly in rural areas. Recognising the health risks associated with impure water, such as diarrhoea, cholera, and gastrointestinal issues, the project aims to install advanced water purification systems in schools. By providing purified water, the program seeks to improve the overall health, hygiene, and well-being of school children, ensuring their physical and cognitive development is not hindered by waterborne diseases. This initiative was implemented in Mahatma Gandhi School, Dhani, and Mahatma Gandhi School, Kaveri Path, Jaipur, where the lack of clean drinking water posed significant health challenges for students and staff.

Project Activities



To install advanced Mineral RO water purifiers with TDS controllers in schools.



To ensure the purification systems can provide 500 litres of clean water per hour, catering to approximately 1,000 children and staff.



To educate students and staff on the importance of drinking purified water and maintaining hygiene.



To monitor the functionality and usage of the purification systems regularly.

Design Snapshot



Name of the project

Water purification



Research methodology

Descriptive



Qualitative Methods

Structured Interviews



Key Stakeholders

Project team, SMC members



Implementation year

2022-23 & 2023-24



Implementing Partners

RPC with Implementing Partner
Kalyan Bharati Sansthan



Project Location

Jaipur & Mysuru



Financial Year of Impact Assessment

2024-25



SDG Goals



- SDG 3 Good Health and Well-being
- SDG 6 Clean Water and Sanitation

Key Outputs



Installation of water purification systems in schools, ensuring access to clean drinking water.



Provision of 500 litres of purified water per hour, sufficient for 1,000 children and staff.



Increased awareness among students and staff about the importance of drinking purified water.



Regular monitoring and maintenance of the purification systems to ensure sustained functionality.

Key Impacts



Reduction in waterborne diseases such as diarrhoea, cholera, and gastrointestinal issues among school children.



Improved attendance and concentration levels in schools due to better health and hydration.



Enhanced awareness and adoption of healthy drinking water practices among students and staff.



Strengthened immune systems and overall well-being of children, contributing to their long-term development.

5.6.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

The program was launched in response to the alarming health risks posed by impure drinking water in schools, particularly in rural areas. Many children were unable to access safe drinking water, leading to frequent illnesses, absenteeism, and hindered development. The lack of clean water not only affected their health but also their ability to focus and perform well in school. By installing water purification systems, the program addresses these challenges, ensuring children have access to clean water and a healthier learning environment.

OBJECTIVES OF THE PROGRAM



To provide access to safe and clean drinking water for school children and staff.



To reduce the incidence of waterborne diseases and improve overall health.



To promote awareness about the importance of drinking purified water and maintaining hygiene.



To create a conducive learning environment by ensuring children are healthy and hydrated.

5.6.3 KEY IMPACT INDICATORS

HEALTH IMPROVEMENT



The program has led to a noticeable reduction in waterborne diseases such as diarrhoea and cholera among school children, ensuring a healthier student population.

AWARENESS LEVELS



Students and staff have gained a deeper understanding of the importance of drinking purified water and fostering healthier habits and hygiene practices.

ATTENDANCE RATES



With fewer illnesses, school attendance has improved significantly, allowing children to focus on their education without frequent interruptions.

SYSTEM FUNCTIONALITY



The water purification systems are regularly used and maintained, ensuring a consistent supply of clean drinking water for the school community.

LONG-TERM WELL-BEING



Children have shown improved immune systems, better hydration, and overall development, contributing to their long-term health and academic success.



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- School children experienced fewer waterborne diseases like diarrhoea and cholera due to access to clean drinking water.
- Improved hydration levels enhanced their energy, concentration, and overall physical and mental development.



HOUSEHOLD LEVEL

- Families saved on medical expenses as children's health improved, reducing the financial burden of water-related illnesses.
- Parents felt reassured about their children's safety and well-being, knowing they consumed purified water at school.



COMMUNITY LEVEL

- Schools became hubs for promoting hygiene and health awareness, influencing students, teachers, and staff.
- The program encouraged community responsibility toward maintaining clean water sources and adopting healthier practices.



STATE LEVEL

- The initiative aligned with state health policies by ensuring access to safe drinking water in schools, improving public health outcomes.
- Better student health led to improved attendance and academic performance, supporting state educational objectives.



NATIONAL LEVEL

- The program contributed to national health and hygiene campaigns, promoting clean water access in underserved areas.
- It supported Sustainable Development Goals (SDGs) related to clean water and sanitation, fostering long-term national development.

Sustainability

LONG-TERM HEALTH BENEFITS FOR STUDENTS



The water purification systems provide clean, safe drinking water, reducing waterborne diseases like diarrhoea and cholera. This strengthens students' immune systems, improves metabolism, and supports overall development, creating a healthier school environment for better learning and growth.

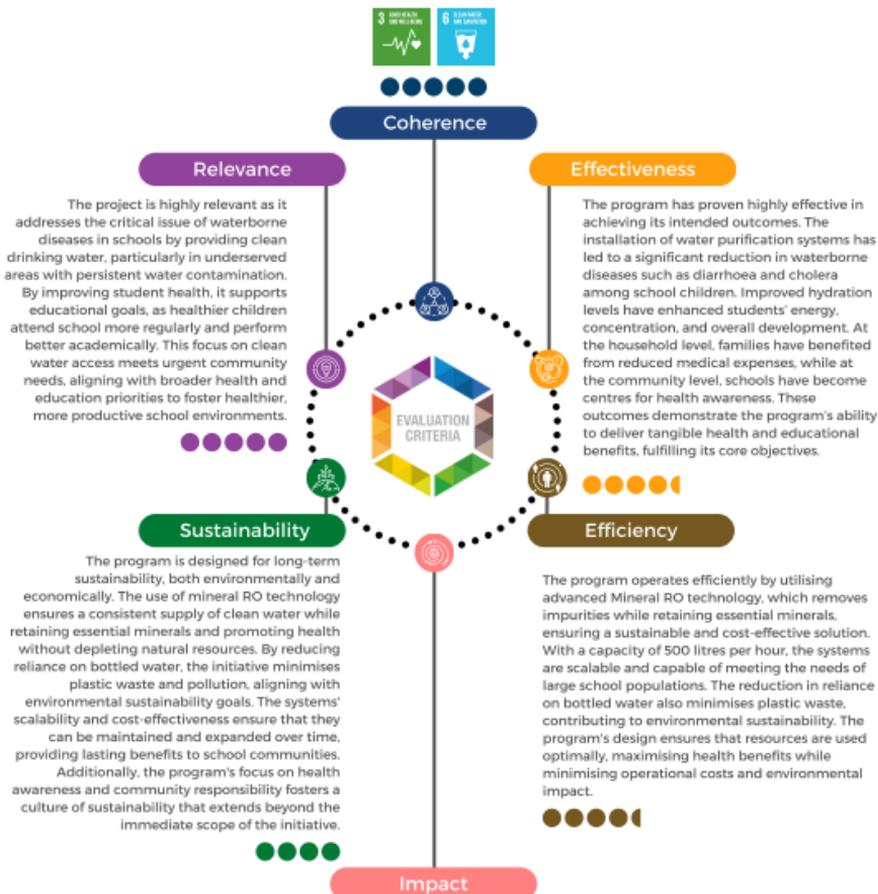
ENVIRONMENTAL AND ECONOMIC SUSTAINABILITY



The advanced Mineral RO technology removes impurities while retaining essential minerals, offering sustainable access to clean water. By reducing reliance on bottled water, the program minimises plastic waste and pollution. With a capacity of 500 litres per hour, the systems are cost-effective and scalable, ensuring long-term access to safe water for schools.

5.6.4 OECD FRAMEWORK

The program aligns with the following SDG Goals:
SDG 3 Good Health and Well-being, SDG 6 Clean Water and Sanitation



Relevance



Coherence



Effectiveness



Efficiency



Impact



Sustainability

5.6.5 The Way Forward



EXPAND THE INSTALLATION OF WATER PURIFICATION SYSTEMS IN SCHOOLS

To ensure the health and well-being of school children, the program should expand the installation of water purification systems to more schools, particularly in rural and underserved areas. This will provide access to safe and clean drinking water, reducing the risk of waterborne diseases and promoting overall child development.



CONDUCT AWARENESS CAMPAIGNS ON THE IMPORTANCE OF PURE WATER

Alongside the installation of purification systems, the program should conduct awareness campaigns to educate children, staff, and parents about the health benefits of drinking pure water. Emphasising the dangers of impure water and the advantages of hydration can encourage consistent usage of purification systems and foster healthier habits.

5.6.6 CONCLUSION

The installation of water purification systems in schools ensures access to safe drinking water, protecting children from waterborne diseases and promoting their overall health. By providing purified water, the program enhances immunity, hydration, and energy levels, enabling students to focus better on their education. This initiative fosters long-term well-being and raises awareness about the importance of clean water. Through such efforts, we are nurturing healthier and more informed future generations.

