



Impact Assessment
of Eicher Motors
Limited CSR
Projects- Responsible
Travel – Coimbatore zone (NMCT)

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Eicher Motors Limited

Submitted By
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List of Abbreviations

ATR – Anamalai Tiger Reserve

BC – Backward Class

CAPI – Computer Aided Personal Interview

CSR – Corporate Social Responsibility

EDC – Eco-Development Committee

EML – Eicher Motors Limited

FGD – Focus Group Discussion

IDI – In-Depth Interview

KII – Key Informant Interview

MTR – Mudumalai Tiger Reserve

NMCT – Native Medicare Charitable Trust

NTFP – Non-Timber Forest Products

OECD-DAC – Organisation for Economic Co-operation and Development – Development Assistance Committee

RfP – Request for Proposal

SC – Scheduled Caste

ST – Scheduled Tribe

SurveyCTO – Survey Community Tool for Organizations

WASH – Water, Sanitation and Hygiene

Section- A
Summary Report

1. Brief description of project activities

The Responsible Travel Project, developed by Royal Enfield in partnership with NMCT, is dedicated to conserving the ecology and environment of the Western Ghats. The project focuses on educating and involving local communities in eco-friendly practices while overseeing the management of both existing and newly established facilities to promote sustainable travel and tourism. The program is being carried out across four routes in the Mudumalai Tiger Reserve (MTR) and Anamalai Tiger Reserve (ATR), engaging various stakeholders such as tourists, tribal families, bike riders, the Forest Department and other related departments.

1.2. Key Findings

The project in Coimbatore effectively addresses WASH challenges and promotes responsible tourism, aligning with community needs. With 47.5% of the population female and 52.5% male, education levels remain low, as 47.5% have no formal schooling and 32.5% have studied only up to grade 5. Additionally, 95% of the community identifies as Scheduled Tribe (ST), highlighting the need for infrastructure support. Economic vulnerability is evident, with many households earning under ₹2,00,000 annually limiting access to sanitation, clean water and stable employment. With 42.5% engaged in home-based work and 22.5% as daily wage earners, reliance on public facilities emphasizes the significance of sanitation units, water filters and solar lighting in improving living conditions.

The project supports government WASH objectives, with 96.6% of respondents reporting access to Vayujal Plants, ensuring clean drinking water and reducing health risks. The Play Area, accessible to 23.3% of the population, meets a need for recreational spaces and supports tourism. Among tourists, 87.5% have seen or used a Vayujal Plant, confirming the demand for safe drinking water, while 37.5% seek recreational spaces. The intervention benefits diverse visitor demographics, with 62.5% graduates and representation across SC (25%), BC (50%) and minority groups (25%), ensuring inclusivity. By integrating sanitation, water access and tourism, the project contributes to sustainable development, improving public health, economic resilience and social inclusion.

Sanitation Units

The efficiency and effectiveness of the sanitation units are evident in their high-quality maintenance and positive health impact, though usage patterns suggest behavioural and awareness-related limitations. Among the community, 25% (10 out of 40) have access to newly constructed or renovated units, with **90%** reporting noticeable improvements and **100%** describing them as “much cleaner.” All users report positive health changes, including reduced open defecation, highlighting the effectiveness of infrastructure upgrades. However, 60% use the facility only “rarely,” and 30% use it two to four times daily, suggesting ingrained habits or alternative household options may affect frequent usage. Among tourists, 31.2% (5 out of 16) have used the sanitation units, but all do so only “rarely,” despite **100%** rating cleanliness as “Excellent” and 80% highlighting an abundant supply of soap, water and paper. Low usage suggests a need for better visibility, behavioural nudges and signage to increase adoption.

Project interventions in Coimbatore have significantly improved health, safety and economic opportunities. In the sanitation sector, 100% of sanitation unit users reported increased cleanliness and 90% observed a reduction in open defecation, improving public hygiene. Additionally, 10% of users noted fewer waterborne diseases, further validating the positive health impact. Water filters have also contributed to improved water quality, with 54.5% of users reporting fewer waterborne illnesses and 72.7% rating the filtered water as “much better.”

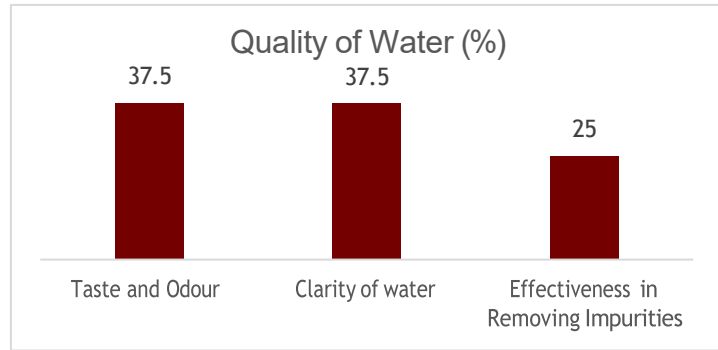


Figure 1: Quality of Water (%)

Water Filters

The water filtration system has significantly improved health and tourism experiences, despite underutilization among both community members and tourists. Among the community, 27.5% (11 out of 40) have access to a water filter, but 81.8% use it only occasionally, with just 9% using it daily. Despite this, 54.5% report fewer waterborne diseases and 72.7% feel water quality has significantly improved, highlighting that consistent use enhances health outcomes. Among tourists, 50% report access to filtered water, with 25% using it daily, 50% occasionally and 25% never. While water quality feedback is varied, with 37.5% citing good taste and odour, 37.5% clarity and 25% impurity removal, 66.6% rate taste and odour as "Highly Satisfactory." More notably, 83.3% say access to filtered water influenced their stay and 100% believe it improved their travel experience, reinforcing its role in enhancing responsible tourism perceptions. Strengthening awareness campaigns and increasing accessibility could further maximize both community health benefits and tourist satisfaction, improving long-term efficiency and adoption rates.

Convex Mirrors

Among residents, 50% are aware of the mirrors and 100% of those aware are satisfied with their placement, highlighting thoughtful installation at key locations. More importantly, 95% believe the mirrors have effectively reduced speeding, while 90% feel safer as pedestrians, reinforcing their role in accident prevention and improved visibility. Tourist feedback further supports their effectiveness, with 62.5% noticing them and all who did (100%) reporting increased safety at blind spots, reducing navigational stress and enhancing the overall visitor experience. Additionally, 80% rate the mirror quality as "Exceptional," demonstrating high functionality and durability. However, 30% reported instances of vandalism or damage, suggesting the need for stronger materials or protective barriers to maintain long-term effectiveness.

