

Benin

Map of African continent



Indicator	Data
Population, 2019 (no.)	11,801,151
Population density, 2018 (people per sq. km of land area)	101.85
Coastal population, 2014 (no.)	3,235,418
Share of people living in urban areas, 2019 (%)	47.9
Total MSW generated, 2014 (tons/year)	702,944

Socioeconomic Profile

Benin is a lower-middle-income country in West Africa bordered by Nigeria, Togo, Niger, and Burkina Faso. Its economy is highly dependent on the informal reexport and transit trade with Nigeria, as well as the export of cotton.¹ The country comprises 12 regional *départements*² and runs a unitary presidential republic system with a parliament.

In 2019, Benin recorded an overall GDP (purchasing power parity, PPP) just below \$39 billion and a GDP (PPP) per capita of \$3,287.^{3, 4} With an area of 112,622 square kilometers (km²), it has a population of 11,801,151 (2019) and a population density of 101.85 people per km² (2018).⁵ Though urbanization has increased in recent decades, the majority of Benin's population still resides in rural areas—52.1 percent in 2019.⁶ Though its coastline measures 171 kilometers (km), over a quarter of its population—over 3 million in 2014⁷—reside in coastal areas, including the important port city of Cotonou.

Plastic Industry and Ecosystem

In 2018 and 2019, Benin had no domestic resin production. Its conversion industry processed 1 kiloton (kt) of polyethylene terephthalate (PET) in both years. Similar to other West African countries, Benin is a net importer of plastics. In 2019, 6.7 million kg of plastics were imported into the country, with polyvinyl

¹ World Bank Group, "Benin—Overview," 2021, <https://www.worldbank.org/en/country/benin/overview#1>.

² Statoids, "Departments of Benin," 2019, <http://www.statoids.com/ubj.html>.

³ GDP, PPP (constant 2017 international dollars) and GDP per capita, PPP (constant 2017 international dollars).

⁴ World Bank Group, "World Development Indicators," 2020, <https://datacatalog.worldbank.org/dataset/world-development-indicators>.

⁵ Ibid.

⁶ Ibid.

⁷ Jambeck et al., "Plastic Waste Inputs from Land into the Ocean."

chloride (PVC) and polyethylene (PE) accounting for about 89 percent of the imports.⁸ Only 45,380 kg of plastics were exported from Benin that same year, 70 percent of which was classified as scrap plastics.⁹

Solid Waste Management

Benin generates 0.54 kg of municipal solid waste (MSW) per capita per day and this amounts to an overall daily MSW generation of 1.7 million kg.¹⁰ However, the West African nation has struggled to effectively manage its waste arisings—about 82.8 percent of MSW generated in Benin is inadequately managed.¹¹

Plastic waste management has increasingly been cited by Benin’s government as a pressing environmental issue for the nation. Plastic waste accounts for just below 8 percent of MSW arisings, with a daily generation rate of about 139,000 kg, of which 83 percent is inadequately managed¹²; 2,778 kg/day of plastic waste leaks into the environment in Benin.¹³

Legislation, Policies, and Other Initiatives

As of 2017, the Government of Benin had assigned responsibility for guidance on waste management legislation to four state agencies¹⁴:

- The Ministry of Life and Sustainable Development
- The Ministry of Environment, Housing and Urban Planning
- The Ministry of Public Health
- The Ministry of the Interior, Security and Decentralization

Currently, waste management in Benin is driven by two legislative instruments and an interministerial order:

- Law No. 98-030, 1999: As the primary legal framework, Law No. 98-030 prioritizes the “polluter pays” principle as the main driving force for waste management in Benin.¹⁵
- Law No. 98-005, 1999: This law mandates local governments as directly responsible for the collection and treatment of MSW.¹⁶
- Interministerial Order No. 136/DHAB, 1995: This order regulates the activities of collection, treatment, and disposal of solid waste in Benin.¹⁷

Though a national CE strategy has yet to be introduced by the government, Benin has made some strides in the adoption of product and fiscal policies geared toward promoting resource efficiency. Notably, a plastic ban law was introduced in 2017. In addition to prohibiting the manufacture, import, use, and sale of non-biodegradable plastic bags, the law also applies stiff fines for persons who contravene its

⁸ UN Comtrade, “UN Comtrade Database,” 2018, <https://comtrade.un.org/>.

⁹ Ibid.

