India

(Output Paper)

Policy Solution Prototypes for Marine Litter Prevention in India

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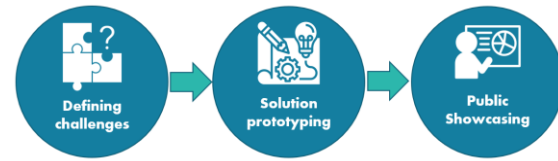## Project Contribution to SDGs:

Project Implemented by:

Introduction

Prevention of Marine Litter in the Lakshadweep Sea (PROMISE) is a 4-year project (2020-2024) supported by the European Union (EU) under the SWITCH Asia Programme.

In recent years, the project partner countries, Maldives, Sri Lanka and India have undergone substantial growth in tourism clusters located along their shorelines of the Lakshadweep Sea. This led to economic well-being of the local population. However, due to high consumption rates of fast-moving consumer goods (FMCG) and single-use plastic packaging, tourism industries have also been identified as major contributors to marine litter. In many touristic regions of the global south, this is aggravated by the absence of effective policy frameworks, a lack of consumer awareness and insufficient capacities of local authorities to handle the increasing solid waste[1].

The PROMISE project responds to this by preventing leakage of wastes from land-based sources into the Lakshadweep Sea in line with a Sustainable Consumption and Production (SCP) approach. To achieve the desired impact, the activities target tourism clusters located along the Lakshadweep shorelines in the Maldives, Sri Lanka and India[2].

As part the project PROMISE, a series of policy roundtables were organised with an aim to prototype policy solution mechanisms for challenges in prevention of marine litter. Three policy roundtables are organised, each focusing on Defining Challenges (1st), Solution Prototyping (2nd), and Public Showcasing of policy mechanisms (3rd). Each roundtable is designed to feed-in inputs to the next one to prototype potential policy solutions that can help national policy makers in furthering marine litter prevention policies.

Defining Challenges (1st Policy Roundtable)

The first phase, the Defining Challenges policy roundtable, convened in India on 25.04.2022, marked the foundational step in this journey of Policy solutions prototyping. Esteemed participants, representing a spectrum of stakeholders including policy makers, governmental bodies, institutions, development organizations, associations, NGOs, and social enterprises in waste management and marine litter prevention, engaged in a collaborative discourse. This stage centered on elucidating the prevailing hurdles and lacunae within India's existing policies pertaining to marine litter prevention.

Key challenges surfaced during this deliberation included the absence of Extended Producer Responsibility (EPR) schemes and policies, inadequate awareness concerning waste management practices, the dearth of regulatory frameworks at the state level for waste management, and the exigent need for policies targeting marine litter stemming from tourism and fishery activities.

Solution Prototyping (2nd Policy Roundtable)

Subsequently, the Solution Prototyping policy roundtable, convened on 26.07.2022, emerged as a dynamic platform for strategic brainstorming and innovation. Participants delved into the realm of policy benchmarking, drawing insights from global best practices and customizing them to suit the nuanced landscape of India. A collaborative synergy among governmental institutions, development organizations, universities, and NGOs was palpable as participants co-created actionable policy prototype solutions, tailored to the challenges unveiled in the preceding roundtable.

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[1] https://projectpromise.eu/

[2] https://projectpromise.eu/project-brief/project-activities

Two noteworthy solutions materialized from this collaborative endeavour:

- The formulation of **'Capacity Building Programmes for Sanitation Committees,'** designed to equip ward-level sanitation committees with the requisite knowledge on Waste Management regulations and enforcement strategies.
- The establishment of a **'District-level Task Force for Single-Use Plastics (SUP) Ban,'** envisaged to bolster the effective execution of SUP ban mandates.

Public Showcasing (3rd Policy Roundtable)

The culminating stage of the Policy Prototyping Series unfolded in the form of the Public Showcasing of Policy Mechanisms policy roundtable, held on 03.02.2023. Here, the meticulously crafted policy prototypes underwent a process of refinement, enriched by the valuable feedback garnered from esteemed participants. This stage accentuated the iterative nature of policy development, ensuring a fine-tuned and pragmatic approach towards addressing the issue of marine litter.