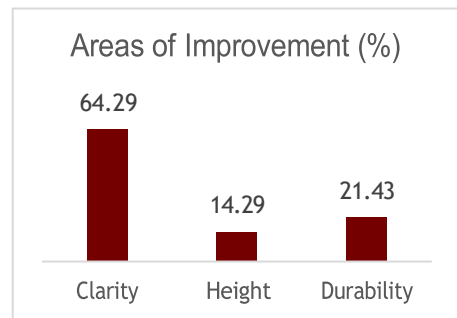


Figure 2: Areas of Improvement

Specific areas of improvement have been identified, with 64.2% citing clarity concerns and 21.4% highlighting durability issues, indicating that weather conditions or external factors may affect visibility and performance. A smaller portion (14.2%) note height adjustments, suggesting that optimal placement for varying vehicle sizes could further enhance usability. Addressing these concerns will sustain the mirrors' efficiency and reinforce their contribution to community and tourist safety.

Solar Lights

Solar lighting installations have been widely adopted, improving safety and mobility in communal areas. Among respondents, 52.5% (21 out of 40) are aware of solar-powered lights and **90.4%** confirm their regular use, demonstrating successful integration into daily life. The impact is particularly pronounced in enhancing safety, with 85.7% believing these lights reduce accidents or injuries, reinforcing their role in improving nighttime visibility. Additionally, 90.4% rate solar lighting as “very important” for overall community security. Community benefits extend across key public areas, with 28.5% highlighting improvements in roads and streets, 14.2% noting benefits in public gathering areas and 4.7% citing enhanced illumination in tourist spots, contributing to responsible tourism.

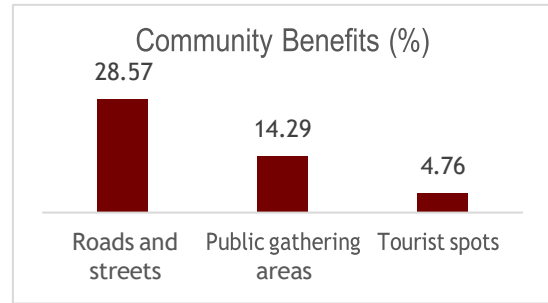


Figure 3: Community Benefits – solar lights (%)

"Installation of this solar plant has helped five villages get light facilities. Forest department also helped us in a big way. We are using this plant to make products like chairs, tables and wall hangings."- Ms. Bommi, Member of Eco-Development Committee

Interventions aimed at enhancing community safety have also yielded tangible benefits. The installation of solar lights has been highly effective, with 85.7% of respondents stating that the lights significantly reduce accidents, while 90.4% believe they are crucial to overall safety. The addition of convex mirrors at critical road points has also proven effective, with 95% of residents observing reduced speeding, increasing confidence among both drivers and pedestrians. These measures have collectively transformed Coimbatore into a safer and more accessible space for residents and visitors alike.

Waste Management

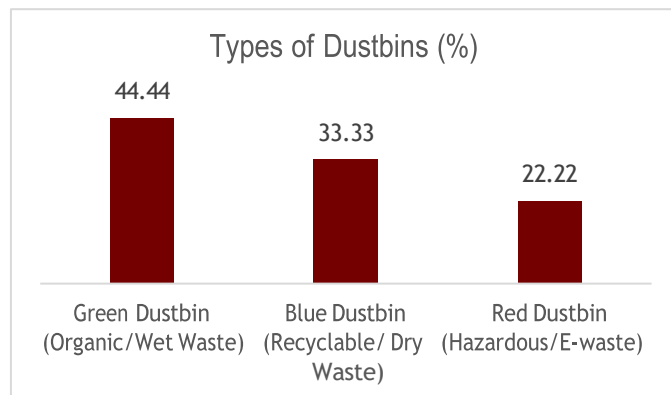


Figure 4: Types of Dustbins (%)

The waste management and recycling program has led to significant improvements in public cleanliness, with 55% of respondents aware of the program and 90.9% confirming the presence of separate bins for dry and wet waste. A cleaner environment is unanimously reported (100%), with waste collection occurring daily for 81.8% of respondents, highlighting operational efficiency. However, 31.8% still cite irregular garbage collection, though this marks a 5% improvement from previous rates (36.3%), indicating gradual but positive progress. Among tourists, 68.7% noticed signage confirming the presence of separate bins, reinforcing structured waste segregation. However, **45.4%** of tourists “always” use the bins, 36.36% use them “frequently,” and 18.1% “never” use them, suggesting that while compliance is high, behavioral nudges could increase participation.

"Tourists previously didn't have facilities, but now, because of our sanitation and awareness efforts, we see an increase in responsible tourism, which benefits both the community and the environment."- Implementation Partner

100% of those who used water filters felt their travel experience was better, reinforcing the positive role of clean drinking water in attracting and retaining tourists. Additionally, segregated bins and plastic crushers have strengthened the area's reputation as an eco-friendly destination, aligning with responsible tourism values.

1.3. Recommendations

To enhance community impact and ensure long-term sustainability, expanding sanitation units and water filter coverage is crucial, as only 25% of community members have access to new sanitation units and 27.5% to water filters. With most users accessing these facilities rarely, increasing coverage must be supported by community training and awareness to encourage regular use and improve health outcomes.

"Tribal products should be marketed across Tamil Nadu so that people everywhere understand their value and contribute to sustainable livelihoods." - Forest Officer, Coimbatore division

Awareness campaigns on solar lights and convex mirrors should be strengthened, focusing on their safety benefits. While 85.7% of the community finds solar lights helpful in reducing accidents and 95% see convex mirrors improving road safety, issues like vandalism (30%) and poor clarity (64.2%) remain. Regular maintenance and integrating waste management education are needed, especially since 31.8% reported irregular garbage collection.

Setting up local monitoring committees will strengthen community ownership and maintenance of these interventions. With 95% of respondents from tribal groups, training self-help groups can build local skills and ensure sustainability.

"Tourism awareness was low. Many tourists did not understand why plastic was banned or why certain areas were off-limits. We had to invest heavily in awareness campaigns." - Gautham, Implementation partner

Behaviour-change initiatives such as door-to-door visits, demonstrations and recycling education should be introduced to promote regular use of sanitation facilities and water filters. These efforts will help sustain the community's progress toward better health, hygiene and economic independence.

Section- B
Detailed Report

Impact Assessment Study

1. Introduction

1.1. Background

Eicher Motors Limited (EML) is committed to Corporate Social Responsibility (CSR), focusing on long-term, sustainable change in communities across India. Eicher adopts a holistic approach, addressing community-specific needs through well-designed programs that enhance quality of life. By collaborating with local organizations, government agencies and community groups, Eicher ensures its initiatives are impactful and scalable. The company prioritizes self-reliance, creating systems that empower communities rather than offering short-term solutions. Its CSR efforts have led to improved access to essential services, better opportunities and healthier environments. This report covers the key findings for the responsible travel intervention implemented in collaboration with Native Medicare Charitable Trust. Through these initiatives, EML aims to continue supporting stronger, healthier and self-sufficient communities.

1.2. Objectives of the impact assessment

The key objectives of conducting this impact assessment are as follows:

1. To quantify the extent to which the projects have been successful in achieving the intended outcomes
2. To establish the effectiveness of program implementation
3. To identify and capture success stories, challenges and areas for improvement
4. To provide actionable recommendations to enhance the effectiveness of future programs

1.3. OECD- DAC framework

Considering the objectives of the project, this evaluation will be based on the **OECD-DAC framework**¹.

