



West Africa Coastal Areas Management Program

A Partnership for Saving West Africa's Coastal Assets



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Africa's development and climate agendas are inextricably linked: If unaddressed, climate change and variability will jeopardize Africa's hard-won development achievements and thwart its aspirations for further growth and poverty reduction.

Erosion and coastal flooding are taking lives and reducing productivity in West Africa. They are the most visible evidence of the climate changes affecting the region's coastal areas. The degradation and vulnerability of coastal areas is a cause of serious concern.

Context

West Africa's coastal areas host an abundance of natural resources, on land and at sea, that provide vital ecosystem services and help buffer against severe weather events. These resources play a key role in the economic and physical resilience of coastal regions to existing and future challenges.

The coastal zone is home to 31 percent of West Africa's population—and the figure is expected to rise. Across Sub-Saharan Africa, urban population growth is growing at an annual rate of 4 percent, almost twice the worldwide average of 2.1 percent. In West Africa rapid urbanization and net migration to the coasts put further demand on the land, its resources, and the services the ecosystem provides to people.

The coastal zone is also the source of 56 percent of West Africa's GDP. It is home to major industries, including agro-industry, fisheries, offshore petroleum exploration and production, and tourism, as well as city and seaside residences. Poor choices about the location of infrastructure and groins, limited environmental governance, and human-induced pollution, coupled with population pressures and overexploitation of coastal natural resources, have led to rapid degradation of coastal ecosystems. The degradation manifests itself in the form of coastal erosion and flooding, depletion of fisheries, and disease.

Climate change will exacerbate the environmental stresses along the coast, increasing the socioeconomic vulnerability of coastal populations, especially the poor, whose well-being and livelihoods depend on the quality and quantity of natural resources (figure 1). Interventions are needed at all levels of government and society to decrease the vulnerability of the poor in coastal West Africa.

Spurred by erosion and flooding disasters, West African countries have started to take action. Acting alone at the national level is insufficient to tackle the challenges, however. A regional approach is needed, because preventing erosion in one country can cause erosion in its neighbors and because the financing needed to contain erosion and flooding is too great for individual countries to raise or manage. Countries need to work together in a coordinated manner, at both the policy and the technical levels, and strategically use available funding provided to manage priority erosion and flooding hotspots.

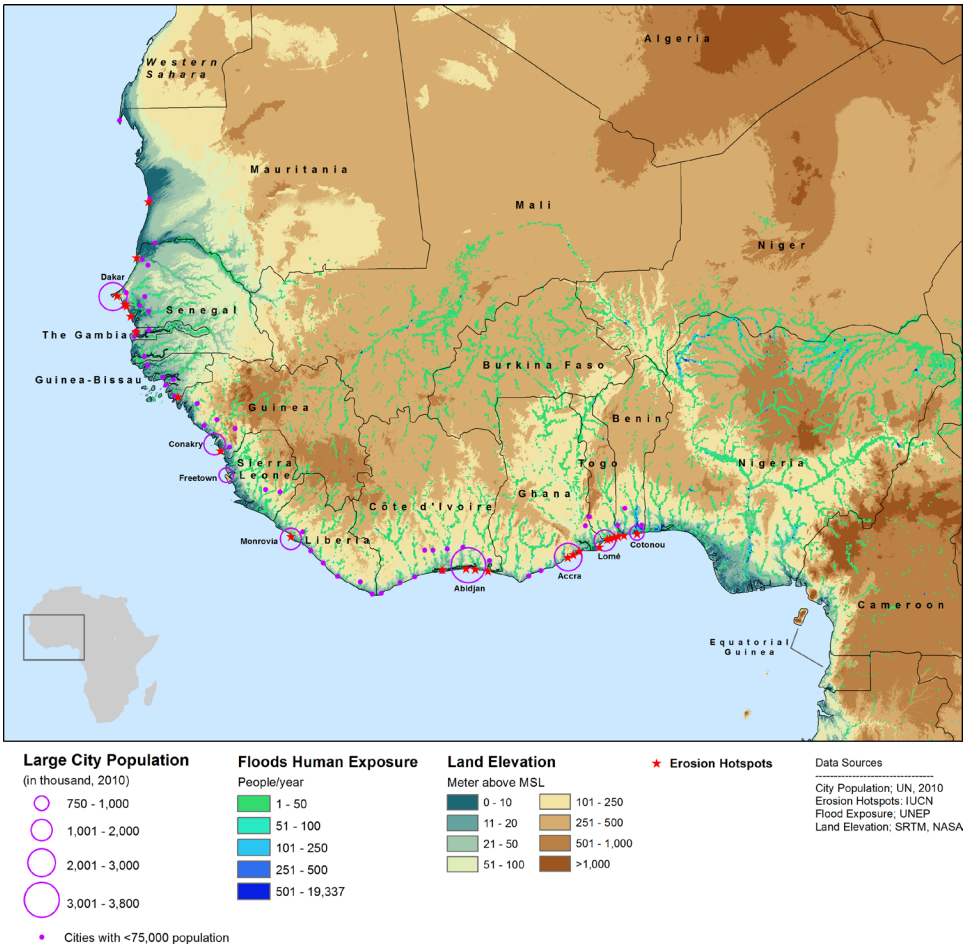
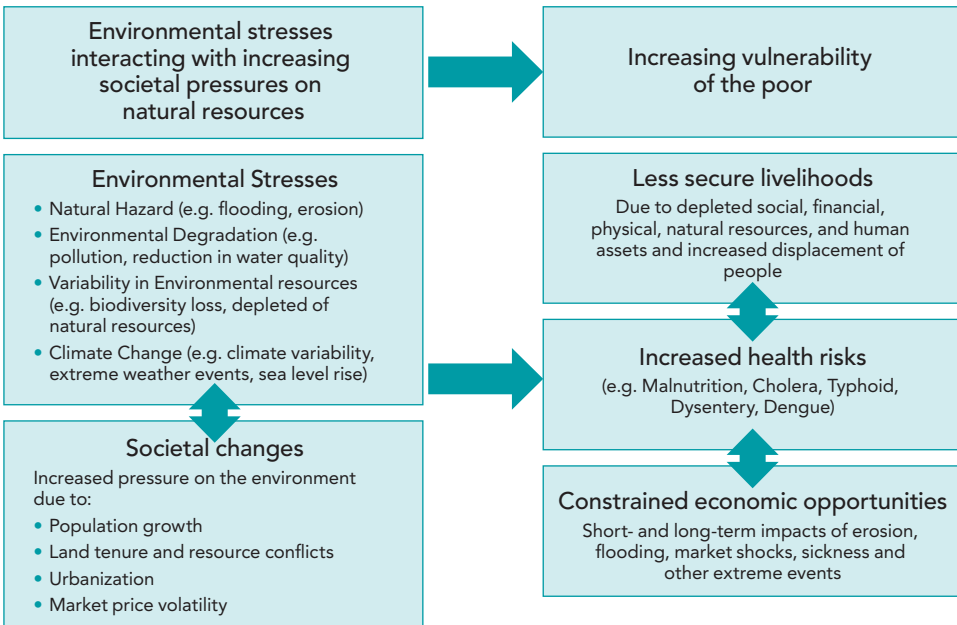


