



## **CLIMATE CHANGE ADAPTATION ACTIVITIES AND EXPERIENCE IN LAO PDR**

**5th APN Southeast Asia Sub-Regional  
Cooperation Meeting,  
Climate Adaptation Seminar,  
Proposal Development Training Workshop  
22-26 October 2012,  
Siem Reap City, Cambodia**



# OVERVIEW CLIMATE CHANGE ACTIVITIES IN LAO PDR

- The GOL is keenly aware of Climate change and its impacts
- In 1995 the GOL joined the global community by ratified the United Nations Framework Convention on Climate Change (UNFCCC) and has completed its first greenhouse gas (GHG) inventory (2000)
- Joint Tokyo Protocol (2003)
- 2009 the country released the National Adaptation Plan of Action (NAPA)
- Established the National Steering Committee on Climate Change (NSCCC) and the Technical Working Groups (TWG) established in 2008
- Clean Development Mechanism Regulation



# INITIATIVES ON ADAPTATION ACTIVITIES

- ❖ National Adaptation Programme of Action (NAPA)
  - Completed for rapid assessment on climate change adaptation in 2009.
  - Identified 4 key sectors vulnerable to climate change: Agriculture, Forestry, Health and Water Resources.
  - One project on agriculture is implementing by NAFRI and second project was submitted to GEF and expect implementation early 2013.
- ❖ National Strategy on Climate Change (NSCC)
  - Strategy approved by government 2010 focusing on Mitigation and Adaptation Option in priority sectors:
    1. Agriculture & Food security
    2. Forestry & Land use change
    3. Water Resources
    4. Energy & Transport
    5. Industry
    6. Urban Development
    7. Public Health

# INITIATIVES ON ADAPTATION ACTIVITIES

## ❖ Capacity Enhancement for Coping with Climate Change (CECCC)

Implement 4 adaptation pilots demonstration:

### ○ 2 in agriculture:

1. Increasing the Resilience of Upland Agriculture to Climate Variability and Climate Change (LuangPrabang Province)
2. Dry Season Irrigation of Cash Crops to Increase the Resilience of Lowland Farming System (Attapeu Province)

### ○ 2 in water resources:

1. Integrated Management of Fresh Flooding in Nam Po (Vientiane Province)
2. Integrated Management of Water Scarcity in HouayNam Sai (Salavan Province)

## ❖ Technology Need Assessment for Mitigation and Adaptation (TNA)

- Conduct assessment in 3 main sectors to identify mitigation and adaptation option on technology need ( Forestry, Agriculture and Water Resource)

**Building Community Resilience to Climate Change in  
Champhone District, Savannakhet Province  
Lao PDR**

**Climate Change Adaptation Demonstration Projects in the  
Lower Mekong Basin**



## Project Goal

The project goals are:

- to improve the awareness and knowledge of rural community vulnerabilities on adapting to the changing of climate and its impact;
- to enhance the community livelihood, and to feed back and extend the lesson learned from demonstration site to the up-scale.



## Project Objectives

Specification objectives for demonstration adaptation activities are as below:

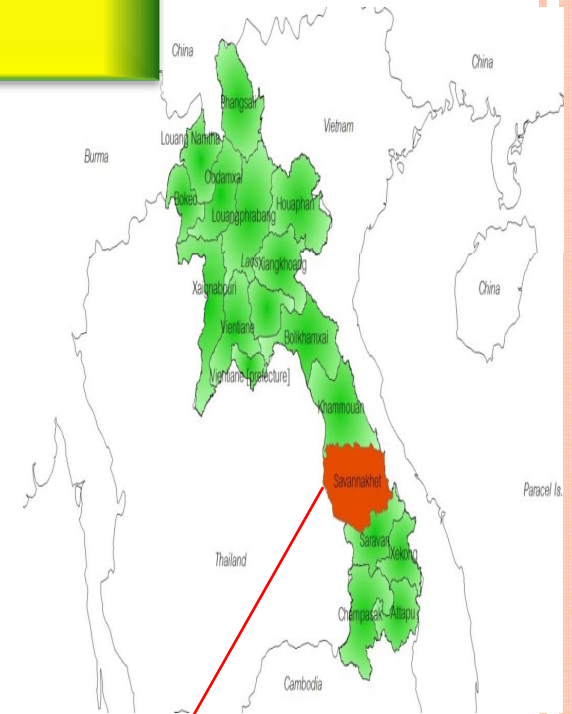
- Study of potential climate change impacts, risks and vulnerability assessment and conducting adaptation planning;
- Supporting capacity building training and climate change mainstreaming in local, provincial, and national planning;
- Raising awareness of climate change and its impacts;
- Demonstrating implementation of adaptation options.



