

CityAdapt

Ecosystem-based Adaptation in Bhutan, Cambodia, Lao PDR and Myanmar

2017-2023

Supported by the Least Developed Countries Fund



SUSTAINABLE DEVELOPMENT GOALS



Diversifying livelihoods that benefit 1,920 households in Thimphu, Kep, Phongsaly, Oudomxay and Mandalay.



Training 40 city management authorities to integrate urban ecosystem-based adaptation (EbA) into city management planning and National Adaptation Plan processes.



Developing strategies for up-scaling urban EbA in pilot cities that have a combined population of 1.56 million, while creating an EbA decision-making tool.



Restoring urban ecosystems, reservoirs, watersheds, wetlands, and mangroves, including protecting 1.5 km of the riparian zone/riverbank and establishing 10 acres of climate-resilient agriculture gardens.



PROJECT TITLE:

BUILDING CLIMATE RESILIENCE OF URBAN SYSTEMS THROUGH ECOSYSTEM-BASED ADAPTATION (EBA) IN THE ASIA-PACIFIC REGION 'URBAN EBA ASIA'

EXECUTING ENTITY:



UN Environment Programme
Regional Office for Asia Pacific

KEY TARGETS:

1,920

Households benefitting from diversified livelihoods

40

Number of city authorities equipped to implement urban ecosystem-based ecosystem

8

Number of areas where investments in EbA reduce vulnerability of poor urban communities

FUNDING:

GEF Grant: \$6 million
Cofinance: \$88 million

PROJECT PARTNERS:

Gross National Happiness Commission and Thimphu Thromde (Bhutan); The Department of Climate Change of the General Secretariat of the National Council of Sustainable Development (Cambodia); Department of Climate Change (Lao PDR); Environmental Conservation Department (Myanmar), UN-HABITAT

INTRODUCTION

- Like many countries in the Asia-Pacific region, Bhutan, Cambodia, Lao PDR and Myanmar are facing the impacts of climate change in combination with rapid urbanization, which poses a challenge for urban planning.
- This project is building the climate resilience of poor communities in 5 cities using ecosystem-based adaptation (EbA) – a strategy of protecting or restoring ecosystems to reduce the negative impacts of climate change.
- The project's main approaches are: demonstrating the efficacy of urban EbA through ecosystem restoration; strengthening the capacity of city authorities to implement urban EbA; and building the knowledge base and awareness of urban EbA.
- This project is implemented in 5 cities from 4 countries – Thimphu (Bhutan), Kep (Cambodia), Phongsaly and Oudomxay (Lao PDR), and Mandalay (Myanmar).

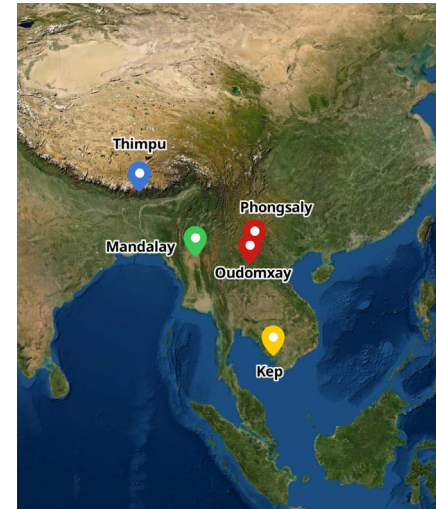
TECHNOLOGIES & METHODS

- The project is carrying out **ecosystem-based adaptation (EbA)**, including restoration of watersheds, riparian areas, and riverbanks to reduce the vulnerability of urban and peri-urban communities to climate change.
- The protection of 1.5 km of the riparian zone/riverbank by **planting climate-resilient tree species** helps to regulate the water flow and reduce the severity of floods, while recharging groundwater supplies and enhancing the ecosystem functioning.
- The project is helping to improve **climate-resilient livelihoods and diversifying income** streams by establishing climate-resilient agricultural gardens, promoting organic farming, urban forestry and crab raising.
- The EbA interventions of watershed and dam restoration, along with the creation of plant nurseries, are combined with **ecotourism**

CLIMATE IMPACTS

- Climate change is expected to increase temperatures and the variability of rainfall, resulting in flooding, storm surges, heat stress, drought, landslides, salt water intrusion, and groundwater depletion in the cities of Thimphu, Kep, Phongsaly, Oudomxay and Mandalay.
- Climate change is expected to damage infrastructure, decrease agricultural yields, and reduce water supplies and food security. The poor and marginalized communities in these cities are particularly vulnerable due to limited access to basic services.
- The increasing urban expansion is also negatively affecting the urban and peri-urban wetlands, agricultural land, coastal areas, and forests as these ecosystems are replaced with urban infrastructure, which limits the provision of ecosystem goods and services on which communities rely.

PROJECT LOCATION



CityAdapt is taking place in 5 cities in 4 Asia Pacific countries - Bhutan (blue), Myanmar (green), Lao DPR (red), and Cambodia (yellow)

CONTACTS

Project Manager:
Mozaharul Alam
alam31@un.org

UNEP Task Manager:
Atifa Kassam
atifa.kassam@un.org

BUILDING EBA KNOWLEDGE

- efforts to protect ecosystem services and livelihoods of local communities.
- To address water scarcity, the project is introducing **water harvesting techniques**, irrigation systems, and water reservation dam.
- In addition, the project is upscaling EbA by establishing programmes to promote long-term research on the impacts of urban EbA, and **training 40 city officials** to integrate EbA into city management planning while increasing the public awareness of climate risk and adaptation options.
- In-depth **vulnerability assessments** will be used to validate and refine the potential EbA interventions that were proposed at the initial development stage of the project.
- In combination with producing climate vulnerability maps for the 5 cities, the project is **developing programmes with research institutions** and universities to study the long-term societal, economic, and ecological benefits of urban EbA.
- Technical guidelines, policy briefs and EbA strategies are being developed to help the 4 governments to **plan, implement, and scale-up** urban EbA interventions.
- To increase the awareness of urban EbA, the project is **training city management authorities**, and implementing national **awareness campaigns** on climate change impacts and the benefits of urban EbA.
- An urban **EbA decision-making tool, Building Climate Resilience of Urban Systems through Ecosystem-based Adaptation**, is being developed in collaboration with UN-Habitat.
- This project is a sister project of the CityAdapt urban EbA project in Latin America, which you can read about [here](#).