¹⁰ Jambeck et al., “Plastic Waste Inputs from Land into the Ocean.”

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Climate & Clean Air Coalition, “Solid Waste Management City Profile: Porto Novo, Benin,” 2017, https://www.waste.ccacoalition.org/sites/default/files/files/city_profile_porto-novo_english_vf.pdf.

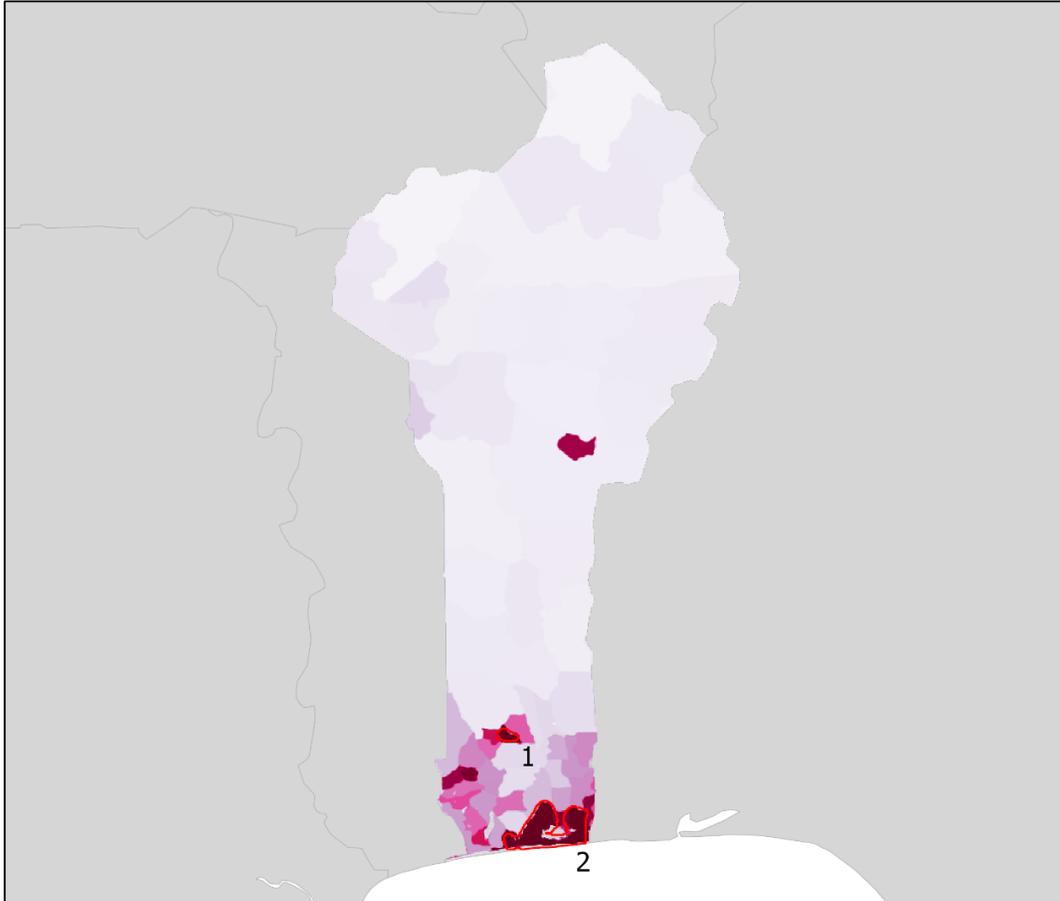
¹⁵ Chatham House, “Policies,” 2020, <https://circulareconomy.earth/>.

¹⁶ Ibid.

¹⁷ Ibid.

stipulations.¹⁸ Likewise, an interministerial order was introduced in 2004 that authorizes the collection of environmental taxes and fines for pollution caused by disposable plastic packaging.¹⁹

Plastic Waste in Benin



Plastic Generation Hotspots

ID	Locale	Rank	Population	Area (km ²)	Plastic Waste (kt)
1	Abomey	50	157,106	130.56	1.5336
2	Porto Novo	14	3,080,583	1,659.76	30.0709

Total Annual National Plastic Waste Generation: 120.95 kt

Annual Plastic Waste (kg/km²)



Hotspot Extent



Location in Region



West Africa Regional Gap Analysis: Plastics Circularity

World Bank Group

¹⁸ Ibid.

¹⁹ Ibid.