How to Reduce Marine Plastic Pollution by Improving the Implementation of the Extended Producer Responsibility (EPR) Policy in Nigeria: Lessons for Asian Pacific Countries

Idowu Kunlere
Lee Kuan Yew School of Public Policy, NUS, Singapore

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Plastics: The Good and the Bad

The joy of plastics.

At first, plastics changed the world, for good.

But over time, the world got addicted to it.

When people get too used to a good thing, get too much of it, abuse or poorly manage it, bad things happen.

Plastic granules (Alibaba.com)

Today’s Stark Reality: Marine Plastic Pollution

Lagoons are overtaken by wastes (Arthus-Bertrand, 2020)

Aquatic animals are at risk (Guevara, 2019)

Some beachfronts have become eyeshore (Puigmal, 2020)

21 million MT of tiny plastic debris float below the surface of the Atlantic Ocean (O’Neill, 2020)

Sources of marine pollution:

Land-based sources:
Inadequate waste disposal management, illicit industrial, agricultural, and construction wastes, urban and storm runoff, sewer overflows, and waste generated and left off by visitors at waterfronts and beaches (McIlgorm et al., 2008; Arcadis 2014).

Ocean-based sources:
Wastes from fishing activities, and wastes that are indiscriminately dumped into oceans from ships.

Africa and Asia remain two of the most vulnerable continents to (marine) plastic pollution

- West Africa, like much of the rest of the continent, struggles with marine plastic wastes (UNEP, 1999, Kunlere et al., 2019).

- The Indian Ocean and the Bay of Bengal , including the Gangetic delta region across India and Bangladesh, is ridden with plastic wastes. (Lebreton et al., 2014; Sakhuja, 2016; Jebaraj, 2019).

- The world’s top 20 rivers implicated for contributing the most to marine plastic pollution are in Asia (Lebreton et al., 2014),

The Link between Land-based Pollution and Marine Pollution

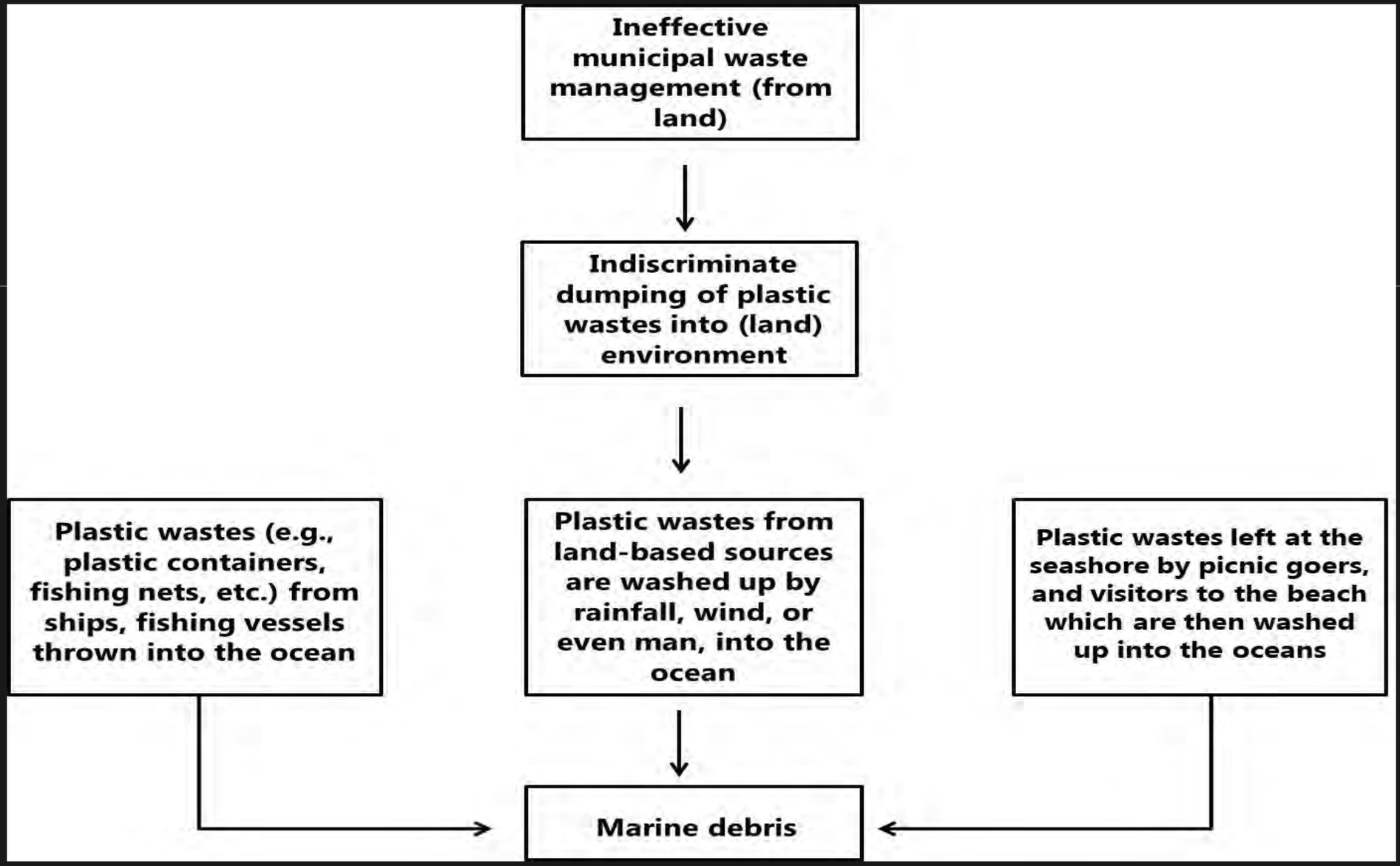
Land-based pollution near a canal in Cairo, Egypt (Watson, 2015)

