

GIZ Gender Competition 2024

Breaking Chains, Building Voices: Gender Transformative Approaches in Plastic Waste Management for Inclusive and Sustainable Communities- Trivandrum

1. Introduction

An estimated 19 to 23 million tonnes of plastic waste enter aquatic ecosystems annually (UNEP, 2021¹), posing severe threats to marine life and accelerating climate change. India has taken steps to combat plastic pollution by banning specific single-use plastic (SUP) items starting from July 1, 2022, and emphasising the implementation of Extended Producer Responsibility (EPR) for plastic packaging.

Addressing the issue of plastic pollution, the Indo-German Technical Cooperation (TC) project '[Circular Economy Solutions Preventing Marine Litter in Ecosystems \(CES\)](#)' has been commissioned by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) implemented jointly with the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India.

Implemented by GIZ India, the project focuses on demonstrating circular economy solutions in river and marine ecosystems to efficiently manage litter. With technological interventions and partnerships with stakeholders, the project operates in states of Kerala, Tamil Nadu, and Uttar Pradesh. The BMUV project has a GG1 marker. The overall objective is to increase plastic waste management of communities, with a focus on vulnerable population groups who have limited access to waste management services, on a regular basis. The project measures have been able to address waste hierarchy, foster institutional coordination, and secure adequate financial resources through the newly framed EPR regulatory framework for plastic packaging waste².

2. CES Project in Kerala

In Kerala, with its extensive coastline, unmanaged plastic waste significantly impacts marine ecosystems. Thus, waste management in cities like Trivandrum (also called as Thiruvananthapuram) (*CES project city*) is crucial for environmental conservation (*Figure 1*). In 2022, Trivandrum had generated 440-450 TPD of Municipal Solid Waste, with plastic waste contributing to 13-14%. The formal and informal sectors manage 70% of the city's waste. A recent CPCB study, supported by GIZ found that banned SUPs make up 8.2% of Trivandrum's total plastic waste, with carry bags being the most common banned SUPs, constituting over 90% by weight.



Figure 1: Plastic Littering in coastal areas of Trivandrum (PC: Recykal)

*Hence, the project is piloting solutions to tackle the multifaceted issues of waste management by **integrating inclusive local participatory approaches to promote plastic alternatives and support plastic waste management operations.***

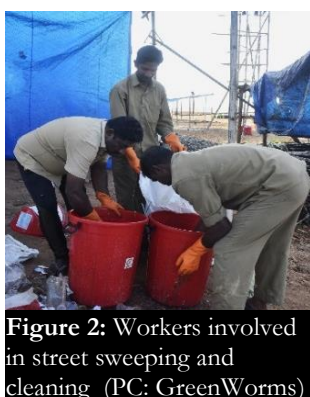


Figure 2: Workers involved in street sweeping and cleaning (PC: GreenWorms)

While contributing to the Green and Sustainable Development Partnership (GSDP) between India and Germany by piloting marine litter reduction solutions under the EPR framework, the project targets at least 4,000 households addressing plastic waste management for approximately 30,000 people, supported by sanitation workers in the city.

Workers involved in street sweeping and cleaning (*Figure 2*), play a crucial role in maintaining the



Figure 3: Workers involved in waste management services. (PC: GreenWorms)

¹ UNEP (2021). Drowning in Plastics – Marine Litter and Plastic Waste Vital Graphics

² [https://eprplastic.cpcb.gov.in/plastic/downloads/4th%20Amendment%20\(EPR%20guidelines\)%20Feb%202022.pdf](https://eprplastic.cpcb.gov.in/plastic/downloads/4th%20Amendment%20(EPR%20guidelines)%20Feb%202022.pdf)

cleanliness and hygiene of the city while women workers support door-to-door collection and segregation of waste (Figure 3), as well as production of plastic alternatives. This is **aligned to the state policy of empowering women (Kudumbashree)** in the society. While street sanitation staff are daily wage workers employed by [Trivandrum Municipal Corporation \(TMC\)](#), the women workers are organised into independent enterprises working under TMC generating revenue from their daily operations supported by incentives from city and state government. **The GIZ India CES project primarily support these women workers to successfully manage their own waste management enterprises and also work in the production of plastic alternatives.**

Women-led initiatives in Kerala: Kudumbashree (meaning “Prosperity of the Family”), stands as a beacon of empowerment and community development and is the backbone of all the women-led initiatives in the state of Kerala. Established by the Government of Kerala in 1998, Kudumbashree organizes women into self-help groups (SHGs) at the grassroots level, providing them with a platform to address social and economic challenges within their communities. Their activities range from micro-enterprises to social development projects, and has become a driving force behind women’s empowerment, transforming them into active contributors to their families and communities.

