IMPACT ASSESSMENT REPORT

COLGATE KEEP INDIA SMILING
WASTE MANAGEMENT PROGRAM

Implemented by: Nepra Foundation

PREPARED BY:

SoulAce
Path to Sustainability

SOULACE CONSULTING PVT. LTD.

CONTENTS

ABBREVIATIONS

CSR	Corporate Social Responsibility
FGD	Focus Group Discussion
KII	Key Informative Interview
NGO	Non-government organization
M&E	Monitoring and Evaluation
OECD	The Organisation for Economic Cooperation and Development
SDGs	Sustainable Development Goals

EXECUTIVE SUMMARY

PROJECT BACKGROUND

The Colgate Waste Management Project brought about a significant behavioural shift in the target villages of Goa. Before the intervention, most households, schools and community members had little knowledge of proper waste disposal or the importance of separating dry and wet waste. Open dumping and burning of garbage were common, resulting in poor hygiene and frequent health issues.

Through a series of awareness sessions, visual materials, school activities, and community engagement events, the project successfully educated both children and adults about sustainable waste practices. Children became key change agents, discussing the importance of waste segregation at home and leading cleanliness initiatives in schools and neighbourhoods. Parents, teachers and community members responded positively, adopting better practices and showing enthusiasm for maintaining cleanliness. A compelling example is the story of Abhishek Vaishnav, a 19-year-old from Manaswada who not only transformed his own understanding but also became a local advocate for waste management. His efforts, along with structured waste collection systems and support from Safai Karamcharis, helped improve the village's hygiene and environmental conditions.

Overall, the project led to visible improvements in cleanliness, health awareness and community responsibility. The positive changes seen in behaviour, school attendance and environmental conditions indicate a strong potential for long-term sustainability and replicability in other regions.

PROJECT DETAILS

Implementation year
FY 2023 – 2024

Project year
FY 2024 - 2025

Assessment year
FY 2025 – 2026

Beneficiaries
Rural households, students, teachers, parents, Safai Karamcharis, and local health facility users

Program Coverage
#Beneficiaries - 143K, #CO2 Emission Diverted - 90 Kg, #Energy Saved - 1 Mn KwH, #Waste Quantum Collected - 1.3 Million Kg,

Locations
Kundaim in Goa and Sanand in Gujarat

Budget

Rs. 2,60,00,000/-

Implemented by

Nepra Foundation

Alignment with SDGs

PROJECT ACTIVITIES

Community mobilization events & employee volunteering.

Awareness sessions in schools & household level engagement & Training of safai karamcharis.

Structured waste collection, sweeping, and transport to MRFs across all target villages.

Real-time data uploads and documentation maintained through Colgate's CSR dashboard.

Community-wide adoption of waste segregation, plastic reduction, and reuse practices.

KEY FINDINGS

95.0%
of the respondents reported attending waste management awareness sessions, indicating high community engagement in the initiative.

90.9%
of the respondents correctly understood the term "waste" as unwanted material, reflecting strong conceptual awareness post-intervention.

92.7%
of the respondents were aware of organic waste, while 85.5% recognised plastic waste and 58.2% identified paper waste as distinct categories.

76.0%
of the respondents understood waste segregation as separating dry and wet waste, and 30.9% understood it as sorting waste into multiple categories, showing a good fundamental understanding.

60.0%
of the students contributed by educating peers on waste segregation, while 30.9% engaged in up-cycling activities, and 29.1% helped organise cleanliness drives.

51.0%
of the community members observed waste segregation being practised in their locality, suggesting strong behavioural adoption across households.

65.5%
of the respondents disposed of dry waste in designated dustbins, and 41.8% practised recycling, indicating increased compliance with proper disposal methods.

94.5%
of the participants received training at school, highlighting the key role schools played in awareness building, while 36.4% learned from family members.

53.0%
of the respondents completely stopped using single-use plastics, while 27.3% continued using them frequently, highlighting partial behaviour change.

42.0%
of the respondents consistently practised reuse and recycling of materials, and 25.5% did so most of the time, showing moderate to strong adoption of eco-friendly habits.

100%
of the respondents reported cleaner roads and surroundings due to improved waste collection, while 80.0% noted cleaner homes and 52.7% observed elimination of open dumping.

56.4%
of the respondents expressed extreme satisfaction with the waste management program, with only 3.6% indicating dissatisfaction.

50.9%
of the individuals actively encouraged their families or friends to practise waste segregation or reduce plastic use and saw positive results.

55.4%
of the respondents were aware of waste segregation practices, while 20.0% had no awareness, highlighting the need for such interventions.

53.8%
of the respondents acknowledged that the project created many job opportunities for economically weaker sections, especially Safai-karamcharis.

40.0%
of the participants reported a significant reduction in health issues post-intervention, and another 52.3% noticed some health improvements.

38.5%
rate the contribution of Safai-Karamcharis as very good, and 23.1% rate it as good, indicating appreciation for their efforts.

KEY IMPACTS

ENHANCED COMMUNITY AWARENESS AND BEHAVIOUR CHANGE
The project significantly improved public understanding of waste segregation, with most households now consistently separating dry and wet waste and demonstrating responsible disposal behaviour.

CLEANER AND HEALTHIER LIVING ENVIRONMENTS
The program resulted in visibly cleaner streets and surroundings in all target villages. Community members reported fewer instances of open dumping and a reduction in unpleasant odours, improving overall sanitation.

REDUCTION IN WASTE-RELATED HEALTH ISSUES
A large number of households reported fewer health problems such as infections, mosquito-borne diseases and respiratory issues due to cleaner surroundings and proper waste handling.

EMPOWERMENT AND EMPLOYMENT FOR SAFAI KARAMCHARIS
The project created dignified employment opportunities for Safai-karamcharis. Many workers reported improved income, job security and social respect, contributing to the upliftment of economically weaker sections.

INCREASED PARTICIPATION OF WOMEN, CHILDREN AND LOCAL LEADERS
Community members, including women and students, took active roles in promoting cleanliness and sustainability through peer education, participation in clean-up drives and home-level segregation efforts.

SCHOOL-LEVEL LEADERSHIP AND SUSTAINABILITY EDUCATION
Students became ambassadors of change by practising and promoting waste management at school and at home. The integration of environmental education contributed to long-term mindset shifts in the younger generation.

INSTITUTIONAL SUPPORT AND INFRASTRUCTURE DEVELOPMENTINABILITY EDUCATION
The involvement of Panchayats, school authorities and local administration led to improved coordination, placement of dustbins and sustained waste collection mechanisms, ensuring long-term project sustainability.

DECLINE IN USE OF SINGLE-USE PLASTICS
Awareness sessions led to behavioural change, with a significant number of households reducing or completely stopping the use of single-use plastics, thereby contributing to environmental conservation.

STRONGER WASTE MANAGEMENT ECOSYSTEM
Waste collection became more structured and reliable through regular door-to-door collection and better coordination between households and sanitation workers, reinforcing a culture of cleanliness.

SHIFT TOWARD CIVIC RESPONSIBILITY AND OWNERSHIP
The project nurtured a sense of civic pride and responsibility among villagers. People began holding themselves and others accountable for keeping the environment clean and healthy.

01. INTRODUCTION

BACKGROUND AND NEED OF THE PROGRAM

Proper waste management is essential for a healthy and sustainable living environment. In many rural areas, however, waste segregation and disposal practices are either poor or completely absent. Recognising this challenge, Colgate-Palmolive, in partnership with Nepra Foundation, implemented a community-based waste management project in several villages of Goa, including Manaswada, Mauzowada, Banastarim, Fadtewada and Muslimwada and Gujarat, namely Goraj, Kundal, Makhiyav, Melsana, Pava, Srinagar, Vinchiya. The project aimed to raise awareness about waste segregation, reduce harmful disposal practices and promote a cleaner environment through community engagement, school-based interventions and collaboration with Safai Karamcharis (sanitation workers). This report presents field insights, community stories and data analysis to highlight the project's impact on schoolchildren, parents, teachers, sanitation workers and the wider community.

Improper waste management continues to pose serious health and environmental risks in many rural areas of India. In project villages of Goa and Gujarat, waste was often dumped in the open or burned, leading to foul smells, mosquito breeding, and frequent infections, especially among children. Lack of awareness, poor infrastructure and the absence of organised systems for waste segregation further worsened the situation. Recognising this pressing need, Colgate-Palmolive, in partnership with Nepra Foundation, launched a waste management awareness program focused on schools and communities. The initiative aimed to educate children and parents, and rural communities about proper waste segregation, promote hygiene, support local sanitation workers and build cleaner, healthier environments through sustained behaviour change and community engagement.

OBJECTIVE OF THE PROGRAM

The main objective of the Colgate Waste Management Program was to promote safe, hygienic and environmentally friendly waste disposal practices in rural villages and schools through awareness, engagement and behaviour change.

Specific objectives included:

- To raise awareness among children, parents, teachers and community members about the importance of waste segregation (dry and wet waste) and responsible disposal practices.
- To introduce structured waste management systems in schools and villages, including the use of dustbins, visual tools, and regular collection mechanisms.
- To encourage active participation of schoolchildren as change agents, motivating them to adopt and spread best practices in hygiene and cleanliness at home and in the community.
- To build the capacity of school staff, parents and local sanitation workers (Safai Karamcharis) through practical demonstrations, games and community events.

To improve public health by reducing open dumping and burning of waste, thereby lowering risks of infections, respiratory issues and other sanitation-related diseases.

To strengthen community ownership and collaboration between schools, families and local administration in maintaining a clean and healthy environment.

To create a replicable model of school and community-based waste management that can be scaled in other regions facing similar challenges.

ABOUT COLGATE-PALMOLIVE (INDIA) LIMITED

Colgate-Palmolive is more than a company; it's a caring, innovative growth engine, reimagining a healthier future for all people and the planet. Colgate-Palmolive (India) Limited stands as the undisputed market leader in oral care in the country, relentlessly pursuing sustainable, profitable growth for its shareholders, while fostering an inclusive and empowering workplace for its people. With a primary focus on cutting-edge, science-led innovations in oral and personal care across the Indian market, the company is globally recognized for its visionary leadership and pioneering efforts in advancing sustainability and community well-being. Among its recent landmark accomplishments, the company has made colossal strides in drastically reducing plastic waste and championing recyclability, meticulously conserving water and energy at its state-of-the-art manufacturing facilities, empowering women through vital financial and digital literacy programs, and profoundly enhancing children's oral health through the iconic Colgate Bright Smiles, Bright Futures® program.

ABOUT IMPLEMENTING PARTNER: NEPRA FOUNDATION

Established in 2012, the NEPRA Foundation is a grassroots voluntary organisation dedicated to the socio-economic development of both rural and urban populations in India. Registered under the Trust Registration Act of 1950 and certified under Sections 12A and 80G of the Income Tax Act, the foundation focuses on empowering marginalised communities through initiatives in education, health, livelihood, and environmental sustainability. By collaborating with local stakeholders, NEPRA Foundation aims to create inclusive growth opportunities and foster community-driven development, aligning with its mission to build a more equitable and sustainable society.