In some countries, particularly developing countries in Africa and Asia, less than 40% of waste generated is collected or recycled (Thomas, 2000; Sanusi, 2018).

About 15-20% of these wastes are plastic wastes Kaza et al., 2018). Plastic wastes do not easily break down, Instead, they persist in the environment.

The rest wastes end up indiscriminately in the environment, constituting land-based pollution.

During heavy rainfall, winds, etc., these wastes are washed through the complex hydrological system into oceans, constituting marine plastic pollution.



How plastic wastes from land-based sources end up in the oceans and contribute to marine plastic pollution (Kunlere, 2020)

Why is ineffective municipal waste management (which is a major contributor to land-based pollution, and marine plastic pollution) commonplace, particularly in developing countries?

Poor funding

There are many factors but “poor funding” stands out.

Apparently, government alone can no longer fund municipal waste management in these countries.

An example of widespread ineffective municipal waste management (Kropf, 2019)

Let’s be clear

Most existing policies do not address the funding problem associated with municipal waste management.

This create huge gaps in public response to the crisis and leaves governments struggling with provision of effective waste management services.

Overcoming marine plastic pollution will remain evasive if land-based pollution is not stemmed.

EIA, 2020

The Big Question

How do you shift the burden of effective funding of municipal waste management services from government, and fairly distribute the burden to waste producers?

