





Integrated Water Resource Management and Ecosystem-based Adaptation (EbA) in the Xe Bang Hieng River Basin and Luang Prabang city Project, Lao PDR

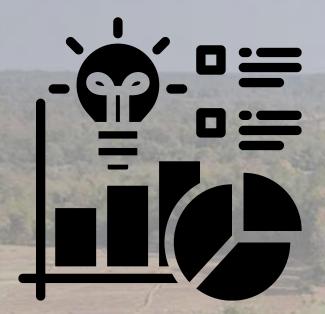
ADAPTATION and RESILIENCE DIALOGUES





Project Overview





PROJECT DURATION

04 (2022 - 2026)

PLANNED START

(NOVEMBER)
2022

PLANNED END

(NOVEMBER)
2026



Project Objective

To promote the integrated management of target sites in the Mekong River Basin) for increased climate resilience of communities in Savannakhet Province and Luang Prabang city vulnerable to floods and droughts

Addressing immediate and incremental climate adaptation

needs



Community Mobilization

Engaging local stakeholders to protect land and biodiversity

Biodiversity Integration

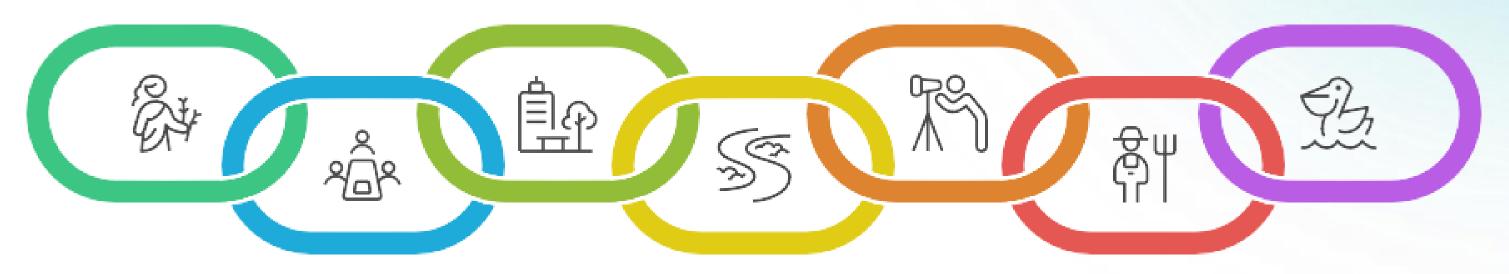
Incorporating biodiversity into local development and urban planning

Ecological Monitoring

Employing tools to measure ecological impact and progress

Wetland Conservation

Protecting wetlands while supporting local livelihoods



Co-created Framework

Developing a framework based on shared values and local knowledge

Nature-based Solutions

Using natural methods to adapt to climate change

Sustainable Food Systems

Promoting sustainable food production and ecosystem health

Using nature-positive pathway to



success...

Policy Influence

Advancing climate resilient strategies and influencing policies.



Investment in Resilience

Calling for increased investment in climate resilience initiatives.

Local Voices

Ensuring local voices shape climate strategies.

Achieving sustainable adaptation outcomes through community ownership and inclusive participation



Nature-Based Adaptation

Developing plans that use natural ecosystems to address climate risks

Climate Education Raising awareness and managing climate knowledge

Community Empowerment

Enabling local communities to participate in climate action

IWRM and EbA

Integrating water management and ecosystem-based adaptation

Indigenous Knowledge

Utilizing traditional knowledge for community-based adaptation

Forest Management

Restoring forests and managing fire risks





Ensuring adaptation benefits equitable and enduring at the local level



Protective Infrastructures



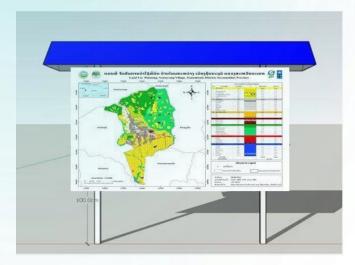


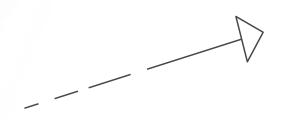




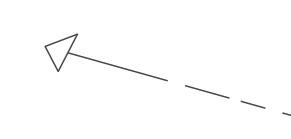
Construction of protective infrastructures benefits all community members equally by reducing floods and droughts, ensuring access to essential services during extreme weather

Forest Management Plans









Vulnerable Group Prioritization



Village-level forest management plans promote equitable adaptation, protecting vulnerable livelihoods and supporting resilient local economies.

Prioritizing the needs of vulnerable groups through CCAs and flood management plans builds stronger, more inclusive, and climate-resilient communities.

Case study – Flood Resilience



Flooding in Kaengdon Village, Songkhone district, Savannakhet Province in 2019

- Severe Flood Impact: Flooding severely affected more than 227 households, destroying paddy and upland fields, resulting in major loss of crops and livelihoods.
- Infrastructure and Shelter Damage: Many houses were partially or completely destroyed, forcing families to seek temporary shelter in unsafe conditions.
- Lack of Basic Needs: The community faced acute shortages of safe drinking water, with limited access to clean water and sanitation, increasing the risk of waterborne diseases.



- Emergency Equipment Provided: The project supplied life vests, motorboats, and loudspeakers to strengthen community preparedness and ensure timely evacuation and communication during floods.
- Water Access Restored: Installation of water tanks and drinking water filters improved access to clean and safe water during flood periods.
- Community Resilience Enhanced: The support improved safety, communication, and response capacity, helping households recover faster and be better prepared for future floods.

Case Study - Drought Resilience







Solar Pumps for Agriculture



Groundwater well with Solar





Before LDCF-GEF Support

- Farmers relied on electric pumps for irrigation, leading to high electricity costs and household debt.
- Agriculture was possible only during the rainy season; during the dry season, farming was nearly impossible due to water shortages.
- Villagers collected drinking water from nearby forests, which was unsafe and unclean.
- Many community members suffered from sore throats and waterborne illnesses after consuming untreated water.
- Limited income and food insecurity made daily life difficult for families in the village.

After LDCF-GEF Support

- Groundwater wells and solar-powered irrigation systems were installed for sustainable year-round water access and Water filtration units provided clean and safe drinking water for households.
- Farmers can now cultivate crops throughout the year, increasing productivity and income.
- Women manage vegetable gardens and small businesses, contributing to family livelihoods.
- Health and sanitation improved, with reduced illness from unsafe water.
- The solar-powered system transformed the sun—from a symbol of drought—into a source of energy, growth, and better living for
- Direct benefits to over 17,000 people and more than 500,000 people indirectly benefited