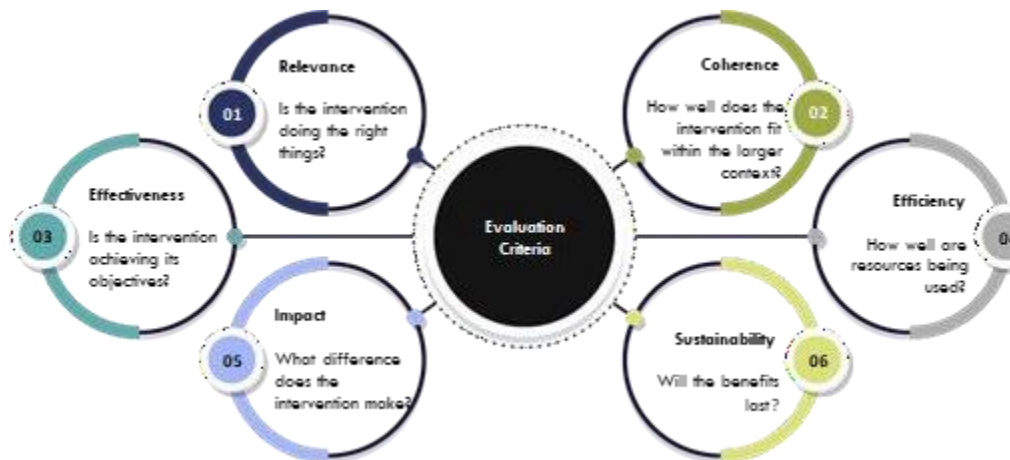


Figure 5: OECD DAC Evaluation Framework

The evaluation will assess the baseline values of various key indicators, against which the impact of the project can be assessed a year after completion. The components of the proposed evaluation framework are –

¹ <https://www.oecd.org/dac/evaluation/dacriteriaforevaluatingdevelopmentassistance.htm>

Relevance - The extent to which the objectives of the development intervention are consistent with beneficiary requirements, state needs, institutional priorities, partners and funding stakeholders, as well as mission coherence in achieving its objectives.

Coherence – The extent to which activities can converge with other programs/projects running the geography/sector.

Effectiveness - The extent to which the development project's objectives were achieved or are expected to be achieved considering their specificities (not just physical outputs but also high-level results; explaining factors determining achievements, including change of context; looking at other possible achievements)

Efficiency - A measure of how economically resources/inputs are converted into results, with reference to project benchmarks (include project delays, overruns; technical issues; operational cost ratio, economic rates of return)

Sustainability - The likely continuation of net benefits from a development intervention beyond the phase of funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the mission activities.

Impact - The changes that have occurred or are expected to occur in the lives of the target beneficiaries (direct and indirect).

1.4. Evaluation Matrix

The evaluation matrix for Eicher's CSR projects follows the OECD-DAC framework, assessing projects based on relevance, coherence, effectiveness, efficiency, impact and sustainability. It includes specific questions and indicators for each project, whether in education, health, or livelihoods to measure outcomes and how they were achieved. The assessment uses both primary and secondary data, collecting insights from students, teachers, health workers and community members, while also reviewing project reports and public sources. This ensures reliable and cross-verified findings.

The evaluation matrix is adaptable, considering diverse cultural and social contexts. It allows for flexible tools and indicators, ensuring context-sensitive yet methodical evaluations. By aligning with OECD-DAC criteria, it assesses project efficiency, alignment with development goals and long-term sustainability. This approach provides a comprehensive understanding of project successes and challenges, offering insights into future improvements.

The thematic evaluation matrix is included in the [Annexure](#).

2. Approach and Methodology

2.1. Study Design

This impact assessment will use a pre-post study design, which means it will compare data from before and after the project to measure its impact. To get a complete picture, the assessment will follow a mixed-methods approach, combining both quantitative and qualitative data.

The quantitative data will help measure the results in numbers, such as changes in key indicators, while the qualitative data will provide deeper insights into why and how these changes happened. By using both types of data, the study can cross-check findings from different sources, ensuring more accurate and reliable results. The assessment will collect information from both primary sources (like surveys and interviews) and secondary sources (such as existing reports or data) to create a well-rounded understanding of the project's impact.

2.2. Data Collection Methods and Sources

Quantitative Methods

For the quantitative data collection, **structured survey tools** were developed and rigorously pre-tested to ensure their effectiveness in real-field conditions. Pretesting helped identify any issues in the questionnaire, removing ambiguities and minimizing bias and errors. The data was collected using Computer Aided Personal Interview (CAPI) methods to ensure accuracy and efficiency. Our team utilized SurveyCTO, a digital data collection platform that streamlined the entire process—from targeting respondents and survey creation to data entry and visualization. SurveyCTO allowed for real-time data uploads, enhancing efficiency while also offering offline capabilities for data collection in low-connectivity areas. With GPS-based tracking, real-time geo-tagging, multilingual support and validation features, SurveyCTO ensured high data quality and seamless experience for field investigators.

Qualitative Methods

To complement the quantitative data, qualitative methods were employed to gain deeper insights into the impact of the CSR projects. This included **in-depth interviews (IDIs), focus group discussions (FGDs) and key informant interviews (KIIs)** with relevant stakeholders such as beneficiaries, project implementers and community leaders. These interactions helped uncover contextual nuances, stakeholder perceptions and the underlying reasons behind quantitative findings. All interviews and discussions were recorded, transcribed and thematically analyzed to identify patterns and insights that contributed to a holistic understanding of the projects' effectiveness, sustainability and impact.

2.3. Data Collection Process

The study was executed strategically in three phases to ensure completion of time:

- **Phase I:** Design Phase begins with consultative meetings to finalize indicators and methodologies based on stakeholder inputs and desk reviews. Sambodhi collaborated with the EML CSR team to ensure alignment with the RfP, documenting the approach in an inception report covering the assessment framework, sampling methodology, analysis plan and work plan. Quantitative and qualitative tools, developed in vernacular languages and referencing standardized underwent pre-testing in non-sample areas for refinement. Tools were translated and training materials developed to ensure uniform data collection.
- **Phase II:** Implementation Phase involves executing the sampling strategy, identifying study geographies and conducting primary data collection as per the established methodology.
- **Phase III:** Dissemination Phase focuses on sharing findings and insights with stakeholders, translating results into actionable recommendations for future initiatives and broader knowledge dissemination.

2.4. Data Analysis

The collected data was analyzed using a convergent mixed-methods approach, integrating quantitative and qualitative data for a comprehensive assessment of the project's impact. Quantitative analysis measured key indicators, while qualitative insights provided context to observed outcomes. Triangulation of findings from diverse sources enhanced the reliability and depth of the analysis. The study assessed endline values of key indicators, comparing pre- and post-intervention data to measure changes over time. This approach ensured a holistic evaluation, capturing both measurable outcomes and the underlying factors influencing the project's effectiveness.