TEAM WHILE TALKING TO THE PARENT - GOA

02 RESEARCH METHODOLOGY

Colgate Palmolive (India) Ltd., under its CSR initiative, has implemented a Community-Based Waste Management Program in selected villages in Goa and Gujarat, through NEPRA Foundation. The project aims to promote safe, hygienic and sustainable waste disposal practices through community engagement, school-based education and active involvement of sanitation workers. Colgate-Palmolive commissioned SoulAce to conduct an impact assessment study during the fiscal year 2024–25 to evaluate the outcomes and effectiveness of the Rural Waste Management initiative implemented in 2023–24.

The evaluation of the Waste Management Program was carried out using a mixed-methods approach, combining both quantitative surveys and qualitative tools such as focus group discussions and key informant interviews. This methodology was designed to provide a comprehensive understanding of the program's effectiveness and the community.

OBJECTIVES OF THE STUDY

Key areas evaluated for the assessment are outlined below:

Assess the level of awareness, behaviour change and adoption of waste management practices among primary stakeholders such as communities, students, parents, teachers, households and Safai Karamcharis.

To document and analyse field insights, community narratives, and quantitative data to assess the impact of the waste management project on key stakeholder groups, including schoolchildren, parents, teachers, sanitation workers, and the broader community.

Measure the environmental and health improvements resulting from the intervention, including reduction in open dumping and improved sanitation.

Evaluate the participation, engagement and satisfaction of community members and school staff with the program activities and communication materials.

Identify gaps, challenges and areas of improvement in implementation for future scalability and sustainability.

Document success stories and best practices that reflect community transformation and youth leadership.

Align findings with Sustainable Development Goals (SDGs) to highlight the program's contribution to global and national development agendas.

USE OF MIXED METHOD APPROACH

EVALUATION METHODOLOGY

The evaluation employed a comprehensive mixed-methods approach, integrating both qualitative and quantitative research methodologies to provide a holistic understanding of the project's effectiveness and impact.

QUALITATIVE TECHNIQUES

The qualitative component focused on capturing the real-life experiences, perspectives, and stories of key stakeholders, including community members, students, parents, teachers, and implementation partners. Methods such as in-depth interviews and focus group discussions (FGDs) were used to explore observed changes in areas such as the practices of waste management adopted. The insights gathered through these tools complemented the quantitative findings and offered a deeper understanding of the program's effectiveness, key barriers, existing challenges and potential areas for improvement.

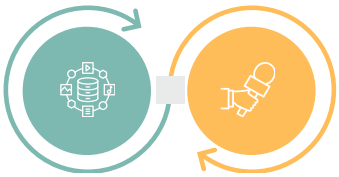
QUANTITATIVE TECHNIQUES

In parallel, the quantitative component facilitated the collection and analysis of numerical data through structured surveys and questionnaires. This data was gathered from direct beneficiaries and stakeholders to measure key performance indicators. Quantitative analysis provided statistical insights into behavioural changes, service utilisation, and outcome trends, offering a measurable basis to assess the project's success and impact.

TRIANGULATION FOR RELIABILITY

To enhance the credibility and reliability of the evaluation, the study adopted triangulation strategies.

Data triangulation involved collecting information from various sources, including field notes, beneficiary feedback, and interviews with project staff.



Methodological triangulation was achieved by employing multiple data collection methods such as surveys, interviews, and FGDs to cross-check and reduce potential bias.

By leveraging the strengths of both qualitative and quantitative approaches, the evaluation ensured a robust, well-rounded, and evidence-based assessment of the project. This methodological rigour enabled a deeper understanding of the project's reach, relevance, and long-term impact on the target population.

RESEARCH DESIGN

Name of the project

Colgate - Keep India Smiling Waste Management Program

Research design used

Descriptive research design

Implementing agency

Nepra foundation

Sampling Technique

The study employed a mix of purposive sampling (for key stakeholders and FGDs) and random sampling (for community-level quantitative surveys)

Sample Size

Beneficiaries	Interaction Type	Gujarat	Goa	Total
SafaiKaramcharis	In - depth Interview	10	5	15
Principal/ Teachers		10	5	15
School Children		30	20	15
ASHA & Anganwadi Worker		5	2	7
Parents/ Communities	Focused Group Discussion	70	50	120
Total		**125**	**82**	**207**

Quantitative data

Quantitative data was analysed using Excel and basic statistical techniques to generate frequencies and percentages.

Qualitative data

Inputs from Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) were examined through thematic analysis to identify recurring patterns, lived experiences, and perceptions from the community, teachers, parents, and Safai Karamcharis.

KEY STAKEHOLDERS

- School Principals and Teachers
- Students and parents
- Safai Karamcharis Sanitation Workers
- Panchayat Members and Local Administration
- School Management Committees (SMCs)

STUDY TOOLS

STRUCTURED QUANTITATIVE SURVEY QUESTIONNAIRES

Administered to over 200 respondents, including students, parents, teachers, and community members. The survey covered domains such as awareness of waste segregation, household disposal practices, school cleanliness, health impact, and satisfaction with the program interventions.

FOCUS GROUP DISCUSSIONS (FGDS)

Conducted with various stakeholder groups, including school students, parents, Safai Karamcharis, and village residents, to gather collective perspectives on behavioural changes, challenges faced, and community participation.

KEY INFORMANT INTERVIEWS (KIIS)

Held with school principals, teachers, Panchayat members, Safai Karamcharis, and the implementing team. These interviews provided deeper insights into the program's implementation process, local coordination, and institutional support.

OBSERVATION CHECKLISTS

Used to assess the availability and condition of waste bins, school and village cleanliness levels, the presence of segregation systems, and the participation of students and Safai Karamcharis in day-to-day waste management.

ETHICAL CONSIDERATIONS

INFORMED CONSENT

Participants were fully informed about the study's objectives, procedures, risks and benefits. They had the opportunity to ask questions and make their decisions voluntarily after understanding the details, ensuring informed consent was obtained.

CONFIDENTIALITY AND PRIVACY VOLUNTARY PARTICIPATION RESPECT, DIGNITY AND FAIRNESS

Participants' data was securely stored and accessible only to authorised personnel. Anonymisation techniques were used to protect identities, ensuring privacy throughout the study.

VOLUNTARY PARTICIPATION

Participation was entirely voluntary, with no coercion or pressure. Participants had the freedom to withdraw at any time, respecting their autonomy and personal choice.

RESPECT, DIGNITY AND FAIRNESS

Participants' data was securely stored and accessible only to authorised personnel. Anonymisation techniques were used to protect identities, ensuring privacy throughout the study. Participants were treated with respect and fairness. Their well-being was prioritised, and necessary support was provided to ensure a positive experience throughout the study.

TEAM AT THE SHOP FOR DATA COLLECTION - COMMUNITY (GOA)

03

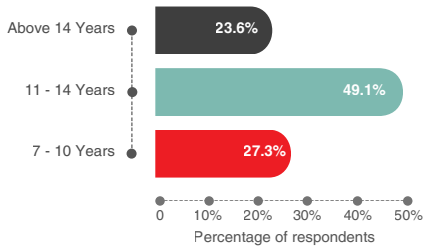
KEY FINDINGS AND IMPACTS

This section presents an in-depth analysis of the design, implementation, and effectiveness of the Colgate Rural Waste Management Program implemented in partnership with NEPRA Foundation. It focuses on key interventions such as community sensitisation, school-based awareness sessions, and engagement of Safai Karamcharis and their multidimensional impact on rural communities. The evaluation draws from field observations, household surveys, and stakeholder interviews, offering a comprehensive understanding of the program's structure, strategies, and the development framework guiding its objectives. Colgate-Palmolive, through its CSR initiative, has successfully executed this program across selected villages in Goa and Gujarat.

SCHOOL CHILDREN ANALYSIS

DEMOGRAPHIC

CHART 1: AGE DISTRIBUTION OF RESPONDENTS



49.1%

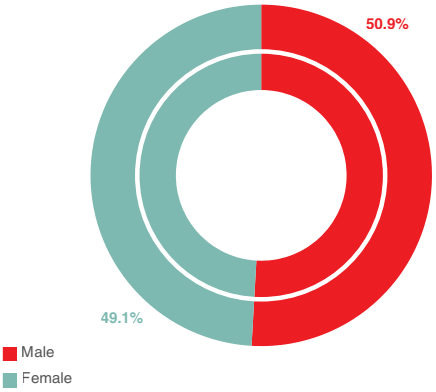
of the respondents (27 out of 55), were in the 11 to 14-year age range, typically representing upper primary and early secondary students. 27.3% (15 respondents) were between 7 and 10 years, indicating active participation from lower primary classes.

23.6%

of the respondents (13 respondents) were above 14 years, covering adolescents. This broad age range reflects the program's ability to engage students at different learning levels, encouraging early adoption of responsible waste management practices among younger generations.

SOULACE TEAM WHILE COLLECTING DATA - KUNDAIM (GOA)

CHART 2: GENDER DISTRIBUTION OF RESPONDENTS



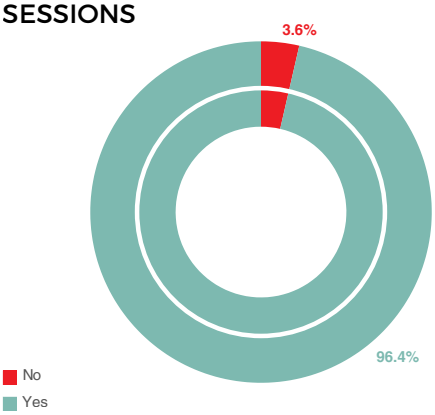
50.9%

of the respondents (28 out of 55) identifying as male and 49.1% (27 respondents) as female.

Such gender-balanced involvement is essential for obtaining a gender-balanced assessment of behavioural change around waste segregation and environmental hygiene.

WASTE SEGREGATION - GOA

CHART 3: ATTENDANCE IN WASTE MANAGEMENT AWARENESS SESSIONS



96.4%

of the respondents (53 out of 55), attended the Waste Management Awareness Sessions conducted under the project.

This high level of participation reflects strong community interest and engagement with the initiative. It also suggests that the outreach and mobilisation efforts were effective in encouraging attendance.

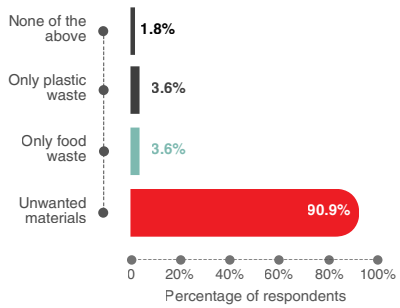
3.6%

of the respondents (2 respondents) did not attend the sessions, which may be due to personal or logistical reasons.

