

# Conserving biodiversity in Myanmar's Upper Chindwin Basin

Community-based integrated  
catchment management



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## SEI fact sheet

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**Project period:** October 2020 to September 2023

**Project owner/donor:** UK Department of Environment, Food and Rural Affairs/the Darwin Initiative

### Summary

This project will implement a set of land and water management practices in the Upper Chindwin Basin, Myanmar, to protect and restore the Key Biodiversity Area (KBA), and secure sustainable livelihoods.

Biodiversity and ecosystem service assessments will feed into Community Action Plans (CAP) developed alongside local stakeholders to establish sustainable agricultural, land and water management practices. These will include conservation and restoration zones, enhancing community-based natural resource management, and supporting just transitions.

**Lead organization:** Stockholm Environment Institute (SEI)

**Partners:** 1) The Wildfowl and Wetlands Trust (WWT); 2) UK Centre for Ecology & Hydrology (UKCEH); 3) Myanmar Environment Institute (MEI); 4) Ecosystem Conservation and Community Development Initiative (ECCDI); 5) Myanmar Forest Association (MFA)

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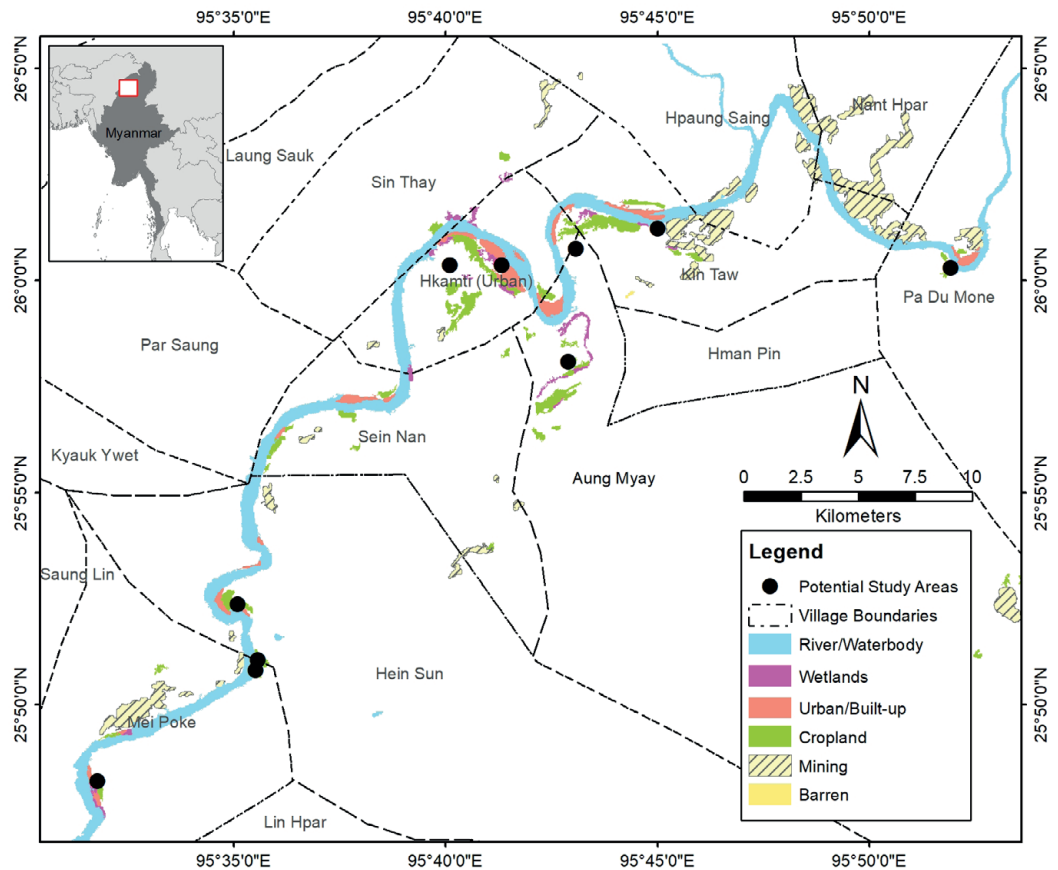
## Background

Myanmar's Upper Chindwin Basin contains some of the Indo-Burma region's most critical biodiversity habitats, also known as Key Biodiversity Areas (KBAs). For example, Hkamti Township is home to 38 threatened freshwater species including the Critically Endangered *Batagur trivittata* (Burmese Roofed Turtle), and the Endangered *Puntius manipurensis* (Red Jasper Barb), *Schistura kangjupkhulensis* (a species of ray-finned fish, a stone loach in the genus *Schistura*) and *Schistura reticulata* (a species of ray-finned fish, a stone loach in the genus *Schistura*) (IUCN 2017). Subsistence rice farming and fishing remain the livelihood mainstays supporting 36 819 people (including 18 201 women) in the township. Fish provides 60% of the local population's protein intake and 80% of main household incomes are from nature-based activities.

In 2018, SEI's work in the Chindwin Basin identified some of the key threats to wetland habitats and ecosystem services, which included commercial mining and logging, as well as unsustainable farming and overfishing. The work showed that a high demand for land, a lack of alternative livelihood pathways and local insecurity about depleting resources have caused a rapid decline in fish catch, the loss of wetland habitats and the rapid shrinking of populations of endangered aquatic species. The KBAs in the Upper Chindwin Basin currently have no formal, legal protection.

