



West Africa Coastal Areas
Management Program

KNOWLEDGE SHEET 9A | CIVIL SOCIETY

Preserving the Coastal and Marine Environment: What Does it Mean and How Can You Help?

Engaging Civil Society on coastal and marine preservation



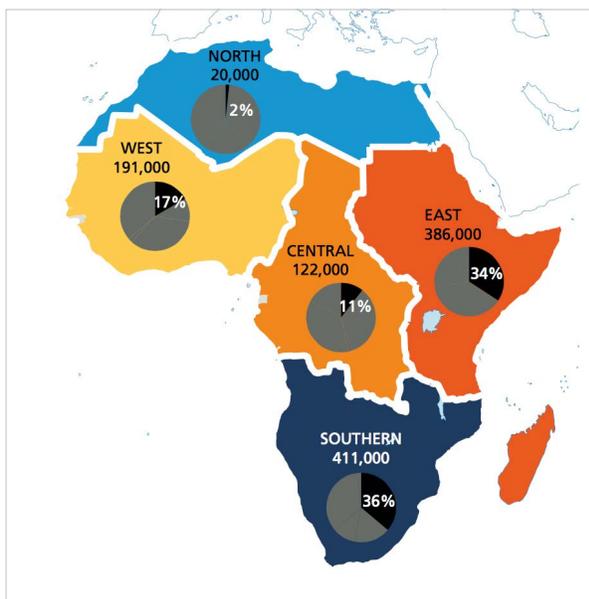
Houses washed away by rising sea levels in Togo. Photo credit UNEP

- Researchers have found that disasters triggered by natural hazards have forced 191,000 people in West Africa from their homes in 2015 (IDMC 2016, page 10). Many displaced from coastal areas to rising seas and flooding, while others move towards the coasts as rural farming areas suffer.
- The trend is getting worse in that recorded natural disasters have doubled from approximately

200 to over 400 per year over the past two decades, affecting especially the coastal areas of West Africa (Cohen et al 2010)

- Waste generation has increased by 5 fold per person in West Africa as consumption increases, however only 40% of this waste is collected – the increased waste accumulation damages the environment and prevents it from protecting local populations from storms and climate change in coastal areas.
- In areas where there is constant coastal erosion, the people have lost some of their shrines, gods, sacred groves or even burial grounds to the sea thus significantly affecting their cultural activities.
- Crop growing periods in West Africa may shorten by an average of 20% by 2050, causing a 40% decline in cereal yields and a reduction in cereal biomass for livestock, this forces more people to move to the coastal areas where there are potentially more jobs, putting more stress on coastal resources (Zougmoré et al 2016).

West African coasts are rich in natural resources therefore it is no surprise that coastal communities have for generations lived off the land and the sea taking advantage of these abundant natural resources for health, food and economic activities. The coastal ecosystems such as mangroves, provide important breeding grounds for fish and the mineral deposits that have helped to build the thriving coastal cities, trade, commerce and economic development in the area. However, this once abundant land is under threat from Climate Change, a rising sea level, beach erosion, etc. Human activities are also affecting the functioning and integrity of the environment, the water supplies, agriculture, fishing, mangroves and the available beach areas that the tourists flock to visit. This all directly impacts on the health of families in the community and potentially the family income, a healthy environment can control itself and can help coastal communities to cope with any changes in climatic conditions. Local people and communities can take action to preserve the coastal and marine environments to ensure the environment continues to function well into the future.



Percentage of newly displaced people in Africa due to natural hazards in 2015. West Africa accounts for 17% of the African continent's displacement (IDMC 2016).

Challenges

The impacts on the environment due to climate change and human activities can have a direct bearing on your coastal community. For example human activities in the Volta Region in Ghana have impacted significantly the local coastal communities. The Keta area has a very low-lying topography with loose sediments. With the construction

of the Akosombo hydroelectric dam it resulted in higher intensity coastal erosion and flooding along the entire Keta coast particularly in the eastern parts of the coastal strip. The persistent erosion resulted in the displacement of the coastal communities, the destruction of domestic, commercial, educational, historical (fort), cultural edifices and infrastructures as well as the siltation of the lagoon basin, including perennial flooding of farms and a reduction in farmlands. The community in particular was unable to respond to the situation by themselves, the only strategy adopted was a 'do nothing' and in some instances a 'retreat' (involving relocation) approaches. The Keta sea wall was built but it does not allow ships to dock which has affected the commercial activity.