2.5. Limitations

While this impact assessment provides valuable insights into the outcomes of these CSR initiatives, certain considerations must be acknowledged to contextualize the findings appropriately:


- **Selection Bias:** Given the scale of the intervention and the sampling approach, there is a possibility of some selection bias, particularly if certain sub-groups were self-selected into the study. However, concerted efforts were made to ensure diverse participation and capture a wide range of perspectives.
- **Timeframe Constraints:** The assessment reflects outcomes observed within the available study period and while it provides a meaningful snapshot of impact, some long-term effects may emerge over time. Future follow-ups could further enrich the understanding of sustained change.
- **Self-Reported Data:** A significant portion of the data is based on self-reported responses from beneficiaries and stakeholders. While every effort was made to enhance accuracy through careful data collection and validation techniques, minor variations due to recall or interpretation are natural in such studies.

2.6. Structure of the report

This report is structured to provide a holistic analysis of Eicher's CSR projects, ensuring that insights are embedded within the OECD-DAC evaluation framework to highlight key findings across diverse thematic areas. The framework, encompassing **relevance, coherence, effectiveness, efficiency, impact and sustainability**, enables a multifaceted evaluation that captures both the outcomes achieved and the processes that led to those results. Our presentation of these findings weaves the data seamlessly into each criterion, clarifying how well projects align with broader development goals and how effectively resources are utilized.




To enable meaningful interpretation of the findings, a **two-tiered** benchmarking approach has been employed across the report. The benchmarking has been **limited** to key project-specific outcome and impact indicators. Wherever credible benchmarking data is **available**, project outcomes have been compared against standardized external datasets such as NFHS (for health indicators) and ASER (for learning outcomes), as well as baseline or need assessment figures. In such cases, performance that exceeds these benchmarks is highlighted in **blue**, denoting a positive deviation from established standards.

Table 1: Colour coding - benchmark data is available

Performance Band	Interpretation	Colour
Exceeds benchmark	Performance surpasses credible external benchmark figures/baseline values	 Blue

Where external benchmarks are **unavailable**, a progressive scoring scale based on project duration, nature and literature review has been applied to assess outcomes. In this scale, scores are categorized as High, Moderate and Low each reflecting the level of performance and potential for scalability.

Table 2: Performance band- colour coding where benchmarking data is unavailable

Performance Band	Score Range	Interpretation	Colour
High	61–100%	Strong performance, scalable potential	 Green
Moderate	31–60%	Average, in line with similar interventions	 Yellow
Low	0–30%	Below average, needs improvement	 Red

Additionally, for indicators where lower values indicate better outcomes (such as *dropout rates* or *disease incidence*), both the desired direction of change and the colour coding have been reversed to reflect positive performance. This structured approach ensures consistency, clarity and contextual relevance in evaluating project impact across varied geographies and interventions.

3. Eco-friendly and Responsible Tourism – Native Medicare Charitable Trust (Coimbatore zone)

3.3.1. Brief description of project activities

The Responsible Travel Project, developed by Royal Enfield in partnership with NMCT, is dedicated to conserving the ecology and environment of the Western Ghats. The project focuses on educating and involving local communities in eco-friendly practices while overseeing the management of both existing and newly established facilities to promote sustainable travel and tourism. The program is being carried out across four routes in the Mudumalai Tiger Reserve (MTR) and Aanamalai Tiger Reserve (ATR), engaging various stakeholders such as tourists, tribal families, bike riders, the Forest Department and other related departments.

3.3.2. Key Findings

3.3.2.1. Relevance and Coherence

The project demonstrates strong alignment with community needs, particularly in addressing WASH (Water, Sanitation and Hygiene) challenges and fostering responsible tourism. The demographic and socioeconomic context highlights the necessity of such interventions, with 47.5% of the population being female and 52.5% male. Education levels remain low, as 47.5% have no formal schooling and 32.5% have studied only up to grade 5, indicating limited literacy and access to resources. Additionally, 95% of the community identifies as Scheduled Tribe (ST), reinforcing the project's relevance in tribal areas where essential infrastructure is often lacking.

"We did a study for 4-5 months, conducted a baseline study with the forest department, public department, district administrative department and highways department. We then conducted advocacy meetings before finalizing the proposal." - Gautham, (Implementing Partner)

The economic vulnerability of the community further strengthens the case for cost-efficient, community-managed interventions. With many households earning under 2,00,000 INR annually, financial constraints limit access to private sanitation, clean drinking water and stable employment. Occupational patterns reveal that 42.5% engage in home-based artisan work or piecemeal labour, while 22.5% are daily wage earners, highlighting the instability of incomes and reliance on public facilities. This underscores the significance of sanitation units, water filters and solar lighting, which not only improve WASH conditions but also create safer and healthier living environments.

The project also aligns with broader government WASH objectives by improving access to safe drinking water, as reflected in the 96.6% of community respondents who report using the Vayujal Plants. These plants ensure reliable and affordable access to clean water, reducing health risks and enhancing overall well-being. Similarly, the Play Area, though currently accessible to only 23.3% of the population, addresses a pressing need for recreational spaces, contributing to healthier lifestyles and local tourism development.

"We cover Mudumalai tiger reserve and Aanamalai tiger reserve. Man-animal conflict is a lot. Every month we still have 1-2 deaths (caused due it)). Tourists have a lot of restrictions. Many issues are there and not many facilities. We started this project to address these challenges." - Gautham, (Implementing Partner)

From a tourist perspective, the project successfully meets visitor needs, with **87.5%** of surveyed tourists having seen or used a Water Purifier, confirming the importance of clean drinking water. While only 37.5% of tourists actively seek out recreational spaces, the Play Area adds value, particularly for families, making the area more attractive as a safe travel destination. Moreover, the demographic diversity of visitors—ranging from 21 to 58 years old, with 62.5% being graduates and social representation across SC (25%), BC (50%) and minority groups (25%) demonstrates the project's broad reach. The intervention benefits multiple social and economic groups, ensuring inclusivity and equitable access. By integrating sanitation, water access and tourism development, the project aligns with sustainable development goals, improving public health, social inclusion and economic resilience.

3.3.2.2. Efficiency and Effectiveness

Sanitation Units

The efficiency and effectiveness of the sanitation units are evident in their high-quality maintenance and positive health impact, though usage patterns suggest behavioural and awareness-related limitations. Among the community, 25% (10 out of 40) have access to newly constructed or renovated units and **90%** report noticeable improvements, with 100% describing them as "much cleaner." Additionally, all users report positive health changes, including reduced open defecation, highlighting the effectiveness of infrastructure upgrades in promoting better sanitation practices. However, 60% of users access the facility only "rarely," while only 30% use it two to four times daily, indicating that deeply ingrained sanitation habits, distance or household alternatives may affect frequent usage despite the improved conditions.