IMAGE (ABOVE): The Chindwin Basin's critically endangered Burmese Roofed Turtle (*Batagur trivittata*) is one of the known 27 species of freshwater turtles in Myanmar © THANAPON PIMAN

Figure 1. Map of project study area



Political boundaries : MIMU (<http://themimu.info/>) land cover data : SERVIR-Mekong

## LINKS TO SUSTAINABLE DEVELOPMENT GOALS (SDGS)

The project supports the 2030 Agenda for Sustainable Development (SDGs 1, 5, 6, 10, 12, and 15). The proposed integrated water and land management-based CAP, and its focus on biodiversity conservation, contributes directly to SDGs 6 and 15. The suggested practices will improve water-use efficiency in different sectors (SDG 6.4), enable integrated management (SDG 6.6) and protect water-related ecosystems (SDG 6.7).

The KBA in and around Hkamti Township will see the implementation of conservation and restoration plans (SDG 15.1), the sustainable management of the encompassing mountain ecosystem and forest (SDGs 15.2, 15.4), and the orientation of existing pathways towards the protection of biodiversity and endangered species (SDG 15.5).

In order to protect the Chindwin's biodiversity, it is necessary to take steps that can generate environmentally-sensitive livelihoods for people in the basin, aimed at protecting the KBA and conserving local biodiversity and ecosystem services. It is critical to address the current improper land and water management practices, while also building awareness about the socio-ecological importance of healthy and functioning wetland ecosystems. This project links to the SEI global strategy by contributing to enhancing sustainable resource use and resilient ecosystems, and improving local livelihoods.

## Plan of action

1. Develop an ecosystem benefits baseline knowledge system: The Ramsar Rapid Assessment of Wetland Ecosystem Services (RAWES) will be used in selected villages within Hkamti Township for biodiversity and livelihood assessment.
2. Co-develop and implement Community Action Plans (CAP): The development and implementation of CAPs will follow the Sustainable Livelihood Approach to Poverty Reduction. Stakeholder consultations and issue-based selection will be used to identify priority villages.
3. Establish wetland conservation zones: Traditional knowledge will complement biodiversity and ecosystem service data to inform an agreed habitat restoration and conservation zoning plan for the site.



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4. Develop policy recommendations for upscaling CAPs across biodiversity hotspots: A high-level, multi-stakeholder workshop will be held to present results and propose key policy recommendations for community-led conservation. A series of public awareness and outreach activities will be organized to influence policies and explore upscaling potential. The aim of these activities is to cascade CAP processes and implementation to a national level.

### Expected outputs

1. Baseline assessment of the physical conditions, ecosystem services, key biodiversity hotspots and habitats, and existing livelihood practices related to water and land management, informing an endorsed habitat restoration plan and the development of CAPs.
2. CAPs focusing on integrated water-land ecosystem measures developed for villages, implemented in three priority villages.
3. Optimal ecological conditions agreed for endangered and key livelihood species, and a habitat restoration plan completed and shared.
4. Policy recommendations published for upscaling CAPs and conservation measures in the Upper Chindwin Basin.

### Raising awareness about biodiversity

The project will produce a range of communications and knowledge-sharing materials targeting two key audience groups: 1) local communities in the Upper Chindwin River; and 2) government agencies. By demonstrating the value of an integrated approach to better manage the project area's land-water systems for biodiversity conservation, we ultimately aim to influence the policy process in the development arena.

We will produce customized information products to highlight local biodiversity, livelihood challenges and their linkages. Individual departments within governments (national and



Mining, roads, logging and agricultural expansion is leading to the degradation and fragmentation of biodiversity rich habitats in the Basin.

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Myanmar is home to 46 IUCN globally threatened bird species. © WICHAI JUNTAVARO



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regional) will be continuously engaged with through workshops, focus group discussions, trainings and one-to-one meetings to emphasize the utility of integrated socio-ecological management systems.

In addition, key outputs, guidelines and policy recommendations will be presented in national and international forums, both in Myanmar and the ASEAN region, to reach a wider range of conservation agencies and bilateral and multilateral organizations.

**Capacity building**

Capacity building and training programmes will be conducted at different levels: at a community group level, for farmers; at a township level for village and household heads; and at an institutional level, for government staff. In addition, we plan to involve graduate students from Monywa University at various project stages, from the ecosystem services survey, to CAP implementation.

**Gender equality**

As in other Southeast Asian countries, women in Myanmar are under-represented in decision-making roles, possess limited control over and access to natural resources, and have fewer financial pathways. The project will ensure parity at all stages to ensure women’s meaningful participation, with consideration of cultural sensitivities.

**Pathways to change**

This project demonstrates the effectiveness of replicable local action in both restoring healthy wetland habitats and tackling direct and indirect threats through support for transitions to more profitable sustainable livelihoods.

The project’s implementation will help to address the threats presented by unsustainable use of land and water resources, while creating clear incentives for local people to make decisions that provide direct economic, and long-term environmental, benefits. The successful CAPS will serve as demonstrations of integrated community-based conservation schemes in the region, influencing policy and decision-making.



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