06. EDUCATION PROJECT



6.1 FOSTERING EDUCATION THROUGH SCHOOLING AND TRAINING

6.1.1 EXECUTIVE SUMMARY

Project Background

The Pehlay Akshar Foundation's project is an ambitious initiative aimed at significantly enhancing the English language teaching capabilities of primary and upper primary teachers across 24 wards of the Brihanmumbai Municipal Corporation (BMC). This strategic project, launched in collaboration with the Maharashtra Education Department, focuses on elevating English language teaching capabilities and integrating 21st-century skills into the curriculum. By enhancing digital literacy, critical thinking, and communication skills through specialised training workshops and digital interventions, the initiative seeks to close the urban-rural education gap and address the gender disparities in learning outcomes highlighted in recent assessments.

Project Activities



ENGAGED GOVERNMENT AND STAKEHOLDERS

- Secured government approvals and collaborated with BMC and the Maharashtra Education Department.
- Organised launch events and orientation sessions for school leaders.



CONDUCTED TEACHER TRAINING WORKSHOPS

- Organised 3,900+ training sessions for BMC teachers to improve their Functional English, classroom management, level-based learning, and student-parent engagement.
- Focused on pedagogical techniques, student engagement strategies, and enhancing communication with stakeholders.



FACILITATED SAATHI SESSIONS (PEER LEARNING & SUPPORT)

- Conducted 19,000+ Saathi Sessions with monthly peer learning sessions where teachers exchanged best practices, discussed challenges, and improved classroom strategies.
- Created a safe space for learning and reinforced key training concepts.



PROVIDED WEEKLY CLASSROOM SUPPORT & DEMONSTRATION

- Facilitators supported teachers in classrooms through live demonstration sessions showcasing effective teaching methods and student engagement techniques.



IMPLEMENTED DIGITAL LEARNING & INTERVENTIONS

- 5,782 teachers actively used the Pehlay Akshar App to access English learning materials, activities, and lesson plans.



TRAINED HEADMASTERS (HM) & STRENGTHENED LEADERSHIP

- Conducted a one-day training workshop for headmasters to enhance leadership and decision-making skills in schools.



BUILT CAPACITY OF FACILITATORS

- Trained facilitators to improve communication, leadership, and time management skills.
- Ensured they effectively supported teachers and students throughout the program.



DEVELOPED TRAINING CONTENT & CURRICULUM

- Designed and updated learning modules, teaching strategies, and training materials.
- Created digital resources, lesson plans, and structured teaching tools for teachers.

Design Snapshot



Implementation year
FY 2022-23 & 2023-24



Implementing partner
Pehlay Akshar Foundation



Financial Year of Impact Assessment

FY 2024-25



Project location project activity wise

Brihanmumbai Municipal Corporation,
Maharashtra



SDG Goals



- SDG 4: Quality Education
- SDG 5: Gender Equality
- SDG 10: Reduced Inequalities



Key Outputs

A. Promoting Education through a Teacher Training Program



84.0%

of the respondents attended the Regular Teaching Program; 38.0% attended the Star Teaching Program.



98.0%

of the respondents found training useful in enhancing reading, speaking, and comprehension skills.



96.0%

of the respondents reported consistent support from school management.



60.0%

of the respondents used WhatsApp for learning weekly; 82.0% found WhatsApp learning materials helpful.



100%

of the respondents observed improvements in communication skills after Sathi Sessions.



94.0%

of the respondents gained new knowledge; 86.0% learned new techniques and felt motivated.



90.0%

of the respondents found the Pehlay Akshar App helpful for classroom teaching and professional development.



50.0%

of the respondents gained confidence communicating in English with peers; 62.0% felt confident in classroom settings.



100%

of the respondents saw improved student participation; 42.0% noted better attendance, and 38.0% observed improved English-speaking skills.



98.0%

of the respondents found training techniques effective; 62.0% found teaching strategies helpful (38.0% were neutral).



92.0%

of the respondents found techniques to engage parents useful; 70.0% saw no increase in parental pressure for attendance.



100%

positive response on effectiveness across all indicators: training content, methods, tools, communication confidence, personal and professional growth, and peer group support.

B. Enhancing English Outcomes and Developing Future Leaders through Reading Room



97.8%

of the respondents had a structured schedule with one session per day in the English Room.



94.0%

of the respondents encouraged students to communicate in English, 72.0% used classroom discussions, and 62.0% provided additional learning materials.



95.6%

of the respondents found the English Room effective in improving learning experiences.



80.0%

of the respondents found wall paintings helpful in English learning.



93.3%

of the respondents noted the English Room fostered curiosity and a desire to read.



100%

of the respondents observed improved student confidence.



100%

of the respondents noted enhanced academic performance post-intervention.

C. Engagement and Academic Progress of Students



72.0%

of the students attended offline classes; 26% attended both offline and online.



96.0%

of the respondents had access to books in the English Room; 88% used tablets and learning games.



98.0%

of the respondents engaged in classroom games; 84.0% participated in quizzes.



96.0%

of the presentations were conducted in English.



98.0%

of the respondents reported increased confidence in English communication.



Teacher-student engagement improved; 100% of the respondents received verbal praise; English communication increased from 88.0% to 98.0%.



Fear of English dropped from 64.0% to 4.0%, with significant improvements in reading, spelling, and speaking skills.



Academic scores improved, with more students scoring above 80.0% post-intervention.



98.0%

of the students attended school regularly.



100%

of the respondents found the English Room motivating and beneficial for engagement.

Key Impacts



Structured training programs significantly improved instructional delivery and teacher confidence.



Peer group learning and support contributed to motivation and knowledge retention.



English Room interventions boosted enthusiasm for learning and reduced fear of English.



Classroom participation, interaction, and student-teacher engagement improved.



A structured approach to English language learning enhanced speaking, reading, and comprehension skills.



Academic performance in English significantly improved across all students.



The Pehlay Akshar App and WhatsApp-based learning materials were effective in professional and classroom development.



92.0% of teachers found engagement techniques helpful in involving parents.



70.0%

reported no added parental pressure on students to attend classes.



98.0%

of students attended school regularly.



Training, resources, and engagement strategies contributed to reduced absenteeism.

6.1.2 PROJECT INTRODUCTION



BACKGROUND AND NEED OF THE PROJECT

With a literacy rate of 77.7% (NSSO 2017-18), significant urban-rural and gender disparities remain, as highlighted by ASER 2023, where many rural adolescents struggle with basic numeracy and reading fluency. Financial constraints and infrastructure limitations further hinder educational equity, with urban households investing more in education than their rural counterparts. Maharashtra, a leader in educational innovation, serves over 22.5 million students across 109,605 schools, with initiatives like 'Chief Minister My School, A Beautiful School' and 'Majhi e-Shala' enhancing digital inclusion and infrastructure, while the 'Read Maharashtra' program aims to ensure all class 3 students can read proficiently by 2026. The Pehlay Akshar Foundation (PAF), established in 2008, plays a crucial role in bridging learning gaps by equipping underprivileged students with Functional English skills and fostering creativity, communication, and emotional intelligence. Through collaborations with the Maharashtra Education Department and the BMC, PAF has developed an innovative 'English Room' and a Teacher Development Program, empowering educators with transformative teaching practices. A strategic project under PAF focuses on enhancing English language teaching across 24 BMC wards, integrating 21st-century skills like digital literacy and critical thinking through specialised training workshops and digital interventions.

By addressing the urban-rural divide and gender disparities in education, these initiatives contribute to a more inclusive, advanced, and equitable learning ecosystem in India.

OBJECTIVES OF THE PROJECT



To enhance the English language skills and teaching levels (personal and professional) of primary and upper primary BMC teachers through training, peer learning, and classroom support.



To improve student learning outcomes by equipping teachers with effective pedagogy, digital tools, and level-based teaching strategies.



To strengthen school leadership by providing Headmasters with leadership and management training.



To ensure continuous professional development through digital interventions, mentoring, and facilitator capacity-building.

6.1.3 RESEARCH METHODOLOGY

KEC commissioned a study to SoulAce to assess the impact of the Education program implemented during FY 2022-24. These initiatives aimed to provide comprehensive training and capacity-building support to primary and upper primary BMC teachers, enhancing their English teaching skills through workshops, peer learning and digital interventions.

Objectives of the study

Qualitative methods offer insights into the real-life experiences, perspectives and stories of beneficiaries and those involved in project implementation. Conducting in-depth interviews and focus group discussions enables a thorough examination of observed changes. These methods help explore improvements in skilling and employability among beneficiaries through the intervention. By capturing personal experiences and narratives, qualitative approaches provide a deeper understanding of the project and its impact.

