



SOCIAL IMPLICATIONS OF PLASTIC POLLUTION MITIGATION INITIATIVES ALONG THE IMUS RIVER: A BASIS FOR POLICY FRAMEWORK

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A student throws a PET bottle in a wire basket at a school in Cavite. Among the most effective initiatives to combat plastic waste are proper segregation for eventual recycling, aided in part by waste pickers and junkshops. (Gregg Yan / PEMSEA)

The study investigates the socioeconomic implications of plastic waste pollution mitigation initiatives along the Imus River, which traverses the Philippine province of Cavite. It explores initiatives identified by local communities on plastic waste management and examines how these initiatives are managed and implemented. It also describes the various communities' culturally nuanced understanding of plastic waste management as well and its implications to

them as Cavite residents. It is based on reports commissioned by the ASEANO project to help Local Government Units (LGUs) better understand the plastics pollution problem and develop practical and enforceable solutions. The study confirms the following:

- (1) **Residents are aware of their role in the worsening problem of plastic pollution, and are willing to participate in worthwhile initiatives to address it.** Residents single out regular and proper waste collection as the most important measure to curb plastic pollution, while local government officials identified programs, mostly on reuse and recycling.
- (2) **Most of the plastics used in households are sachets from ubiquitous neighborhood *sari-sari* or sundry stores.** These are preferred for their lower prices, which better match weekly or bimonthly incomes, providing what is seen as premium quality at an affordable cost. Such sachets are often prohibitively difficult and expensive to recycle.
- (3) **Residents' knowledge of initiatives to address plastic pollution and leakage into the river is limited to regular clean-up drives.** While many initiatives exist, which this study found through informant interviews and FGDs, the public was not commonly aware of them. The effectiveness of these initiatives was ranked. The Wangwa Waste Management Model in Thailand, which has similarities in its setting and program features, was deemed appropriate to identify alternative practices in curbing plastic waste. Interview vetting yielded three exemplary initiatives: War on Waste (Bacoor), BasuRaffle (Imus), and Waste to Ecobricks Technology (Silang). A cost-benefit analysis was done for these initiatives.
- (4) **Mitigating efforts in plastic waste management are perceived to result in limited incomes for waste pickers who earn from recyclable plastics,** to difficulty in packaging goods from the wet market or in finding cheaper alternative packaging, plus budget constraints for people with meager incomes. Laws are generally in place to mitigate plastic waste and to regulate use and disposal, but these policies barely translate to actions.

In general, laws are in place to mitigate plastic waste and to regulate its use and disposal, but implementation is patchy. The authors study hope that policymakers and managers of pollution mitigation initiatives consider public understanding of plastic pollution, and its implications to their income and welfare. This study recommends the following:

- **Launch IEC campaigns.** People in the studied communities are only aware of cleanup drives as the primary initiative that addresses plastic waste pollution in the river. In addition, regular collection was the only solution raised by the public regarding waste.

As such, efforts must be made by the government and likeminded advocates to further publicize various actions being taken.

- **Increase public participation.** People in the studied communities are aware of their contribution to plastic waste pollution, and seem willing to help address the problem. Thus, inclusive programs that seek to involve groups, households, and individuals in communities should be sought.
- **Enact Extended Producer Responsibility (EPR).** While findings confirm the presence of general laws on ecological solid waste, selective plastic bans, plus the promotion of more ecofriendly bags as alternatives to plastics, a policy on extended producer responsibility is called for. Specific laws targeting producers, in coordination with manufacturers, distributors, and retailers, increases accountability for proper waste disposal.
- **Consider alternative packaging.** This study highlights the retail culture in these communities, which often uses single-use and difficult to recycle packaging. A movement towards more sustainable packaging, in addition to extended producer responsibility, would be necessary to reduce plastic containers or packaging materials without prejudice to local retail culture. The research and development of viable alternative packaging should be sought both by government and private industries.
- **Observe stringent implementation.** The findings affirm that good laws abound in the country to address immediate community concerns. However, many are not implemented effectively, despite remaining good on paper. National and local chief executives need to play their part with more political will.

This study reiterates the need to understand the cultural and socio-economic context of local communities to better grapple with the complexity of promoting practical plastic waste solutions.

ABOUT PROJECT ASEANO

East Asian countries produce over half of our world's marine plastic pollution. Rivers act like conveyor belts to discharge waste to the oceans.

To stem this flow, Project ASEANO is developing practical and sustainable measures to reduce the impacts of plastic pollution and their implications on both socioeconomic development and the environment.

The ASEAN – Norway local capacity development project is a three year project that aims to enhance local capacity on monitoring and understanding the source, flow and nature of riverine waste. It aims to strengthen local enforcement and provide practical solutions to tackle problems at the local level.

The project uses an integrated solid waste management approach and focuses on the city and municipal level through two pilot sites: the Citarum River in Indonesia and the Imus River in the Philippines. For more information, Email PEMSEA ASEANO Project Manager **Thomas Bell** at TBell@pemsea.org or download the **Full Study** at pemsea.org.