This document stands as the Output Paper encapsulating the prototypes co-created by the participant groups within the Policy Roundtables of the Prototyping Series. The subsequent section provides a comprehensive delineation of the prototypes formulated by both groups, accompanied by vivid visualizations elucidating the mechanism of each solution.

Through this meticulously orchestrated series, the PROMISE project endeavours to furnish national policymakers with innovative, actionable policy frameworks, poised to propel India towards a sustainable and litter-free marine ecosystem.

The overarching aim of these Policy Outcome Paper is to serve as pivotal tools in the hands of policymakers, governmental agencies, ministries, and development organizations within India. By disseminating the innovative prototypes devised through the PROMISE project, these papers are designed to guide and inspire the formulation of robust policies for marine litter prevention and waste management. Through a targeted sharing strategy, they aim to influence decision-making processes, encouraging the incorporation of these cutting-edge solutions into policy frameworks.

Moreover, the papers are poised to catalyze action by presenting tangible, evidence-based approaches that address the pressing challenges in this realm. The PROMISE project team further aims to showcase these outcomes at high-level events, strategically disseminating this wealth of knowledge to a wider audience.

This dissemination effort seeks to spark dialogue, collaboration, and momentum towards effective policy implementation and impactful change. Ultimately, these Policy Outcome Papers are envisioned as catalysts for transformative policy interventions, paving the way for a cleaner, healthier, and more sustainable future for India's marine ecosystems.

Group 1: Capacity Building for Sanitation Committee

Focus:	Capacity Building, Community based awareness raising
Ecosystem Impact:	Effective policy enforcement, improved WM system, Increase in waste segregation rates
Challenge:	Lack of information, lack of training and expertise,

Background

The challenge focuses on the lack of awareness surrounding waste management issues. Even though there are several public and private efforts for awareness raising, there is often a gap in successful implementation and the initiatives are short lived. Long-term efforts are not prioritized and financed when it comes to awareness efforts.

Marine litter is originated from the surrounding landmass and poses a challenge when the source and composition of the waste is unclear. There is overall lack of awareness on proper segregation and waste disposal methods which leads to mixing of municipal waste. When plastic and other waste is not segregated and recycled properly on land, it ends up in landfills or leaches into the marine ecosystem.

Another gap arises in policy implementation of marine litter prevention. Hence, capacity building and awareness raising at community level can be a potential solution to bridge this

gap. It is important that there is a sense of political and public ownership towards waste management issues. The Stakeholders are unaware of decentralized waste management options and government subsidies to find the best solutions. Hence it is important that there are dedicated efforts towards capacity development and knowledge-transfer activities.

The Suchitwa Mission is the Technical Support Group (TSG) in Waste Management sector under the Local Self Government Department, Government of Kerala. It is responsible for organizing awareness raising events and conducting creative workshops among other duties like conceptualizing, action planning, organizing training programs, initiating sector related studies and monitoring activities in Waste Management Sector[3]. The Suchitwa Mission has established a significant and successful initiatives, namely 'My waste, my responsibility' which is intended to create a sense of ownership among citizens to reduce and separate waste at the source. This includes 'The Green Protocol', Reuse-Swap shops, recycling and home composting[4].