In the state of Kerala, the project majorly cooperates with [Directorate of Environment & Climate Change, Govt. of Kerala](#), [Kerala State Pollution Control Board \(regulatory body\)](#), [Suchitwa Mission \(Technical Support Group in waste management under Local Self Government Department\)](#), [Kudumbashree \(State Poverty Eradication Mission\)](#) and [city of Trivandrum](#). The project is implemented with the support of partners- [GreenWorms](#), [Thanal](#) and project management unit – [Centre for Environment and Development](#).

The CES project supports the overall plastic waste management operations of the city of Trivandrum. **Poonthura, Valiyathura and Vettucaud are the three pilot wards** that are part of the ongoing CES project. These are **coastal wards with extremely vulnerable population** primarily engaged in fishing and exhibit a **tightly knit structure with clear social hierarchy**. **Traditionally marginalized and vulnerable to poverty and natural disasters**, these communities **have patriarchal gender norms**. For instance, **male members, assume decision-making roles**, have predominantly remained the primary breadwinners, **limiting women's access** to mainstream opportunities. While some women partake in fish sales on a small scale, domestic conditions for many are distressing, marked by **instances of domestic abuse** and **minimal decision-making power**. **Early marriages, enduring abusive conditions, and the pervasive issue of intoxicant (mostly alcohol) consumption** among men further compound the challenges faced by women.

3. Implementing Gender Transformative Approaches in the Project - Technical and Strategic Aspects

- Women-led SHGs in Trivandrum are **organised as “Haritha Karma Sena- HKS (Green Warriors)”** under the Kudumbashree movement and encourage citizens to segregate their waste into bio-degradable and non-biodegradable, promoting responsible waste disposal practices. Working closely with TMC, **the project supports the capacity building, digital and social skills and formalization of the HKS members (Figure 4).**

Revenue is made from the user fees collected from waste generators and from the sale of recyclable items to plastic waste processing units. The business model of sale of recyclable items to formal processing units, make them complaint to the EPR rules (2022).



Figure 4: HKS Workers and CES project team in training session for financial accounting (PC: GreenWorms)

- The SHG members in the city of Trivandrum are **supported and trained** (Figure 5) to produce eco-friendly items (cloth bags, bamboo products, cloth sanitary pads) to minimise waste and boost women-led businesses. Dedicated awareness and training sessions are conducted to promote menstrual health and hygiene and use of sustainable menstrual products like cloth pads or menstrual cups.



Figure 5: SHGs getting trained to make cloth sanitary pads (PC: Thanal)

- The project tries to **garner public cooperation along with the sanitation staff**, emphasizing the importance of community involvement in waste management. The project efforts may inadvertently reinforce gender stereotypes in waste management by associating women with traditional caregiving roles. To counter this, with the support of TMC, **specific campaigns are organised prioritising inclusivity, involving representatives of all genders, aligned with the state government's inclusive initiatives**. Recognizing the emotional and psychological challenges faced especially by women in waste management, the project has initiated '**wellness initiatives and medical camps**' to provide support and conversations around **mental health and well-being**.



Figure 6: Inclusive, consumer centric and compliance aspects of the CES project addressing the challenges of plastic waste management and community empowerment through women leaders (with the support of city and state government)

4. Community Empowerment and Impact as a Quality Feature of Our Work³

The project interventions revealed existing gaps in public perceptions and the outcomes of the project has **gradually shifted public attitudes** towards acceptance and respect for women working under these challenging conditions. The women led SHGs in Trivandrum are **trained under the project** and these SHGs have established collaborations with local businesses and retailers (Figure 7) to promote a market for their products.



