

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.



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:

GCF grant
\$11.5m



Cofinance
\$1.5m

PROJECT PARTNERS:

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

INTRODUCTION

- Lao PDR, a country in South East Asia with cities dotted along the Mekong River, is expected to experience more extreme rainfall events due to climate change, leading to floods that threaten livelihoods in vulnerable urban areas.
- This project is building the climate resilience of urban communities through the implementation of integrated, climate-resilient flood management — including Ecosystem-based Adaptation (EbA) — to reduce the impacts of urban flooding. The project represents a paradigm shift in urban flood management towards nature-based solutions.
- The project's main approaches include: strengthening technical capacity and knowledge management for EbA; developing flood management strategies; and employing urban EbA solutions to reduce floods.

TECHNOLOGIES & METHODS

- **Ecosystem-based Adaptation (EbA)** is central to the project's activities. EbA is the strategy of protecting or restoration of ecosystems to reduce the negative impacts of climate change on people.
- Urban EbA solutions are being implemented, which involves **rehabilitating 1,500 hectares of wetlands and urban streams** to reduce flooding. The interventions include removing invasive plants, planting indigenous vegetation, and removing barriers that impede natural water flow and wetland functioning.
- The project is **designing a toolkit** for local authorities, national governments, and other stakeholders to implement urban EbA. The toolkit provides guidance on optimal methodologies and techniques.
- The project is conducting an **economic valuation on the range of ecosystem services** provided by the ecosystems in the 4 target cities to encourage decision-makers to invest in ecosystems and integrate EbA into planning,

CLIMATE IMPACTS

- Lao PDR has a tropical climate, influenced by the southeast monsoon that causes significant rainfall and high humidity
- In the cities, floods are affecting the population's health and livelihoods, leading to economic losses that amount to 2.8–3.6% of GDP every year.
- The extreme floods are causing outbreaks of water-borne diseases, loss of livestock and crops, and damage to infrastructure and economic activities.
- Inadequate urban planning and rapid urbanization is leading to the degradation of urban ecosystems that have historically provided buffers and defences against urban floods, thereby worsening the impacts of climate change.

PROJECT LOCATION



The project is taking place in 4 major cities in Lao PDR - Vientiane, Paksan, Savannakhet and Pakse.

policies and legal frameworks.

- To encourage the uptake of EbA, the project is developing a **knowledge hub** in collaboration with the National University of Laos for research and monitoring activities.
- The project is conducting campaigns in the 4 target cities to **raise awareness in communities and the private sector** on urban EbA and flood management.
- To complement the EbA measures, **integrated flood management strategies (ICFMS)** are being developed for each of the target cities, with plans underway to mainstream the strategies into existing flood plans, development plans, and land use plans.
- For the 4 target cities, **permeable paving solutions** are being designed and installed to improve drainage. In total, the project is creating a total of 18,000 m² of permeable paving solutions.

CONTACTS

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"Lao PDR is one of the most vulnerable countries to climate change impacts such as floods and droughts. This project could help us to reduce the damage of floods in urban areas and build resilience of communities to climate change."

- Dr. Saynakhone Inthavong, Vice Minister,
Ministry of Natural Resources and
Environment of Lao PDR

Read the full press release about the project launch [here](#).