For tourists, 31.2% (5 out of 16) have used the sanitation units, but all do so only "rarely", despite **100%** rating cleanliness as "Excellent" and 80% highlighting an abundant supply of soap, water and paper. The facilities meet high hygiene standards and are strategically placed, with 100% of users being "Very satisfied" with accessibility. However, low usage suggests a lack of awareness or preference for alternative options, requiring better visibility, behavioural nudges and signage to increase adoption. Strengthening engagement strategies can enhance the impact and long-term efficiency of these improved sanitation units.

Water Filters

The efficiency and effectiveness of the water filtration system are evident in its health benefits and impact on tourism, despite underutilization among both community members and tourists. Among the community, 27.5% (11 out of 40) have access to a water filter, but 81.8% use it only occasionally, with just 9% using it daily. Despite this, 54.5% report fewer water-borne diseases and 72.7% feel water quality has significantly improved, highlighting that consistent use enhances health outcomes. However, low daily usage suggests behavioural factors, alternative water sources, or lack of awareness may limit full efficiency.

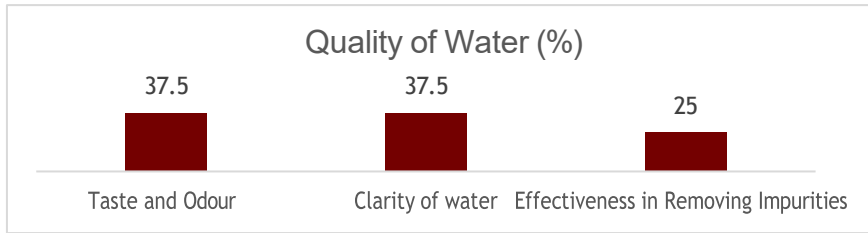


Figure c: Water quality feedback by tourists

Among tourists, **50%** report access to filtered water, with 25% using it daily, 50% occasionally and 25% never. While water quality feedback is varied, with 37.5% citing good taste and odour, 37.5% clarity and 25% effectiveness in impurity removal, 66.6% rate taste and odour as

"Highly Satisfactory." More notably, 83.3% say access to filtered water influenced their stay and 100% believe it improved their travel experience, reinforcing its role in enhancing responsible tourism perceptions. Strengthening awareness campaigns and increasing accessibility could further maximize both community health benefits and tourist satisfaction, improving long-term efficiency and adoption rates.

Solar Lights

The efficiency and effectiveness of the solar lighting installations in community areas are evident in their widespread daily usage and strong impact on safety and mobility. Among respondents, 52.5% (21 out of 40) are aware of solar-powered lights and **90.48%** confirm their regular use in communal spaces, demonstrating successful integration into daily life. The impact is particularly pronounced in enhancing safety, with 85.7% believing these lights reduce accidents or injuries, reinforcing their critical role in improving nighttime visibility. Additionally, 90.4% rate solar lighting as "very important" for overall community security, underscoring its effectiveness in addressing local safety concerns.

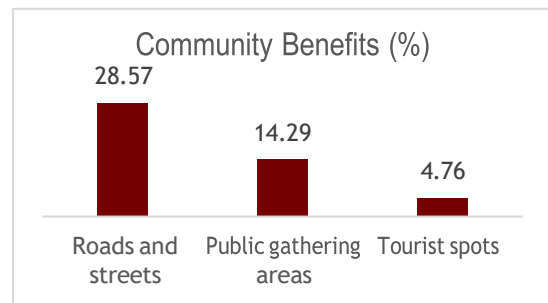


Figure 7: Benefits of solar light installation

Community benefits extend across key public areas, with 28.5% of respondents highlighting improvements in roads and streets, making them safer for pedestrians and vehicles. Another 14.2% note benefits in public gathering areas, where lighting fosters greater social engagement, while 4.7% cite enhanced illumination in tourist spots, contributing to responsible tourism. Despite lower recognition in tourist areas, the solar lights play a crucial role in enhancing public spaces, ensuring cost-effective, sustainable and long-term energy solutions for community welfare. Expanding their coverage could further maximize impact, ensuring broader accessibility and increased safety benefits.

Waste Management

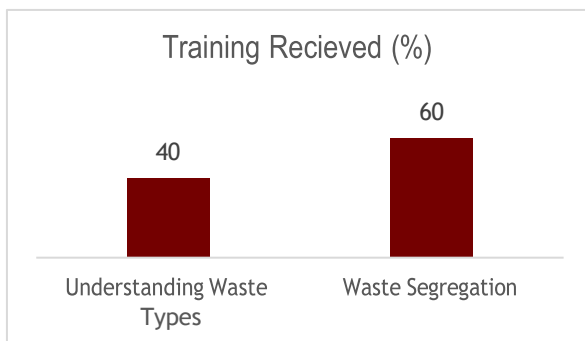


Figure 8: Training provided to community members

The efficiency and effectiveness of the waste management and recycling program are reflected in high community awareness and visible improvements in public cleanliness. 55% of respondents are familiar with the program and **90.9%** confirm the presence of separate bins for dry and wet waste, demonstrating strong community engagement. A cleaner environment is unanimously reported (100%), with waste collection occurring daily for 81.8% of respondents, highlighting operational efficiency.

However, challenges persist, as 31.8% still cite irregular garbage collection, though this marks a 5% improvement from previous rates (36.3%), indicating gradual but positive progress. The distribution of community benefits further emphasizes impact, with 28.5% of respondents highlighting improvements on roads and streets, enhancing public hygiene and mobility. Additionally, 14.2% note better waste management in public gathering areas, supporting cleaner social spaces, while 4.7% report enhancements at tourist spots, contributing to a more sustainable visitor experience. These insights suggest that while the program is effective, targeted interventions in waste collection frequency and expanded coverage in key locations could further optimize long-term impact.

The efficiency of the waste management system is evident in strong tourist awareness and positive hygiene perceptions, though infrastructure enhancements could further improve engagement. 68.7% of tourists noticed signage confirming the presence of separate bins, reinforcing visibility and structured waste segregation. Among users, 45.4% “always” use the bins, 36.3% use them “frequently” and 18.1% “never” use them, suggesting that while compliance is high, behavioral nudges could increase participation.

The distribution of dustbin types, as reported by tourists, further highlights the system’s efficiency and effectiveness in waste segregation. 44.4% of tourists observed separate bins for organic/wet waste (green), 33.3% noticed bins for recyclable dry waste (blue) and 22.2% reported seeing bins designated for hazardous/e-waste (red). This indicates that while segregation infrastructure exists, visibility and awareness could be further strengthened to ensure consistent usage. The effectiveness of this system is reflected in 72.7% of tourists rating the area as “Very Hygienic”, suggesting that maintenance and disposal processes are well-managed.