Overall, the high attendance rate indicates a solid foundation for behaviour change and awareness-building around sustainable waste practices.

> "Earlier, waste was dumped or burned, leading to foul smells, mosquitoes, and illness. Since the implementation of this program, dustbins were installed, regular collection began, and we were educated on segregation and hygiene. Now, our village is much cleaner, healthier, and more aware."
>
> **Ganpatbhai Sakrabhai Patel, Farmer & Sarpanch, Gokalpura,Sanand, Ahmedabad**

CHART 4: UNDERSTANDING OF THE TERM WASTE



90.9%

of the respondents (50 out of 55), correctly understood the term waste as unwanted materials, reflecting a strong awareness of the general concept.

3.6%

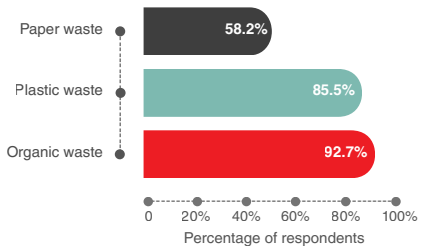
of the respondents each associated waste only with food waste or plastic waste, showing a somewhat limited understanding.

1.8%

of the respondents (1 respondent) did not select any of the given options, indicating either a lack of awareness or confusion.

Overall, while most respondents demonstrated a comprehensive understanding, a small section still holds a narrow or incomplete perception of what constitutes waste, suggesting the need for continued education on the broader aspects of waste types and sources.

CHART 5: AWARENESS OF DIFFERENT TYPE OF WASTE



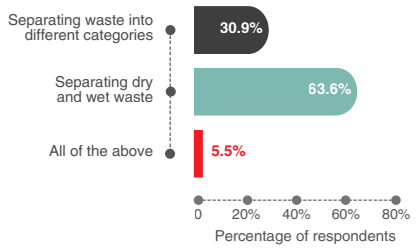
92.7%

of the respondents (51 out of 55) of respondents identified organic waste, and 85.5% (47 respondents) recognised plastic waste as a distinct category.

However, awareness of paper waste was noticeably lower, with only 58.2% (32 respondents) acknowledging it. This suggests that while most students are familiar with commonly discussed waste types like organic and plastic waste, there is a need to strengthen awareness around less-highlighted categories such as paper waste. Addressing this gap could further enhance waste segregation practices and promote more effective waste management at the household level.

> I am extremely happy to see children in our village take the lead on ensuring cleanliness in the village. Due to the drives done by our school-going children, the villagers have also become more conscious of their responsibility in waste management.
>
> **Prathima Fadtegavkar, Farmer, Fadtewada Village, Goa**

CHART 6: UNDERSTANDING OF WASTE SEGREGATION



63.6%

of the respondents (35 out of 55) respondents understood waste segregation primarily as separating dry and wet waste, which is a positive sign, as this is a key component of effective household-level waste management.

30.9%

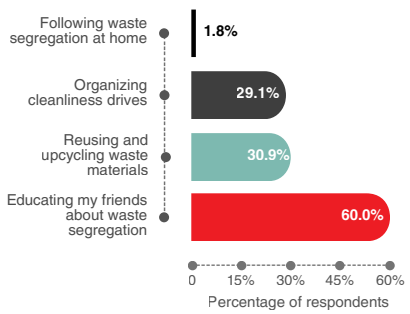
of the respondents (17 respondents) interpreted it as separating waste into different categories, showing a broader awareness of segregation practices.

5.5%

of the respondents (3 respondents) selected "All of the above," which suggests that very few respondents fully grasped the comprehensive definition of waste segregation.

This highlights the need for reinforcing education around the holistic concept of segregation, ensuring that people understand it includes separating waste by type (e.g., dry, wet, recyclable, hazardous) for proper disposal or recycling.

CHART 7: STUDENT CONTRIBUTION TO WASTE MANAGEMENT OF SCHOOL



60.0%

of the respondents (33 out of 55), reported that they contributed by educating their peers about waste segregation, indicating strong peer-to-peer learning and awareness sharing.

30.9%

of the respondents (17 respondents) were involved in reusing and upcycling waste materials, reflecting creative engagement with sustainability practices.

29.1%

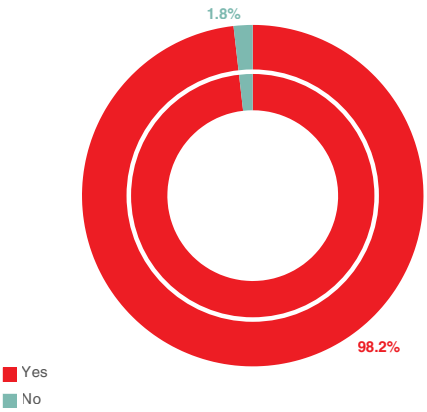
of the respondents (16 students) took the initiative by organising cleanliness drives, demonstrating leadership and community involvement.

1.8%

of the respondents (1 respondent) reported practising waste segregation at home, suggesting a gap in translating school-based awareness into household behaviour.

This emphasises the need to encourage students not only to act within the school environment but also to influence change at home and in their communities.

CHART 8: OBSERVATION OF WASTE SEGREGATION ON THE LOCALITY



98.2%

of the respondents (54 out of 55), reported observing waste segregation practices in their locality, indicating that the awareness generated through the waste management project has led to visible behavioural change at the community level.

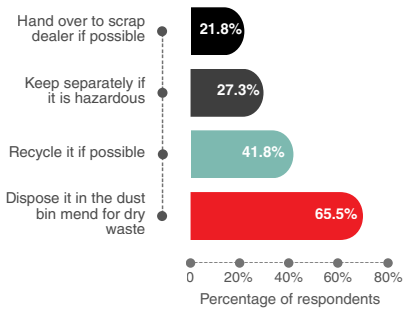
This suggests successful dissemination and adoption of waste segregation practices across households and public areas.

1.8%

of the respondents (1 respondent) did not observe such practices, which may point to limited exposure or isolated gaps in implementation.

Overall, the high visibility of waste segregation is a strong indicator of the project's effectiveness and the community's commitment to maintaining a cleaner and more sustainable environment.

CHART 9: KNOWLEDGE OF CORRECT DISPOSAL METHOD FOR DRY WASTE



65.5%

of the respondents (36 out of 55) correctly identified that dry waste should be disposed of in the designated dustbin, showing awareness of basic waste segregation practices.

41.8%

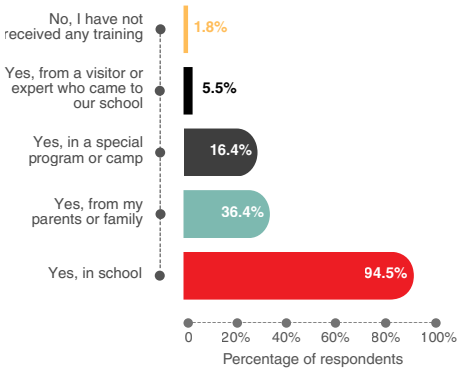
of the respondents (23 respondents) recognised that recycling is an appropriate option, reflecting a growing consciousness around sustainability.

27.3%

of the respondents (15 respondents) understood the importance of keeping hazardous dry waste separate, while 21.8% (12 respondents) mentioned handing it over to scrap dealers, indicating awareness of informal recycling channels.

These responses suggest that while the majority have grasped key concepts of dry waste management, there is still a scope to reinforce knowledge around recycling and safe handling of specific dry waste types to ensure complete and consistent practices.

CHART 10: TRAINING OR LESSONS ON WASTE SEGREGATIONS RECEIVED



94.5%

of the respondents (52 out of 55) respondents reporting they received lessons on the topic at school. This highlights the strong role educational institutions play in promoting environmental awareness.

36.4%

of the respondents (20 respondents) mentioned learning from parents or family members, indicating that the message is also being reinforced at home.

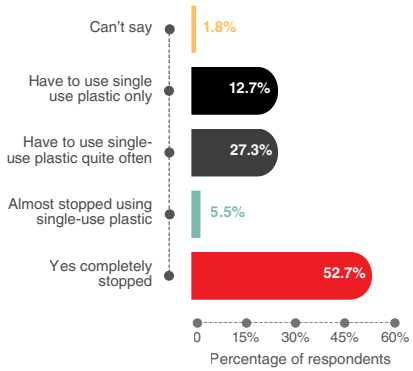
A smaller proportion gained exposure through special programs or camps (16.4%) and visits by experts (5.5%), showing limited but diverse channels of learning.

1.8%

of the respondents (1 respondent) reported not receiving any training, suggesting near-universal exposure to waste segregation education within the community.

These results reflect the success of school-based interventions and suggest that expanding community and expert-led programs could further enhance understanding and practice.

CHART 11: AVOIDANCE OF SINGLE USE PLASTIC



52.7%

of the respondents (29 out of 55) reported that they have completely stopped using single-use plastic, indicating a significant positive impact of the awareness campaign.

5.5%

of the respondents (3 respondents) mentioned they have almost stopped using it, reflecting partial behavioural change.

27.3%

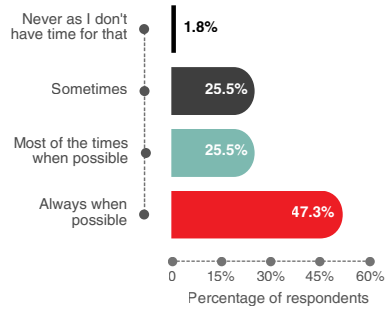
of the respondents (15 respondents) still use single-use plastic quite often, and 12.7% (7 respondents) reported that they exclusively rely on it, pointing to existing barriers such as a lack of alternatives or convenience.

One respondent (1.8%) was uncertain. These findings highlight the need for continued awareness, access to eco-friendly alternatives, and community-level support to reduce dependency on single-use plastics and ensure long-term behaviour change.

No one in our village or homes understood the concept of dry waste and wet waste and why segregation was important, but after attending the sessions in school on waste management, we understand the importance of being responsible citizens for our village and country.

Parul Patel, Student, Vinchiya Village, Ahmedabad

CHART 12: PRACTICE OF REUSE AND RECYCLE PRINCIPLES



47.3%

of the respondents (26 out of 55) reported that they always practice reuse and recycling when possible, indicating a strong commitment to sustainable habits.

25.5%

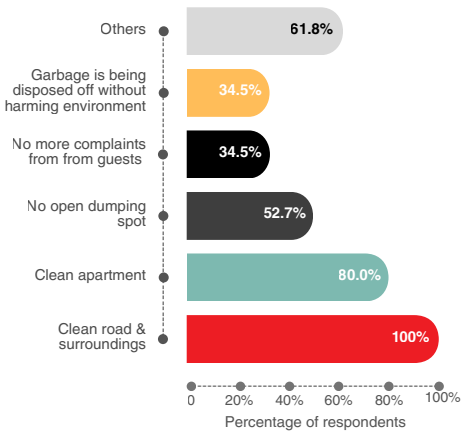
of the respondents (14 respondents) stated they do so most of the time, and another 25.5% mentioned doing it sometimes, reflecting moderate but promising levels of engagement.

