

SOCIAL AND BEHAVIORAL CHANGE FOR EFFECTIVE PLASTIC WASTE MANAGEMENT IN PORTS

BRIEFER 4

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BRIEFER INTRODUCTION

As the maritime industry navigates the uncharted waters of plastic pollution, the World Wide Fund for Nature (WWF) implemented a three-year project to reduce plastic waste leakage in ports in the Philippines. This project, called **“Clean Ports, Clean Oceans: Improving Port Waste Management in the Philippines”** (hereinafter “the project”), which was implemented in partnership with the Grieg Group and funded by the Grieg Foundation, acknowledged the pivotal role of social and behavioral change to tackle plastic pollution.

The aim of the brief, published by WWF-Philippines, is to share the experience and lessons learned from the project in promoting social and behavioral change in the management of waste in ports. It underscores the paramount importance of nurturing responsible waste practices within the port and the adjacent communities and recognizes that social and behavioral change is integral to effective plastic pollution mitigation. By implementing a strategic approach regarding social and behavioral change, and documenting the lessons learned, the project aimed to empower stakeholders to pursue initiatives to reduce plastic waste leakage and inspire other entities in the Philippines and around the world.

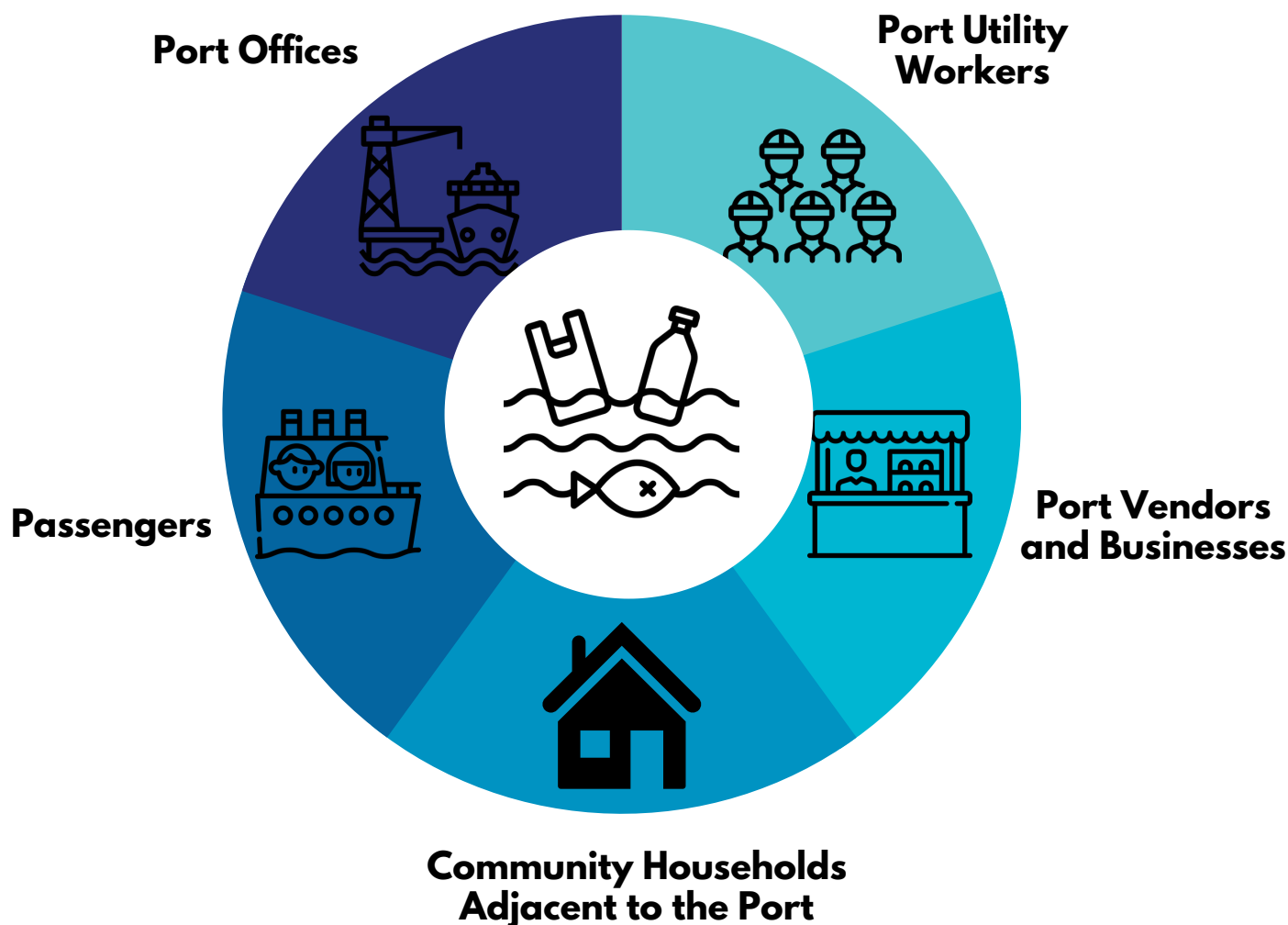
Social and behavioral change refers to the process of transforming attitudes, perceptions, and actions of individuals, communities, or institutions towards adopting sustainable practices and behaviors [1]. In the context of port waste management, social and behavioral change goes beyond merely implementing policies and regulations; rather, it involves the promotion of a collective mindset and cultivation of habits related to proper and responsible waste management practices.

