

# FACT SHEET

PLANNING FOR RESILIENCE IN EAST AFRICA  
THROUGH POLICY, ADAPTATION, RESEARCH AND  
ECONOMIC DEVELOPMENT (PREPARED) PROJECT

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## VALUING ECOSYSTEM SERVICES OF SANGO BAY–MINZIRO FOREST ECOSYSTEM IN UGANDA AND TANZANIA

### THE SANGO BAY–MINZIRO FOREST ECOSYSTEM

The Sango Bay–Minziro Forest Ecosystem is a large, biologically rich, transboundary landscape that expands across the wetland system in southwest Uganda (55,100 hectares) and the Minziro National Forest Reserve (MNFR) in northwest Tanzania (25,700 hectares). It is in the transition zone between the East African (Afro-montane) and West African (Guinea-Congolian) floral and faunal zones.

The landscape has multiple land uses and management authorities. In Tanzania, the MNFR is a protected area, while in Uganda some of the wetland is designated a Ramsar site and official Important Bird Area, while other areas are managed by communities.

The Sango Bay–Minziro Forest Ecosystem is home to rare and endemic flora and fauna. The *Pseudagrostistachys ugandensis*, a small branched tree, has only been recorded in Sango Bay, Uganda, and Democratic Republic of Congo. Wild coffee (*coffea canephora*) is considered rare but found in several locations in Minziro. The endangered African elephant, black and white colobus monkey, and the restricted-range blue monkey all reside in this transboundary landscape. Sango Bay alone contains 1,000 species of plants, 78 species of mammals, 431 species of birds (including the rare and vulnerable blue swallow and shoebill), 31 species of amphibians, 44 species of fish, 279 species of butterflies, and 67 species of dragonflies. The Minziro Forest Ecosystem is home to almost 250 bird species, 56 of which have only ever been seen in Minziro.



Shoebill. Photo: John Rollins/Audubon Photography Awards



## JUSTIFICATION FOR CONSERVATION

The rapid economic valuation of ecosystem services shows that Sango Bay–Minziro Forest Ecosystem significantly contributes to local, national, and even global economies. The provisioning services that communities rely on for sustenance and shelter have an estimated value of **USD 89,620,224 per year**. The regulation and supporting services, which govern climate, rainfall and production, are estimated to be worth about **USD 131,905,153 per year**.

The majority of the 422,420 people living in the transboundary ecosystem (219,788 in Uganda and 202,632 in Tanzania) depend heavily on the ecosystem services provided by the wetland to support their economic well-being and survival. For example, the Sango Bay ecosystem has a significant value for supporting livestock production by providing fodder for grazing, especially during the dry season. Livestock farmers expressed deep concern about the depleting resource caused by overgrazing, which is leading to increases in diseases.

One of the important services provided by the Minziro Forest Ecosystem is support to crop productivity through pollination, seed dispersal, and pest and disease control. The Minziro Forest Ecosystem contributes to the maintenance of soil moisture and fertility that contributes to agricultural productivity. The loss of the ecosystem would have dire consequences for the food security of the many households living within and adjacent to the landscape.

The loss of the Sango Bay–Minziro Forest Ecosystem would jeopardize spiritual, sacred, and historic sites. Sango Bay contains a Stone Age site that is of archaeological and religious importance and a significant tourist attraction. The area, internationally known as the Sangoan archaeological site, is located both in wetland and woodland forest areas and includes tools that were used approximately 200,000 years ago.

The Sango Bay–Minziro Forest Ecosystem is under stress from increasing demands for resources from the rapidly growing human population. The transboundary ecosystem is suffering from overexploitation of forest products such as fuelwood, timber, medicinal plants, construction materials, and bushmeat. Heavy dependency on subsistence agriculture, encroachment for settlement and agriculture, poor land management, grazing, and fire constitute the main threats to the ecosystem services. If appropriate measures and activities to conserve the area are not undertaken, many goods and services provided by the forests and wetland will not be available to future generations.



*Sango Bay*

## ACTIONS NEEDED TO CONSERVE SANGO BAY–MINZIRO FOREST ECOSYSTEM

The economic value of the Sango Bay–Minziro Forest Ecosystem is a strong justification to design, finance, and implement plans and activities that ensure conservation and sustainable management of the landscape. To this end the PREPARED Project worked with key stakeholders in Uganda and Tanzania to develop Conservation Invest Plans (CIPs) for Sango Bay in Uganda and Minziro Forest Ecosystem in Tanzania.

The CIPs are a resource mobilization document that the governments of Uganda and Tanzania can use (separately or together) to solicit funds for conservation activities. The CIPs were developed using a multi-stakeholder, participatory approach and draw from existing management plans or strategies.

The CIPs prioritize four bankable investment packages for each landscape. The total cost of the conservation activities for Sango Bay is USD 9.57 million and for Minziro Forest Ecosystem USD 6.02 million (Figure 2). The cost of implementing the CIPs is significantly less than the value of the ecosystem services provided by the Sango Bay–Minziro Forest Ecosystem each year, demonstrating the value of conservation.

## CONSERVATION INVESTMENT PACKAGES (2016)

Sango Bay, Uganda Conservation Investment Plan	Minziro Forest Ecosystem, Tanzania Conservation Investment Plan
<p><b>Preserve key natural species and habitats.</b> This investment package aims to maintain the flow of valuable ecosystem services. It consists of five projects with a combined cost of USD 2.33 million.</p>	<p><b>Foster collaborative approaches to natural resource governance and law enforcement.</b> This investment package aims to safeguard key transboundary species, habitats and ecosystems in the Sango Bay–Minziro landscape. It consists of three projects with a combined cost of USD 1.7 million.</p>
<p><b>Enhance sustainable livelihood opportunities.</b> This investment package aims to strengthen local development prospects. It consists of five projects with a combined cost of USD 2.97 million.</p>	<p><b>Integrate biodiversity and sustainable livelihoods at the local level.</b> This investment package aims to improve economic and environmental conditions for all sectors of the community. It consists of three projects with a combined cost of USD 2.7 million.</p>
<p><b>Promote ecotourism market development.</b> This investment package aims to build new green jobs and income sources. It consists of four projects with a combined cost of USD 2.98 million.</p>	<p><b>Build community–public–private ecotourism partnerships.</b> This investment package aims to enhance revenues, business opportunities and returns from non-extractive land/resource uses. It consists of five projects with a combined cost of USD 0.96 million.</p>
<p><b>Facilitate research, monitoring, and evaluation.</b> This investment package aims to enable better-informed conservation and development decision-making. It consists of five projects with a combined cost of USD 1.29 million.</p>	<p><b>Strengthen information generation, dissemination and awareness.</b> This investment package aims to enable more sustainable, effective, and inclusive conservation and development decisions. It consists of four projects with a combined cost of USD 0.66 million.</p>

**NOTE:** Although the valuation study presented above covered the transboundary Sango Bay–Minziro Forest Ecosystem, separate CIPs were prepared for each site because there is no overall management plan for the landscape, but management plans exist for each site.



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