FIGURE 1 Links between environmental stresses and the vulnerability of the poor



Source: Dow, K., 2005. Vulnerability Profile of West Africa, Stockholm: Stockholm Environment Institute.

WACA: A Regional Approach to Coastal Development

The West Africa Coastal Areas Management Program (WACA) was established by the World Bank in 2015 in response to demand from countries in the region to manage their growing coastal erosion and flooding problems. Recognizing that multisectoral investments are needed—in land management and planning, infrastructure, natural habitat management, and pollution management—these countries asked for technical assistance to determine the key factors that are increasing the vulnerability of the people, ecosystems, and assets along the coast, making them especially susceptible to the consequences of climate-related and man-made pressures. Countries already participating in the program include Benin, Côte d'Ivoire, Ghana, Mauritania, São Tomé and Príncipe, Senegal, and Togo, and discussions are under way with other countries.

WACA is designed to improve the livelihoods of coastal communities in West Africa by reducing the vulnerability of its coastal areas and promoting climate-resilient integrated coastal management. The program's mix of technical assistance and investments will seek to preserve and rehabilitate the natural coastal resources essential for livelihoods; spur economic development and increase social welfare; and support the sustainable development of key growth sectors, such as agro-industry, fisheries, off-shore petroleum exploration and production, and tourism.

WACA is also a convening platform to help countries obtain the finance and expertise they need to sustainably manage their coastal areas. It also serves as a forum within which countries and regions can share lessons learned.

The World Bank is committed to supporting countries in low-carbon and climate-resilient growth and poverty reduction. As part of the 17th International Development Association (IDA) Replenishment, the World Bank Group committed to support a number of IDA countries in their efforts to prepare multisector investments plans and better manage the disaster risks and other effects of climate change. WACA is the vehicle for this response for the coastal areas of West Africa.



The Development Challenge

Unsustainable infrastructure development, inadequate management of natural habitats and resources, and pollution are threatening the productivity of coastal ecosystems in West Africa. Climate change related events such as sea-level rise, land subsidence, storm surge, and coastal flooding are exacerbating the region's vulnerability.

How can coastal countries manage their coastal landscapes to spur economic growth and reduce poverty while adapting to the effects of climate change?

Interventions, Actions, and Themes

Countries face difficult decisions in crafting solutions to development challenges in the coastal zone. Making the right choice requires decision-support tools and appropriate legal and institutional frameworks. Table 1 identifies some possible solutions and their rationales.