Research Methodology

The impact assessment study adopted a comprehensive mixed-methods strategy, blending quantitative and qualitative approaches to offer a more intricate understanding of the project's impact. This combination allowed for the acquisition of both numerical data and detailed contextual insights, resulting in a more comprehensive evaluation of the project's outcomes.

Application of Quantitative Techniques

In the quantitative aspect, the study utilised structured interviews featuring predetermined response options. Closed-ended surveys included specific questions with multiple-choice or Likert-scale options. This approach facilitated the collection of data that could be quantified and statistically analysed, offering a clear and measurable understanding of the project's impact.

Application of Qualitative Techniques

To ensure accuracy and a diverse participant pool, a mix of semi-structured interviews, open-ended interviews, and Focus Group discussions (FGDs) engaged essential project stakeholders, including project team members, implementing team members, principals, parents of the students, teachers in charge and teachers. These qualitative inputs complemented the quantitative data, providing deeper insights into program effectiveness, significant barriers, challenges, and areas for enhancement.

Ensuring Triangulation

The quantitative research findings were cross-validated with the insights derived from the qualitative research. The report was structured to reflect this triangulation, enhancing the reliability of the findings.

Sampling Framework

In order to ensure a well-rounded representation of the different sub-groups within the target population, the study employed a stratified random sampling technique. Additionally, for qualitative interactions, purposive sampling was utilised to engage key stakeholders.

Stratified random sampling is a method that involves dividing the population into distinct subgroups and then randomly selecting samples from each subgroup to ensure representative diversity in the study.

Purposive sampling is a method in research where specific individuals or groups are deliberately chosen for inclusion in a study based on their unique characteristics or expertise to provide targeted and specialised insights into the research topic.

State	District	Schools covered	Sample size
Maharashtra	Brihanmumbai	<ul style="list-style-type: none"> Rambhau Bhogle Marathi School New Byculla Municipal English School Rajashree Shahu Nagar Municipal English School Tank Bunder Municipal Urdu School 	Teachers: 50 Students: 50

Data Quality Control & Analysis

The study employed a centralised dashboard and an in-house app for real-time data monitoring, ensuring data integrity and enabling prompt corrective actions when needed. Data analysis encompassed descriptive numerical and graphical methods to systematically present and interpret data patterns, extracting key characteristics and trends.

Standardised Framework for Evaluation

The research study applied the OECD-DAC framework for evaluation, ensuring alignment with globally accepted standards and norms. This framework offered a strong and uniform method to evaluate the project's impact, bolstering the credibility and pertinence of the research findings.



Study Design Snapshot



Name of the project

Pehlay Akshar Teacher Training & English Room Project



Implementing Organisation

Pehlay Akshar Foundation



Research Design

Descriptive and Interpretive research design



Sampling Technique

Purposive and Stratified Random Sampling



Sample Size

100



Qualitative Methods used

Testimonials and Focus Group Discussion

Key Stakeholders

- Students
- Teachers
- Project team members,
- Implementing team members
- Principals/ Teachers in charge
- Parents of the students
- Education dept - BMC

Upholding Research Ethics

The impact assessment study upheld a robust framework of research ethics principles throughout its process.



Informed Consent

Participants made informed decisions after understanding the study goals, risks, and benefits.



Confidentiality

Participant information was secured securely, establishing a foundation of trust.



Data Security and Anonymity

Rigorous measures ensured participant data remained private and untraceable.



Non-Maleficence

Participant well-being was safeguarded, with no harm caused by the research.



Integrity

Research maintained high credibility through sincere and transparent practices.



Justice

Equitable treatment prevailed, free from biases or stereotypes, promoting fairness.



6.1.4 KEY STUDY FINDINGS AND IMPACT

This comprehensive report explores the multifaceted impact of the Pehlay Akshar training program across various educational settings, focusing particularly on teacher training, enhancing English outcomes and fostering student engagement and academic progress. Through detailed feedback from educators and parents, the report underscores the program's effectiveness in improving English literacy, teaching confidence, and overall educational quality, highlighting the transformative experiences of teachers and students alike in fostering a dynamic and supportive learning environment.

A. PROMOTING EDUCATION THROUGH THE TEACHER TRAINING PROJECT

This section evaluates the outcomes of various training interventions aimed at enhancing teaching skills and methodologies as a part of the Teacher Training program. Key focus areas include how structured training programs contribute to improving instructional delivery and overall student outcomes, which reflects the broader goal of fostering an enriched educational environment.

SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 1: AGE-BASED DISTRIBUTION

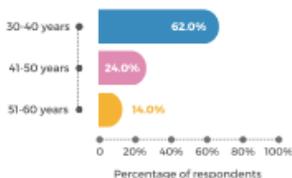


CHART 3: GRADE MANAGEMENT

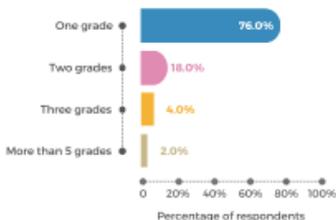


CHART 2: GENDER-BASED
DISTRIBUTION

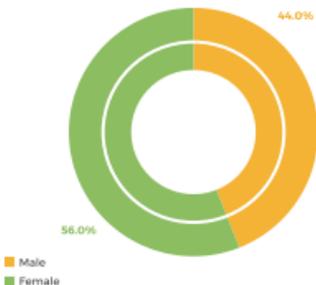


CHART 4: QUALIFICATION-BASED
DISTRIBUTION

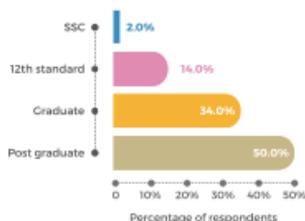
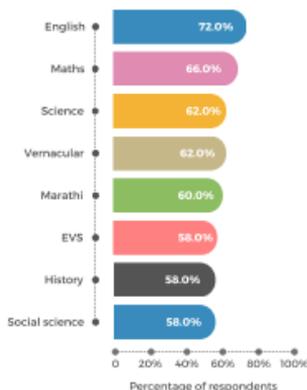


CHART 5: SUBJECTS TAUGHT



The data provided offers a comprehensive demographic and professional profile of the respondents. The age distribution is skewed towards younger individuals, with the majority (62%) aged between 30-40 years. Gender-wise, females are slightly more represented than males, making up more than half (56%) of the sample. Professionally, a large majority (76%) manage just one grade, indicating a specialised focus in their educational roles. In terms of educational qualifications, half of the respondents (50%) are postgraduates, suggesting a highly educated group. Lastly, when looking at the subjects taught, there is a broad diversity, with English (72%) and Mathematics (66%) being the most commonly taught subjects, followed by Science (62%), vernacular languages (62%), and other humanities subjects.

PROJECT INTERVENTIONS

CHART 6: TEACHERS' TRAINING COURSE ATTENDED

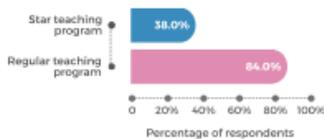


CHART 7: . ATTENDANCE MODE

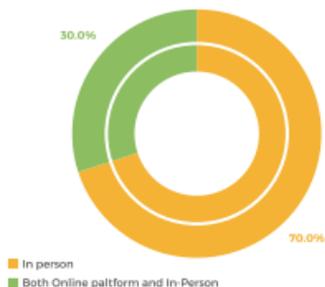


CHART 8: ENHANCING READING, SPEAKING, AND COMPREHENSION

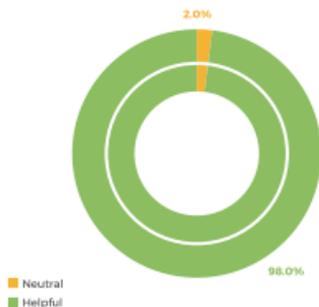
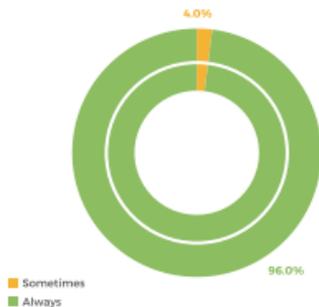


CHART 9: SUPPORT RECEIVED FROM THE SCHOOL



The majority (84%) attended the Regular teaching program when compared to theStar teaching program (38%). Preferences for session attendance mode revealed a strong inclination towards in-person sessions, with the majority (70%) opting for this traditional method, while the rest (30%) participated in a hybrid model. Additionally, the effectiveness of the training content was highly regarded, with nearly all the respondents (98%) affirming its usefulness in enhancing reading, speaking, and comprehension skills. This suggests that the educational material successfully met its learning objectives. Support from school management was also positively highlighted, as nearly all (96%) of the participants reported receiving consistent support that enhanced the overall teaching environment. These findings reflect a well-supported and engaged group of educators benefiting from focused and effective training programs.

