Nigeria

Socioeconomic Profile

Nigeria is the most populous country in Africa and West Africa, with an estimated 201 million inhabitants in 2019, amounting to more than 50 percent of the total population in West Africa. The Nigerian economy, classified as lower middle income, is considered a major emerging market in the context of Africa and globally. The country is a federal republic comprising 36 states and the Federal Capital Territory where its capital, Abuja, is located. Lagos is the most populous coastal city in Africa, with an estimated population of over 24 million residents.

Nigeria has the second-highest population density in the West African region after Gabon, at 215.1 people per km² (2018). About half the country lives in urban areas while 13.7 percent live in coastal areas.

Plastic Industry and Ecosystem

Nigeria is Africa’s largest oil producer, with the oil and gas sector accounting for about 10 percent of GDP and where petroleum exports represent around 86 percent of total exports revenue. Nigeria is the only resin producer in the WACA region. It produced 486 kt of resin (325 kt PE, 96 kt PP, 65 kt PET) in 2018 and 498 kt of resin (322 kt PE, 101 kt PP, 75 kt PET) in 2019. Nevertheless, the country is a net importer of plastics, which in its raw form is typically made from oil (naptha). In 2019, imports of plastics into Nigeria amounted to $1.7 billion, including net imports of all key plastics resins (PE, PP, polystyrene [PS], and...

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233 Jambeck et al., “Plastic Waste Inputs from Land into the Ocean.”
238 Jambeck et al., “Plastic Waste Inputs from Land into the Ocean.”
Almost two-thirds of demand for virgin resins in Nigeria is currently met through imports, thus being the continent’s largest importer of resins. Nigeria’s conversion industry processed 1,094 kt of resin (581 kt PE, 367 kt PP, 137 kt PET, 9 kt PS) in 2018 and 978 kt of resin (564 kt PE, 238 kt PP, 164 kt PET, 12 kt PS) in 2019.

Nigeria’s large consumption of primary plastics (resins) supports a robust plastic manufacturing sector. According to market reports, plastic production in Nigeria has grown rapidly at a rate of 13.9 percent annually, from 120 kt in 2007 to a projected 513 kt in 2020. While being a net importer of resin, Nigeria is the largest producer of olefins and polyolefin plastics in West Africa led by Indorama Eleme Petrochemicals Limited. The country has over 3,000 plastic companies today, producing various products ranging from jerry cans, shopping bags, tables to mats. The literature highlights the challenge of managing waste from water sachets, where it is estimated that over 1,500 water sachet factories are present in Lagos alone.

In terms of plastics recovery, studies find that less than 12 percent of plastic waste is recycled in Nigeria. There are reportedly 8 completed plastic waste recycling plants in Nigeria, with 18 others at various stages of completion. There is no current capacity for waste-to-energy, for example, in cement kilns or incinerators with heat recovery. The remaining plastic waste (~80 percent) goes to landfills and dumpsites. Examples of businesses that are pioneering circular plastics solutions include Lagos-based Salubata, which produces shoes from recycled plastics waste (this company was also the recent winner of African Innovation Week 2020).

**Solid Waste Management**

Nigeria generates 0.51 kg of MSW per capita per day, amounting to an overall daily MSW generation of 75.6 million kg. About 81 percent of MSW generated in Nigeria is inadequately managed. Plastic waste accounts for approximately 13 percent of MSW arisings, with a daily generation rate of about 12.9

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247 Babayemi et al., “Initial Inventory of Plastics Imports in Nigeria.”
250 Jambeck et al., “Plastic Waste Inputs from Land into the Ocean.”
251 Ibid.
million kg. Relatedly, Nigeria is home to 3 out of the top 20 plastic polluting rivers globally, that is, the Cross, Imo, and Kwa Ibo rivers\(^{252}\). Studies have found microplastics in aquatic life due to pollution, especially due to mismanagement of low-value plastics\(^{253}\). Nigeria’s recycling industry is still largely informal, with recovery and recycling activities dominated by informal waste pickers, intermediaries, artisans, and re-manufacturing small-scale enterprises\(^{254}\).

**Legislation, Policies and Other Initiatives**

There is significant momentum in Nigeria to tackle plastics waste through CE principles. In 2020, the Nigerian Federal Executive Council approved a new law on plastic waste to encourage the development of a CE around plastic waste\(^{255}\).

Nigeria’s National Environmental Regulations\(^{256}\) introduced EPR requirements for the following industries: food, beverages, tobacco, pharmaceuticals, soap and detergent, electricals and electronics, and plastics. Additionally, the EPR Programme was introduced in 2016 as a framework geared toward achieving a zero-waste society, including the reduction of the environmental impact of packaging waste.

In May 2019, a plastic bag prohibition bill was passed, providing “an Act to prohibit the use, manufacture and importation of all plastic bags used for commercial and household packaging in order to address harmful impacts to oceans, rivers, lakes, forests, environment as well as human beings and also to relieve pressure on landfills and waste management and for other related matters.”\(^{257}\) The bill further states that a retailer should offer a paper bag to customers at the point of sale.\(^{258}\) However, this bill is reportedly not yet implemented as the president has not assented to it.\(^{259}\)


\(^{256}\) National Environmental Regulation 2009 and National Environmental Regulation 2011.


\(^{258}\) Rachel Karasik, Zoie Diana, Janet Bering, Juan Caldas, Amy Pickle, Daniel Rittschof, and John Virdin, *20 Years of Government Responses to the Global Plastic Pollution Problem* (Durham, NC: Duke University, 2020).

\(^{259}\) Akindele, “Why Microplastics Found in Nigeria’s Freshwaters Raise a Red Flag.”
Plastic Waste in Nigeria

Note: Hotspots are delineated based on their statistical significance, then associated with the nearest locale. Multiple hotspots may be associated with a single locale (as in the case of 14 and 15 being associated with Oshogbo).