The Green Protocol focuses on waste minimization through prevention of use of single use plastics (SUPs) and promotion of using sustainable alternatives. It was initiated during the 2015 National Games and it has now become a successful people's movement in Kerala. For example, restaurants were asked to stop using plastic straws and the education board was asked to encourage students to use ink pens instead of plastic pens. The government offices are also instructed to follow green protocol for all their official meetings. There was also an attempt to spread awareness about the concept of 'Green Weddings', where the usage of plastic and other non-degradable articles including disposable glasses and plates and thermocol decorations were to be avoided[5],[6].
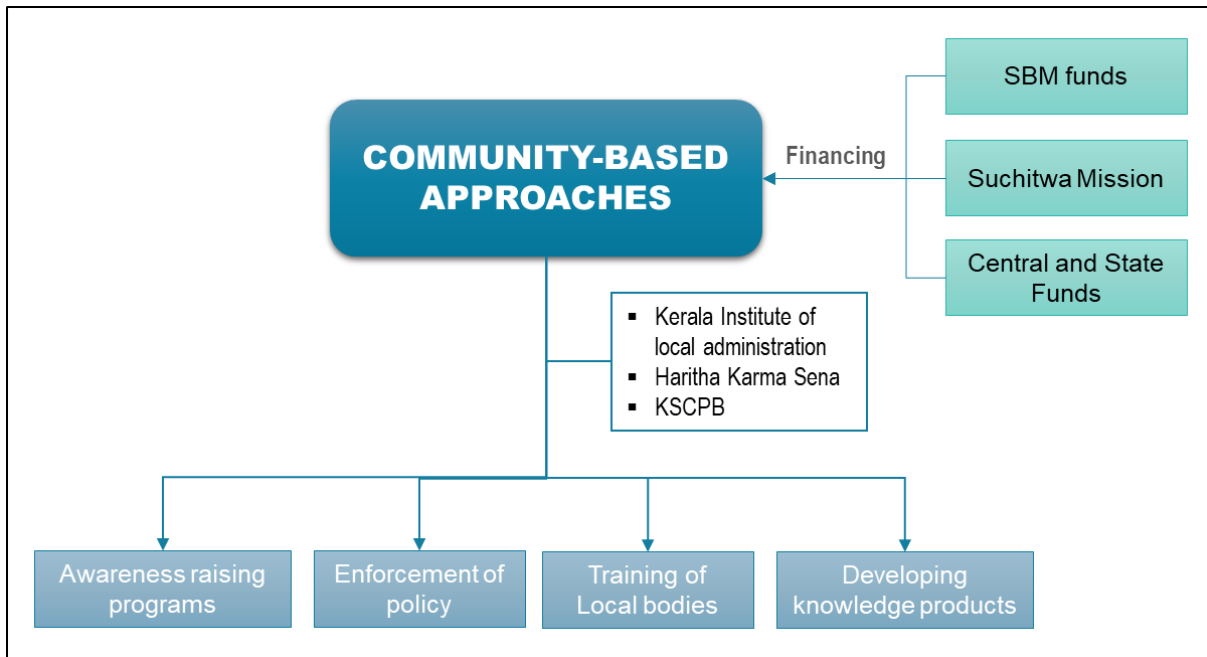
The Haritha Karma Sena (Green Task Force) collects and transports non-biodegradable

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[3] https://suchitwamission.org/

[4] https://suchitwamission.org/public/storage/files/1/Suchitwa-mission-innovative-initiatives.pdf

[5] https://suchitwamission.org/public/web/what-is-green-protocol

[6] http://haritham.kerala.gov.in/greenprotocol/

waste from houses and establishments to shredding units for recycling. This is formed as part of Haritha Kerala Mission campaign named 'Waste free Kerala' and is administered by each local government. Currently there are more than 22000 task force members, who collect waste and segregate into different sections based on its constituents[7].

Solution overview

The Community Based Approaches is an effort of overall development of capacity building program for the sanitation committee. The main objective of the program is to empower the sanitation committee through adequate capacity building so they in turn can carry out door-to-door awareness generation on waste management. This includes awareness and training on source segregation and systematic waste handling. The Community Based Approaches is also designed to improve the implementation of waste management policies and ensure compliance of municipal authorities.

The development of the training module can be supported by the Kerala Institute of Local

Administration (KILA). This entails development of training material for trainers and designing the awareness campaign. Knowledge products such as leaflets and pamphlets will also be developed such that it is easily comprehensible by all stakeholders.

Additionally, an educational curriculum can also be designed so that it can be introduced to students in primary and middle schools.

The implementation of the program will be overseen by the Kerala State Pollution Control Board (KSPCB), and can be financed through the Swachh Bharath Mission funds received by the state which is channelled through Suchitwa Mission.

For the execution, firstly the KSPCB will have to identify the right persons from local bodies who can become trainers. Then the KSCPB will undertake the training of trainers and local bodies which can be assisted by Haritha Karma Sena and Suchitwa Mission members. The members from the training program will then be responsible for general awareness raising activities at community level.