“

This activity-based training has transformed the way we teach English and made learning a delightful and interactive experience for the students. The incorporation of storytelling, storybooks, and various educational games not only captivates the students' interest but also significantly aids in their psychological development and interpersonal skills. Thanks to the Pehlay Akshar training, we have seen remarkable improvements in student engagement and interaction, which extend beyond the classroom to involve parents and the broader school community. It is a privilege to be part of such an innovative educational approach that enriches both the teaching and learning environments at our school.

- Mayur M. Bhoir, 8th Standard Educator,
Rajshi Shahu Nagar Municipal School,
Mahim

”

CHART 10: USING WHATSAPP FOR LEARNING

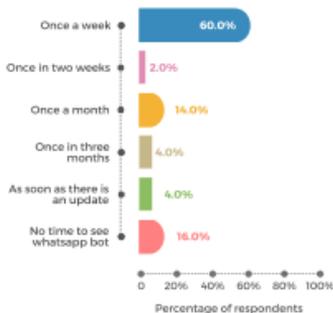
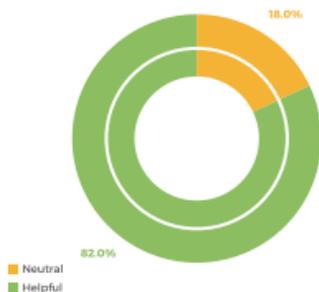


CHART 11: HELPFULNESS OF LEARNING MATERIAL ON WHATSAPP



The data on the use of WhatsApp for learning reveals diverse engagement levels with the platform. A majority (60%) utilised WhatsApp once a week for learning, indicating regular but not daily use. Smaller groups engage less frequently, with some using the platform monthly, bi-weekly, quarterly, or only when updates are available. Regarding the effectiveness of the learning materials provided through the WhatsApp bot, a substantial 82% of respondents found the materials helpful, which reflects a positive perception of the content's utility for learning. However, the rest (18%) remain neutral, suggesting that while the content is generally well-received, there might be room for improvement to better meet the needs and expectations of all users. This data illustrates varying reliance on WhatsApp as a learning tool and overall satisfaction with the content provided.

“

I have found the learning materials shared via WhatsApp to be quite helpful. The accessibility and convenience of receiving updates, lesson plans, and engaging activities directly on our phones have significantly enhanced our teaching practices. It serves as a quick reference tool that supports the implementation of new teaching strategies, such as the 'pull and push' method, which we have successfully integrated into our classrooms to enhance student performance. Besides saving time, this has increased our effectiveness in addressing the diverse needs of our students.

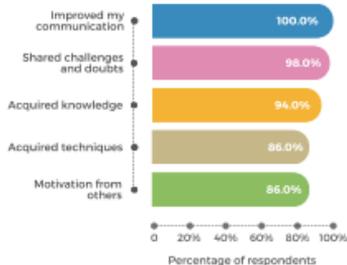
- Deepak D. Kokate, 7th Standard Educator,
Rajshi Shahu Nagar Municipal School,
Mahim

”



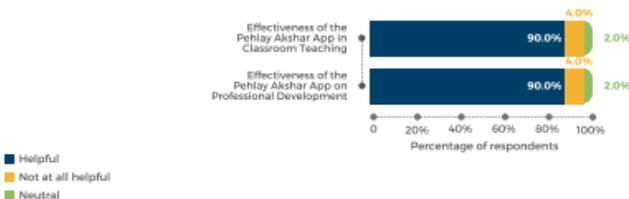
IMPACT OF THE PROJECT

CHART 12: IMPROVEMENT OBSERVED OWING TO THE SATHI SESSION



The data regarding the Sathi Sessions reflected overwhelmingly positive feedback, which demonstrated significant benefits in various aspects of professional development. All participants reported improvements in communication skills, and nearly all found the sessions conducive to discussing challenges and doubts. Additionally, the majority of the respondents (94%) acquired new knowledge, while 86% learned new techniques and felt motivated by their peers. These sessions provided a platform for sharing experiences and fostered a supportive and motivational learning environment.

CHART 13: EFFECTIVENESS OF PEHLAY AKSHAR APP IN CLASSROOM TEACHING AND PROFESSIONAL DEVELOPMENT



The data provides a clear assessment of the effectiveness of the Pehlay Akshar App across two domains: classroom teaching and professional development. The majority (90%) found the app helpful in both areas, underscoring its broad utility and positive reception. A small percentage did not find the app helpful (4%) for either classroom teaching or professional development and remained neutral (2%), which indicated some reservations or indifferent experiences. This feedback highlights that the majority of respondents perceive the app as a valuable tool for enhancing educational and professional practices.

PEHLAY AKSHAR TRAINING PROGRAM AT EAST BYCULLA MUNICIPAL HIGHER SECONDARY SCHOOL

This field study outlines the insights and feedback gathered from a focus group discussion with four educators at East Byculla Municipal Higher Secondary School. The discussion centred on the Pehlay Akshar training program's impact, effectiveness, and challenges experienced during its execution.

The participants included:

1. Rajendra Bhimraj Jori - Teaches 8th and 9th grades
2. Harshada Ramchandra - Teaches 6th and 7th grades
3. Rahul Jagdhane - Teaches 5th, 6th and 7th grades
4. Virendra Singh Rajput - Teaches 5th to 10th grades

KEY FINDINGS



CONFIDENCE IN ENGLISH BEFORE THE PROGRAM:

Before the Pehlay Akshar training, some confidence was instilled through online functional English training provided by the British Council during the pandemic. Participants noted this earlier exposure as beneficial.



TRAINING OVERVIEW

The Pehlay Akshar training introduced various teaching aids and demonstrated their effective use in child- and student-centred lessons, enhancing content understanding and concept clarity.



PARENT-STUDENT ENGAGEMENT

Engagement strategies included fun activities and regular parent-teacher meetings, which informed parents about the initiatives and motivated students to attend school more regularly.



EFFECTIVENESS OF LEVEL-BASED LEARNING

The training did not focus on level-based teaching but rather on identifying student categories by performance and engaging them effectively. The approach was noted as highly effective for meeting diverse learning needs.



SUPPORT FROM SCHOOL MANAGEMENT

The school management provided full support, facilitating teacher participation in the training program.



PROFESSIONAL DEVELOPMENT IMPACT

The training sessions were valuable for professional growth, introducing a more friendly and engaging teaching approach.



SAATHI SESSIONS FOR TEACHER CAPACITY BUILDING

These sessions were instrumental in building teacher capacity, introducing them to innovative, friendly, and activity-based teaching styles that enhanced student engagement.



ENGLISH ROOM AND ENGLISH ROOM ON WHEELS

The facilities provided, such as digital TVs, tablets, laptops, and projectors, significantly increased student enthusiasm and motivation. The flexibility of the English Room on Wheels was particularly praised for its accessibility.



MOTIVATION TECHNIQUES IN ENGLISH CLASSROOMS

Techniques included activity-based learning that increased student participation and confidence in learning English.



SOCIAL AND EMOTIONAL AWARENESS

Parents appreciated that their children were learning English effectively in a vernacular medium environment comparable to English medium schools.



ALIGNMENT WITH SYLLABUS AND CURRICULUM INTEGRATION

The program aligned well with the syllabus, enhancing student performance across subjects.



NEW TEACHING IDEAS

Innovative methods like using visual aids and practical teaching approaches were introduced, making English learning more engaging and effective.



CONFIDENCE IN STUDENT EMPOWERMENT

Both educators expressed confidence in the enhanced English literacy of their students, facilitated by continuous exposure to English through various media and activities in the English Room.



FEEDBACK FROM THE EDUCATIONAL COMMUNITY

Positive feedback from colleagues, mentors, and students affirmed the benefits of the training for both teachers and students.



TRACKING STUDENT PERFORMANCE

English proficiency and overall performance were tracked through various academic and co-curricular activities, showing noticeable improvements in student engagement and confidence.



IMPACT ON ENROLLMENT AND RETENTION RATES

Although some teachers observed an increase in enrollment and retention, others noted that external factors like socio-economic conditions posed significant challenges.

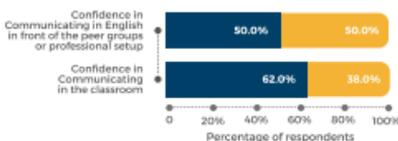


CHALLENGES AND SOCIETAL IMPACTS

Major challenges included student migration, financial hardships, and the need for supportive home-based learning environments. Hunger was also highlighted as a critical issue affecting student attendance and engagement.

The Pehlay Akshar training program at East Byculla Municipal Higher Secondary School has made significant strides in enhancing English literacy and teaching effectiveness. However, broader societal issues and the need for additional support mechanisms are critical for realising the full potential of these educational initiatives. The program's alignment with the syllabus and innovative teaching strategies have positively impacted student learning outcomes, yet addressing the external challenges remains essential for sustained success.