1.8%

of the respondents (1 respondent) admitted to never practising reuse or recycling, citing a lack of time.

Overall, the responses show that nearly all participants have incorporated reuse and recycling into their behaviour to varying degrees, suggesting that awareness initiatives are yielding positive outcomes. Further reinforcement and access to resources could help strengthen and sustain these eco-friendly practices across the community.

CHART 13: PERCEIVED BENEFITS OF GARBAGE COLLECTION AND DISPOSAL SERVICES



100%

of the respondents acknowledged that these services have contributed to cleaner roads and surroundings, indicating a universally recognized improvement in public cleanliness.

80.0%

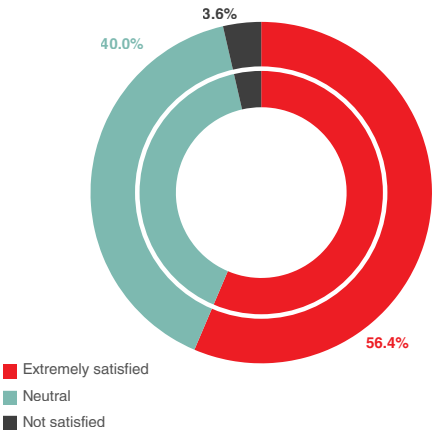
of the respondents (44 respondents) noted cleaner open spaces near home, while 52.7% (29 respondents) observed the elimination of open dumping spots, reflecting substantial environmental and hygiene benefits.

34.5%

of the respondents (19 respondents) mentioned a reduction in complaints from guests and appreciated that garbage is now disposed of in an environmentally safe manner.

A significant portion (61.8% or 34 respondents) also identified other benefits, which may include improved health, community pride, and better air quality. Overall, the responses reflect strong community satisfaction with the waste disposal system, affirming the effectiveness and impact of the intervention.

CHART 14: SATISFACTION WITH THE WASTE MANAGEMENT PROGRAM



56.4%

of the respondents (31 out of 55) reported being extremely satisfied, reflecting strong approval of the program's outcomes and implementation.

40.0%

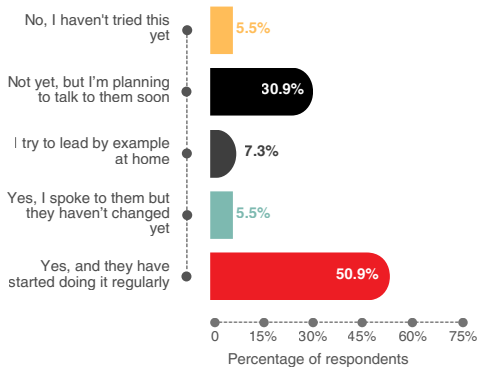
of the respondents (22 respondents) expressed a neutral stance, which may suggest that while they do not have negative views, there is room for further engagement or visible impact to shift their perception more positively.

3.6%

of the respondents (2 respondents) reported being not satisfied, indicating minimal dissatisfaction.

Overall, the results demonstrate a positive reception and acceptance of the program, with the majority of the community appreciating the efforts made toward improved waste management and cleanliness.

CHART 15: INITIATIVE TO ENCOURAGE FAMILY OR FRIENDS TO PRACTICE WASTE SEGREGATION



50.9%

of the respondents (28 out of 55) of respondents reported that they took the initiative to speak to family or friends, and their efforts have led to regular practice of these habits. This indicates a strong ripple effect of the awareness program.

30.9%

of the respondents (17 respondents) expressed that they plan to initiate such conversations soon, showing potential for further influence.

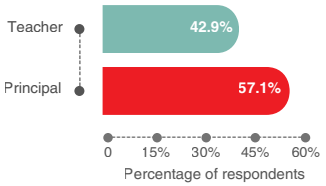
7.3%

of the respondents (4 respondents) stated they are leading by example at home, reflecting indirect yet impactful advocacy.

A small number (5.5% or 3 respondents) mentioned that although they have spoken to others, it has not yet resulted in behaviour change, while another 5.5% admitted they haven't tried to influence others yet. Overall, these responses suggest that peer influence and household advocacy are playing a significant role in reinforcing sustainable waste practices, with room for continued encouragement and support.

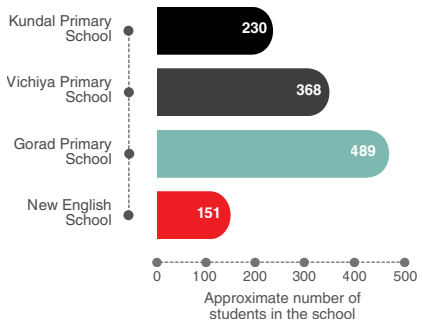
TEACHER AND PRINCIPAL ANALYSIS

CHART 16: DESIGNATION OF THE RESPONDENTS



The data indicates that the feedback for this segment of the study was collected from a small but relevant group of stakeholders comprising school leadership and teaching staff. Among the 7 respondents, 57.1% (4 respondents) were Principals and 42.9% (3 respondents) were Teachers. This distribution ensures that perspectives have been captured from both administrative and instructional roles within the school ecosystem, providing valuable insights into how the waste management program has been understood, implemented, and observed at the school level.

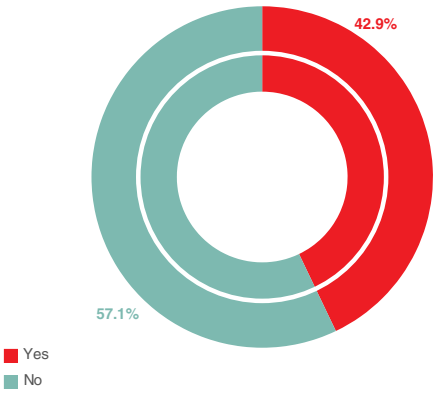
CHART 17: NUMBER OF STUDENTS IN THE SCHOOL



The waste management awareness program was implemented across four schools, covering a diverse student population. Gorad Primary School had the highest student strength with approximately 489 students, followed by Vichiya Primary School with 368 students, and Kundal Primary School with 230 students. New English School, while smaller in size, engaged around 151 students.

The program's reach across schools of varying sizes ensured that a broad spectrum of students benefited from the awareness sessions, contributing to greater impact and dissemination of sustainable waste practices within their respective communities.

CHART 18: SCHOOL PARTICIPATION IN ENVIRONMENT OR SANITATION



57.1%

of the respondents (4 out of 7) of the schools had not participated in any environment or sanitation-related projects, indicating limited prior exposure to structured environmental programs.

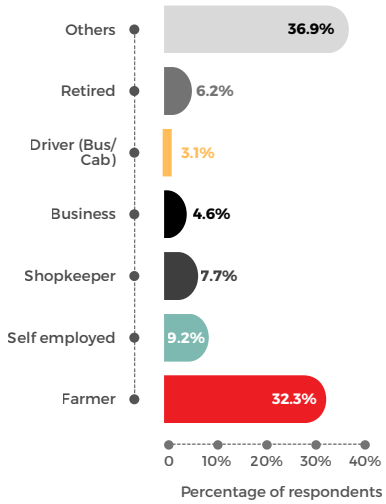
42.9%

of the respondents (3 schools) had been involved in such initiatives previously.

This highlights the importance and relevance of the current intervention, as it has introduced or expanded environmental awareness and sanitation efforts in schools that previously lacked such engagement. The program has thus played a critical role in building a foundation for sustainable practices in these educational institutions.

COMMUNITY LEVEL HOUSEHOLD - PRE AND POST ANALYSIS

CHART 19: OCCUPATION OF RESPONDENTS



32.3%

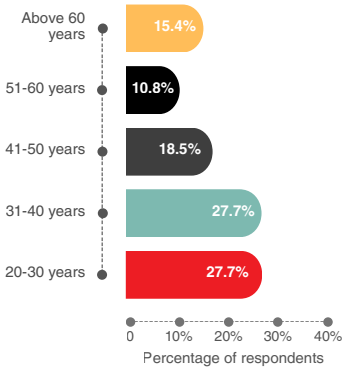
of the respondents (21 out of 65), were farmers, reflecting the agrarian nature of the region.

36.9%

of the respondents (24 respondents) fell under the "Others" category, likely including homemakers, daily wage labourers, or occupations not specifically listed.

Smaller proportions were self-employed (9.2%), shopkeepers (7.7%), and individuals engaged in business (4.6%). A few respondents were retired (6.2%) or working as drivers (3.1%). This occupational spread provides valuable context for understanding the community's socio-economic profile and their varying levels of exposure to environmental practices and infrastructure. The mix of livelihoods also underscores the importance of tailoring awareness strategies to address the specific needs and lifestyles of different occupational groups.

CHART 20: AGE OF RESPONDENTS

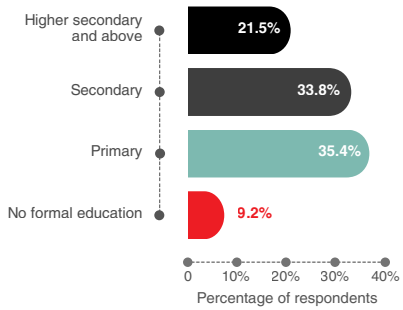


The data reveals that the respondents represent a diverse age group, providing a broad spectrum of perspectives on the waste management program. Both the 20–30 years and 31–40 years age groups formed the largest segments, each accounting for 27.7% (18 out of 65) of the total respondents. This indicates strong participation from young and early middle-aged adults, who are likely to be more active in community and household-level waste management practices. The 41–50 years group comprised 18.5%, followed by 10.8% in the 51–60 years range. Additionally, 15.4% (10 respondents) were above 60 years, suggesting valuable input from older community members with long-term perspectives on village sanitation. Overall, the balanced age distribution contributes to a well-rounded understanding of behavioural changes and the community impact of the initiative.

When the waste management project started in our village, I saw a big change. Inspired by the cleaner surroundings, I began encouraging my customers and neighbors to dispose of waste properly. Today, Manaswada is cleaner, healthier, and people are more aware. I feel proud to have played a small role in this positive transformation.

Abhishek Vaishnav, General Store Owner, Manaswada Village, Kundaim, Goa

CHART 21: EDUCATION LEVEL OF RESPONDENTS



35.4%

of the respondents (23 out of 65), had attained primary education, followed closely by 33.8% (22 respondents) with a secondary education level.

21.5%

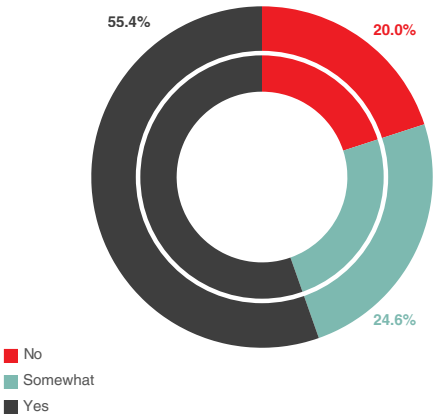
of the respondents (14 respondents) had pursued higher secondary education or above, indicating a fair level of higher learning within the community.

