



KNOWLEDGE SHEET 5

Reducing Marine and Coastal Pollution

he West African coastline is home to major industries, mining activities, peri-urban and agro-industry, and tourism, as well as urban and seaside residences, all of which generate waste and cause pollution. Many areas along the coast also lack adequate wastewater and solid waste management systems. As a result, large volumes of untreated wastewater and solid waste are dumped into the open, polluting the land and water.

Ports are crucial to the region's economy, but they have serious negative impacts on the environment. The first Ports Environmental Network-Africa (PENAf) workshop for West and Central Africa, held in Ghana in 2010, identified the key environmental issues as waste from shipping operations, oil spills, inadequate ballast water management, dredging, effluent, water quality, noise, dust, air pollution, and habitat degradation (Echart and others 2012).

Challenges

Most municipal and industrial effluent in West Africa ends up in coastal areas with little or no pretreatment, posing risks to public health. Less than 10 percent of urban areas in Africa have access to sewerage services. As a result, only a small fraction of sewage is treated.

Less than 10 percent of urban areas in Africa have access to sewerage services. As a result, only a small fraction of the sewage produced is treated (World Bank 2012). In Ghana disease risk caused by a lack of adequate sanitation is high, with diarrhea accounting for roughly a quarter of the deaths of children under five and outbreaks of cholera reported annually (World Bank 2013).

The collection, transportation, and treatment of wastewater from onsite systems is so limited that most of the sludge from these systems ends up in roadside drains and storm drains before being discharged into the ocean or other bodies of water (photo 1) (World Bank 2012).

Pollution poses a health risk to fish, a critical resource in West Africa and a primary source of protein for coastal populations. It reduces the productivity of fisheries, by degrading the natural habitat, increasing egg mortality and decreasing egg quality. Legally captured fish stocks generate about \$2.5 billion a year in the region, and the fishing industry employs 3 million people (World Bank 2013). Keeping fish healthy is thus crucial to development.

Fishing can also contribute to pollution. Discarded nets and other materials contribute to the mass of solid waste disrupting drainage systems, exacerbating the impacts of flooding and damaging natural ecosystems.

Plastic debris is inflicting enormous damage on Africa's coastal areas. This debris jeopardizes the survival of marine species that ingest or become entangled in it, poses a

PHOTO 1 Untreated sludge and wastewater are dumped into the Korle Lagoon, in Accra, Ghana



Source: Google Earth.

PHOTO 2 The dumping of household waste helps prevent coastal erosion—but it pollutes and destroys the beauty of Ghana's coast



threat to human health, increases the risk of flooding (by clogging drainage infrastructure), and reduces the attractiveness of the region to tourists (photo 2).

Western countries dump a range of waste and near-waste products into West Africa, which penetrate the region through ports and often accumulate in coastal areas. Such dumping and related activities (such as the breaking up of ships) pollute the marine environment with a range of toxic substances and materials, including persistent organic pollutants.

Solutions

The marine pollution profile for each country differs significantly depending on which sectors are most active near the coast, as well as on the political, technical, and economic will to address these issues. A number of issues—and the means of addressing them—cut across the region as a whole, however.

Water quality studies can help policymakers set targets and baselines and develop pollution reduction plans at the local, national, and regional levels. Such studies generally focus on pollution from sewage/wastewater, nutrients, and marine litter; they may also include other pollutants, such as oil (spills from ships and offshore oil exploration and production), chemicals, and heavy metals.

Reducing the generation of plastic debris requires collecting data on the origin, volumes, and types of plastic litter, so that appropriate measures can be taken to reduce, reuse, or recycle plastic products.

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The West Africa Coastal Areas Management Program (WACA) is a convening platform that aims to assist West African countries to sustainably manage their coastal areas and enhance socio-economic resilience to the effects of climate change. The program also seeks to facilitate access to technical expertise and financial resources for participating countries.

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