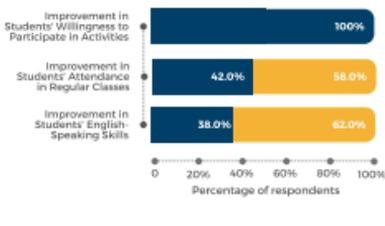
CHART 14: IMPROVEMENT IN CONFIDENCE IN COMMUNICATING IN ENGLISH AFTER TRAINING



■ Confident
■ Less confident

The data captures respondents' confidence in communicating in English after undergoing training, focusing on two settings: peer groups or professional setups and classroom environments. Half of the respondents (50%) felt confident communicating in English in front of peer groups or in professional contexts, while a majority (62%) felt confident in classroom settings. This distribution highlights a higher confidence level in classroom communication compared to more public or professional environments, suggesting that the training might be more effective in educational settings or that individuals feel more at ease in familiar, academic contexts.

CHART 15: IMPROVEMENT IN STUDENT PARTICIPATION, ATTENDANCE, AND ENGLISH-SPEAKING SKILLS



The data evaluates the impact of a specific intervention on student participation, attendance, and English-speaking skills. All respondents (100%) observed an improvement in students' willingness to participate in activities. However, results are mixed for attendance and English-speaking skills: nearly half (42%) noted an improvement in regular class attendance, and another section (38%) saw an enhancement in English-speaking skills. This survey indicates a significant positive impact on student engagement in activities but less effectiveness in boosting regular attendance and English language proficiency.



CHART 16: EFFECTIVENESS OF TECHNIQUES FOR STUDENTS

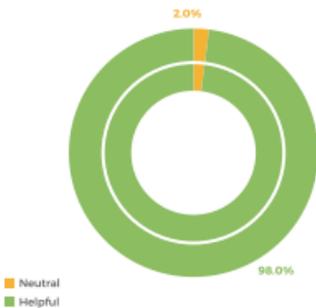
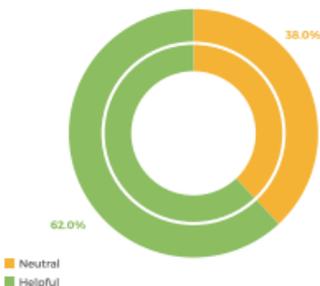


CHART 17: EFFECTIVENESS OF STRATEGIES TO TEACH STUDENTS



Nearly all the respondents (98%) found the tools and techniques provided during training helpful, reflecting an overwhelmingly positive reception. This suggests that the resources are effectively enhancing the participants' abilities to support student learning. In contrast, while a good majority (62%) found the teaching strategies developed during training helpful, a significant 38% remained neutral. This indicates that although a majority see the strategies as beneficial, there is a notable portion of the group that may require further evidence or modifications to fully appreciate their effectiveness. This disparity highlights areas for potential improvement in training content and delivery.

CHART 18: HELPFULNESS OF TECHNIQUES TO ENGAGE PARENTS

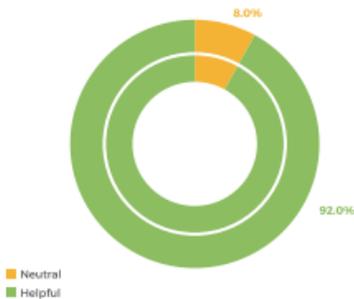
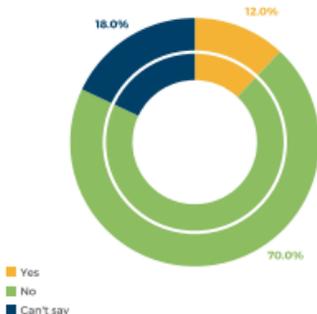


CHART 19: PARENTAL PRESSURE ON STUDENTS TO ATTEND CLASSES



The data provides insights into the effectiveness of techniques used to engage parents in their children's education and the impact of these techniques on parental pressure for class attendance. A significant majority (92%) found the techniques for engaging parents helpful, indicating their effectiveness in fostering parental involvement without increasing pressure on students. Regarding parental pressure to attend classes after parent sessions, the majority (70%) observed no increase, 12% noted some pressure, and 18% were unsure. This suggests that the parent engagement strategies are largely successful in involving parents without adversely increasing pressure on students to attend classes.

PEHLAY AKSHAR PARENT FEEDBACK AT EAST BYCULLA MUNICIPAL HIGHER SECONDARY SCHOOL

This focus group discussion synthesises feedback gathered from a group of parents at East Byculla Municipal Higher Secondary School regarding the Pehlay Akshar program. The focus is on understanding parents' perspectives on the program's communication, effectiveness in improving teaching techniques, and its impact on their children's interest in school activities and academic performance.

Participant Demographics

1. Firoza Khatun - She holds a B.A. degree and is a homemaker.
2. Rizawana Khatun - Illiterate, homemaker, with a monthly income of Rs. 10,000.
3. Asha Devi - Illiterate, homemaker, with a monthly income of Rs. 16,000.

KEY FINDINGS



CHILD'S COMMUNICATION ABOUT TEACHING TECHNIQUES

Children have positively communicated at home about the teaching methods employed by the Pehlay Akshar teachers, including the use of cartoons on touch screens and engaging English learning games, which suggests effective and enjoyable teaching methods are being implemented.



INTEREST IN SCHOOL ACTIVITIES

The program has significantly increased the children's enthusiasm for attending school, especially the Pehlay Akshar English classes. This increase in interest is a positive indicator of the program's impact on student engagement.



IMPROVEMENT IN ENGLISH SPEAKING FLUENCY

While the mothers observed that their children are still very young and not yet fluent in English, they believe that proficiency in speaking English will develop as the children mature. This perception points to an expectation of gradual improvement rather than immediate results.



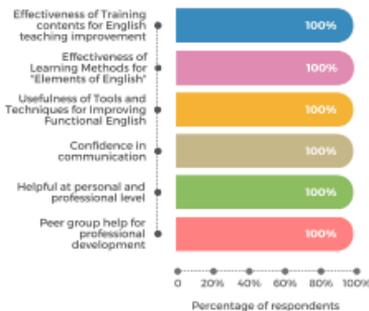
ACADEMIC PERFORMANCE

Parents have noted an improvement in their children's academic engagement, particularly in terms of increased interest in studying and regular completion of homework. One mother specifically noted a marked increase in her elder daughter's enthusiasm for learning since joining the Pehlay Akshar program.

The feedback from the parents indicates a positive reception of the Pehlay Akshar program, particularly in terms of teaching methods and increased enthusiasm for learning among students. However, the findings also suggest a need for better communication strategies, especially for parents of children in lower grades, such as kindergarten.

SATISFACTION

CHART 20: PERCEIVED INDICATORS ABOUT THE EFFECTIVENESS OF THE TRAINING



Every indicator assessed reported a 100% positive response rate, which reflected the comprehensive effectiveness of the program. These indicators include the effectiveness of training content for enhancing English teaching, learning methods for mastering elements of English, and the usefulness of tools and techniques for improving functional English. Additionally, respondents reported a complete boost in communication confidence and found the training helpful on both personal and professional levels. The peer group support within the program also significantly contributed to professional development, affirming the training's all-around efficacy.

B. ENHANCING ENGLISH OUTCOMES AND DEVELOPING FUTURE LEADERS THROUGH READING ROOM

The section examines how access to dedicated English Rooms significantly nurtured English language skills and leadership qualities among students. The analysis covers the extent of program interventions, such as the availability of learning facilities, structured usage schedules and classroom activities that promote English proficiency.

PROJECT INTERVENTION

CHART 21: ACCESS TO ENGLISH ROOM OR ENGLISH ROOM ON WHEELS IN SCHOOL

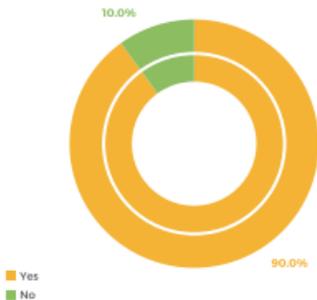


CHART 22: FACILITIES AVAILABLE

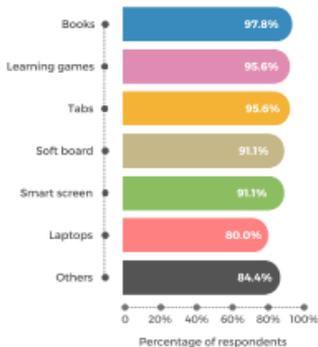
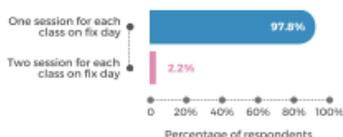
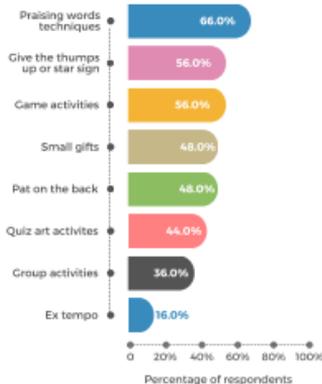
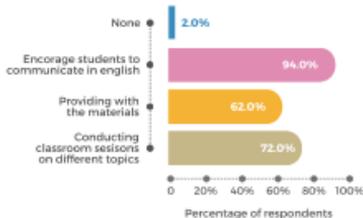


CHART 23: STUDENTS' SCHEDULE FOR ENGLISH ROOM USAGE

The study highlighted the prevalence and resources of English Rooms or English Room on Wheels in schools based on feedback from the respondents. A substantial 90% of schools reported having such facilities, suggesting widespread access to specialised environments dedicated to enhancing English proficiency. Within these rooms, the facilities include a variety of educational resources. Books, learning games, and tablets are nearly ubiquitous and present in almost all rooms. Soft boards and smart screens are also common, while laptops are slightly less prevalent. Additional resources such as proper chairs and tables, drawing kits, IQ kits, and drawing materials further enrich these learning spaces.