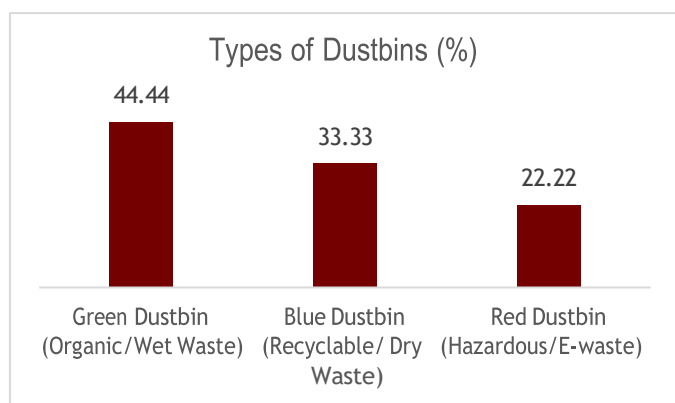


Figure S: Types of dustbins as reported by tourists

However, tourists cite key areas for improvement, including dimensional changes (41.6%), better placement (25%) and more frequent waste disposal (16.6%), indicating that optimizing bin size and location could enhance usability. Additionally, only 31.2% recall seeing a plastic crushing machine, suggesting that better signage and awareness campaigns could maximize its impact on sustainable waste management and tourist engagement.

NTFP Products

The data suggests that awareness and engagement with Non-Timber Forest Products (NTFPs) among tourists remain limited but promising. Only 31.2% (n=16) of tourists reported visiting the souvenir shops during their trip and among these, 20% were aware of NTFPs prior to their visit. A broader awareness gap was evident, with 80% of those who visited the shops stating they had no prior knowledge of NTFP products. However, for some of the tourists who engaged with NTFPs, satisfaction levels were notably high reporting being “Very Satisfied” (100%) with the variety available and finding edible items such as honey and spices particularly appealing. This points to the latent potential of NTFP-based products to generate interest and satisfaction among visitors when effectively introduced.

New Stores

The newly established stores appear to be positively received by tourists, with 43.7% (n=16) reported they noticed new shops during their visit. Among these, the majority (85.7%) said they were drawn to the stores primarily due to their strategic location near tourist spots, while a smaller segment has said the main attraction was the unique signage and design features. Notably, 85.7% of those who noticed the stores also

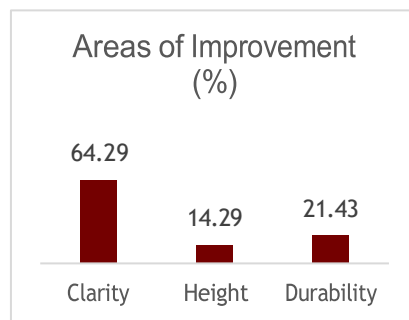
accessed them, indicating that visibility and placement played a significant role in encouraging engagement. The types of stores accessed included tea stalls and general stores in equal measure (50% each), reflecting a demand for both refreshments and everyday travel essentials. All of the visitors agreed that these stores were easily accessible and enhanced their overall experience of the trip, suggesting that such additions to the local landscape contribute positively to visitor satisfaction.

Visitors primarily explored tea stalls and general stores in equal numbers, showing a clear interest in quick refreshments and essentials during their trip. What stood out, however, was the impact these small establishments had on the overall experience: every tourist who visited them agreed that they added value to the trip. The majority (85.7%) even said they were “Very Satisfied” with the products and services. At the same time, tourists offered thoughtful suggestions—most wanted a wider product selection and some felt improvements in the store layout and customer service would elevate the experience further. These reflections present an opportunity for local stakeholders. With the right support, through training for shopkeepers, better merchandising, or inclusion of locally made, sustainable goods, these small stores can become not just points of convenience, but meaningful touchpoints in the tourist journey, contributing to both visitor satisfaction and community livelihood.

Convex Mirrors

Among residents, 50% are aware of the mirrors and **100%** of those aware are satisfied with their placement, underscoring thoughtful installation at key locations. More importantly, 95% believe the mirrors have effectively reduced speeding, while 90% feel safer as pedestrians, highlighting their role in accident prevention and improved visibility.

Tourist feedback further reinforces the mirrors' effectiveness, with 62.5% noticing them and all who did (**100%**) reporting increased safety at blind spots, reducing navigational stress and enhancing the overall visitor experience. Additionally, 80% rate the mirror quality as "Exceptional", demonstrating high functionality and durability in most cases. However, 30% reported instances of vandalism or damage, suggesting the need for stronger materials or protective barriers to maintain long-term effectiveness.



Moreover, specific areas of improvement have been identified. 64.2% of respondents cite the clarity of mirrors as a concern, while 21.4% highlight durability issues, indicating that weather conditions or external factors may affect visibility and performance. A smaller portion (14.2%) note height adjustments, suggesting that ensuring optimal placement for varying vehicle sizes could further enhance usability. Addressing these concerns will sustain the mirrors' efficiency and reinforce their contribution to community and tourist safety.

Figure 10: Areas of improvement- convex mirrors

3.3.2.3. Impact

The project interventions in Coimbatore have resulted in significant improvements in health, safety and economic opportunities, benefiting both local communities and tourists. In the sanitation sector, 100% of sanitation unit users reported increased cleanliness, while 90% observed a reduction in open defecation, leading to improved public hygiene and health outcomes. Additionally, 10% of users noted fewer waterborne diseases, further validating the positive health impact. Similarly, water filters contributed to better water quality, with 54.5% of users reporting fewer waterborne illnesses and 72.7% rating the filtered water as “much better.”

"Installation of this solar plant has helped five villages get light facilities. Forest department also helped us in a big way. We are using this plant to make products like chairs, tables and wall hangings."- Ms. Bommi, Member of Eco-Development Committee

Interventions aimed at enhancing community safety have also yielded tangible benefits. The installation of solar lights has been highly effective, with 85.7% of respondents stating that the lights significantly reduce accidents, while 90.4% believe they are crucial to overall safety. The addition of convex mirrors at critical road points has also proven effective, with **95%** of residents observing reduced speeding, increasing confidence among both drivers and pedestrians. These measures have collectively transformed Coimbatore into a safer and more accessible space for residents and visitors alike.

Environmental cleanliness has also improved significantly, thanks to enhanced waste management efforts. 100% of surveyed community members report a cleaner environment, attributing this to more frequent waste collection, proper bin segregation and the presence of recycling mechanisms. The project's success in waste management was further recognized at the district level, earning an award from the Minister of Jal Shakti, who praised its effective execution and impact, awarding ₹7.5 lakh for future sustainability as reported by the implementation partner during his interview.

Beyond infrastructure improvements, the project has had a transformative effect on livelihoods and economic independence, particularly for tribal communities. Previously reliant on barter systems, they have now transitioned to financial independence, with many learning pricing strategies, saving money and even engaging in online marketing of their products. These interventions have provided sustainable livelihood opportunities, empowering marginalized groups.

"Before this project, people didn't come out much. Now, our children are also involved in self-employment and they are ready to take this forward." -Bommi, Member of Eco-Development Committee

From a tourism perspective, improvements in sanitation, water access and waste management have enhanced the visitor experience, with tourists universally rating sanitation facilities as “Excellent”. Similarly, 100% of those who used water filters felt their travel experience was better, reinforcing the positive role of clean drinking water in attracting and retaining tourists. Additionally, segregated bins and plastic crushers have strengthened the area's reputation as an eco-friendly destination, aligning with responsible tourism values.

