

CONTEXT

India is one of the mega biodiversity centres in the world and houses two of the world's thirty-four biodiversity hotspots, located in the North Eastern Region (NER). The region has abundant species of flora and fauna, in particular an extraordinary aquatic biodiversity which includes e.g. 520 fish species (35 endemic), 186 molluscs species and 367 different dragonfly species among others. Even though the unique nature and its species requires protection and conservation practices, so far mostly only "attractive" animals like Rhinoceros and Tiger get the required attention and interventions by the public and authorities. Thus, due to their importance for ecosystems and livelihood, aquatic resources particularly require an increased focus and sustainable management.

Aquatic resources serve as significant sources for nutrition security and income for considerable parts of the local population in NER. These resources, however, are under threat due to climate change, pollution and unsustainable developmental activities. Changing demographies, lifestyle patterns, over- exploitation and neglect of traditional practices are further adding to the woes of already vulnerable and neglected aquatic freshwater ecosystems with devastating consequences for fish and invertebrate stocks and thus livelihoods of the riverine population. There is also a growing requirement on improved cooperation between research institutions and creation of a knowledge base in the region.

OBJECTIVE

The Indo-German project on Protection and Sustainable Management of Aquatic Resources in Northeastern Himalayan Region of India (NERAQ) aims at addressing some of these challenges. The overall objective of the project is the protection and sustainable management of aquatic freshwater ecosystems in the states of Assam, Manipur, Meghalaya and Nagaland. Through targeted project interventions, selected species-rich aquatic ecosystems can provide the irreplaceable ecosystem services in a sustainable manner. This ensures resilience and adaptability of the ecosystem to climate change impacts. The activities will also improve livelihoods of the riparian communities.

BIODIVERSITY HOTSPOT



570 fish species and

367
dragonfly species
are found in the
North Eastern
Region









APPROACH

The project aims to strengthen the knowledge and management capacities of state and local stakeholders for climate-friendly management of aquatic freshwater ecosystems. Freshwater fish species and invertebrates (mussels, crustaceans, etc.) are the focus of the project activities (Outcome).

Scientifically proven protection and sustainable use of concepts for aquatic resources in selected river sections of the Indo-Burma biodiversity hotspot will be developed and tested in cooperation with the Indian Ministry of Environment, Forest and Climate Change (MoEFCC), state government departments, scientific institutions, civil society organisations and local communities with their traditional administrative structures. Following a participatory approach, they develop concepts that are adapted to the respective conditions (Output II).

A German cooperation partner will be the Institute for Inland Fisheries (IFB) Potsdam, Germany. In cooperation with local universities and research institutions, analyses of fish and invertebrate stocks, climate vulnerability and locally available traditional knowledge will be carried out and processed into concrete recommendations in state action plans (Output I).

Based on key learnings from pilot measures, the scientific analyses and the recommendations formulated into state action plans, a supported knowledge network will develop capacity building measures for governmental and non-governmental stakeholder awareness of the value — both ecological and economic — of aquatic resources in the North Eastern Region. To ensure the dissemination of project measures at state and regional levels, the project will also support the four state governments in revising relevant sections on aquatic ecosystems in the State Action Plans on Climate Change (SAPCCs) (Output III).



PROPOSED MAJOR ACTIVITIES

- Strategic capacity building and training of relevant stakeholders to conduct inventories, surveys, data analysis, and establish an M&E system in collaboration with IFB Potsdam.
- Based on identified vulnerabilities of the aquatic resources and recommended SAPCC strategies, identification of six different, alternative sources of income for developing and testing in three pilot projects.
- Support block and/or district administrations in drawing up or revising plans for the protection of aquatic ecosystems on the basis of pilot experiences and tested concepts with associated capacity building and training.

CONTRIBUTION TO INTERNATIONAL AND NATIONAL AGREEMENTS ON WATER AND CLIMATE ACTION

The project is embedded in the national implementation of four international strategies - the Paris Climate Agreement, the Convention on Biological Diversity, Agenda 2030 as well as meeting the SDGs. The project contributes to SDG 2: Zero Hunger , SDG 13: Climate Action, SDG 14: Life below Water and SDG 15: Life on Land. Since the specific contribution of aquatic resources in the implementation of these strategies has been often overlooked, the project places a special focus on this issue.











Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices: Bonn and Eschborn, Germany

Protection and Sustainable Management of Aquatic Resources in the Northeastern Himalayan Region of India GIZ Regional Office, Guwahati Sarbeswar Bhawan Bye Lane-01, Jayanagar Sixmile, Guwahati-781022 Kamrup(M), Assam T +91 49495353 F +91 49495391 www.giz.de/india

Photo credits: Robertson Basan, image 1 GIZ/Scholz, image 2

Responsible: Patricia Dorn, Project Manager, NERAQ

As at July 2022

GIZ is responsible for the content of this publication

Commissioned by	German Federal Ministry of Economic Affairs and Climate Action (BMWK) and German Fedederal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) under the International Climate Initiative (IKI)
Nodal Ministry	Ministry of Environment, Forest and Climate Change (MoEFCC)
Lead Implementing Agency	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Duration	August 2020 - December 2023