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[7] https://www.kudumbashree.org/pages/677

Objective

- Empowering sanitation committee through adequate capacity building program to enable them to carry out door-to-door awareness generation
- Improved awareness on source segregation and scientific waste management
- Better enforcement of law and order and implementation
- More effective utilization of funds

Key features

- Financing through Swacch Bharat Mission funds and Suchitwa mission
- Training resources provided by Kerala institute of Local Administration
- Training and implementation by KSPCB and Haritha Karma Sena

Impact Potential

- Improved waste segregation in community
- Increased awareness on proper management and disposal of waste
- Increased knowledge among young students on waste management
- Pressure on municipalities managing waste is reduced
- Cleaner cities and environment

Foreseen Challenges

In the third and final policy roundtable, the participants further discussed the policy prototype and identified the following foreseen challenges:

- Absence of periodic reviews & monitoring
- Lack of effective implementation
- Lack of access to funding

- Challenging attitude of local population and continued use of conventional practices
- Lack of incentive for citizen participation (especially women and children)

Further Recommendations

Additionally, the participants also discussed policy refinements and mapped out success strategies in the third meeting.

One of the main focus was to ensure involvement of local populous and participation of government bodies. This could be achieved by approaching student bodies such as SPC & NSS and integrating environment friendly waste management practices into student curriculums. This would increase student body involvement and eventually lead to environmentally conscious population. Additionally, key success factor in increasing the participatory process of government body is to conduct training and capacity building programs for the implementing authorities.

Another area of concern that the participants discussed was tourism and tourist regulations. The goal is to enforce stricter policies conduct awareness programs to reduce waste generation in regions with mass tourism as well as in religious and community gatherings. This mainly includes mitigation of cooking and food waste and SUP waste used in large events. This will also bring attention to sensitive areas such as coastal zones and benefit vulnerable communities.

Lastly, proper monitoring and evaluation of the policy is essential to ensure success. This includes periodic assessment and follow-ups with implementing bodies and waste management coordination at LSG committee level. More funding opportunities such as CSR can also be explored to help finance the implementation process.

Project Implemented by:

Group 2: District level Task Force

Focus:	District Level regulatory body
Ecosystem Impact:	Effective implementation of SUP ban, cleaner cities, better distribution of resources
Challenge:	Lack of proper monitoring body, Lack of effective implementation of policies

Background

The roles and responsibilities for leadership in waste management are split across a number of Government ministries at Sate level. The waste management framework in Kerala is designed under the overarching Solid Waste Management and Plastic Waste Management rules of 2016, including the 2018 and 2021 amendment. Since national policies often lack the specificity to be implemented at a local scale in India, National Solid Waste Management Rules, 2016 postulate preparation of a state policy and solid waste management strategy for each state[8].

The State Policy on Solid Waste Management 2018 outlines the various monitoring and evaluation responsibilities of the stakeholders and implementing authorities. The process is distributed through different tiers of Government to ensure continued improvement and performance efficiency[9].

•   The 73rd and 74th constitutional amendments entrusted Panchayats and Urban Local Bodies with many responsibilities

including Solid waste management. Existing legislations with respect to local governance empowers the Panchayat and municipal authorities to deal with waste management within their geographical limits.

•   Kerala State Pollution Control Board is responsible for enforcing all provisions of the solid waste management rules, 2016 through the local governments in their respective jurisdiction. They also review its implementation at least twice year in close coordination with the Suchitwa mission, Directorate of Urban Affairs, Directorate of Panchayats, and Secretary, Local Self Government Department.