"Tourists previously didn't have facilities, but now, because of our sanitation and awareness efforts, we see an increase in responsible tourism, which benefits both the community and the environment."- Implementation Partner

Overall, the Coimbatore project has successfully integrated health, safety, environmental sustainability and economic development, creating a holistic model for community-driven growth. The combination of effective waste management, improved sanitation, enhanced safety infrastructure and economic empowerment has

not only uplifted local communities but also positioned Coimbatore as a sustainable and tourist-friendly destination, supporting long-term regional development and inclusive prosperity.

3.3.2.4. Sustainability

The project has embedded sustainability mechanisms to ensure that interventions remain effective beyond the initial implementation. Community ownership and institutional linkages have been central to this approach. To ensure economic sustainability, a leader from the community was nominated to oversee product quality and customer engagement, allowing impact to continue without external intervention. Additionally, tribal groups have been trained in financial management, equipping them with skills to sustain business activities and livelihood projects beyond direct project support.

"We planned for sustainability by linking with government departments and EDC, which now monitor and train people to ensure that the impact continues beyond the project period."- Implementation Partner

At an institutional level, sustainability has been strengthened by linking government departments and the Eco-Development Committee (EDC), which now monitors and trains people to maintain these interventions beyond the project period. This structured governance approach ensures continued local engagement and minimizes dependency on external organizations.

Based on community-level data, ongoing maintenance remains critical for sustainable impact: although sanitation facilities have shown clear benefits, 60% of users rely on them only "rarely," risking a slide back to older practices if consistent usage and upkeep are not reinforced. Similarly, water filters see sporadic use, suggesting the need for more robust maintenance mechanisms and community awareness campaigns. Strengthening community ownership is another key consideration, particularly given that 95% of respondents belong to tribal groups (ST), who may benefit from organized local committees or self-help groups to manage and maintain these interventions especially solar lighting systems and waste-segregation initiatives ensuring they remain functional and relevant over the long term.

"We nominated a leader from the community to ensure they maintain product quality and understand how to engage with customers. This way, the impact continues without external intervention.".... "Tribal people have been trained to maintain accounts and manage their businesses. This has empowered them to sustain their livelihoods beyond our direct support."- Officer- Forest Department, Coimbatore Division

Based on data gathered from tourists, maintenance and upkeep emerged as critical themes: although the sanitation facilities are rated "excellent," usage remains rare, suggesting that frequent cleaning, adequate restocking and enhanced awareness are needed to encourage more consistent use. Convex mirrors, meanwhile, face occasional vandalism (noted by 30% of respondents), highlighting the importance of ongoing repairs or sturdier materials. For long-term adoption, the water filter's success depends on regular maintenance and quality checks, along with improved signage or user instructions to increase daily usage rates. Likewise, while waste management appears generally effective, adjustments to dustbin size and placement could ensure sustained tourist compliance and reinforce a cleaner, more welcoming environment. Thus, by embedding community leadership, institutional support and CSR partnerships, the project ensures that sanitation, water, safety and livelihood interventions continue to benefit both local communities and tourists, reinforcing long-term sustainability and resilience.

3.3.3. Success Stories and Best Practices

Transforming Kallar Check Post: A Story of Sustainable Development and Empowerment

Introduction

Kallar Check Post in Coimbatore, once a site struggling with plastic waste, has undergone a significant transformation into a cleaner and more welcoming space. Through the support of Royal Enfield and NMCT, key improvements have enhanced both the environment and local livelihoods, making the area more accessible and beneficial for the community.

Addressing Gaps

Previously, plastic waste accumulation was a major challenge at Kallar Check Post, making waste management difficult and reducing its appeal as a tourist stop. The lack of proper infrastructure also limited economic opportunities for the local Self-Help Groups (SHGs). To address these issues:

A plastic crushing machine was introduced to manage waste more efficiently, ensuring a cleaner environment

A water purifier was installed to provide access to safe drinking water, benefiting both visitors and residents

The bridge was restored, improving connectivity and access, allowing for better movement of people and goods. Additionally, a livelihood shop was set up for the Joint Liability Group (JLG), enabling members to market their products more effectively and enhance their income-generation opportunities.

Impact

With these improvements, Kallar Check Post has become more than just a transit point—it now serves as a hub for tourism and local economic activities. The cleaner environment, improved infrastructure and enhanced accessibility have helped SHGs find new livelihood opportunities.

Reflecting on the transformation, Mr. Kranti Kumar Patil (I.A.S, District Collector, Coimbatore District) shared, *"We are deeply grateful to Royal Enfield and NMCT for transforming Kallar Check Post from a plastic waste collection site into a vibrant tourist spot and livelihood hub for our Self-Help Groups. The plastic crushing machine, water purifier and bridge restoration have improved the environment and boosted economic opportunities. This project exemplifies the power of corporate social responsibility in driving sustainable development. Thank you for making Kallar a place of pride for us all."*

With these efforts, Kallar Check Post is now a cleaner and more accessible space, benefiting both the local community and visitors while setting an example of sustainable development.



3.3.4. Challenges

Limited access and usage constraints continue to impact sanitation and water facilities. 75% of community respondents lack access to a newly constructed sanitation unit and even among those who do, many use them only rarely. Similarly, while 27.5% have access to water filters, most use them only occasionally, limiting the potential health benefits of clean drinking water.

Waste management, while improved, still faces operational inefficiencies 31.8% of respondents report irregular garbage collection, suggesting that while systems are in place, service consistency remains a challenge. Awareness gaps further hinder the impact of these interventions, as 47.5% of respondents are unaware of solar lights and only 50% know about convex mirrors, underscoring the need for enhanced outreach and education efforts. Additionally, training gaps persist, with 54.5% lacking formal instruction on waste disposal and 60% of water filter users relying on them sporadically, indicating a need for behavioral change initiatives.

From a tourism perspective, low sanitation unit usage despite excellent cleanliness ratings suggests behavioral barriers or a lack of awareness, as most tourists access these facilities only “rarely.” Moreover, 31.2% of tourists did not notice waste management signage and 37.5% failed to see convex mirrors, indicating potential communication gaps or inadequate signage. Concerns regarding vandalism and maintenance were also raised, with 30% of respondents reporting potential damage to convex mirrors, posing a risk to long-term road safety interventions.

"Weather unpredictability was a major challenge. Landslides often blocked roads and the lack of mobile network coverage made communication difficult."- Forest Officer, Coimbatore Division

Additionally, environmental challenges further complicate implementation. Unpredictable weather, frequent landslides, poor mobile network coverage has created logistical difficulties, delaying project execution and limiting communication with stakeholders. Addressing these structural, behavioural and environmental challenges through consistent service delivery, awareness campaigns and infrastructure resilience will be key to maximizing long-term impact.

