Community project improving marine litter management on remote Kenyan coastlines

Overview
Bahari Moja is a community-based organisation, located within the Kiunga Marine National Reserve. With a dedicated team, it works to tackle the relentless accumulation of marine debris washing up on its shores, with both community and environmental benefits.

"We are proud of our achievements and proactive approach to local plastic pollution, but long-term, upstream solutions are needed that stem the flow of plastic at source" - Amina Shali, Bahari Moja Manager

Local solutions

Awareness raising campaigns: fostering behavioural change, demonstrating benefits of recycling plastic and the value of a clean environment.

Beach clean-ups: 63.2 tonnes of plastic waste collected between 2019 – 2022. However, while clean-ups are important for removing plastic waste from beaches, no permanent solution has been identified to dispose of the waste once collected.

Education and training: women-led initiative focusing on the production of ‘eco-bricks’ for construction and other recycled plastic handicrafts out of the waste collected.

Construction of a centre for plastic collection, sorting and crushing, utilising eco-bricks in construction.

Purchase of a 3-phase solar powered shredder to reduce transportation costs, hence increasing the value of recycled plastic.

Key successes

Income generated: hard plastics sold for reuse, with profit invested in improving operations.

Sea turtle nesting: 46% increase in turtle nesting since project began, likely due to cleaner beaches.

Female empowerment: leadership and management training of women from local communities.

Recommendations for the Plastics Treaty

1. Identify and implement upstream solutions to reduce the flow of plastic into the environment
2. Reduce plastic production and eliminate single-use plastic
3. Ensure solutions are equitable and locally appropriate, and prioritise vulnerable communities
4. Demand greater enforcement of Kenya’s single-use plastic bans and similar regulation by other countries
5. Hold plastic polluting companies and operations responsible
6. Detoxify plastics to protect human health and biodiversity
7. Promote regulation on management of old, discarded fishing gear

Local impact of plastic pollution

Coastal communities are on the frontline of global, trans-boundary plastic waste. Plastic carried by ocean currents from countries on the Indian Ocean rim accumulates on the remote northern Kenyan coastline. Further, local consumption of cheap, single-use plastics exacerbates the problem, impacting:

- **Species**: loss of turtle nesting sites due to polluted beaches and entanglement
- **Ecosystems**: mangroves and reefs choked with plastic pollution leading to reduced fisheries
- **Livelihoods**: poor health and sanitation in communities due to excessive waste and no institutional waste management systems

Future project ambitions

Develop a strategic business plan: outlining training needs, income generating activities, establishment of integrated waste management systems in local villages.

Establish a robust marine litter data collection system to better understand the origins of plastic waste, and correlate data with impacts on biodiversity, especially sea turtles as a flagstone species.

Explore upstream solutions to reduce plastic

Reduce plastic pollution: reduce local sources of litter and plastic on land and at sea.

Multi-stakeholder engagement: including government authorities, businesses, tourism industry and Western Indian Ocean Marine Science Association (WIOMSA) networks.

Expansion of project: following its initial success, Bahari Moja is preparing to expand its model to the greater Lamu archipelago.

Lessons learnt

Key lessons:

- Despite all efforts, plastic waste keeps washing up on the shore. Local communities cannot cope with the quantity of waste, highlighting the need to prioritise circular product design principles.
- Community buy-in is an essential foundation on which to build support.
- A clean, safe environment benefits communities, increases biodiversity preservation, attracts tourism and enhances employment.

Challenges:

- No permanent solution exists to dispose of collected waste, highlighting the need to reduce the amount of waste produced.
- Poor management of old fishing gear.
- Many types of plastic cannot be recycled and/or have no value, stressing the need to detoxify plastic.
- Recycling plastic has yet to become financially viable, particularly as the cost of transport is prohibitive, however acquiring a shredder has helped increase its value.
- Microplastics are near impossible to address through clean-up operations and continue to pose a threat to human and animal health.

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www.zsl.org/globalplasticstreaty

“**What is visibly noticeable is the Mkokoni villagers’ enthusiasm in this initiative and their pride in having one of the cleanest villages in the entire Lamu archipelago**” - Hannah Evans, Lamu Environment Foundation

www.fauna-flora.org/plastic-treaty