# Demonstration Site

Champhone district has been selected for demonstration of adaptation planning based on its present vulnerability to climate change (flooding and drought)

- Area : 1, 114 square kilometers
- Population: 105,415 peoples
- Villages: 102
- Xe Champhone is the main river
- 91.5 % farmers





# Climate Change Rapid Assessment

- Kangkoknuea village : 175 household of 118 ha is effected by flooding; 115 household of 76 ha is effected by drought.
- Nakathang village: 130 household of 50 ha is effected by flooding.
- Taleow village: 98 household of 345 ha is effected by flooding.



## Risk and Sector at Risk

- Flood ( Month 8-9): Farmer in wet season, rain-fed system
- Dry spell (Month 6-7): Farmer in wet season, rain-fed system
- Low flow in dry season (Month 12 – 4): farmer in dry season, irrigated system
- Heat stress in dry season crop (Month 3): Farmer in dry season, irrigated system
- Salted soil: Farmer in dry season, semi-irrigated system (Ban Na Ka Tang)
- Sand depositing: Farmer in dry season , semi-irrigated system (Ban Na Ka Tang)



# Implementing Adaptation Activities

Introduction of flood tolerant rice varieties to farmers in Kangkoknue, Nakathang and Taleo village.

- 5 families are involved in this activity and volunteer to test the flood resistant rice in 1 ha rice field of TDK-Sub1 and IR64



## Adaptation Activities (Cont.)

Field survey and soil analysis study at silt-covered area of 18.5 ha , Nakathang village:

- Of 10 soil samples analysis for N, P, K, OM and pH and the results were found that pH 4.5-5.9 , very low quality of soil and not suitable for crop plantation.



## Adaptation Activities (Cont.)

Extension of soil irrigation channel at kangkoknue village:

- 1,000 m long
- 76 ha of rice field use water in dry season
- 65 families are involved



# Adaptation Activities (Cont.)

## Capacity Building Training on:

- Climate Change Risk Assessment Modeling and Data Input for National Officers.
- Strengthen resilience to climate change for local villagers : improvement high quality of rice production, hybridize and frog breeding, etc.



## Adaptation Activities (Cont.)

Field study to demonstration site in Thailand:

- Visited to Phonyangkam Cooperatives, Sakonnakhon Province, Inpeng Center at Ban Boua, Kudbak District, Sakonnakhon Province
- Sainawang Subdistrict, Naku district, Kalasin Province
- Ban khokkong, kuchinarai District, Kalasin Province



# Lessons Learnt From Adaptation Activities

- Understanding on climate change impacts and adaptation planning at local community;
- Assisting the district and provincial authority in preparation and development of the Action Plan.
- Up-scaling the community adaptation success actions available for the vulnerable groups;
- Capacity building: CC Adaptation strategy and actions for government officers, small-scale farmers
- Establish the farmer's adaptation learning group in community





## Challenge and Needs

- Lack of knowledge on CC impacts and adaptation , adaptation planning etc. (learning by doing);
- Limitation of scientific data and information related to climate change;

### Needs:

- Conduct more research to provide more scientific information such as agronomist to identify flood tolerance crop variety;
- Financial support for flood control system ;
- Establish group in community to improve technique / design on handicraft production & assistance in marketing;



**THANK YOU**  
**Kob Jai Lai Lai**