9.2%

of the respondents (6 respondents) reported having no formal education.

The data shows that the waste management program reached individuals across a broad educational spectrum, which is vital for inclusive and effective community behaviour change.

CHART 22: AWARENESS OF WASTE SEGREGATION BEFORE THE PROJECT



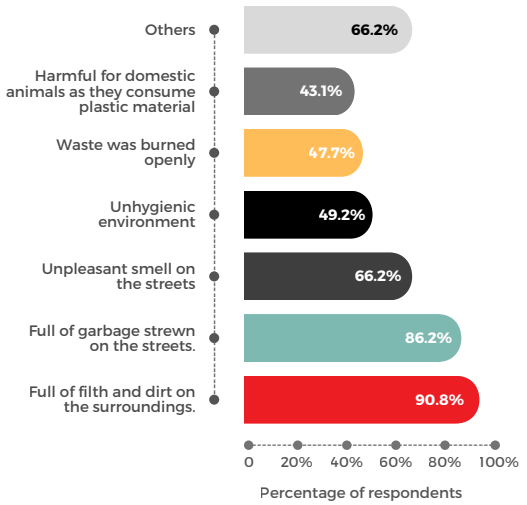
The data indicates that prior to the implementation of the waste management project, community awareness about waste segregation was moderate but not universal.

55.4%

of the respondents (36 out of 65) reported that they were aware of waste segregation, a significant portion, 24.6% (16 respondents), had only partial or limited understanding, and 20.0% (13 respondents) had no awareness at all.

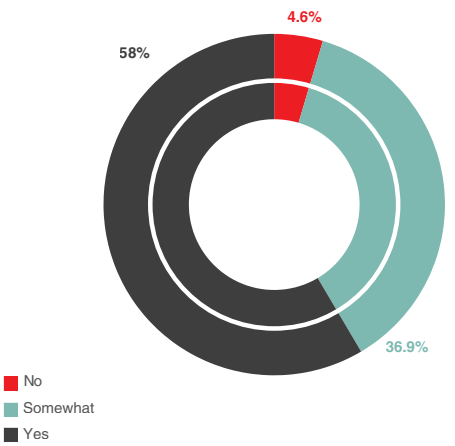
This highlights a clear gap in environmental education and underscores the importance of structured awareness programs like the one introduced through the project. The mixed levels of prior knowledge emphasise that targeted interventions were necessary to build foundational understanding and promote consistent waste segregation practices across the community.

CHART 23: VILLAGE AMBIENCE BEFORE WASTE MANAGEMENT SYSTEM



The data clearly reflects the poor environmental and sanitation conditions that existed in the villages prior to the implementation of the waste management program. A vast majority of respondents—90.8% (59 out of 65)—reported that the surroundings were full of filth and dirt, while 86.2% (56 respondents) noted garbage strewn on the streets. 66.2% (43 respondents) experienced an unpleasant smell, and an equal number cited other issues, likely related to hygiene, waste overflow, or drainage problems. Nearly half of the respondents highlighted the unhygienic environment (49.2%), open burning of waste (47.7%), and risks to domestic animals consuming plastic waste (43.1%). These findings collectively paint a picture of a severely mismanaged waste environment, with significant health, environmental, and animal welfare concerns. The data underscores the critical need for the waste management intervention, which aimed to restore cleanliness, safety, and sustainable practices in the community.

CHART 24: AWARENESS ABOUT NON-RECYCLABLE WASTE DISPOSAL TO CEMENT/ WASTE-TO-ENERGY PLANTS



The data indicates a reasonably strong awareness among respondents regarding the appropriate disposal of non-recyclable waste through channels like cement plants or waste-to-energy facilities.

58.0%

of the respondents (38 out of 65), reported being aware of this method, suggesting that project-related awareness efforts have effectively reached the community.

36.9%

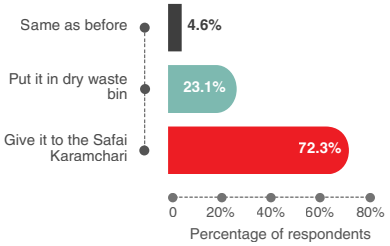
of the respondents (24 respondents) stated they were only somewhat aware, indicating partial understanding or uncertainty about the actual process or its benefits.

4.6%

of the respondents (3 respondents) had no awareness of this disposal method.

These findings highlight that while the concept of sustainable disposal is gaining traction, there is still a need for further education and clarity, especially around the role of industrial and energy recovery systems in waste management.

CHART 25: CURRENT PLASTIC WASTE DISPOSAL PRACTICES



72.3%

of the respondents (47 out of 65), now hand over their plastic waste to Safai Karamcharis, indicating increased reliance on formal collection systems and better integration of waste workers into community waste management.

23.1%

of the respondents (15 respondents) reported disposing of plastic waste in designated dry waste bins, reflecting an understanding of waste segregation protocols.

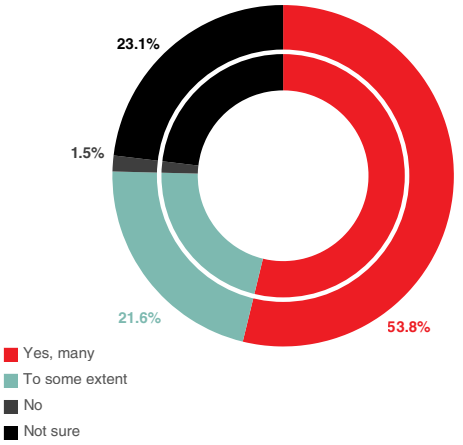
4.6%

of the respondents (3 respondents) indicated that their disposal practices have not changed and remain the same as before.

These results suggest that the program has been effective in shifting community behaviour toward more responsible and structured plastic waste management, though a small portion still requires further awareness and support.

PARENTS & CHILDREN- SHRINAGAR

CHART 26: JOB CREATION FOR ECONOMICALLY WEAKER SECTION



The data indicate that the waste management project has made a notable contribution to employment generation, particularly among economically weaker sections of the community.

53.8%

of the respondents (35 out of 65) believe the project has created many job opportunities, especially through the involvement of Safai Karamcharis and waste collection services.

21.5%

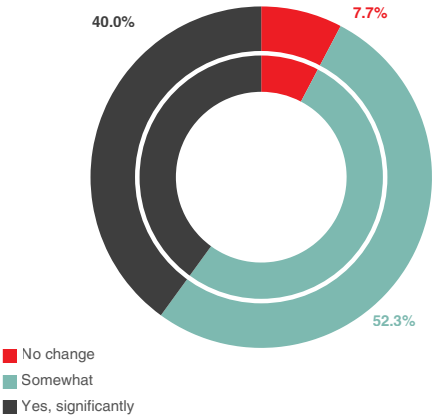
of the respondents (14 respondents) felt that job creation occurred to some extent, indicating a moderate impact.

1.5%

of the respondents (1 respondent) stated that no jobs were created, while 23.1% (15 respondents) were unsure, possibly due to limited visibility or indirect engagement with employment-related aspects of the project.

Overall, these findings highlight the project's potential for social and economic empowerment, especially when integrated with inclusive livelihood strategies.

CHART 27: REDUCTION IN HEALTH ISSUES AFTER WASTE MANAGEMENT



40.0%

of the respondents (26 out of 65) of respondents reported a significant reduction in health issues, suggesting clear benefits such as fewer infections, reduced exposure to waste-related hazards, and improved hygiene.

52.3%

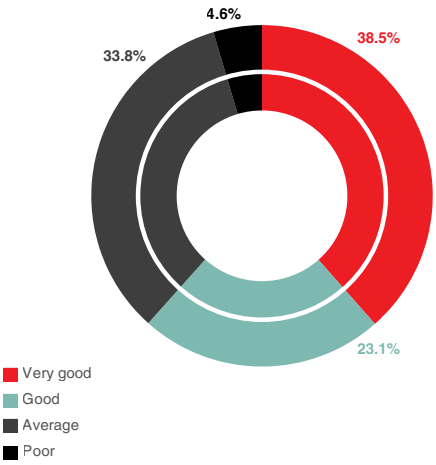
of the respondents (34 respondents) observed some level of improvement, indicating moderate but noticeable health gains.

7.7%

of the respondents (5 respondents) felt there was no change, which may be due to ongoing health challenges unrelated to waste or limited awareness of the project's effects.

Overall, the responses demonstrate that the project has contributed meaningfully to public health, particularly by promoting cleaner environments and better waste disposal practices.

CHART 28: RATING THE ROLE OF SAFAI KARAMCHARIS IN VILLAGE



38.5%

of the respondents (25 out of 65) rated their performance as very good, and 23.1% (15 respondents) rated it as good, indicating widespread appreciation for their efforts.

33.8%

of the respondents (22 respondents) gave an average rating, which may reflect expectations for more consistent or visible work, or a need for additional support and resources.

4.6%

of the respondents (3 respondents) rated their role as poor, suggesting isolated concerns or dissatisfaction.

Overall, the findings show that Safai Karamcharis are recognised as key contributors to improved cleanliness in the village, though there is potential to enhance their impact through capacity building, better tools, and community collaboration.

CASE STUDY 2

EMPOWERING LIVES THROUGH SANITATION EMPLOYMENT – THE STORY OF A SAFAI KAMDAR

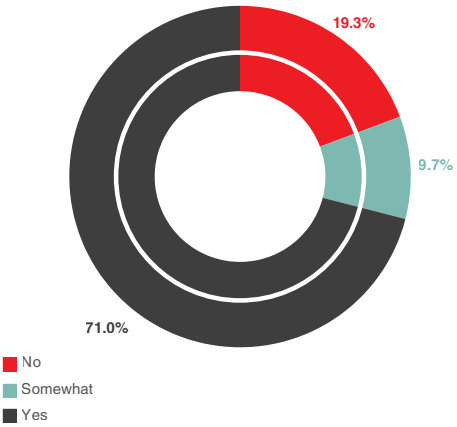
Before the implementation of the Waste Management Project by NEPRA Foundation and Colgate-Palmolive, many villagers like this Safai Kamdar lived in economic hardship, surviving on irregular and low-paying jobs. The family struggled to afford basic necessities like proper food, clothing and education.

There was also a lack of dignity and social recognition in the community with the introduction of the program, the situation changed significantly. The Safai Kamdar was employed as a sanitation worker, which brought financial stability, respect and a renewed sense of purpose. Village-level cleanliness initiatives and awareness campaigns led to behavioural change. Residents began segregating dry and wet waste, using dustbins and refraining from open dumping. Schoolchildren were educated about proper waste disposal, and the community saw a decline in disease prevalence linked to unhygienic surroundings. Today, this individual not only earns a steady income but also feels proud to contribute to the community's wellbeing. The transformation is a testimony to how CSR-led interventions can simultaneously address environmental, health and livelihood challenges.

