

# Chindwin Biodiversity and Ecosystem Services

**Geographical Focus:** Chindwin River Basin, Myanmar

**Project Name:** Chindwin Biodiversity and Ecosystem Services (CBES)

**Full Title:** Empowering Civil Society and Governmental Agencies to Mainstream Biodiversity and Ecosystem Service Values into Development Plans for the Chindwin River Basin, Myanmar

**Partners:** Stockholm Environment Institute (SEI) and Myanmar Environment Institute (MEI) in collaboration with the Sagaing Regional Government, other relevant government agencies, academics, researchers and media in Myanmar

**Funder:** Critical Ecosystem Partnership Fund (CEPF)

**Timeframe:** April 2017-March 2019

## Biodiversity, livelihoods and development in the Chindwin River Basin

The Chindwin River, the largest tributary of the Ayeyarwady River in Myanmar, is an important river ecosystem for multiple uses and users, providing a range of ecological services that support people and biodiversity in the Chindwin Basin and beyond. About six million people depend upon the natural resources and ecological services of the basin for meeting essential needs such as drinking water, food and fuel as well as livelihoods, including fisheries, navigation and tourism. The basin is also of high importance for biological diversity, hosting 11 key biodiversity hotspots designated by the International Union for Conservation of Nature (IUCN), and home to over 38 globally threatened species. Presently, the Chindwin Basin is facing a range of impacts from development including mining, logging, hydropower, agriculture, navigation and transportation as well as impacts from climate change affecting communities, livelihoods and biodiversity within the basin.

From 2013-2016, SEI, along with MEI, in collaboration with Myanmar government partners, undertook

a scoping exercise to assess and consult with stakeholders about the core sustainability issues in the basin. The assessment and consultations highlighted social and environmental concerns, primarily the declining water quality in the Chindwin River due to mining and deforestation, river bank erosion and unpredictability in water availability due to climate change.



*Local Livelihood and provisioning service from ecosystem, Chindwin River Basin (Thanapon Piman, SEI)*

One of the key recommendations of the scoping study was the need to better integrate sustainable water resources management with development plans in the basin. To do so, further research and capacity building are necessary to assess the potential impact of various development activities and climate change on the local livelihoods, basin ecosystem services provisions and biodiversity in the Chindwin River Basin.

## Rationale

The Chindwin Biodiversity and Ecosystem Services (CBES) project will assess the potential impacts of development and climate change on livelihoods and biodiversity within three key biodiversity hotspots in the Chindwin River Basin. CBES aims to support policy-makers in making comprehensive basin development plans and for providing strong environmental and social safeguards for the people and environment.

## Objective

- 1) Building capacity of civil society and government agencies in assessing potential impacts of development and climate change on biodiversity and ecosystem services and livelihoods.
- 2) Mainstreaming biodiversity and ecosystem services values into policies and plans.
- 3) Raising public awareness on biodiversity conservation.



*Biodiversity in Chindwin River Basin (Win Maung, MEI)*

## Project outcomes

- 1) Potential impacts of selected development plans including mining, logging, hydropower, agriculture, navigation and transportation and climate change on biodiversity, communities and livelihoods in Chindwin Basin are quantified and demonstrated.
- 2) Capacity of civil society groups and government agencies are built in valuing biodiversity and ecosystem services and assessing the potential impacts of development plans and climate change on biodiversity, communities and livelihoods.
- 3) The decision-making process on government policies and plans in Chindwin Basin is positively influenced through direct engagement and policy dialogue with key stakeholders in mainstreaming biodiversity and ecosystem services values into selected government policies and plans. These policies and plans include MONREC's National Biodiversity Strategy and Action Plan (for areas in Chindwin Basin), the Environmental Impact Assessment (EIA) procedures and biodiversity monitoring programmes of Environmental Conservation Department (ECD) and future implementation plans emerging from the Chindwin River Basin Organization.
- 4) Public awareness on the issues related to biodiversity conservation, ecosystem service values and sustainable development, is increased through direct engagement with local and international media.

## Our approach

The goal of the project is to influence national development policies and plans to include biodiversity and ecosystem service values. We will use inclusive stakeholder participation approaches combined with evidence based-science to support policy-makers in achieving this goal.

### Research

The project will identify and select three critical sites within the key biodiversity areas (see Figure 1). SEI and MEI will undertake detailed assessments in these field sites to quantify the values of biodiversity, ecosystem services and livelihoods and assess the potential impacts of development plans and climate change. Project participants will not only be trained in research methods but will also be involved in conducting the assessments.