Furthermore, human activities directly affect local coastal ecosystems for example industrial and domestic pollution from the city of Abidjan, Côte d'Ivoire, home to 3.5 million inhabitants and 60 per cent of the country's industry (GEF, 2002), have affected the Ebrié Lagoon mangroves which have disappeared as a result. The consequence is the reduction of the storm barrier that these forests offer and the removal of the breeding ground for many fish.

Apart from human activities that can worsen natural phenomenon, climate changes are already affecting local coastal communities. For example, a local villager from the coastal town of Nsiamfumu, Muanda in the DRC gives an idea of the impact of rising seas and coastal degradation have on a coastal community.

"Our ancestors brought us to the coastal areas to exploit the resources the ocean offers, but with the increasing impacts of climate change and the threats it poses on our families and our livelihoods, we are forced to retreat inland and to leave our ancestor's lands." (UNDP, 2016).

These rising oceans also cause sea water intrusion into the underground water supplies which makes the water too salty for crop irrigation.

WHAT CAN I DO ABOUT IT?

You can take action and work with local NGOs to preserve the environment and to protect your livelihood. For example the Gulf of Guinea Large Marine Ecosystem Project undertook a pilot mangrove restoration project facilitated by NGOs in Côte d'Ivoire, Ghana, Togo, Benin, Nigeria and Cameroon from 1995 to 2000. The project involved many local organisations including

the local community with fisheries ecology, physical environmental processes incorporating activities such as pollution prevention, socio-economic management aspects and governance. The project showed how coastal pollution and living marine resources respect no political boundaries and therefore a large-scale concerted, international, holistic and community lead approach for assessment and control can help to restore coastal ecological processes (UNEP-GPA, 2006).

Furthermore to avoid polluting the local environment, household waste can be managed by having it collected and treated. This will help by reducing the waste in rivers that affect many aspects such as making flood impacts worse or damaging the mangrove forests. Waste collection and other coastal management aspects can be managed in a collective way by working together with the local government, local businesses and other communities (this is called Integrated Coastal Zone Management - ICZM). Teachers and educators can also play a strong role in raising awareness of the situation and to also receive training on ICZM, agricultural and fisheries management in coastal regions.

Communities can plan new trees and look after existing plants that are local to the area, this will help the environment to recover and to ensure that the “services” that the environment offers the local community are preserved. An example of this is taken from the communities of Muni-Pomadze Ramsar located in Winneba in the Central Region of Ghana who got involved in a Joint Community Mangrove Restoration Program. The local surrounding communities of the Muni-Pomadze Ramsar area collaborated together with the Ghana Chapter of A Rocha International and the Wildlife Division of the Forestry Commission, in an effort to restore the degraded mangrove forests of this site.

The “Community Mangrove Restoration Project” has four main components:

1. Conservation education and awareness creation

2. Sustainable Natural Resource Management and Conservation
3. Fuel-efficient cook stoves
4. Alternative livelihood training for the surrounding communities

In all, a total of 30 participants (from three fringe communities (Akosua village, Mankoadze village and Biwadze) were trained in:

- Establishing Nurseries
- Sustainable natural resource management
- Alternative livelihoods (snail and grass-cutter rearing)

The participants were given start-up capital in the form of a revolving fund to start their alternative livelihood enterprises. The results have been impressive, 7.5 ha of degraded mangrove area along the Muni Lagoon at Akosua village were replanted late 2013 and mid 2014. There were additional plantations of 3,500 seedlings of fire resistant tree species planted over a 1km stretch along the Pratu River. This has resulted in a recovery of the mangrove forests and increased protection from storms and flooding in the Muni-Pomadze Ramsar area and increased business opportunities for the local community.

Although human and natural impacts can negatively affect the environment and subsequently the livelihood of the community, action can be taken and positive changes can take place as these examples show.



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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.