This setup indicated that the English Rooms are well-equipped to support diverse and interactive learning methods, effectively aiding in the advancement of English skills. Subsequently, an overwhelming majority (97.8%) reported that each class has one fixed session in the English Room per day. This pattern suggests a structured approach to utilising the English Room, primarily favouring a single, consistent session per class to enhance English learning systematically.

CHART 24: CLASSROOM ACTIVITIES**CHART 25: ADDITIONAL TECHNIQUES PROVIDED TO BUILD PROFICIENCY**

The survey provided insights into the motivational techniques and proficiency-building strategies employed in classrooms. For motivation, the most popular technique is the use of praising words (66%), followed by gestures like thumbs up or star signs and game activities (each at 56%). Smaller gifts, pats on the back, quizzes, art, and group activities are also used, with extempore activities being the least common. These diverse methods aim to enhance student engagement and motivation. In terms of building English proficiency, a significant 94% of respondents encourage students to communicate in English. Other prevalent methods include conducting classroom sessions on varied topics (72%) and providing learning materials (62%). These techniques emphasised practical engagement and resource utilisation to foster English language skills, with only a small minority not employing specific strategies.





We are committed to leveraging every resource to enhance our students' learning experiences. Our English Room, equipped with a diverse collection of books, plays a pivotal role in fostering robust reading habits among students, especially important in today's digital age. The Pehlay Akshar program's focus on vocabulary and spoken English enriches our curriculum through singing, demonstrations, activity-based songs, and storytelling. Teachers are not only learning new activity-based teaching techniques but are also integrating Pehlay Akshar's methods with their existing styles. With a total student body of 380 and a dedicated teaching staff of 11, the enthusiasm and engagement we see from our students confirm the positive impact of our approach. We are proud to provide an environment that promotes the academic growth and development of every student.

- Shaikh Hajra, Principal, East Byculla Municipal Higher Secondary School



IMPACT OF THE PROJECT

CHART 26: OBSERVED IMPROVEMENT THROUGH ENGLISH ROOM

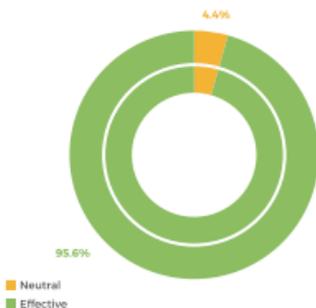


CHART 28: EFFECTIVENESS OF WALL PAINTING IN LEARNING ENGLISH

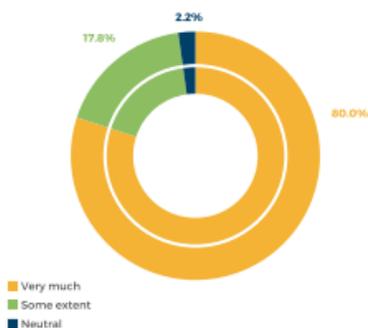


CHART 27: PERCEIVED EXCITEMENT AMONG STUDENTS

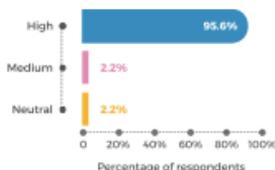


CHART 29: BUILDING CURIOUS MINDS



A substantial majority (95.6%) affirmed the effectiveness of the English Room in enhancing learning or teaching experiences, with similar levels of excitement expressed about utilising these specialised learning environments. Furthermore, visual aids like wall paintings are seen as very effective by most of the respondents (80%), enhancing English language acquisition for daily conversations. Additionally, 93.3% of the respondents believe that the English Rooms are instrumental in developing an inquiry mindset and fostering a desire to read. Overall, the feedback underscores the substantial value and appeal of English Rooms as effective and engaging educational tools that significantly contribute to both language skills and cognitive development.

PEHLAY AKSHAR TRAINING PROGRAM AT RAJSHI SHAHU NAGAR MUNICIPAL SCHOOL, MAHIM

This focus group discussion provides an analysis of the feedback collected from four teachers at Rajshi Shahu Nagar Municipal School in Mahim following their participation in the Pehlay Akshar training program. The purpose of this study is to evaluate the effectiveness of the program, identify areas of improvement and provide recommendations based on the insights gathered from the focus group discussion.

The focus group consisted of four participants:

1. Mayur M. Bhoir - Teaches multiple subjects across various grades.
2. Ravikumar D. Ingole - Handles classes for grade 8A.
3. Sagar B. Kadam - Responsible for grade 8B.
4. Deepak D. Kokate - Manages grade 6A and 7A.

KEY FINDINGS



CONFIDENCE IN ENGLISH PRE-TRAINING

Teachers expressed a general lack of confidence in delivering English lessons effectively, using traditional methods and some digital aids like YouTube before the training.



TRAINING CONTENT AND DELIVERY

The training focused on activity-based learning, incorporating storytelling, storybooks, games, and interactive teaching methods aimed at increasing student engagement and psychological development.



PARENT-STUDENT ENGAGEMENT

Engagement between students and parents has improved, evidenced by regular attendance and participation in events like the drama performance at the Kala Ghoda Arts Festival.



LEVEL-BASED LEARNING

The implementation of level-based learning has significantly improved students' reading and writing skills through tailored activities for different grades.



SUPPORT FROM SCHOOL MANAGEMENT

The school management fully supports the training, with mandatory participation and no leave allowed on training days.



USE OF DIGITAL TOOLS

The Pehlay Akshar app, which includes lesson plans and various educational materials, has been extremely useful; however, teachers reported being unaware of the WhatsApp Bot.



PROFESSIONAL DEVELOPMENT

Professional development sessions, lasting two to three hours, have been beneficial, enabling teachers to share views and discuss various teaching strategies



SATHI SESSIONS FOR CAPACITY BUILDING

Online sessions during the pandemic focused on leadership skills and innovative teaching methods, including the use of Google Sheets and objective question design.



ENGLISH ROOM FACILITIES

The English Room and English Room on Wheels, equipped with dictionaries and storybooks, have greatly enhanced students' confidence and interest in learning English.



MOTIVATIONAL TECHNIQUES

The introduction of activity-based learning and motivational activities has increased student engagement and interest in learning.



PROGRAM ALIGNMENT AND EFFECTIVENESS

The program aligns well with the syllabus, integrating functional English effectively through various activities.



FEEDBACK AND GROWTH MINDSET

Positive feedback from mentors and students has encouraged a growth-oriented mindset among teachers.



IMPACT ON STUDENT PERFORMANCE AND RETENTION

There have been noticeable improvements in students' English proficiency and behaviour, with an increase in enrollment rates and a decrease in dropout rates.



CHALLENGES AND RECOMMENDATIONS

Initially, there were concerns about the program's management and effectiveness, especially regarding discipline challenges from students from the Dharavi region. It is recommended to keep students engaged during holidays through digital platforms like WhatsApp to prevent a decline in learning.

The Pehlay Akshar training program has substantially impacted the teaching strategies at Rajshi Shahu Nagar Municipal School, enhancing both teacher confidence and student outcomes in English literacy. Ongoing support and incremental improvements in program delivery can further these gains, ensuring sustained educational success and higher student retention rates.

SATISFACTION AND PERCEPTION ABOUT THE STUDENTS

CHART 30: STUDENTS' CONFIDENCE AFTER INTERVENTION



■ Confident
■ Not confident

CHART 31: STUDENTS' ACADEMIC PERFORMANCE



■ Improved
■ Not improved

Remarkably, 100% of respondents noted an increase in student confidence following the intervention.

Similarly, all respondents observed improvements in students' academic performance, indicating that the interventions were entirely effective in boosting academic achievements. This data highlights the success of the strategies implemented, significantly improving their academic performance across the board.