SOULACE TEAM AT SCHOOL - KUNDAIM (GOA)

PARENT ANALYSIS

CHART 29: AWARENESS OF WASTE SEGREGATION



71.0%

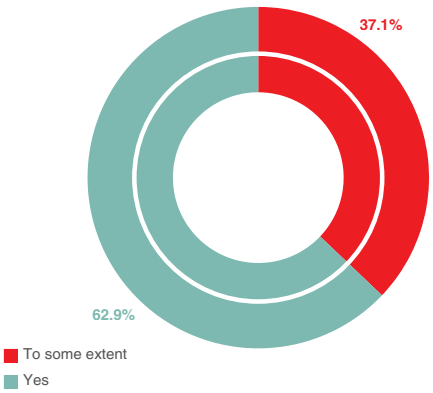
of the respondents were already aware of the importance of waste segregation.

19.4%

of the respondents reported having no awareness of waste segregation, while a smaller group, around 9.7%, had only some awareness.

This indicates that although most people had some understanding of waste segregation prior to the project, there was still a significant portion who either lacked awareness or were only partially aware, highlighting the need for targeted educational efforts.

CHART 30: IMPROVEMENT IN EASE OF DRY WASTE DISPOSAL



62.9%

of the respondents reported that it had become easier for them to dispose of dry waste.

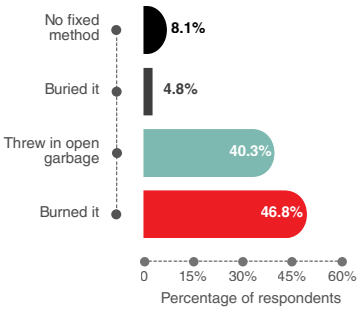
37.1%

of the respondents felt that there was some improvement in the ease of dry waste disposal.

This reflects a positive impact of the project in facilitating better dry waste management for the community.

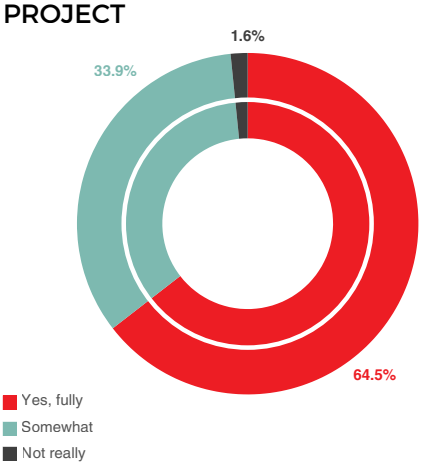
CLEANING IN VILLAGE LEVEL

CHART 31: PLASTIC WASTE DISPOSAL METHOD PRIOR TO THE PROJECT



Before the project began, the methods of plastic waste disposal among respondents varied considerably. Nearly half of the respondents (46.8%) reported burning plastic waste, while a significant portion (40.3%) disposed of it by throwing it into open garbage. A smaller percentage of respondents (4.8%) buried their plastic waste, and 8.1% had no fixed method for disposing of plastic waste. These findings indicate that despite considerable awareness, prior to the project, unsafe and environmentally harmful disposal practices like burning and open dumping were common, underscoring the need for improved waste management education and alternatives.

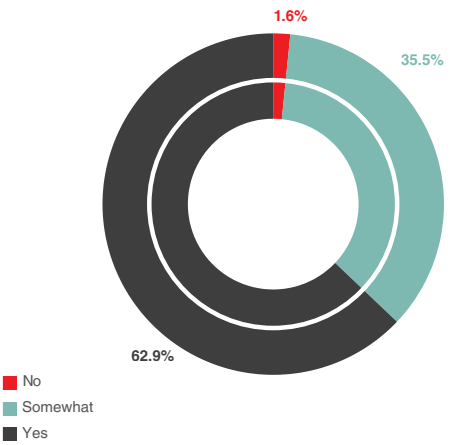
CHART 32: ADOPTION OF NEW DISPOSAL PRACTICES AFTER THE PROJECT



64.5%

of the respondents fully adopted new waste disposal practices, reflecting strong acceptance and behavioural change. Additionally, 33.9% of respondents somewhat adopted these new practices, indicating a partial but positive shift. Only a small fraction (1.6%) reported not really adopting the new methods. Overall, the project appears to have been effective in encouraging improved waste disposal habits among the community.

CHART 33: ENHANCED DIGNITY AND RECOGNITION FOR SAFAI KARAMCHARIS

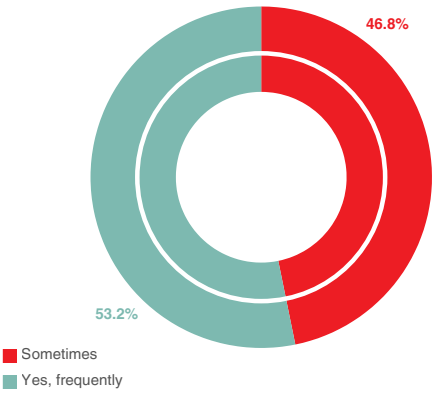


62.9%

of the respondents felt that the project significantly enhanced the respect and acknowledgement given to these workers.

Additionally, 35.5% believed there was some improvement in their dignity and recognition. Only a very small percentage (1.6%) did not observe any positive change. This suggests that the project not only improved waste management but also contributed to better social appreciation for the efforts of sanitation workers.

CHART 34: CHILDREN'S HEALTH ISSUES RELATED TO UNMANAGED WASTE BEFORE THE PROJECT



53.2%

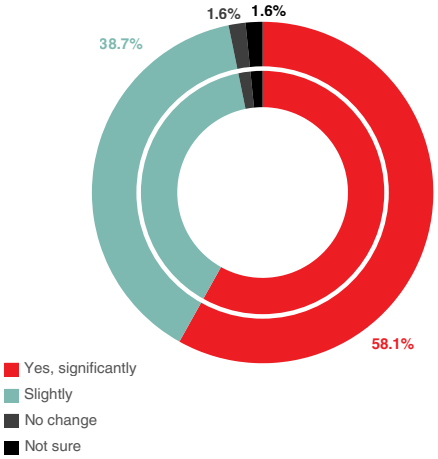
of the respondents (33 out of 62 respondents) reported that children in their households frequently suffered from health issues related to poor waste conditions, such as infections, respiratory problems, or vector-borne diseases.

46.8%

of the respondents (29 respondents) noted that such health problems occurred sometimes, indicating that the threat was widespread across the community.

These findings underscore the urgent need for waste management solutions at the time, as children's health was directly impacted by unsanitary surroundings and unsafe waste disposal practices.

CHART 35: REDUCTION IN HEALTH PROBLEM AMONG FAMILY MEMBER AFTER THE PROJECT



58.1%

of the respondents considered a reduction in health problems among their family members after the waste management initiative.

38.7%

of the respondents considered a slight improvement in health conditions. Only a small fraction of respondents (1.6%) felt no change, and another 1.6% were unsure about any health impact.

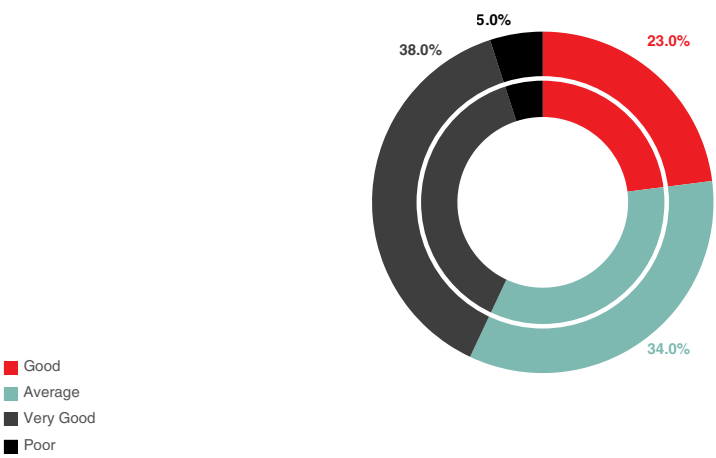
These findings indicate that the project positively contributed to improving community health by reducing health-related issues linked to waste management.

CHART 36: PARTICIPATION OF CHILDREN OR SCHOOLS IN WASTE MANAGEMENT ACTIVITIES

100%

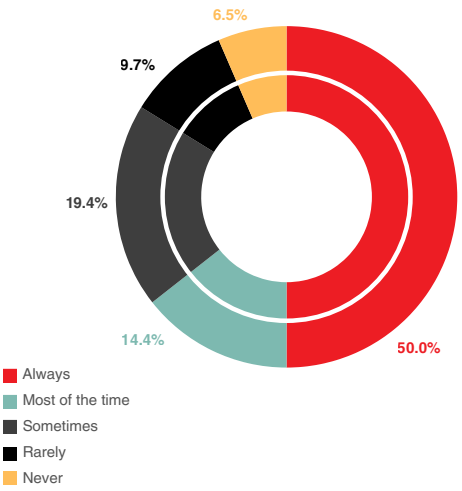
of the respondents reported that children in schools participated in cleanliness and waste awareness activities. This demonstrates parents' awareness of full engagement of educational institutions and young community members in promoting cleanliness and spreading awareness about waste management, which is a positive sign for sustainable behavioural change in the community.

CHART 37: RATING THE ROLE OF SAFAI KARANCHARI'S IN VILLAGE CLEANLINESS



The community largely views the work of Safai Karamcharis positively, with 38% rating it Very Good and 23% rating it Good. While 34% feel the performance is Average, only 5% consider it Poor. Overall, the feedback shows strong appreciation with some scope for improvement.

CHART 38: FREQUENCY OF CHILDREN AVOIDING LITTERING IN PUBLIC PLACE SINCE THE PROJECT



50.0%

of the respondents (31 out of 62 respondents) stated that children always avoid littering in public places, indicating a strong internalisation of cleanliness habits.

14.5%

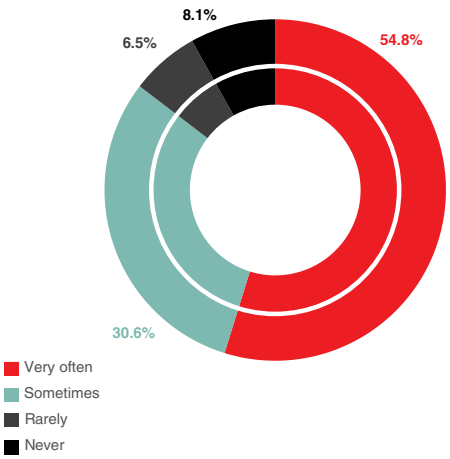
of the respondents reported that children avoid littering most of the time, and 19.4% noted they do so sometimes, showing moderate to high levels of behaviour change.