[1] United Nations International Children’s Emergency Fund (n.d.) Social and behaviour change: Helping families access the decisions that affect their lives. Retrieved from <https://www.unicef.org/social-and-behaviour-change>

TARGET STAKEHOLDERS

The effectiveness of interventions in addressing plastic pollution hinges on the quality and on the acceptance and cooperation of stakeholders. While technical solutions play a crucial role, **human behavior is equally important in driving environmental outcomes**. By instigating a shift in behaviors and attitudes, a culture of environmental consciousness can be established which leads to more sustainable practices in ports and the communities beyond.

Social and behavioral change in this project involves the following stakeholders to actively participate in waste reduction, waste segregation, and waste recycling efforts:



IMPORTANCE OF SOCIAL AND BEHAVIORAL CHANGE

Social and behavioral change is vital for several reasons.

- **Ripple effect:** the port is interconnected with various stakeholders, including local communities, businesses, and tourists. When ports embrace sustainable practices through social and behavioral change, it creates a ripple effect, **inspiring others to adopt similar environmentally conscious actions.**
- **Long-term impact:** while implementing waste management policies is essential, the **long-term success of these initiatives depends on sustained behavioral change.** Individuals and organizations become lasting stewards of the environment when they internalize sustainable practices.
- **Holistic approach:** effective waste management in ports requires a holistic approach that involves not only infrastructural changes but also behavioral shifts. By integrating social and behavioral change strategies, ports can ensure that waste **management efforts align with the overall mission** of environmental preservation.
- **Stakeholder engagement:** engaging stakeholders in the process of social behavioral change **empowers them to take ownership of their role** in protecting the environment. When individuals feel personally invested in the cause, they are more likely to actively participate in proper waste management efforts.

Dropping the Anchor: Indicators of a Successful Behavioral Change

The realization of behavioral change lies in observable shifts in individuals' actions, attitudes, perceptions, and practices towards plastic waste management. Key indicators of successful behavioral change include the following:

- **Adoption of sustainable practices:** when port office personnel, passengers, and vendors actively engage in choosing eco-friendly alternatives over disposable plastics and incorporating sustainability into their daily routines.
- **Increased participation:** when stakeholders demonstrate segregation practices and proper waste disposal.
- **Behavioral consistency:** when positive behaviors become ingrained and habitual.

DESIGNING EFFECTIVE SOCIAL AND BEHAVIORAL CHANGE STRATEGY

To harness positive practices related to solid waste management, an integrated and systematic approach is imperative.

1. Crafting a social and behavioral change strategy:

It is important to develop a strategy on how to push for social and behavioral change in the maritime industry. Building on existing data, information related to stakeholder behaviors, available communication materials, and the current solid waste management system should be first extracted. This information will help link up interventions towards improving social behaviors in the port premises. This process is also applicable for pushing social and behavioral change in other industries and communities.

The project in the Philippines worked a lot with the Barangay Calicanto, a community situated near the Port of Batangas. In this community, it was difficult to influence people to segregate their waste. The local authorities have constantly reminded people about proper waste segregation, but this has been challenging due to many reasons including the **lack of a Materials Recovery Facility (MRF)** in the community and **limited information about proper waste segregation**. Community households are however willing to segregate if they see an economic value in doing so.

Based on this information, the project has drafted a social and behavioral strategy that included raising awareness about waste segregation and plastic pollution, while establishing a MRF that could help the community to get financial benefits from the recyclable materials. The end goal is for people to be aware about the importance of waste segregation, put an economic value on segregation, and have a system in place for recyclables that generates economic benefits.

2. Communication, education, and training:

Craft compelling communication campaigns and information, education, communication (IEC) materials to raise awareness among stakeholders and communicate messages. Key messages should be clear at the onset to avoid confusion. The effectiveness of the IEC highly depends on the simplicity of communicating a statement.

Apart from IEC materials, there should also be capacity building activities for strengthening the capacity of people, for instance to segregate waste. In the context of ports, capacity building activities could include waste segregation training for port employees, utility workers, and vendors to emphasize the significance of proper disposal and the importance of adopting sustainable practices.