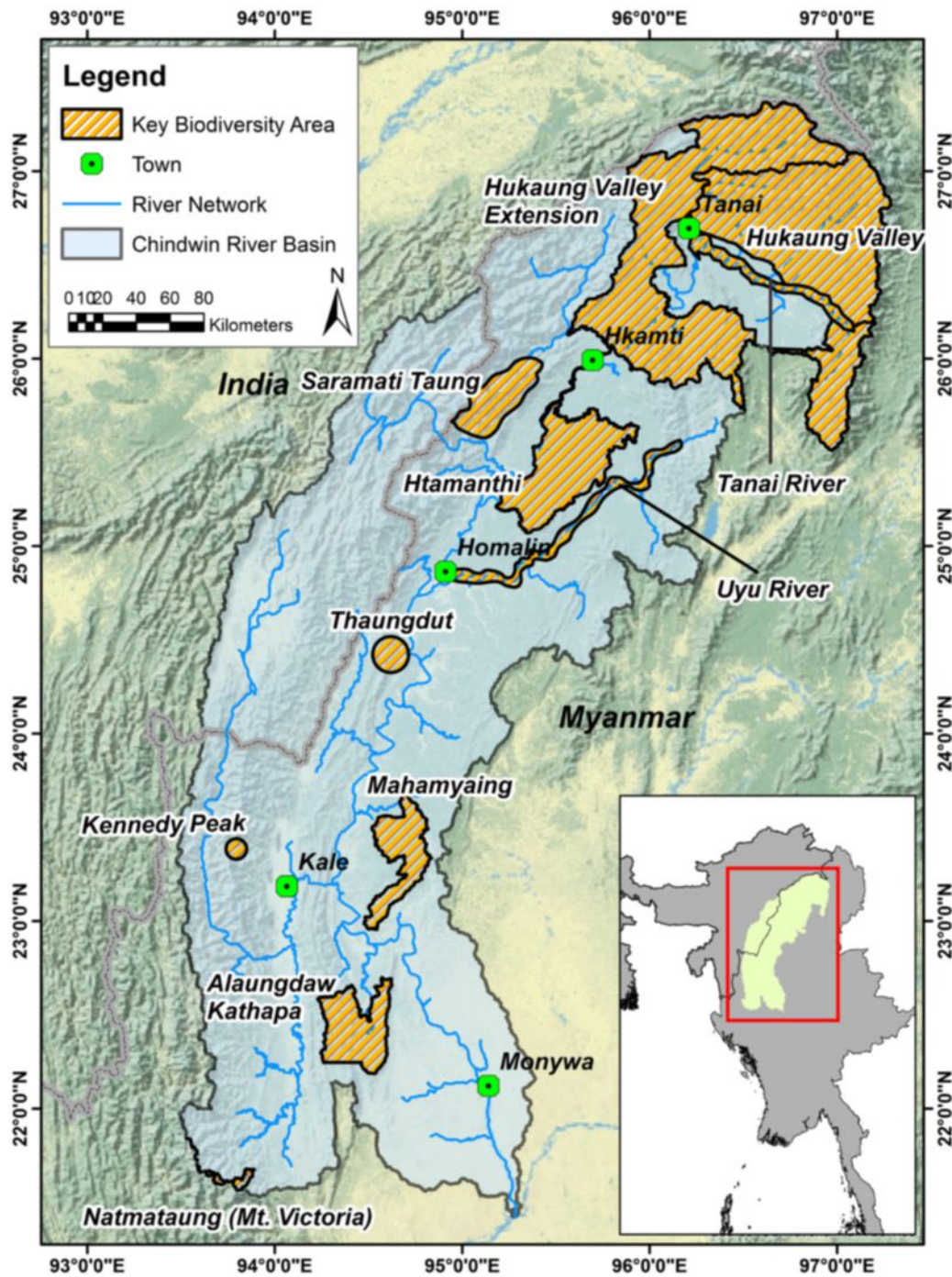


Figure 1: Key biodiversity areas within the Chindwin River Basin.

### **Media dissemination**

A unique aspect of this project is our engagement with media to disseminate our research findings to the public for raising awareness on biodiversity protection and conservation. The media will be able to access our research and share knowledge with the greater public and also to influence policy-makers.

### **Policy engagement**

The relevant policies and policy-makers will be

identified for engaging with policy issues on biodiversity protection and conservation. A series of intensive policy dialogues will be implemented in the project's final year with focus on policy-makers from key agencies to determine ways to have greater policy impact related to national policies on biodiversity, ecosystem services and development plans including activities under the National Biodiversity Strategy Action Plan and in the implementation of national environmental impact assessment laws.