C. ENGAGEMENT AND ACADEMIC PROGRESS OF STUDENTS

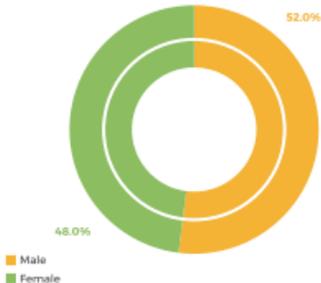
This section focuses on various aspects, including the nature and impact of program interventions and the overall effect of these initiatives on student confidence, teacher-student interactions, English language proficiency and academic performance. By analysing data on class participation, access to learning facilities, and the qualitative impact of educational techniques employed, this report aims to provide a comprehensive overview of the educational outcomes influenced by the Pehlay Akshar program.

SOCIO-ECONOMIC DEMOGRAPHIC PROFILE OF THE RESPONDENTS

CHART 32: GRADE-BASED
DISTRIBUTION



CHART 33: GENDER



The data shows that 2nd-3rd graders constitute nearly one-third (28%) of the participants, 4th-5th graders represent more than one-third (32%), and 6th-8th graders form the largest group (40%). In terms of gender distribution, there is a nearly even split between 52% males and 48% females.

PROJECT INTERVENTION

CHART 34: PARTICIPATION IN CLASS
TYPE

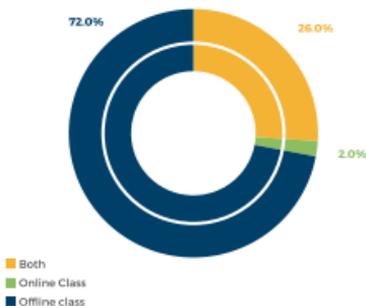


CHART 35: FACILITIES AND ACCESS IN
THE ENGLISH ROOM

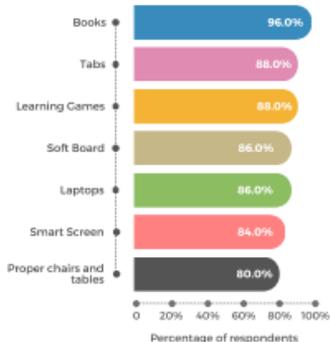


CHART 36: ACTIVITIES DONE IN CLASS

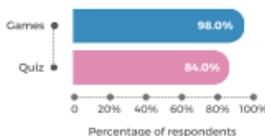
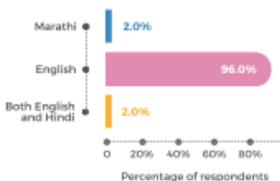


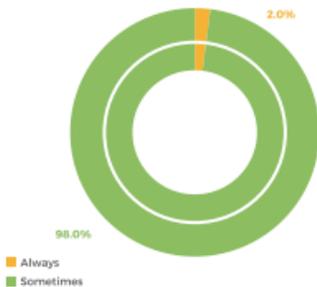
CHART 37: PRESENTATION LANGUAGE



In terms of class attendance, the majority (72%) participated in offline classes, followed by both online and offline classes (25%) and only online classes (2%). The English Room facilities show a well-equipped environment with books available for nearly all the respondents (96%), followed by tablets and learning games (88% each), and other educational tools like soft boards, laptops, and smart screens also highly accessible. Classroom activities highlight strong engagement, as most of the students participated in games (98%) and quizzes (84%), which emphasised the popularity of interactive and competitive learning methods. Additionally, presentations in English classes were predominantly in English (96%), with minimal usage in other languages like Marathi and Hindi, which implied a strong focus on English language use in educational presentations.

IMPACT OF THE PROJECT

CHART 38: IMPROVED CONFIDENCE LEVEL IN COMMUNICATION SKILLS



An overwhelming 98% of the participants reported feeling confident in their English communication skills. Only 2% of the group felt that they were not confident. This demonstrates a high overall confidence level after improvement in English communication within the surveyed group.

IMPROVED STUDENT-TEACHER ENGAGEMENT

CHART 39: POSITIVE REINFORCEMENT RECEIVED FROM TEACHERS

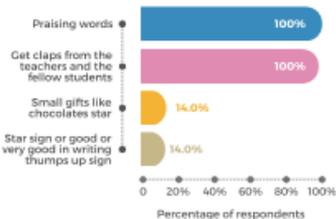
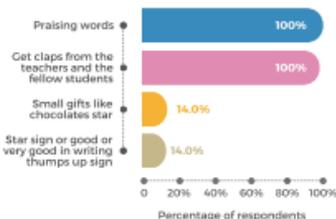


CHART 40: ENHANCED INTERACTION IN ENGLISH



Firstly, all respondents received praising words and claps from teachers and peers for good responses, which indicated the universal use of verbal praise and applause. However, tangible rewards like small gifts are much less common, as only a few students (14%) received such items. Secondly, there is a notable increase in the use of English during English classes post-program. Before the program, 88% of teachers consistently interacted in English, which increased to 98% after the program, while the frequency of only sometimes using English decreased significantly from 12% to 2%. This suggests a marked improvement in consistent English usage by teachers in classroom settings following the program.

“

The Pehlay Akshar training has been a transformative experience for both our students and teaching staff. Overseeing the school with 600 students, all our 15 teachers participated in the Pehlay Akshar training, which has significantly enhanced their presentation skills and ability to engage students through activity-based teaching techniques. This comprehensive involvement has fostered a uniform approach to integrating Pehlay Akshar's curriculum, which, while more closely aligned with the CBSE board, has been adapted to complement our Maharashtra SSC syllabus. The program provided invaluable resources like the English Room and English Room on Wheels. These facilities offer a dynamic and immersive English learning environment that parents greatly appreciate. Functional English sessions for students and teachers have increased engagement and skill retention, enhancing the overall academic atmosphere. The English Room initiative, in particular, has led to increased student attendance and a reduction in dropout rates, underscoring the program's effectiveness in retaining students.

- Deepak D. Kokate, Teacher in Charge, Rajshil Shahu Nagar Municipal School, Mahim

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IMPROVED ACADEMIC PROGRESS OF STUDENTS

CHART 41: PERCEPTION OF ENGLISH BEFORE AND AFTER THE PROGRAM



CHART 42: IMPROVEMENT IN ENGLISH SKILLS

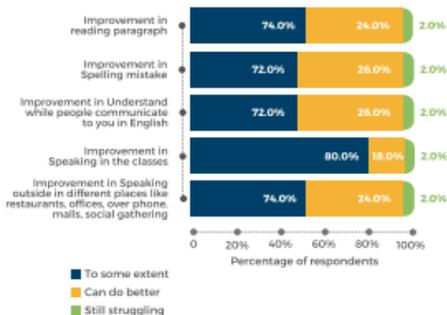
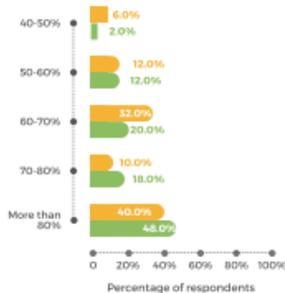


CHART 43: ACADEMIC SCORE BEFORE AND AFTER THE PROGRAM



Before Program
After Program

The study shows substantial improvements in attitudes and competencies in English following a targeted program. Initially, a majority (64%) felt intimidated by English, but post-program, this fear dropped to only 4%, while confidence and comfort increased significantly. In terms of skill development, there were broad improvements across reading, spelling, understanding, and speaking English, with the majority noting progress and a smaller portion still seeing room for improvement. Speaking skills, in particular, showed considerable enhancement, both in classroom settings and diverse social contexts. Academically, there was notable progress in English scores, with significant increases in the higher score brackets (above 80%) post-program. These results collectively highlight effective shifts in both perception and academic performance in English among the participants.

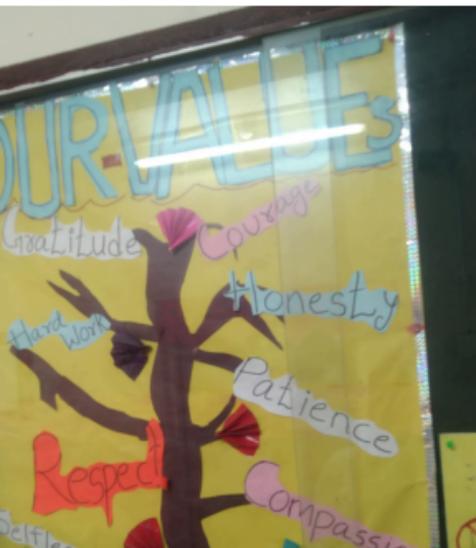
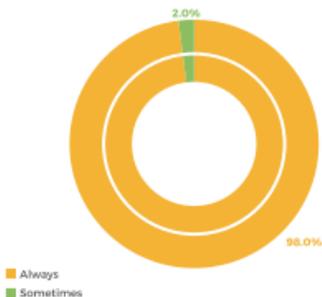


CHART 44: REGULARITY OF SCHOOL ATTENDANCE



The data indicates a high level of school attendance, as nearly all (98%) attended school regularly. Only a small section (2%) reported attending school sometimes, which reflected the overall strong attendance patterns among the surveyed students.