•   The progress and performance of the waste management sector is monitored by the State Level Empowered Committee constituted for sanitation and the State Level Advisory Board for Solid Waste Management.
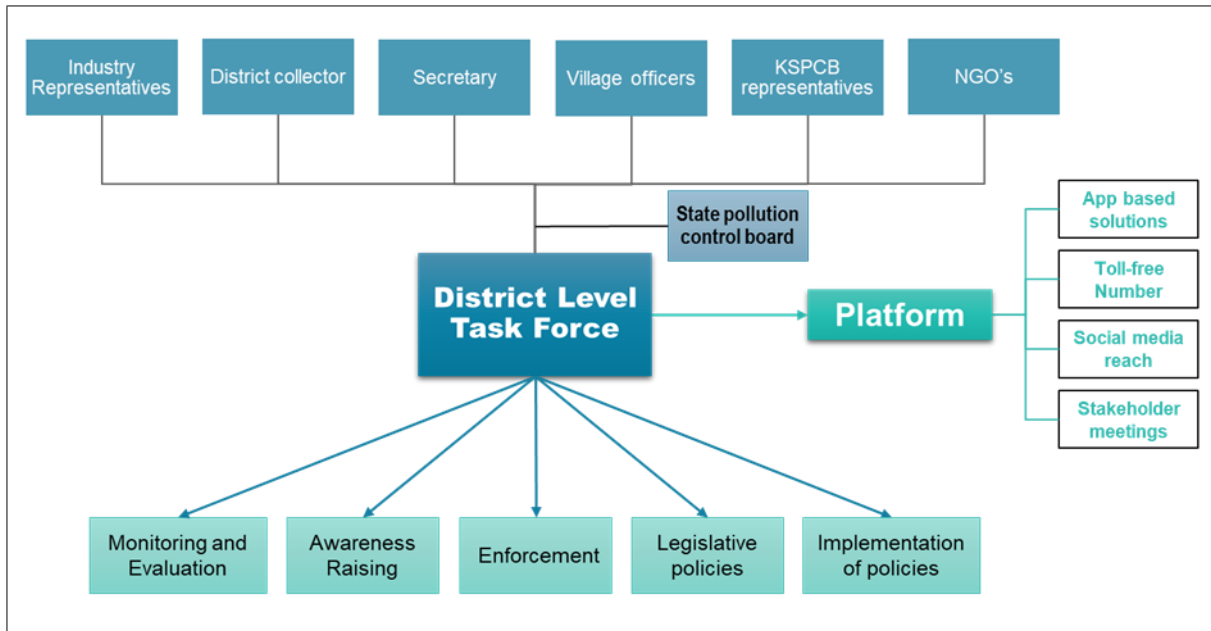
•   In addition, the Haritha Keralam Mission is formed for enabling the integrated activities of waste management, which is chaired by the Chief Minister who reviews and monitors the Progress of the Sector. The respective chief executives of Haritha Keralam Mission also monitor the performance of Solid waste management sector and ensure corrective measures where required at district, city corporation, municipality and grama panchayat level.

Most recently, in June 2022, Kerala Solid Waste Management Project (KSWMP) was launched to strengthen the institutional and service delivery systems for solid waste management in Kerala. The project comprises three components (i) institutional development, capacity building, and project management (ii) grant support to Urban Local Bodies (ULBs), (iii) development of regional SWM facilities. KSWMP funds are allotted to the Urban Local Bodies as additionality to the budget provisions given as Plan fund by the State Government[10].

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[8] https://cpcb.nic.in/uploads/MSW/SWM_2016.pdf

[9] https://kspcb.kerala.gov.in/activities/waste-management/municipal-solid-waste

[10] https://kswmp.org/

Solution Overview

The District Level SUP Task Force (DLTF) will be set-up to support effective implementation of SUP ban mandates. The Kerala State Pollution Control Board enforces the SUP at a state level, and the city municipalities enforce it at a local level. However, there is no monitoring body at district level to help facilitate policy implementation.

The primary role of the District Level Task Force will comprise of monitoring and evaluation activities. This includes enforcement of legislative policies. The DLTF will also play a role in promoting beneficial state government schemes such as buy-back incentives, organic waste composting and recycling schemes.

Another important role that the DLTF can play is to organise awareness programmes and activities at district level, such as promoting the use of sustainable alternatives instead of SUP items. Such activities can be extended to target primary and secondary schools, by organising district-level competitions and knowledge programmes for students. This encourages overall improvement in waste management practices and increases decentralised waste management which leads to reduction of Marine Litter.

The DLTF is designed to be easily accessible by all stakeholder groups though multiple-platform engagement. The DLTF will have a strong digital presence through the use of social media pages for information dissemination and awareness raising. It will also develop user-friendly app-based solutions that can be used in multiple languages including Malayalam and English. Additionally, a toll-free number will be set up so that stakeholders can directly address any issues or concerns. To further increase stakeholder engagement in the policy implementation process, the DLTF will organise quarterly stakeholder meetings to receive feedback.