3.3.5. Recommendations

To enhance community impact and ensure long-term sustainability, expanding sanitation units and water filter coverage is essential. This recommendation stems from the finding that only 25% of community members currently have access to newly constructed or renovated sanitation units, while water filters reach just 27.5%. Additionally, 60% of sanitation unit users reported using the facility rarely and 81.8% of water filter users said they used it only occasionally. This shows that increasing accessibility must be paired with community-specific training and awareness to encourage regular usage and improve health outcomes.

Awareness campaigns for solar lights and convex mirrors should also be intensified, focusing on their safety benefits. Data shows that 85.7% of community members believe solar lights reduce accidents and 95% of respondents feel convex mirrors have helped reduce speeding and increased pedestrian safety. However, vandalism was reported in 30% of the mirrors, while 64.2% of respondents raised concerns about clarity. Regular check-ups and maintenance, combined with awareness drives, can help maintain these safety interventions. Waste management education should also be integrated into these campaigns to reinforce proper segregation and responsible waste disposal. Though 55% of the community is aware of the waste

management program, 31.8% still cited irregular garbage collection, showing the need for continuous engagement.

"Tribal products should be marketed across Tamil Nadu so that people everywhere understand their value and contribute to sustainable livelihoods."- Forest Officer, Coimbatore division

Establishing local monitoring committees will be critical to strengthen community ownership of sanitation and water interventions. Community-led teams can be trained to oversee regular check-ups for solar lighting, convex mirrors and waste management to ensure all systems function properly. This is especially important as 95% of respondents belong to tribal groups who may benefit from structured committees or self-help groups for long-term maintenance. These steps will not only improve functionality but also build local skills and leadership for sustained impact.

Behaviour-change initiatives must also encourage consistent usage of sanitation facilities and water filters. Currently, a large portion of the community accesses these services infrequently. Door-to-door visits, hands-on demonstrations and recycling education sessions will help embed sustainable habits in daily life. These initiatives will complement the progress already made, such as the community's shift from barter systems to financial independence, with many now saving money and marketing their products online.

Tourism-Specific Recommendations

To further promote responsible tourism, improving signage and outreach is critical. Only 31.2% of tourists noticed the Plastic Crushing Machines and 7.14% found the Vayujal Plant somewhat inaccessible. Increasing visibility through better signboards and digital campaigns will strengthen tourist education, reduce vandalism and encourage proper use of facilities like plastic crushers and convex mirrors. Tourists already respond well to these interventions, with 72.7% rating the area as "Very Hygienic" and 83.3% saying access to filtered water influenced their stay.

"Tourism awareness was low. Many tourists did not understand why plastic was banned or why certain areas were off-limits. We had to invest heavily in awareness campaigns."- Gautham, Implementation partner

Sanitation interventions should also focus on boosting tourist engagement. Although 100% of tourists rated the cleanliness of sanitation units as "Excellent", only 31.2% had used the units and all did so rarely. On-site demonstrations, better placement and improved accessibility can encourage tourists to shift from rare to regular users. Similarly, enhancing water filter awareness is necessary. Health benefits and free access should be highlighted, along with strict water quality checks.

Waste management strategies should also optimize bin placement and size, keeping in mind tourist feedback. While 68.7% of tourists noticed waste segregation bins, 41.6% suggested better dimensions, 25% recommended improved placement and 16.6% called for more frequent waste disposal. Continuous education on waste segregation and recycling will further support responsible tourism and community hygiene.

For convex mirrors, using stronger materials and protective designs is necessary to prevent damage. Tourists confirmed their impact on safety, with 62.5% noticing the mirrors and 100% reporting reduced stress at blind spots. However, clarity and durability concerns raised by 64.2% and 21.4% of users, respectively, need to be addressed through routine maintenance and possible height adjustments.

Lastly, financial sustainability must be carefully considered. As Ms. Bommi, a member of the Eco-Development Committee (EDC), suggests, "Government support in providing fair transport facilities will help tribal entrepreneurs reach larger markets." Similarly, a Forest Official from Coimbatore stresses the need for *"more financial literacy training to ensure self-sufficiency."* Strengthening market linkages, expanding financial

education and setting up maintenance mechanisms will ensure that the benefits of these interventions continue well beyond the project's initial phase. This approach will support both local communities and the tourism sector, securing long-term impact and resilience.

3.3.6. Annexures

3.3.6.1. Sample distribution

Table 3: Sample Distribution

Beneficiaries across key tools	Sample
Semi structured Interviews	
Primary beneficiaries	16
Secondary beneficiaries	40
Key informant Interviews	
Forest Officials	3
Eco Development Committee members	3
Local Panchayat Leaders	3
Implementing Partner	1
Direct Observation	
Facilities/Units	7

3.3.6.2. Evaluation Matrix

Table 4: Evaluation Matrix

Study Population	Key Area of Enquiry	Tool Type	Planned Analysis	Evaluation Dimension (OECD -DAC)
Local community	<ul style="list-style-type: none"> Awareness and engagement in hygiene and eco-friendly practices Utilization and management of existing and newly established facilities Involvement in community-led initiatives for responsible tourism 	<ul style="list-style-type: none"> Semi-structured 	<ul style="list-style-type: none"> Descriptive analysis to summarize community engagement, facility utilization and eco-practices. Logistic analysis to determine factors influencing community involvement and eco-friendly practices. 	<ul style="list-style-type: none"> Relevance Sustainability

Study Population	Key Area of Enquiry	Tool Type	Planned Analysis	Evaluation Dimension (OECD -DAC)
	<ul style="list-style-type: none"> Impact of eco-friendly and responsible travel practices 			
Tourists	<ul style="list-style-type: none"> Demographic and Visitor profile Experience with souvenir shops and NTFP products Perception of eco-friendly initiatives, including solar energy, waste management and cultural preservation Awareness and satisfaction with solar lights and energy Impact of sanitation facilities Challenges and suggestions for improvement 	<ul style="list-style-type: none"> Semi-structured Interviews 	<ul style="list-style-type: none"> Descriptive analysis to capture tourist profiles, satisfaction levels and experiences with eco-friendly practices. Thematic analysis to explore qualitative insights on challenges and suggestions for improvement. 	<ul style="list-style-type: none"> Effectiveness Impact
Local govt./Forest department/Panchayat	<ul style="list-style-type: none"> Capacity building and training for facility management Planning and development of infrastructure for waste management, tourism facilities and conservation areas 	<ul style="list-style-type: none"> In-depth Interviews 	<ul style="list-style-type: none"> Thematic analysis to evaluate the effectiveness of capacity-building activities and infrastructure development efforts. 	<ul style="list-style-type: none"> Efficiency Effectiveness
Implementation partners	<ul style="list-style-type: none"> Details about program implementation and implementation strategies Challenges and barriers Alignment of interventions with project objectives Success stories – Stories of change 	<ul style="list-style-type: none"> In-depth Interviews 	<ul style="list-style-type: none"> Thematic analysis of implementation strategies, alignment with objectives and qualitative documentation of success stories. 	<ul style="list-style-type: none"> Efficiency Sustainability