The role of Cross River State's forests in supporting development and well-being

Why do forests matter and what are their value?

The benefits provided by the forests of Cross River State are varied and plentiful.

There are many reasons why forests are important for our daily lives, contributing to environmental integrity, as well as social and economic development. Forests help to stabilize climate, regulate the water cycle, provide habitats for a huge variety of plants and animals, support local livelihoods, and provide shelter, medicine, fuel and opportunities for recreation. They are also a source of employment and income through forest-based farming, fisheries and collection of non-timber forest products (NTFPs).



Forest Products

Natural forest products are widely used both in Cross River State and beyond, and are valued for many different purposes. Many people in the State depend on wood for fuel - about 64% of communities use fuelwood as a primary source of energy. Fuelwood is also used in some industries, such as processing agricultural and fishing products.

products Non-timber forest (NTFPs), such as afang, bush mango and medicinal plants, also play a vital role in supporting the



Forest loss in Cross River State

Nigeria has experienced one of the highest rates of forest loss in the world; losing more than half of its forest cover in the last few decades. In Cross River State, a number of pressures on forests are causing deforestation and forest degradation, these include:

- The expansion of agriculture, through both commercial and small-scale farming
- Unsustainable harvesting of timber and fuelwood
- The development of infrastructure, e.g. for transportation
- The expansion of mining and quarrying
- The need for more sustainable management of protected areas and community forests



Natural forest areas have decreased in Cross River State during 2000-2014, while areas of cropland and plantations have grown. This loss has occurred within montane areas and protected areas, as well as in open forest areas, mangroves and community forests.



G. africanum, G. kola, P. gueneansis, Lacosperma and Calamus, Archarchatina, L. africana, H. crenata, Randia, C. luttea, Hommallum, G. africanum, G. kola, P. gueneansis, Lacosperma and Calamus, Archarchatina, L. africana, H. crenata, Randia, fauna africana, H. crenata, G. latifolia, F. aspirifolia, I. gabonensis, mushrooms, fauna G. latifolia, H. crenata, P. guineense, G. africanum, L. africana, mushrooms, faur 5. latifolia, H. crenata, P. guineense, L. africana, mushrooms, faun gueneansis, Lacosperma and Calamus, mushrooms, fau latifolia, Archachatina, mushrooms, faur

economy and people's well-being. In Cross River State, over 700 different NTFPs have been identified, with harvesting of over half of these.





Ecotourism

Attractive and sustainable ecotourism is dependent on high-quality landscapes, diverse and abundant wildlife and rich culture. With its substantial areas of tropical forest and associated endemic species (in particular primates), Cross River State is recognised as having strong potential for further ecotourism development. Existing ecotourism sites and facilities are mainly in and around forested areas.



n sites: Geographical coordinates of important ecotourism sites compiled by Cross River State and UNEP-WCM



latural forest mask: NASRDA and FAO on behalf of the UN-REDD Progra tiver State. Based on the 13 land cover classes derived from satellite imagery: Natural forest is a combination of the 'Montane forest', 'Tropical High Forest' pen forest' and 'Mangrove' classes; Other forest is a combination of the 'oil palm', 'rubber' and 'Gmelina' classes; the non-forest class i nland, grazing field, swamp, settlement and derived savannah land cover classes in the 13-class datase

This map is based on a dataset with originally 13 different categories of land cover. These have been regrouped into a smaller number of categories to create these maps. For example, mangroves have been placed in the "natural forest" category, whereas before they were classified together with swamps/wetlands.

How does forest loss affect communities?

Loss of forest in Cross River State has the potential to negatively affect the livelihoods and well-being of communities in a number of ways.

Food, medicine, shelter and energy As forests degrade and disappear so too does their rich biodiversity and the resources that they provide. Loss of habitat can lead to reduced populations of wildlife or even species extinction. This also means the potential loss of sources of food and medicine, and affects the communities who rely on these resources. In addition, as many communities rely on fuelwood, and as this resource is often harvested unsustainably, this too could affect the basic needs of people.



Income and employment

Forest loss could increase the vulnerability of livelihoods in the face of economic uncertainty. Livelihoods reliant on forests resources, such as the harvesting of NTFPs, help people to supplement other incomes (e.g. from farming). In some cases, these forest products provide the main source of income. This opportunity is reduced with deforestation and degradation. Similarly, employment and income which depends on the presence of rare animals or tourism sites in the forest could be affected if forests are lost.