A steering committee will be established by the Government of Kerala who will in turn appoint the District Level Task Force members. To maximise stakeholder representation, the members are to include, the District Collector, Secretary of Local Self Government Institution, Kerala State Pollution Control Board representatives, Industry Representatives, and NGO's.

Objective

- To effectively implement the legislation and policies related to SUP ban
- To develop a proper monitoring and evaluation system for SUP policy implementation
- To implement buy by-back and incentive-based recycling system
- To raise awareness on plastic waste and to promote eco-friendly alternatives to SUP

Key Features

- Digital platform with app-based solutions and toll-free number
- Involvement of multiple stakeholders
- Improved monitoring and evaluation system of single use plastic
- Awareness raising through social media reach

Impact Potential

- Reduction of Single-use plastic and overall Municipal waste
- Better implementation of legislations and policies related to SUP ban
- Increased stakeholder engagement

Foreseen Challenges

The participants further discussed the policy prototype and identified the following foreseen challenges:

- Village officers may not be effective in implementation
- SUP from packed goods brought to the market by industries
- Principal directorate recently set up by the Local Self Govt. Department of Kerala

Further Recommendations

The policy refinements and success strategies discussed in the third policy roundtable are as follows:

One of the key success factors in the policy implementation is to ensure a proper monitoring and evaluation framework. An SUP monitoring committee can be established at state level, district level, as well as at panchayat level. All panchayats should be involved in the process which ensures positive impact and longevity of the policy. There can also be a monitoring panel at the Local Self Govt. Department (LSGD) level which includes hotels, tourism SME's and NGOs, and the Principal Director of the LSGD can be approached to take the lead.

Another important activity for policy success would be overall awareness creation in educational institutions and marginalised societies. Schools, colleges and universities can be actively involved by introducing Waste management and marine litter prevention can in the curriculum. It is also important to bring awareness to existing mechanisms and promote initiatives such as Green Protocol to encourage citizen participation. The government can also support R&D for biodegradable plastics and promote start-ups offering sustainable alternated to SUP.

A way to ensure compliance of the SUP mandate would be to firstly provide necessary information and support to the vendors. The technical wing should also give resource support and raise awareness in marginalised societies. Additionally, a toll-free number can be set up to answer queries and there can be an app in which non-compliance can be reported.

Recommendations

- **Focus on Public Spaces:** Develop policies targeting waste disposal in public spaces, particularly in tourism-centric areas and sea shores, to complement existing Household and Commercial waste management policies.

- **Implement Extended Producer Responsibility (EPR):** Local governmental bodies should establish a comprehensive EPR system to ensure private sector and other stakeholders bear financial responsibility for pollution caused by their products.

- **Support Local Initiatives:** Scale up and promote collaboration among local waste management programs, projects, and initiatives. This collaborative effort will contribute significantly to combating marine litter along India's coastlines.

- **Enhance Capacity of Local Self-Government Bodies (LSGs):** Provide further capacity building for LSGs to effectively translate political objectives into actionable measures. Strengthening enforcement of policies is crucial for addressing littering both on land and at sea.

- **Formalize Informal Waste Pickers:** Offer adequate financial incentives to formalize informal waste pickers, integrating them into the formal waste management systems. This approach not only enhances efficiency but also empowers marginalized communities.

- **Develop Local Waste Collection and Recycling Policies:** Tailor policies to encourage waste collection, segregation, and recycling to suit the specific conditions prevalent in Kerala and other regions.

- **Provide Stakeholder Trainings:** Conduct training programs to build the capacity of public stakeholders on waste management policies, regulations, and implementation approaches. Special focus should be given to training ward-level sanitation committees, which play a crucial role.

- **Promote Eco-Inclusive Entrepreneurship:** Encourage the growth of innovative business models centered on waste management and circularity. Small local entrepreneurs, especially those in the hospitality sector, should be supported through formalized waste management structures.

By implementing these recommendations, India can significantly enhance its waste management practices, reduce marine litter, and foster a more sustainable and environmentally conscious future.

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