A Brief History of the EPR

One such way is through the Extended Producer Responsibility (EPR) program

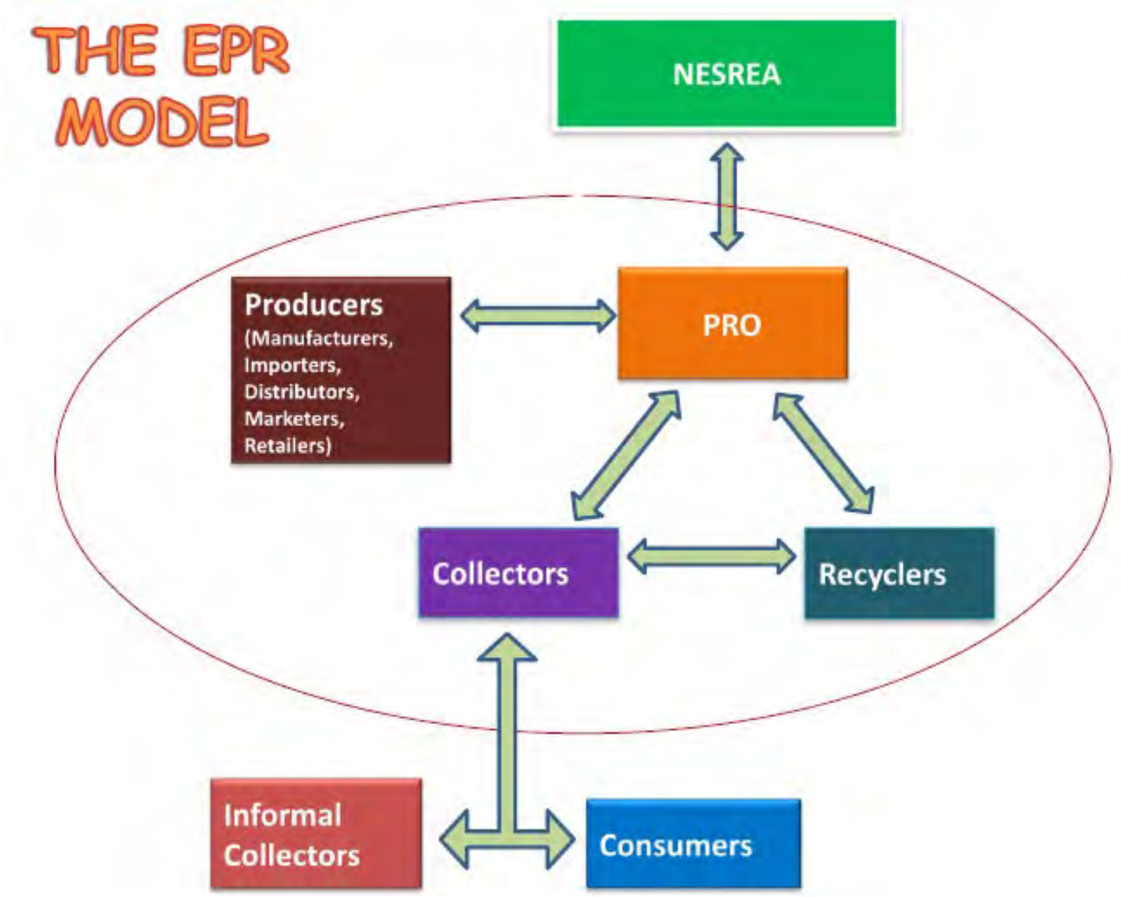
How the EPR started!

Countries that have adopted the EPR

Impacts of the EPR

The EPR in Nigeria

Some Practical Steps on How to Improve the Implementation of the EPR in Nigeria



EPR Framework in Nigeria
(NESREA, 2014; Ajani and Kunlere, 2019)

Some recommendations on general administration of the EPR policy in Nigeria

- Stage-by-stage pilot program that focuses on the peculiarities of each participating community or state, clear goals.
- Translation of the EPR guidelines to local languages, and sustained community outreach and participation.

Some recommendations of financing of the EPR policy in Nigeria

- The EPR should be privately run but only regulated by the government.
- A ₦2.50 (or €0.0022) recycling fee should be imposed on each PET bottle produced, imported, or sold in Nigeria.
- A ₦2.50 (€0.0022) take-back deposit should be on each PET bottle under the EPR program in Nigeria.

NOTE: This proposal could potentially raise a minimum of €6 million annually in extra funding for the cash-trapped waste management sector in Nigeria

Some recommendations on enforcement of the EPR policy In Nigeria

- Mandatory registration of all companies that produce post-consumer wastes.
- Each manufacturer should have annual waste collection and recycling targets.
- There should be specific environmental, safety, and product standards for recycled products produced by recycling companies.
- Provisions of the EPR program must be enforced, round-the-clock.

Thank you

for your rapt attention