
[Africa: The huge value of mangroves for communities](#)

Africa is richly endowed with mangroves, which cover over 3.2 million hectares, extending from Mauritania to Angola on the Atlantic coast and from Somalia to South Africa along the Indian Ocean.

Mangrove forests have a huge value for coastal communities that derive their livelihoods from them. Although commonly defined as “poor” in official statistics, communities living in healthy mangrove areas have what many urban people lack: diverse and abundant food. Mangroves provide for many of their needs, usually complemented with other productive activities such as farming, poultry, bee-farming and so on. Mangrove wood is a multi-purpose resource for fish stakes, fish traps, boat building, boat paddles, yam stakes, fencing, carvings, building timber, fuel and many other uses.

The Rufiji River Delta mangroves provide a good example on the above. Located in southern Tanzania, it is the largest delta in Eastern Africa and contains the largest estuarine mangrove forest on the eastern seaboard of the African continent. The Delta region is home to over thirty thousand people who live, farm and fish in its fertile agricultural lands and rich fishing grounds. The latter produce over 80 per cent of Tanzania's prawn exports with the entire catch being wild prawns.

The importance of mangroves for local communities becomes even clearer when they are degraded or disappear. In the case of Senegal, oysters, shrimp, tilapia, barracuda and catfish are among the many fish species that live in Casamance's mangrove forests, but now, as a result of mangrove degradation "you can only find big fish, as well as shrimps and oysters, but you can no longer find catfish or other varieties, while there used to be plenty."

The depletion of fish stocks has particularly affected women who sell fish in bulk: "Women are closely involved in the fishing economy in this region. We sell fish, shrimp and oysters in the market and can earn up to US\$20 a day from this, which greatly benefits our families. Now it is difficult for fish-sellers in Ziguinchor markets to earn even US\$4 a day because there is so little fish left to sell."

The disappearance of mangroves harms other crops as well. Fewer mangroves means increased salt content of the water, which impedes the growth of paddy rice. "When we plant the rice now, it doesn't grow because there is so much salt in the water."

Regarding biodiversity, mangrove forests have few tree species to show (6 to 10), which may lead people to think that they are biodiversity-poor. In fact, they are exactly the opposite: mangroves are an irreplaceable and unique ecosystem, hosting incredible biodiversity and ranking among the most productive ecosystems in the world. The aerial roots of their trees form a complex web, hosting a multitude of animal species (fish, molluscs, crustaceans) and they operate as zones for mating, refuges and nursery areas for a large number of other species. The enormous quantities of fish and invertebrates that live in these coastal waters, provide an abundance of food for monkeys, turtles, and aquatic birds and they serve as an important migratory point for many birds.

Many species of animals use the Baly Bay's 7200 hectares of mangroves as nesting, roosting and feeding areas. Located to the West coast of Madagascar, the bay' mangroves constitute an

important habitat for crab and shrimp species.

By some estimates, over 60% of fishes caught between the Gulf of Guinea and Angola breed in the mangrove belt of the Niger Delta. Mangroves have been sustainably managed by the many generations of communities living there. Sustainable use has been possible because of their profound knowledge about this ecosystem, passed on from generation to generation.

However, a number of changes have taken place over the last few decades that have resulted in mangrove destruction or degradation in many countries. Two different processes (frequently related) affecting mangroves can be observed: total destruction or degradation.

In some cases their total destruction may be due to urbanization, large-scale tourism undertakings, rice production or their eradication to give way to commercial shrimp farming. According to the FAO, Africa has lost about 500,000 hectares of mangroves over the last 25 years.

In other cases, partial deforestation is further aggravated by mangrove degradation – where most trees may remain standing – due to activities such as oil exploitation or mining. That is to say, the installation of pipelines, seismic exploration and open cast mines cause deforestation; while oil-spills, gas flaring and waste dumping pollute the water and the air and seriously degrade the ecosystem as a whole. Another important cause of “invisible” degradation is the use of agro-toxics in nearby agricultural production, where toxic chemicals end up in this ecosystem, thus resulting in severe impacts on mangrove biodiversity and peoples’ livelihoods.

In terms of degradation, major oil spills have occurred that have devastated rivers, killed mangroves and coastal life and affected the health and livelihoods of millions of inhabitants. Although this has happened in several countries in both Eastern and Western Africa, the case of the Niger Delta is probably the worst. As denounced by Amnesty International, the local communities living there rely on “the land and natural waterways for their livelihood and sustenance. Now, they have to drink, cook with and wash in polluted water and eat fish contaminated with toxins. They have lost farming land and their incomes from oil spills and breathe air that reeks of oil, gas and other pollutants.”

A further form of mangrove degradation results from overexploitation of its resources –both the trees themselves or the fish and other aquatic life forms that live there. In Africa, excessive mangrove wood extraction has been linked to fish smoking, building materials, fuelwood and charcoal production.

Within that context, efforts should be made to ensure sustainable use of existing mangroves, to restore degraded areas and to replant mangrove forests whenever possible and viable.

For the above to be possible, the necessary starting point is to identify and address all the direct and underlying causes of mangrove loss and degradation. In this respect, it is important to note that while most of the former have already been identified, the underlying causes are still a matter of debate that needs to be studied much further. Such analysis is fundamental in order to avoid the easy solution of putting the blame on “poverty” or “population growth”, while obscuring the role of governments, international institutions and corporations in mangrove loss and degradation.

While existing problems are addressed, it would be wise to prevent the development of new ones. In this respect, policies should be adopted and implemented to stop the expansion of unsustainable industrial shrimp farming, which is now looking at Africa’s mangrove areas as a new business opportunity to be exploited with little regard to the ecosystem. The negative social and environmental

impacts of this activity are already well documented in all the countries where it has established itself, particularly in Latin America and Asia. The result, in country after country, is that industrial shrimp farming destroys mangroves, biodiversity and local peoples' livelihoods. The impacts of the few existing cases of industrial shrimp farming in Africa should also serve as a basis for convincing governments on this issue.

African mangroves should be allowed to continue to play the role they have traditionally played: to ensure local peoples' livelihoods through the conservation and wise use of their rich biodiversity.

Summarized version of "African mangroves: their importance for people and biodiversity", by Ricardo Carrere, editorial of "The relevance of mangrove forests to African fisheries, wildlife and water resources", Nature & Faune Volume 24, Issue 1. The full article with footnotes, quoted sources and references is available at <ftp://ftp.fao.org/docrep/fao/012/ak995e/ak995e00.pdf>