Forest loss does not only affect the forest resources that communities directly depend on. Other



Biodiversity:

Biodiversity refers to the diversity of all living things including habitat diversity, species diversity and genetic diversity. It is essential to healthy ecosystems and supports livelihoods through activities such as ecotourism and bio-products. Many important and threatened plants and animals live in the forests in Cross River State, such as the Cross River Gorilla (Gorilla gorilla diehli) and the grey-necked rockfowl (Picathartes oreas).



Soil Erosion Control: Forests, particularly those on slopes, can stabilize soil. They help reduce water run-off and provide shelter, decreasing the removal of top soil and help to maintain water quality. Tropical high forest and montane forests are particularly important in controlling soil erosion risk in Cross River State. The areas with the highest risk of soil erosion are those without forest cover in the north-east and south of the State.



services provided by forests help to maintain healthy ecosystems and influence peoples wellbeing close to and far from the forest.

Flood risk and water quality

Deforestation and degraded forests may lessen the ability of land to absorb and hold water. The resulting problems of erosion and sedimentation can increase flood risk and lead to water shortages at other times of the year. More sediment can reduce downstream water quality. On the coast, loss and degradation of mangrove forests can reduce their capacity to limit coastal erosion and the impacts of sea level rise on surrounding areas.

How can we secure forest

The way we use our land and manage our forests affects the type

and flow of benefits we receive. There are many options that can

help us to protect forests and to manage them sustainably.



Climate change and climate resilience

As forests are degraded and lost, the carbon that is stored in trees is released into the atmosphere, contributing to global climate change. Climate change can have many potential impacts on forests and on communities - for example increased risk of droughts, storms, fires and pests. When forests are lost or degraded, the forests themselves and surrounding areas are likely to be less resilient to climate change.

Nigeria's REDD+ Programme

The Federal Government of Nigeria's involvement in REDD+ began in 2009, through engagement in regional networks and interest in promoting REDD+ in Cross River State.

Nigeria requested to join the Forest Carbon Partnership Facility (FCPF) in 2009, and became a Partner Country of the United Nations Collaborative Initiative on Reducing Programme **Emissions from Deforestation and** Forest Degradation in Developing Countries (UN-REDD Programme) in February 2010.

A Nigerian National UN-REDD Programme was approved in 2012, and supports a two-track approach for developing REDD+ readiness: (i) the development of institutional and technical capacities at Federal level, and (ii) carrying out demonstration activities in Cross River State, as a pilot state for REDD+ .

benefits?

Adopting more sustainable practices such as Climate Smart Agriculture and Agroforestry can help to reduce forest loss by reducing pressure to clear land. These approaches can also build resilience to climate change, increase food production and help mitigate climate change.

Sustainable fuelwood management and

Carbon:

Forests store and absorb high amounts of carbon, which helps to mitigate climate change. The State's main carbon stocks are in the mountainous forest areas of the Forest Reserves, Cross River National Park, in the north and south, and in the mangrove forest areas along the estuary and coast.





latural forest mask: NASRD iver State. Natural forest is in of the 'Montane forest', 'Tropical High Forest', 'Open forest' and 'Mangrove' classes in the 13 class datas ss carbon: Saatchi, S., Harris, N., Brown, S., Lefsky, M., Mitchard, E., Salas, W., Zutta, B., Buermann, W., Lewis, S., Hagen, S., Petrova, S., White, J.





developing energy alternatives can reduce negative impacts on forests. For example, providing woodlots for fuelwood production, using more efficient technology such as 'clean cookstoves' and introducing alternative renewable energy sources such as ethanol and biogas.

Conserving and restoring mangrove forests can have benefits of mitigating climate change, as well as supporting local livelihoods and adaptation to climate change. Mangroves have high carbon storage potential, are often rich in biodiversity, and provide ecosystem goods and services such as fisheries production and reducing coastal erosion.



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Left: Bushmango, snail, nuts, fruits [©] Bridget Nkor, CRSFC; Endangered Drill Monkey [©] Brendan van Son (image used under license from shutterstock.com); Cross River Gorilla [©] WCS Nigeria; Picathartes oreas [©] Fransesco Veronesi; Kwa Falls [©] Shiraz Chakera; Tree [©] Paulus Maukonen

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