9.7%

of the respondents mentioned that children rarely avoid littering, and 6.5% said they never do, suggesting that a small segment still requires further awareness and reinforcement.

Overall, the findings demonstrate that the project has had a positive impact on children's environmental behaviour, though continued engagement is needed to ensure consistency across all groups.

CHART 39: FREQUENCY OF CHILDREN ENCOURAGING OTHERS TO DISPOSE OF WASTE PROPERLY



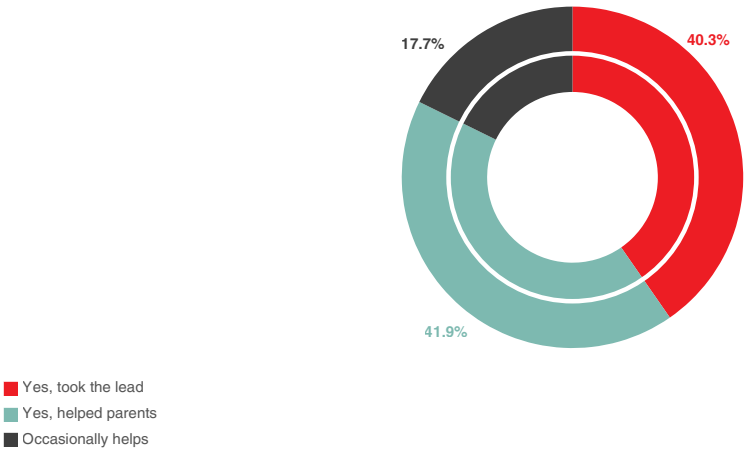
54.8%

of the respondents observed that children very often encouraged others to dispose of waste properly, indicating active participation and leadership by the younger generation in promoting good waste practices.

Additionally, 30.6% reported that children sometimes encouraged proper waste disposal. However, a smaller portion of respondents noted that children rarely (6.5%) or never (8.1%) took such initiatives. Overall, this highlights the important role children play in fostering community awareness and behavioural change regarding waste management.

GORAD VILLAGE-
SARPANCH

CHART 40: CHILDREN CONTRIBUTION TO SETTING UP/MAINTAINING WASTE SEGREGATION BINS AT HOME



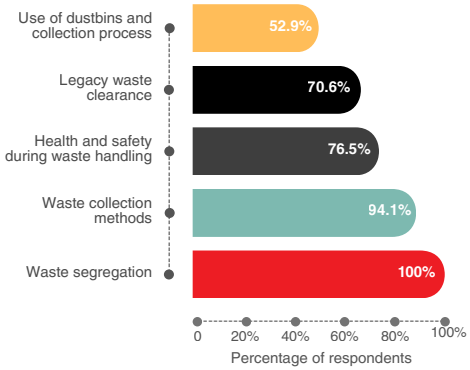
40.3%

of the respondents reported that children took the lead in setting up or maintaining waste segregation bins, while 41.9% said children actively helped their parents with this task. 17.7% mentioned that children occasionally contributed. This data underscores the active involvement of children in fostering better household waste management practices, helping to sustain the project's impact at the family level.

VILLAGE PANCHAYAT - KUNDAIM (GOA)

SAFAII KAMGAAR

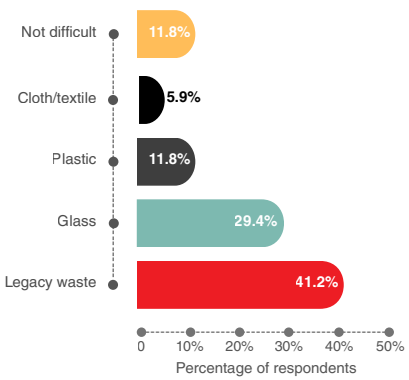
CHART 41: TOPIC COVERED



100%

of the respondents were trained on waste segregation. Nearly all (94.1%) acknowledged having received training on waste collection methods, while 76.5% reported having been trained on health and safety measures during waste handling. 70.6% remembered being educated on legacy waste clearance, and over half (52.9%) on the use of dustbins and collection processes.

CHART 42: MOST DIFFICULT TYPE OF WASTE HANDLE



41.2%

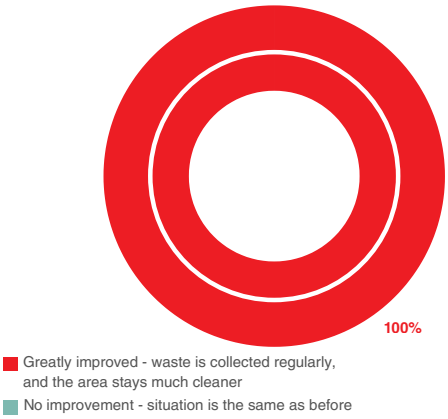
of the respondents highlighting it as a challenge. Glass was the next most difficult at 29.4%, followed by plastic at 11.8%, and cloth or textile waste at 5.9%.

11.8%

of the respondents reported that they did not find any type of waste particularly difficult to manage.

This insight helps target specific waste categories that may require additional support or specialised handling techniques.

CHART 43: IMPROVEMENT IN WASTE COLLECTION IN THE LOCALITY SINCE PROJECT IMPLEMENTATION

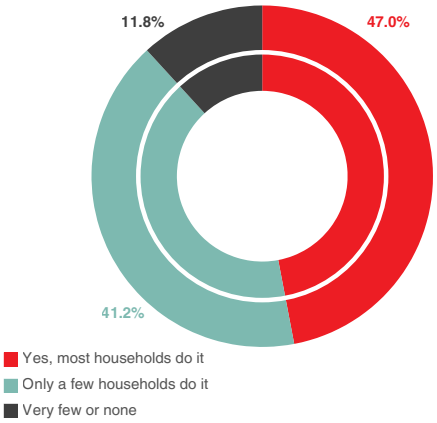


100%

of the respondents reported that waste collection has greatly improved, with regular pick-up and noticeably cleaner surroundings.

Overall, the findings reflect a clear shift toward more structured and efficient waste collection systems, though some localised gaps in consistency may still need to be addressed.

CHART 44: COMMUNITY PRACTICES OF WASTE SEGREGATION BEFORE DISPOSAL



47.0%

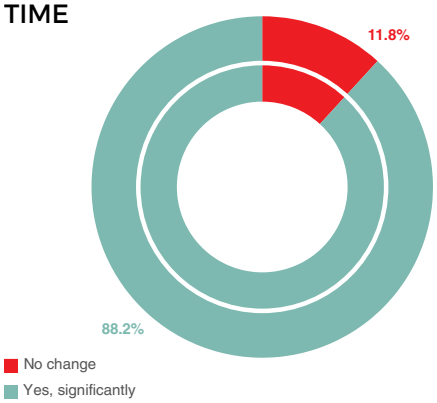
of the respondents observed that most households in the community practised waste segregation before disposal.

41.2%

of the respondents reported that only a few households followed this practice, while 11.8% noted that very few or no households engaged in waste segregation.

This mixed level of adoption highlights both existing awareness and the need for broader community engagement to improve waste segregation practices.

CHART 45: INCREASE IN WASTE SENT TO MRF OR FOR RECYCLING OVER TIME



88.2%

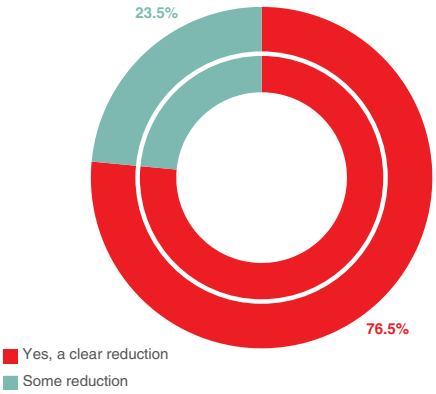
of the respondents (15 out of 17 respondents) reported a significant increase in the amount of waste being sent to MRFs or for recycling, indicating strong adoption of proper segregation and disposal methods.

18.8%

of the respondents (2 respondents) observed no change, suggesting limited awareness or systemic gaps in a small portion of the community.

Overall, these findings highlight the program's effectiveness in promoting recycling and reducing the environmental burden of unmanaged waste, while also strengthening the village's linkage to formal waste recovery systems.

CHAFRT 46: REDUCTION IN WASTE RELATED DISEASES

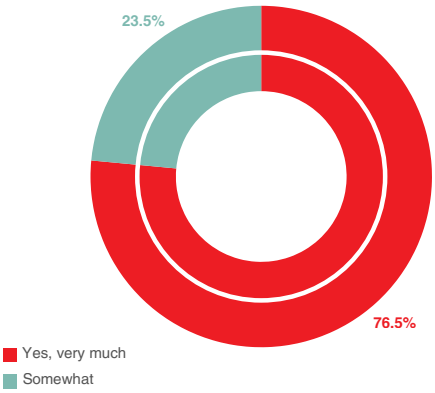


76.5%

of the respondents observed a clear reduction in waste-related diseases within the community. The remaining 23.5% reported some reduction in such health issues.

This indicates that the program has been effective in improving public health by mitigating disease risks associated with poor waste management.

CHART 47: INCREASED SENSE OF EMPOWERMENT AND RESPECT THROUGH PROGRAM IMPLEMENTATION

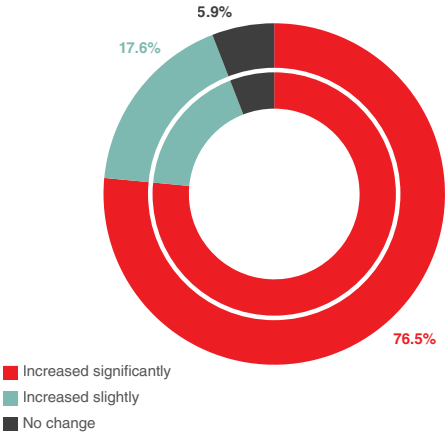


76.5%

of the respondents feeling very much empowered and respected, while 23.5% felt somewhat empowered or respected.

This reflects the program's positive impact not only on practical outcomes but also on the social and psychological well-being of those involved.

CHART 48: CHANGE IN INCOME AFTER JOINING THE PROGRAM



The data indicates that the waste management program has had a notable positive impact on the livelihoods of the individuals involved, particularly Safai Karamcharis. 76.5% (13 out of 17 respondents) reported that their income increased significantly after joining the program, suggesting improved job stability, formalised roles, and regular payment structures. An additional 17.6% (3 respondents) experienced a slight increase in income, while only 5.9% (1 respondent) noted no change. These findings demonstrate the program's contribution not just to environmental outcomes but also to economic empowerment and livelihood enhancement among sanitation workers and other community participants.

GOKULPURA VILLAGERS

04. IMPACT CREATED ACROSS MULTIPLE LEVELS

The impact of the program at various levels can be seen in the following ways:

INDIVIDUAL LEVEL

Students gained deep awareness about dry/wet waste segregation, recycling and proper disposal.

- 88.0% of the students reported learning about waste segregation through interactive sessions.
- Students showed leadership by organising cleanliness drives and spreading awareness among peers and families.