TABLE 1 Possible interventions for reducing risks to West Africa's coastal areas

| Challenge | Possible intervention | Rationale |
|------------------------------|--|---|
| Coastal erosion and flooding | Increasing and preserving areas with green or natural infrastructure (mangroves, sand dunes, vegetation, coastal aggregates, coastal forest, lagoons and coastal swamps, water plants) | Natural infrastructure provides ecological services that need to be preserved. These services include water filtration services; habitats that serve as fisheries, hatcheries, or refuges; and the coastal infrastructure protection that anchors them. |
| | Providing sustainable alternatives to activities that contribute to the continued degradation of coastal areas (such as sand mining) | |
| | Identifying infrastructure solutions and mitigating their environmental impact | |
| Marine pollution | Collecting data on the sources, volumes, and effects of marine pollution throughout the region in order to draft appropriate legislation, regulation, and enforcement functions | Marine pollution has the potential to affect the health, fisheries, and tourism sectors. |
| | Identifying clean-up projects for oil spills, untreated wastewater discharge, and solid waste | The capacity to draft regulation and enforce legislation needs strengthening at all levels. |
| Depletion of fish stocks | Identifying and rehabilitating natural habitats to preserve productive ecosystems and increase resilience | A holistic approach to fisheries that goes beyond the traditional fisheries sector governance and value-chain is needed to address the broader issues of land-based pollution and habitat loss. |
| Rapid urbanization | Planning for sustainable development and zoning for coastal tourism and ecotourism | Forward-looking urban participatory planning would guide urban expansion while reducing sprawl and prevent development in environmentally sensitive coastal areas. |
| | Designing policies for the use of land and institutions to strengthen property rights and address informal settlements | |
| | Defining measures such as coastal protection, managed population relocation, and accommodation, through a process that involves consultations with stakeholders and respects social safeguards | |



WACA is built on three pillars:

- **strategic investment planning**, including the formulation and prioritization of key policies and sectoral investments to foster adaptation to climate change and build socioeconomic resilience
- **knowledge, information, and capacity building**, including multihazard vulnerability assessments in select urban areas, cost-benefit analyses of adaptation options, and the creation of stronger national coastal areas information systems
- **country and regional engagement and resource mobilization**, including analysis of stakeholders' roles and responsibilities, political economy studies, and identification of funding and finance opportunities

It will also address a number of cross-cutting themes that are central to the analytical work:

- **Natural accounts:** Natural accounting of coastal services would build on the Wealth Accounting and Valuation of Ecosystems Services (WAVES) Partnership on protection services of coastal ecosystems, particularly mangroves and coral reefs.
- **Innovative financing:** The monetized value of coastal services and their benefits would remain in the country and be reinvested locally.
- **Participatory risk planning and governance:** Local communities would participate in coastal areas management and disaster prevention planning.
- **Social protection for vulnerable coastal communities:** The program would target the most vulnerable people, through alternative livelihoods, social protection, and labor-intensive public works.

Stakeholders

The main stakeholders of the program are its ultimate beneficiaries: the people who live along the West African coast and depend on it for their livelihood and prosperity. The program will collaborate with national decision makers, including the ministries of finance, planning, economy, environment, agriculture, transport, energy, and others, as well as civil society. National and international academia, research institutes, and nongovernmental organizations will be engaged in analytical work and projects as appropriate. Subregional and regional organizations, private sector, and donors will provide technical and financial support.

Partners

WACA is based on collaborative arrangements agreed upon by donors and partners, including the West Africa Economic and Monetary Union (WAEMU), the Nordic Development Fund (NDF), and the multidonor Africa Climate Investment Readiness Partnership Trust Fund.

- WAEMU funded and prepared the Regional Shoreline Monitoring Study and the Management Scheme for the West African coastal area. It is currently co-financing the West Africa Coastal Area Erosion and Adaptation project.
- NDF is financing the West Africa Coastal Area Erosion and Adaptation project, which will operate in Benin, Côte d'Ivoire, Ghana, and Togo. The project aims to enhance regional and national governance in the target countries and improve their knowledge of coastal erosion, flooding, and other climate change hazards. It will be the first building block of a future technical assistance and investment program in the West Africa coastal area.
- The Africa Climate Investment Readiness Partnership is funding a regional technical assistance program on Building Climate Resilience of Coastal Areas in West Africa, which works with West African countries to design climate-resilient integrated coastal management development and investment plans, enhance their capacity at the national and regional levels, and improve their investment readiness. Participating countries are Benin, Côte d'Ivoire, Mauritania, São Tomé and Príncipe, and Togo.

The World Bank Group is also in dialogue with other partners and donors.

The Way Forward: A Regional and National Investment Program

WACA is the strategic foundation for the World Bank Group's long-term engagement in West Africa's coastal areas. Its aim is to work with countries to create multiyear, multicountry coastal management initiatives that will be implemented in several stages, in collaboration with other development partners. This initiative will lead to the scaling up of key knowledge and capacity-building activities and help prepare the design and implementation of priority infrastructure investments.

In support of the United Nations Framework Convention on Climate Change (UNFCCC) process, the World Bank developed the Africa Climate Business Plan, "Stepping up Support for Africa's Climate-Resilient and Low-Carbon Development." WACA is part of that plan, which proposes \$1 billion in investments and technical assistance to build coastal zone resilience.

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