In the project, communication materials were provided to all the three ports to raise awareness about the single-use plastic ban and proper waste segregation. WWF provided roll-up banners to communicate the ban and waste bins with banners to communicate proper waste segregation. Apart from these, a video to raise awareness about plastic pollution and the single-use plastic ban was distributed for Port Management Offices (PMOs) to play in their respective passenger terminals.

The project conducted waste segregation training for port offices, utility workers, and vendors. In the Port of Batangas, the need for specific segregation bins and collection of segregated waste was identified during the training. The project provided using upcycled plastics and partnered with an organization that collected the recyclable waste and recycled it into pellets or new products.

3. Mechanisms to support behavior change:

The foundation of sustainable waste management is reinforced through **key mechanisms that synergize with social and behavioral change efforts**. Waste infrastructure, complemented with strategically labeled waste bins for segregation and conveniently located water refilling stations to encourage use of reusable drinking containers, provides practical tools to streamline proper waste practices to reduce plastic pollution and foster environmental stewardship.

The Port of Batangas has installed a refilling station for reusable drinking containers inside the passenger terminal. This is part of their efforts to promote reuse and reduce the single-use plastics brought by passengers. Similar refilling station efforts have also been done in Manila North Port and the Port of Cagayan de Oro.

4. Inclusive engagement setting:

Involve all relevant stakeholders, including port employees, utility workers, passengers, businesses, and management, in collaborative decision-making processes and policy development. Engaging stakeholders fosters a sense of ownership and shared responsibility. **Port management should also lead by example** by actively implementing sustainable practices within their offices and facilities, inspiring others to follow suit.

Under the project, engaging utility workers empowers them as they were recognized for their work and being supported on how they can improve the management of waste in ports. Consulting port offices has also been crucial as they have challenges and best practices to share for bettering the solid waste management system. The Port of Batangas implements the “Bring Your Own Utensils” program to encourage port employees to use reusable utensils and food containers which is way of showing that everyone should be engaged in the implementation of port-wide policies.

5. Community-wide collaboration:

In addition to the stakeholders commonly within the port facilities, it is also beneficial to engage the households of the city, where the port is located, in proper and responsible waste management practices, including waste segregation and recycling. By promoting community-level awareness and participation, plastic waste leakage from the city can be reduced, preventing it from adding to the overall plastic waste that may eventually find its way into the waterbodies. This collaborative approach ensures a comprehensive and holistic effort in tackling plastic pollution and safeguarding the environment for a sustainable future.

The project initially conducted collection events in Barangay Calicanto, a community adjacent to the Port of Batangas, where people can sell their plastic waste. These events highlighted the need of the community for a dedicated space where they can bring their recyclables and educated them that there is an economic value for recyclables, so they segregate their waste. From these activities, the project established the barangay MRF composed of an area for selling recyclables, a composting shed, and vertical farms. The project partnered with the San Jose Sico Multipurpose Cooperative, a local organization in Batangas City, to help capacitate sub-community leaders for recyclables' exchange and in raising their constituents' awareness about the value of proper waste segregation.



Adrift in Challenges: Common Mistakes in Driving Social and Behavioral Change

Through the project's journey towards social and behavioral change, several common mistakes emerged, providing valuable lessons for future endeavors.

- **Neglecting the local context:** adopting a standardized approach without considering the unique needs and characteristics of each port can hinder acceptance and engagement. Tailoring interventions to suit specific contexts and cultures is crucial.
- **Insufficient monitoring and evaluation:** inadequate monitoring of the implementation of behavioral change interventions may hinder the identification of challenges and the measurement of progress. Regular evaluation is essential to make data-driven improvements.
- **Lack of communication alignment:** limited communication and awareness-raising campaigns can hinder the dissemination of information. Conducting regular education programs can further strengthen behavior change.
- **Inadequate infrastructure support:** absence of proper waste management infrastructure, such as waste bins for segregation and recycling collection systems, can obstruct desired behavioral shifts. Establishing an environment conducive to responsible waste disposal and recycling reinforces desired behaviors which promote a culture of sustainability and align with social and behavioral change objectives.
- **Disregarding the informal waste sector:** overlooking the informal waste sector's vital role in waste management can impede effective change. Engaging and integrating informal waste workers in the community into behavioral change initiatives ensures a holistic approach, fostering responsible waste practices and reducing plastic pollution at grassroots levels.

CONCLUSION

Social and behavioral change emerges as a crucial force to address plastic pollution in the port. The social and behavioral change in port waste management transcends mere policy implementation, encompassing a collective mindset shift and cultivation of sustainable habits. The project fosters responsible waste practices within the port which further influences other port stakeholders beyond the port boundaries to the adjacent communities. Key facets in designing effective behavioral change strategies include communication, education, and training, mechanisms to support behavior change, inclusive engagement setting, and community-wide collaboration to empower stakeholders on a transformative change towards a responsible port waste management. Regular monitoring and evaluation are important to apply data-driven modification or development.