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On behalf of
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety
of the Federal Republic of Germany

In cooperation with

Ecosystem-based management and ecosystem services valuation in two river basins in the Philippines

EbA in river basins

The challenge

River basins provide habitats and resources for endangered species and, at the same time, livelihood for people within the basin and beyond. These include different sectors, such as domestic water supply, agriculture, energy, environment and health. However, river basins face degradation through uncontrolled and excessive exploitation caused by the increasing population and unsustainable management of natural resources. This poses a threat to the country's economy, social and human well-being, and environment. Deforestation and the large-scale transformation of the original vegetation to non-forestry purposes, coupled with inappropriate land use practices, threaten biodiversity and disrupt the hydrological conditions of the watersheds, resulting in flash floods and prolonged drought. Other adverse consequences are accelerated soil erosion, siltation of water bodies and reservoirs, and poor water quality. Sedimentation has reduced the storage capacity of major reservoirs. These situations cause considerable reduction in the productivity of forests, agricultural lands and fisheries, and decreased returns from major investments in domestic hydroelectric power generation and irrigation systems.

Our approach

The use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change, or in short Ecosystem-based Adaptation (EbA), together with effective governance and integrated ecosystem-based management of watersheds and their resources are an overarching solution to these problems.

It is therefore important that the Philippines enhance their national strategies for watershed management and biodiversity protection.

The project supports the Ministry of Environment and local communities to strengthen ecosystem services, protect biodiversity and reduce vulnerability to climate change and natural disasters in the Ilog-Hilabangan River Basin in the Visayas Region and the Tagum-Libuganon River Basin in Mindanao through integrated management and application of ecosystem services valuation and ecosystem-based adaptation measures.

The project supports national policies and contributes to improved coordination and integration of sectors through an ecosystem-based approach. It will provide impetus for improving the fragmented water governance regime and aims at using the values of ecosystem services as a basis for the private sector buy-in, to contribute to the financing of conservation and protection measures that help to maintain ecosystem services and thereby reducing vulnerability to disasters and climate change.

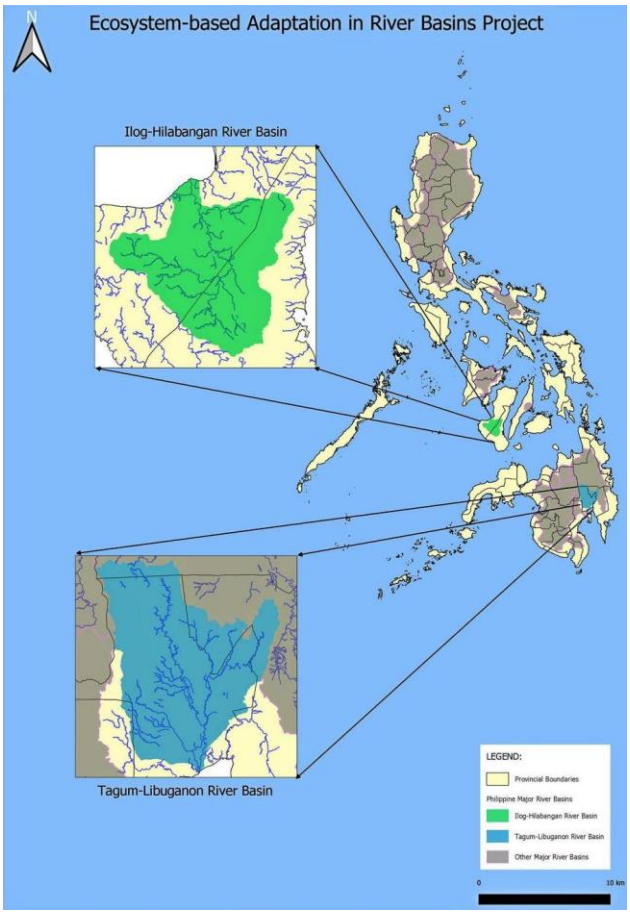
Project name	Ecosystem-based management and ecosystem services valuation in two river basins in the Philippines (E2RB)
Commissioned by	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the International Climate Initiative (IKI)
Project region	Philippines
Lead executing agency	Department of Environment and Natural Resources (DENR) River Basin Control Office (RBCO)
Duration	01.03.2019 – 28.02.2023

Left: Mangroves in the Negros Occidental Coastal Wetlands Conservation Area.

Right: Terraced rice fields in Barangay Orong, Kabankalan, Negros Occidental.

The benefits

Ecosystem-based management and integrated land-use and development planning at river basin level will lead to a reduction of hazard prone households, improved water availability and quality and biodiversity conservation in the Ilog-Hilabangan River Basin in the Visayas Region and the Tagum-Libuganon River Basin in Mindanao.



The improvement of the political and legal framework for integrated river basin management and the private sector buy-in will mobilise additional public and private funds for sustainable management and protection of river basins.

These measures will contribute to a reduction in ecological and economic damage, and thereby ultimately contribute to biodiversity conservation and human well-being.

Success factors

The goal to strengthen ecosystem services, protect biodiversity and reduce vulnerability to climate change and natural disasters in two river basins can be achieved through integrated management and a participatory multi-level approach which involves all stakeholders from the local through the regional to the national level.

The task to help communities adapt to climate change impacts, reduce the risk of natural disasters and protect biodiversity in river basins is complex due to the scale and the future uncertainties resulting from climate change and therefore cannot be addressed just by one player. Strong partnerships are needed to implement EbA measures at the scales required. The private sector will be an important partner to contribute to the sustainable financing of conservation and protection measures.

The project supports the Department of Environment and Natural Resources in its task of coordinating ecosystem-based management of river basins within the frame work of national guidelines and policies such as the National Climate Change Action Plan and contributes to the knowledge management of the Philippine partners.

E2RB builds on the achievements and partnerships created during the implementation of previous and ongoing projects implemented by GIZ, USAID and Earth Security Partnerships in the Philippines as well as projects in neighbouring countries and GIZ global projects.

A role-playing game that allows river basin stakeholders to understand the multiple factors which influence a basin's overall health and apprechiate collaboration during decision-making.

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