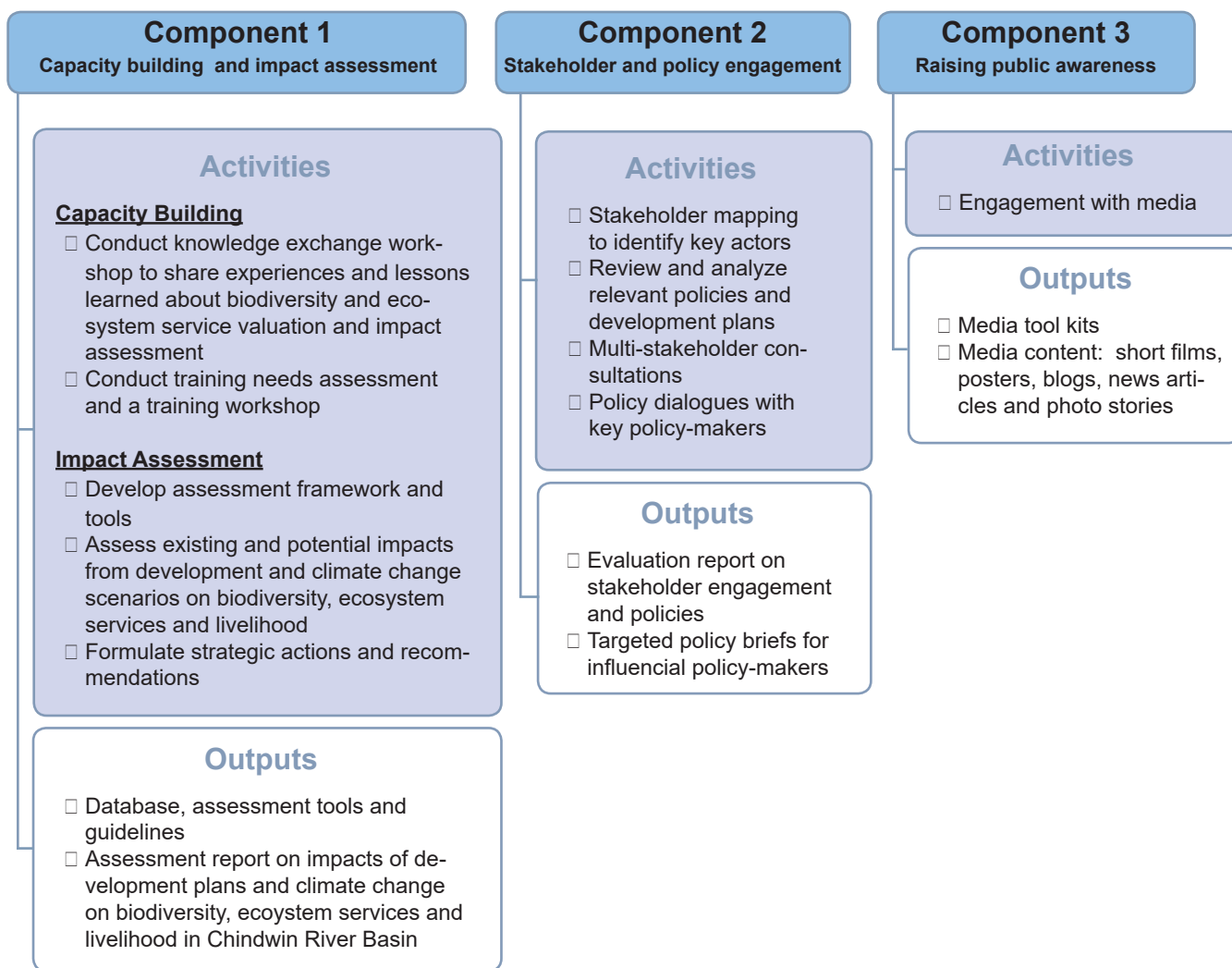
## Key collaborations

The project will collaborate with a number of agencies and groups in the Chindwin Basin and beyond. These include: ActionAid, Evergreen Media, Skynet, Sagaing University of Education, University of Yangon, Sagaing Regional Government, Environmental Conservation Department (ECD), Forest Department (FD), Department of Mines (DOM), Directorate of Water Resources and Improvement of River Systems (DWIR), and others.

## Outputs

A number of outputs in Myanmar and English are planned including a series of exchange and training workshops, assessment tools, assessment report, publications including news articles, blog pieces and media information kits; multimedia products such as short films, photo essays, policy briefs and research findings will also be produced.

**Goal:** Biodiversity and ecosystem service values in Chindwin/Ayeyarwady River Basins are integrated into development policies and plans at the national level for sustainable development through integrated river basin management by 2030.



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