SATISFACTION AND PERCEPTION OF THE STUDENTS

CHART 45: POSITIVE IMPACT OF THE ENGLISH ROOM ON STUDENT ENGAGEMENT AND MOTIVATION

LETS DO IMAGES

All participants expressed extreme happiness with using the English Room, appreciated the wall paintings within it, and indicated a strong desire to continue their studies. This suggested a highly favourable reception and a motivating environment facilitated by the features of the English Room.



Since our children began participating in the Pehlay Akshar initiative at Rajshi Shahu Nagar Municipal School, we've seen changes in their engagement and confidence within the school environment. Our children have become more interested and confident in school activities, which speaks volumes about the program's positive impact. We have observed our children using English words at home, thanks to the motivational teaching style of Pehlay Akshar. As parents, we deeply appreciate the initiative's approach to making learning enjoyable and engaging and building confidence in our children.

- Shazia Banu, Tabrez Idrisi, and Hina Khan,
Parents - Rajshi Shahu Nagar Municipal School,
Mahim



Impact Created Across Multiple Levels



INDIVIDUAL LEVEL

- Individual students and teachers have experienced significant growth in confidence and English communication skills. Teachers shared enhanced abilities in presenting and engaging students through activity-based methods. Students have shown marked improvements in English fluency and literacy, shifting from intimidation to comfort with the language.



COLLECTIVE LEVEL

- The entire community at schools benefits from a more enriched educational environment. This includes the introduction of English Rooms and tools such as the Pehlay Akshar App that support both teachers and students in daily educational activities. Teachers collectively enjoy improved professional development opportunities while students engage more deeply with the curriculum.



STATE LEVEL

- The program's success in individual schools suggests a model for broader educational reforms at the state level. By showcasing effective teaching strategies and the integration of technology in classrooms, the program sets a benchmark for curriculum development and teacher training across Maharashtra.



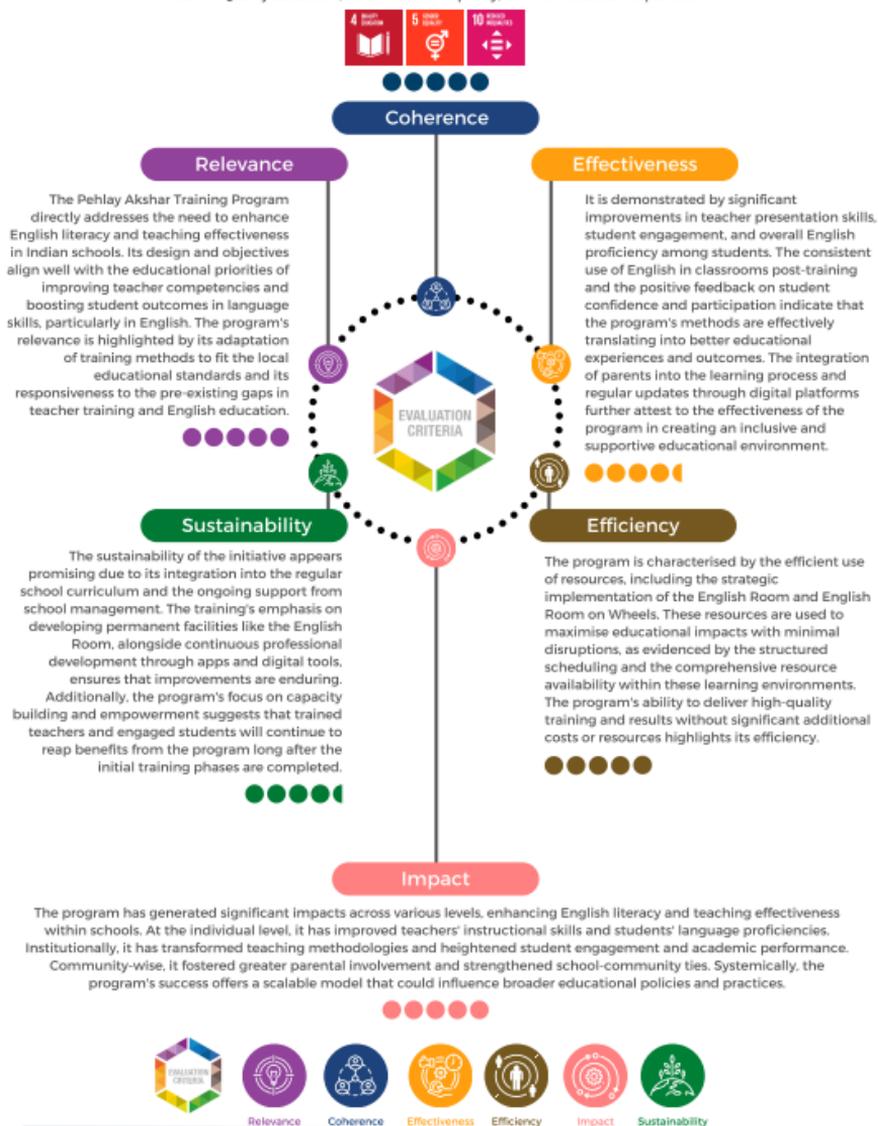
NATIONAL LEVEL

- The overarching success of the Pehlay Akshar training program has the potential to influence national education policies, particularly in the realm of English education and teacher training. As the program highlights innovative methods that can be scaled, it could serve as a blueprint for national initiatives aimed at upgrading educational standards and teacher competencies across India.

6.1.5 OECD FRAMEWORK

The program's design demonstrates a strong coherence between its objectives and activities. The initiative was aligned with the following SDGs:

SDG 4: Quality Education, SDG 5: Gender Equality, SDG 10: Reduced Inequalities



6.1.6 THE WAY FORWARD

By implementing these recommendations, the initiative could be more effective, sustainable, and impactful:



Digital tools and platforms could be further leveraged to enhance educational delivery. This can include the expansion of apps like Pehlay Akshar and WhatsApp for continuous learning, alongside the development of new digital resources that can be accessed remotely, increasing the program's reach and flexibility.



Additional digital resources can be developed to increase accessibility and engagement for teachers and students.



Training modules can be updated regularly based on feedback and educational research.



Modular and scalable training sessions can be introduced to address the specific needs of different regions.



Awareness about the English Room can be improved, ensuring full utilisation of available resources.



Standard operating procedures for the English Room can be established, and the use of the English Room on Wheels can be encouraged in schools without a dedicated space.



Confidence in English communication among teachers can be strengthened through targeted interventions.



Additional spoken English practice sessions can be arranged, and mentoring programs can be introduced for those with lower proficiency.



Peer learning opportunities can be expanded through platforms like Sathi Sessions to enhance knowledge sharing among teachers.



Parental and community engagement can be increased through awareness programs that educate parents on supporting their children's learning at home.



Community partnerships can be formed to enhance student participation in learning activities, with student-led events such as storytelling, debates, and drama performances being promoted.



A structured system for monitoring and evaluation can be implemented to continuously assess the effectiveness of the program.



Data analytics can be used to track student progress, teacher performance, and training outcomes.



Feedback mechanisms can be strengthened to ensure that the initiative remains responsive to the evolving needs of schools and educators.



Collaborations with other NGOs and educational organisations can be explored to share resources and best practices.



Partnerships with government agencies and corporate sponsors can be expanded to scale the initiative across a wider network of schools.



Policy-level advocacy can be undertaken to integrate the Pehlay Akshar training model into formal teacher development programs.



Budget allocations for English Rooms can be secured to ensure long-term sustainability.



Functional English and activity-based learning approaches can be recommended for inclusion in mainstream educational curricula.

Through these measures, the impact of the Pehlay Akshar initiative can be strengthened, creating a more inclusive and effective learning environment that benefits teachers, students, and the broader school community.

6.1.7 CONCLUSION

The Pehlay Akshar program supported by KEC has demonstrated a profound impact on enhancing English literacy and educational practices across diverse student groups. It is supported by a well-structured teacher training system that focuses on innovative, activity-based learning techniques. By integrating digital tools, fostering strong community engagement, and emphasising continuous teacher support, the program has significantly improved student confidence, participation, and academic outcomes. Moreover, its alignment with educational standards and the proactive adaptation to feedback underscore its potential for broader implementation. The success of Pehlay Akshar reflects a scalable model for educational excellence, suggesting a promising pathway for future educational initiatives aiming to combine traditional and modern learning methodologies for comprehensive student development.