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The Indo-German Bilateral Cooperation Project - NERAQ aims to strengthen the knowledge and management capacities of state, research and local stakeholders for aquatic resources in the Indian states of Assam, Manipur, Meghalaya and Nagaland. The overall objective of the project is the protection, sustainable and climate-resilient management of aquatic resources with focus on wild fish and invertebrates (such as snails, crabs, frogs).

Funded by: German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) under the International Climate Initiative (IKI).

Implemented by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH inpartnership with the Indian Ministry of Environment, Forest and Climate Change (MoEFCC).

> "We have totally banned the modern techniques of fishing and have resolved only to practice the traditional style of fishing in Poilwa village."
>
> – Rangsan Nlang, Chairman, Poilwa Village Council

Key documents from the Project can be downloaded by following this QR code

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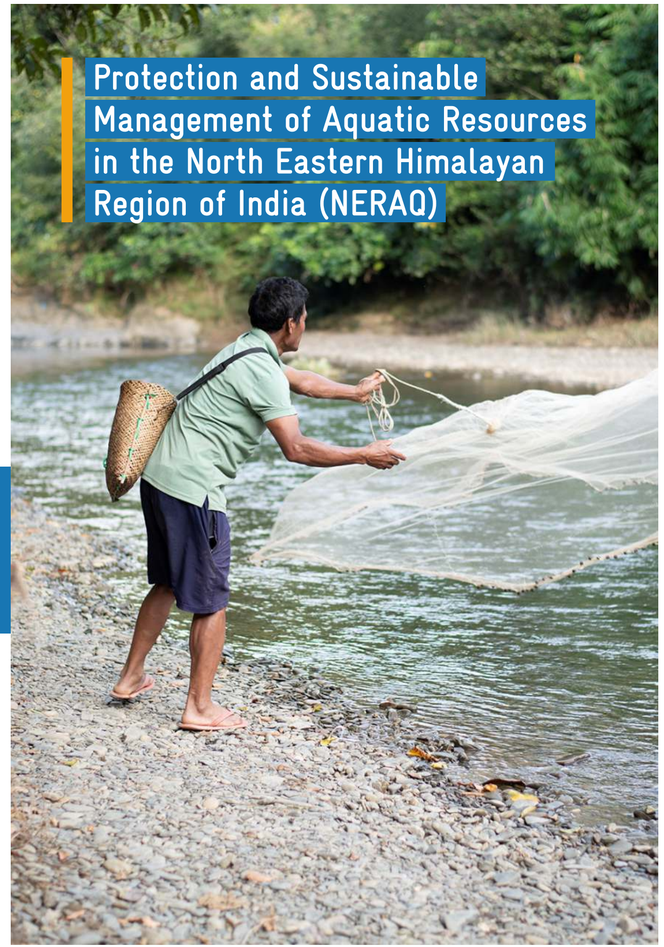
Supported by:
Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection

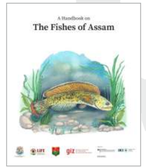
IKI INTERNATIONAL CLIMATE INITIATIVE

Protection and Sustainable Management of Aquatic Resources in the North Eastern Himalayan Region of India (NERAQ)



ASSAM

- For the Doloni Beel, Bongaigaon District, Assam – a wetland of high ecological importance – the first Integrated Wetland Management Plan (IWMP) in Assam has been developed and implemented. An IWMP for the Ramsar site-Deepor Beel in Guwahati is also prepared.
- "A Handbook of Fishes" – a comprehensive reference for common fish species in Assam has been prepared.
- Wetland Managers and Frontline staff from Assam Forest Department have been capacitated in developing IWMPs.



MEGHALAYA

- In Khliehshnong, Sohra, Meghalaya – nestled around the famous water fall en route Cherrapunjee– the newly constructed Visitor Information Centre (VIC) at a three-hectare man-made water body is creating awareness on endemic fish species like the Snakehead species *Channa pardalis* and enhances the livelihood of the 400 households in the village. The VIC is entirely managed by 12 previously unemployed youths who are now trained in water quality monitoring, habitat restoration, guiding nature walks and in conducting environmental education workshops.

- Seven community fish sanctuaries across a 200 m river stretch have been established in Umkaber.
- About 30 youths have been trained in Cave Tourism Management in Lawbah.

Building upon the research and knowledge

- Aquatic species in the 4 states have been inventorised as part of which 2 fish species *(Exostomasentiyonoae, Psilorhynchuskosygini)* and 4 aquatic insects have been **newly discovered** in Nagaland.

