

# Boosting region-wide coherence on adaptation

## Adaptation committee meeting

28-29 August 2023, 14.00-17.30

Songdo Convensia, Incheon, Republic of Korea

# LAO PDR

Ecosystem-based Adaptation in Laos PDR  
2020-2025



## SUSTAINABLE DEVELOPMENT GOALS



Reducing the threat of flooding for 74,600 people living in Vientiane Capital, Paksan, Savannakhet and Pakse cities



Increasing the awareness of climate change for 37,300 people, and using flood management strategies and urban Ecosystem-based Adaptation to protect 4 cities from climate change



Rehabilitating 800 ha of wetlands and 700 ha urban streams to improve biodiversity and reduce flooding in urban and peri-urban areas.

UN  
environment  
programme



GREEN  
CLIMATE  
FUND

## PROJECT TITLE:

BUILDING RESILIENCE OF URBAN POPULATIONS WITH ECOSYSTEM-BASED SOLUTIONS IN LAO PDR

## EXECUTING ENTITY:



Ministry of Natural Resources and Environment, Lao PDR

## KEY TARGETS:

1,500

Hectares of wetlands and urban streams restored and with improved biodiversity

825,000

Individuals benefitting from project activities

37,300

Individuals with increased awareness of climate change

## FUNDING:



## PROJECT PARTNERS:

Environment Protection Fund, Ministry of Public Works and Transport, National University of Laos, Provincial governments of Vientiane, Champasak, Savannakhet, Bolikhamsay

# Adaptation challenge



Flooding in vulnerable cities along the Mekong River caused by increases in the frequency and intensity of extreme rainfall events.



Traditional drainage systems alone have been inadequate to date in reducing flood impacts under climate change conditions.



Approximately 40% of the population is located within urban areas and the annual urban growth rate is ~4%.

## Solutions

- integrated, climate-resilient flood management — including ecosystem-based adaptation (EbA) — in the cities of Vientiane, Paksan, Savannakhet and Pakse.
- i) strengthening technical capacity and knowledge base and management to reduce flood impacts; ii) developing city-level integrated flood management strategies; iii) identifying sustainable financing options for integrated flood management and; and iv) implementing urban EbA solutions.
- EbA solutions: rehabilitation of urban wetland, riparian zones and permeable paving.

Aiming to benefit 74,600 people directly and restore 1,500 ha of urban wetland and stream ecosystems.

4 target cities: Vientiane, Pakse, Paksan and Kaysone



# NEPAL

Ecosystem-based Adaptation  
2019-2022

Supported by the  
Least Developed Countries Fund



## SUSTAINABLE DEVELOPMENT GOALS



Creating 120 hectares of improved terraces on farmland to reduce soil erosion and water run-off, thereby boosting crop productivity



Building 36 water conservation ponds, 24 community rainwater harvesting devices, and 36 filtering dams – all of which increase water supplies for vulnerable communities



Updating 100 community forest management plans to include Ecosystem-based Adaptation interventions



Restoring at least 1,000 hectares of forests and 450 hectares of rangeland in 12 Village District Committees (VDCS)



## PROJECT TITLE:

CATALYSING ECOSYSTEM RESTORATION FOR CLIMATE RESILIENT NATURAL CAPITAL AND RURAL LIVELIHOODS IN DEGRADED FORESTS AND RANGELANDS OF NEPAL

## EXECUTING ENTITY:



Ministry of Forests & Environment,  
Government of Nepal

## KEY TARGETS:

**1,450**

Hectares of forests and rangeland restored to protect communities from climate change

**57,170**

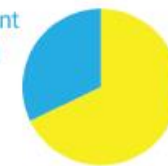
Individuals benefitting directly from the project's interventions

**96**

Water storage and harvesting structures built for climate-vulnerable communities

## FUNDING:

GEF Grant  
\$5.2m



Cofinance  
\$11m

# Adaptation challenge



Increasing variability of rainfall, drought, flooding, landslides



Unsustainable natural resource extraction: loss of forests and rangelands

## Solutions

- 132 Community Forestry Operational Management Plans updated/developed
- 32 Community Livelihood Improvement Plans (CLIPs)
- Restoring 274 ha degraded forests, 217 ha degraded rangelands
- 490 hectares terraces
- 126 filtering dams
- 64 water conservation ponds

Accham and Salyan districts and high mountain-Dolakha district: 10 local municipalities (four Municipalities and six Rural municipalities)



# 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 benefiting 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

# Adaptation challenge



Rising temperatures, flooding, storm surges, heat stress, drought, landslides, salt water intrusion, groundwater depletion



Rapid urbanization and poor urban planning

## Solutions

- Strengthen the technical and institutional capacity of city management authorities to plan and implement EbA
- **Bhutan:** rehabilitation of degraded riparian zones and riverbeds using climate resilient species, conservation of four river islands to serve as habitat for aquatic birds, greening of low income housing for informal settlers and slope stabilization through plantation for reduction of erosion
- **Cambodia:** restoration of Por Heng reservoir with notable capacity of safe water supply as well as ecosystem restoration potential for Kep city and five hectares of mangrove plantation.
- **Lao PDR:** improvement of water reservoir in Phongsaly district and urban green infrastructure improvement in Xay district.

Cities from 4 countries – Thimphu (Bhutan), Kep (Cambodia), Phongsaly and Oudomxay (Lao PDR),

# Project mechanism – too slow for scaling up ambition

- Each of these projects took between 10-12 years from concept approval to project completion. Each has a funding envelope of USD5-6M.
- From concept approval to approval of the full proposal: 2.5 years.
- Major delays came in the implementation phase.
- Need to consider how to overcome these 'soft limits to adaptation'.