Many teachers and principals reported positive behavioural changes among students, such as the use of dustbins and initiating sustainability actions.

Safai Karamcharis gained recognition and structured roles, enhancing their dignity and engagement.

The project generated employment opportunities for Safai Karamcharis and involved local stakeholders in collection and logistics.

- 53.8% of the community respondents acknowledged job creation.

STATE AND NATIONAL LEVEL

The program aligns with key components of the Swachh Bharat Abhiyan (Clean India Mission) and reinforces national goals related to cleanliness, sanitation, and behavioural change.

It serves as a replicable model for waste management in rural and semi-urban areas, which can be adopted by other CSR programs, NGOs, or local governments across India.

HOUSEHOLD LEVEL

Awareness increased in 82% of households; most had no structured waste disposal system prior to the intervention.

76% of households began practising segregation of dry and wet waste after awareness sessions.

Parents began participating in clean-up drives and reported improvements in health and hygiene.

Children influenced household practices; families started keeping separate bins and reducing plastic use.

SCHOOL LEVEL

Prior to the project, schools had no waste segregation system, only basic dustbin use.

- Post-intervention, schools received:
  - IEC materials, visual tools, and dustbins helped in waste management practices.
  - Awareness sessions with games, videos, and hands-on activities were highly effective.

Policies for routine waste disposal were adopted, and cleanliness improved dramatically:

- 85% of schools reported visible cleanliness improvements.

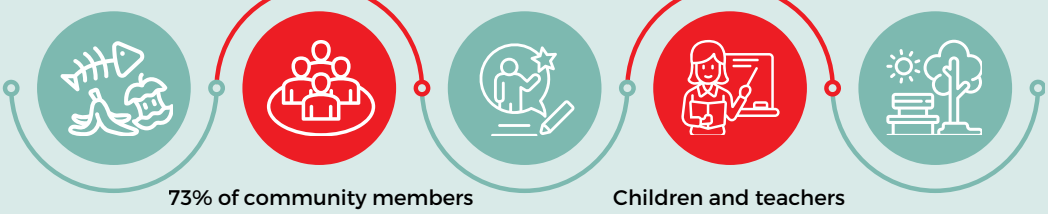
Learning environments became more hygienic, positively influencing attendance and student behaviour.

COMMUNITY LEVEL

Open garbage dumping was reduced across villages, and clean-up efforts became community-wide.

Success stories (e.g., Abhishek Vaishnav) show how individuals inspired larger community transformations.

isible changes in public spaces encouraged pride and ownership over village hygiene.

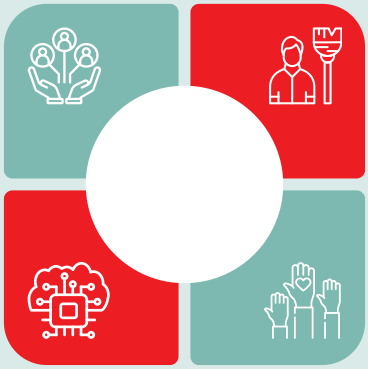


73% of community members participated in awareness and cleanliness drives.

Children and teachers became agents of change in their neighbourhoods.

INSTITUTIONAL LEVEL

Local Panchayats and School Management Committees (SMCs) were engaged to support and sustain waste management efforts.



The role of Safai Karamcharis was institutionalised, and they were integrated into school and community systems for waste collection.

The program introduced structured systems and routines in schools, influencing school-level decision-making on sanitation.

Employee volunteering from Colgate created additional learning opportunities and motivation among students and staff.

ENVIRONMENTAL AND HEALTH – VILLAGE LEVEL

Garbage accumulation, open dumping and burning previously widespread were significantly reduced.

- 62% of households reported fewer waste-related illnesses.
- 100% of respondents saw cleaner roads, streets, and school grounds.

Cleaner school and village surroundings have led to:

- Improved air quality
- Reduced mosquito breeding
- Fewer infections and complaints of smell or disease

Reduction in single-use plastics:

- Over 52% stopped using plastic, and more started reusing and recycling items.

Increased collaboration between communities and waste workers created a functional ecosystem for ongoing waste management.

05. PRE AND POST INTERVENTION COMPARISON TABLE

	INDICATORS	PRE-INTERVENTION	POST-INTERVENTION
	Awareness of Waste Segregation	Limited awareness; only ~55% understood the concept	Over 96% attended awareness sessions; strong understanding established
	Waste Segregation Practices	Rarely practiced; waste often mixed or dumped openly	76% of households began segregating dry and wet waste
	Village Cleanliness	Garbage scattered; open dumping and burning common	100.0% observed cleaner surroundings and organized waste collection
	Health and Hygiene	High rate of illnesses due to poor sanitation	92.3% reported improved health conditions and fewer poor sanitation-related diseases
	Use of Single-Use Plastic	Common and unregulated	52.7% completely stopped use; growing awareness of environmental impact
	Community Participation	Minimal community involvement in cleanliness efforts	Increased ownership among women, youth, and shopkeepers through active participation
	Safai Karamcharis' Role	Under-recognized; informal and unstructured	Formal roles created; improved dignity and employment opportunities
	School and Student Involvement	Limited awareness and engagement	Students led awareness drives and waste segregation practices in school and home
	Waste Disposal Infrastructure	Dustbins largely unavailable or unused; irregular waste collection	Bins installed; regular door-to-door collection established
	Satisfaction with Waste Program	Dissatisfaction due to unhygienic conditions and lack of systems	96.4% satisfied; only 3.6% expressed dissatisfaction

06. KEY CHALLENGES AND BARRIERS

RESISTANCE TO BEHAVIOUR CHANGE AT THE HOUSEHOLD LEVEL

Despite awareness sessions, some families continued old habits of mixed waste disposal due to ingrained practices or lack of interest.

Children applied waste management practices at school, but only a few families fully implemented changes at home.

UNEVEN ENGAGEMENT ACROSS COMMUNITY SEGMENTS

While many parents and community members participated, a portion remained uninvolved or indifferent, limiting the reach of the behaviour change efforts.

Teachers and principals noted that community-wide ownership is still developing, and continued motivation is necessary.

LIMITED CAPACITY OF SAFAI KARAMCHARIS

While their role improved post-intervention, continuous training and better equipment are needed to sustain results.

LACK OF REINFORCEMENT AFTER AWARENESS SESSIONS

In some villages, the practice of cleanup relied heavily on enthusiastic individuals, risking loss of momentum without consistent external motivation.

Although sessions were engaging, follow-up reinforcement was minimal in some areas, leading to partial understanding of concepts like paper waste, hazardous waste and non-recyclables.

LIMITED AVAILABILITY OF ALTERNATIVES TO PLASTIC

Despite efforts to reduce single-use plastic, many families cited difficulty accessing or affording eco-friendly alternatives, especially in rural and remote areas.

SEASONAL AND ENVIRONMENTAL CONSTRAINTS

During the monsoon season, waterlogging affected waste disposal in villages, creating temporary setbacks in maintaining cleanliness and hygiene.

INCOMPLETE UNDERSTANDING OF HOLISTIC WASTE MANAGEMENT

Most understood dry/wet segregation but lacked clarity on safe disposal or reuse of complex materials.

Only a small percentage of community members could accurately describe the full scope of waste segregation, including recyclable vs. hazardous waste.

DEPENDENCE ON EXTERNAL SUPPORT

Some schools expressed concern that sustained cleanliness may decline once external support (like awareness sessions or volunteering) ends, unless internal systems are fully institutionalised.

07. OECD FRAMEWORK

The program has been evaluated using the OECD-DAC criteria, which assess its Relevance, Coherence, Effectiveness, Efficiency, Impact and Sustainability. Each criterion is rated on a scale of 1 (Low) to 5 (High) based on program performance.

★★★★★

RELEVANCE

The program addressed urgent waste management and hygiene challenges in rural schools and communities. It filled a major gap in awareness and infrastructure, aligning well with local needs.

★★★★½

COHERENCE

The intervention worked seamlessly with existing systems like schools, local panchayats and community groups. It complemented government efforts and promoted a unified approach by involving all stakeholders, ensuring the program's actions were well-aligned and mutually reinforcing. The project is aligned with national goals like Swachh Bharat and SDGs such as health, sanitation and environmental sustainability.

★★★★½

EFFECTIVENESS

The project successfully increased awareness and changed behaviour in schools and homes. Students became hygiene champions, households adopted segregation, and Safai Karamcharis became more integrated. All primary objectives were met with strong community participation.

★★★★½

EFFICIENCY

The program achieved high impact using low-cost tools like dustbins, IEC materials and school activities. By leveraging existing school structures and community networks, it delivered results with minimal resources. Some areas could benefit from improved infrastructure and follow-up.

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

★★★★★

IMPACT

The intervention led to cleaner environments, fewer waste-related health issues and greater civic responsibility. Schools and villages saw visible improvements, and children, parents, and sanitation workers reported positive lifestyle and health changes.

★★★★½

SUSTAINABILITY

With new habits formed and strong school-community engagement, the program shows good potential to sustain beyond its active phase. Continued reinforcement and local ownership will be key to maintaining long-term impact.

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

08. RECOMMENDATIONS

Periodic refresher trainings need to be done for sustained capacity building of the Safai Karamcharis.

Create sustainability mechanism - by promoting engagement with local bodies for continuity through infrastructure support (safety gears, dustbins, mops, brooms).

Explore the possibility of introducing alternatives such as low-cost cloth bag vending machines. Tie-ups with SHGs to produce the bags could also be explored in this context.

A village-level committee - Swachhata Samiti, can be formed to oversee and ensure effective implementation of waste management activities in partnership with local bodies

09 CONCLUSION

The Colgate Rural Waste Management Initiative brought about meaningful improvements in waste practices, hygiene and environmental awareness in rural schools and communities. Students became change agents, households adopted segregation, and public spaces became cleaner. With strong participation and visible impact, the program lays a solid foundation for long-term sustainability and can be effectively scaled to other regions. The Waste Management Awareness and Community Sanitation Program, implemented under the CSR initiative of Colgate-Palmolive (India) Ltd., implemented by NEPRA Foundation, has brought about a significant transformation in the target villages. The intervention successfully addressed key challenges related to waste segregation, sanitation, environmental hygiene, and community participation. The project not only enhanced awareness among households, students, parents, teachers, and communities but also encouraged behavioural change and collective responsibility toward maintaining cleanliness.

Visible improvements were observed in household waste practices, school cleanliness, and the health environment across villages. The active role played by Safai Karamcharis led to improved livelihoods, regular waste collection, and higher community respect for sanitation workers. The involvement of students as change agents and the support from local institutions have further ensured sustainability.

Overall, the program has created a replicable model of school and community-led waste management that integrates awareness, action, and accountability. The initiative has not only contributed to a cleaner environment but has also strengthened the foundation for long-term public health, social equity, and environmental responsibility.