A standard protocol on sampling fish species has been published by the Zoological Survey of India and Institute of Inland Fisheries (IfB), Potsdam, Germany and will further guide research institutions across India.

- A **Recirculating Aquaculture System (RAS)** hatchery for the breeding and rearing of two key Small Indigenous Fish Species (SIFS) is operational at Manipur University – a break through for further conservation and livelihood opportunities.

- The **climate risk of aquatic resources** has been assessed at the district level using the CMIP6-GCMs models, under SSP2-4.5 and SSP5-8.5 scenarios, highlighting increased exposure to extreme events and the need for adaptive measures.

- The **climate vulnerability of three fish species** has been assessed through 20 trained regional researchers: Snow Trout *(Schizothoraxrichardsonii),* Golden Mahseer *(Tor putitora)*, and Zig-Zag Eel *(Mastacembelus armatus)* that can predict potential shifts in where species are likely to be found with change in climate conditions.

- The conservation status of freshwater fishes in the 4 states has been assessed via the regional **IUCN Red List** criteria. **Important Fish Areas (IFAs)** have been identified to prioritise conservation strategies.

- Through the formation of the regional knowledge network **"North East India Freshwater Collective (NEIFC)"**, stakeholders from research, community and policy sectors regularly exchange data and knowledge across the region.

Imbibing Traditional Knowledge into the aquatic resources discourse

- An 11-Steps Methods Manual on **How to Document Traditional Knowledge** for Aquatic Resources was developed, field tested in all NERAQ pilots and is available as an e-learning module on Atingi.

In a concerted endeavour across three departments of Kohima Science College - Botany, Zoology and Anthropology – a multidisciplinary course 'Traditional Knowledge – Heritage for the Future' was developed with the support of the Centre for Biocultural Diversity, University of Kent. The course recently launched in 2024 already has over 70 enrolments.

Training on traditional knowledge at KSC

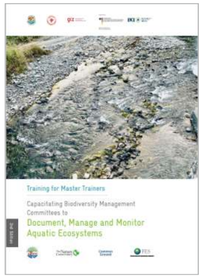
DIMAPUR: A seven-day training on curricular development and traditional Knowledge "Cultural heritage for the future" organized by the Indo-German Bilateral Co-operation project "Protection and Sustainable Management of Aquatic Resources in the North-eastern Himalayan Region of India" in collaboration with Centre for Bio-cultural Diversity, University of Kent, United Kingdom, was held at Kohima Science College Jotsoma from September 14 to 22.

Dignitaries with and trainees 'at KSC Jotsoma.

- About 300 students have documented the traditional knowledge on aquatic resources from their grandparents and turned into conservation champions themselves. Key insights of the documentation were integrated into the local conservation action plan and folk stories have been adapted and illustrated into a children's book.

Biodiversity Management Committees (BMCs) as agents for managing aquatic ecosystems

- The aquatic fauna and flora – which is usually overlooked in People's Biodiversity Registers - were documented in 12 villages in Nagaland. The exercise received national recognition as a pioneering effort in the country and is being upscaled to 70 villages by the State.



- A cohort of master trainers were capacitated through the Toolkit on **"How to document, manage and monitor aquatic ecosystems"** developed for BMCs at the State Institute for Rural Development, Meghalaya.

- The State Biodiversity Strategy and Action Plan was implemented in four villages in Nagaland and in three villages in Meghalaya.

- The revised **State Biodiversity Strategy and Action Plans (SBSAP)** for Meghalaya and Manipur aligned with the NBSAP 2024 and key learnings from the project will set key conservation priorities for the two states.

Our Partners

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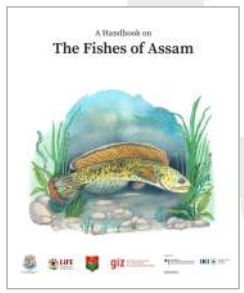

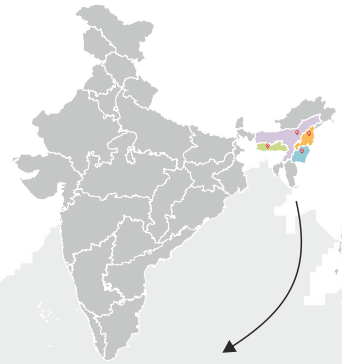

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