Figure 7: Trained women SHG members on plastic alternative products (PC: Thanal)

³ Project activities in Trivandrum corporation social media- [എൻറെ സുന്ദര അനന്തപുരി \(@corporationthiruvananthapuram\)](#) • Instagram photos & videos

A noteworthy achievement includes a Five-member SHG group in Poonthura (CES project location), following successful cloth bag training, secured orders for 2,200 bags for large events in Kerala, earning INR 44,000 within two months.

Formalization of Women SHGs: The independent HKS workforce has limited education and literacy (conventional & digital), lacks organizational and leadership skills which hinders the SHGs from achieving efficiency. Moreover, the existing social structures and cultural norms prevents equal opportunity specifically for vulnerable women workers. Thus, the implementation team on ground, is attempting to **streamline and mobilize the SHGs** to achieve maximum efficiency through various innovative mechanisms which is in line with a **Feminist Development Approach**. This involved ensuring women workers have a **right to decent work management** (includes creation of charts and work cycles - establishing a consistent schedule which is understandable and acceptable) aligning to SDG 5 and 8.

Due to India's 'Digitalisation policies', **specific digital service trainings were conducted for HKS members, such as using a smart device** (Figure 8). The *Government of Kerala-Haritha Mithram App* used to digitally record door-to-door services and waste generation, is also utilised to contribute to effective data management and serves as a monitoring tool for the Government in tracking the necessary activities. Digital tools and social media platforms are leveraged for service promotion, allowing these groups to inform the public in advance. These capacity-building activities empower women, and **the improved wages mark a substantial shift in the financial independence of workers** (Figure 9) offering them a chance to redefine their identity as respectful, and strong self-reliant members of the society.



Figure 8: Upskilling and digital skills training for HKS members (PC: GreenWorms)

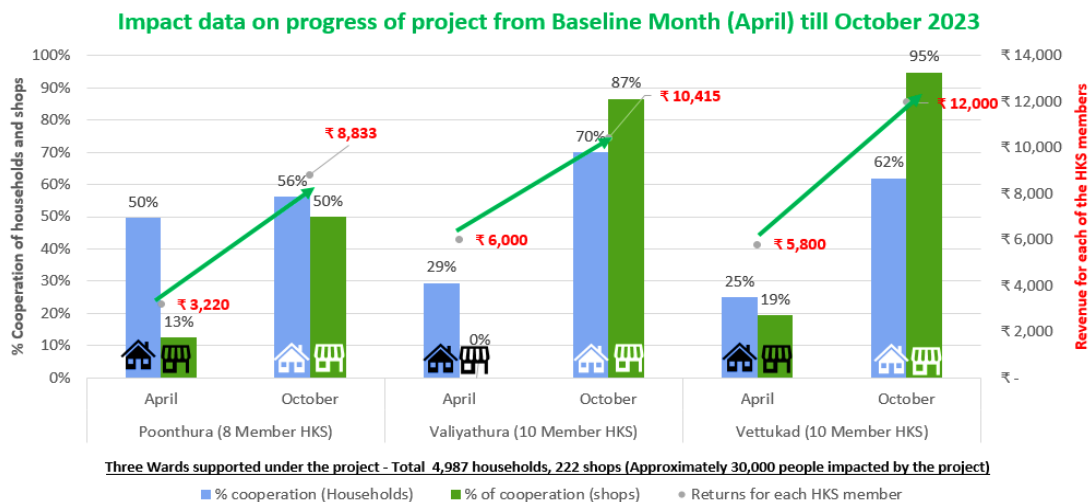


Figure 9: Impact data- Project baseline Month (April) till October 2023

5. Conclusion and Way Forward

The project has developed a **successful enterprise model** addressing waste management and livelihood issues, altering the way the community view these groups. To break into simpler terms, the project was able to facilitate a transition of these collectives from **'people collecting garbage with a vague identity'** to **'professionals and entrepreneurs serving the community and society'**. By empowering women as leaders, the projects initiatives try to ensure equal rights, enable participation in decision-making processes as well as access to resources for skill development and entrepreneurship. In the following months, the project plans to upskill the HKS members like promoting further segregation of waste and facilitate these groups to receive secondary source of revenue from advanced plastic waste processing operations.