

# Lao PDR's Implementation Plan input to AWCI

## Implementation proposal

## 2

### 1. Steps and Strategy following the three approaches:

#### **Framework development approach:**

- National Disaster Management Committee (NDMC) is the high level decision making body which composing of ministerial members and chaired by Vice-Prime Minister.
  - Existing developed framework and legislation tools are:
    - National Water Resources Policy and Strategy
    - National Strategy on Disaster Management
    - National Climate Change Adaptation Plan of Action (NAPA)
- It is proposed to Develop :
- (1). National Policy or Decree on Meteorology and Hydrology (Hydro-Meteorological Services Act)
  - (2). Strategy and SOP on National Early Warning Systems
  - (3). Guidelines and Procedures on Applications of AWCI over Demonstration Basin and Replication to Nationwide.



### Strategic approach

Lao PDR is willing to Input to the AWCI Phase 2 Implementation Plan:

Background.

- In Lao PDR, the implementation of the Integrated Water Resources Management strategy involved the collaboration of various sectors, especially government Departments and River Basin Committee. According to geographical features of the country, AWCI activities implementation need to be conducted at selected river basins approach which benefits to local people living over the basin, their agricultural production, national economic infrastructure, i.e. Hydropower Reservoir for management and operation of dams.
- The selected Demonstration site is Sebangfai River Basin. The Study and analysis of impacts of Climate Change for adaptation planning as well as the study and modeling of flood and drought monitoring, forecasting and early warning will respond to local and national urgent needs on disaster risk reduction and poverty alleviation. Outputs of AWCI implementation over this selected demonstration site is actually also contributed to the Mekong Regional Flood Management and Mitigation Programme and Drought Management Programme (FMMP and DMP of MRC).
- Experiences and best practices learnt from this demonstration will firstly expanded to adjacent upper basin which is the reservoir of Nam Theun, biggest hydropower of the country. Furthermore the outcomes of this AWCI demonstration studies will be replicated to other prioritized river basins over the country, i.e. first five basins during the implementation phase of 7<sup>th</sup> National Development Plan (up to 2015).



### **Technical approach**

It is proposed that the AWCI expert mission to visit Lao PDR for inspection demonstration site, conducting detail design of activities and convene the meeting on awareness and consultation with collaborated agencies. Requirements on technical issues for AWCI activities on demonstration target of Lao PDR should include followings:

1. Detail design to fit AWCI activities and also match national and regional programs;
2. Consultation & Inception Workshop for awareness and transparency
3. Establish adequate automated & telemetry observation station network for rainfall, climate, water level, stream flow and weather.
4. Data collection and Bias correction, through specific trainings
5. Climate Change Assessment and Model testing, downscaling to national and basin's area
6. Flood and drought Modeling, testing and operational application, consistency with relevant MRC's key tools
7. Mainstreaming in to National Early Warning Systems, Disaster Management and Climate change Adaptation Plans of Actions



- Mainstreaming water and climate change within the national policy by getting supports from water nexus.

There existed the National Strategy of mainstreaming Disaster Management and Risk Reduction strategy into the National 7<sup>th</sup> Five Year Economic Development Planning collaborating with Ministry of Planning and Investment (MPI). Also the National Strategy on Early Warning System has been under adoption and endorsement process. It is proposed to merge and mainstream the Demonstration Outputs to the existing national strategies and action plans.

## 2. Suggestion of Potential Collaborators

Collaborators ----- Field	Local	National	Regional	Worldwide
Research	None	National University	None	None
Operation	Provincial authorities	Departments under MoNRE and concerned stakeholders	MRC RIMES	WMO UN-ESCAP GEOSS/AWCI
Administration	Provincial Departments of Natural Resources and Environment	MoNRE and concerned Departments		
Financial res.	None	National Counterpart in-kind Contribution	ADB World Bank MRC' s Programmes	GEOSS/AWCI JICA
Human res.	Provincial Staff Hydro-Met Division	Staff of Departments under MoNRE	Experts from AWCI	



### 3. Specific request to GEOSS and to international community (data/tools accessibility)

- Need assistance to establish an Office as centralized national GEOSS/AWCI database on climate, water, weather including metadata with the service dissemination network accessible to all national agencies and requested users. This center is the hub to link with regional GEOSS/AWCI Data servers.
- Need authorization to access data server of GEOSS/AWCI, real time satellite imagery receiving systems, satellite data in concerned portals.
- Need provision and training of following Models for operational application:  
Climate Prediction downscaling Model, Climate Analysis and Risk assessment Models, Flood forecasting models, Flash Flood Guiding Systems Model, Drought Analysis and Prediction Model.

### 4. Coordination between water cycle integration and capacity development strategy

The urgent and essential needs for capacity development in Lao PDR are both levels of practitioners and researchers.

- Related to these items below, prioritized needs are as follows:

- Short term capacity development workshops on specific observation and modeling skills and medium to long term supports from regional resource centers:
  - Climate
  - Water
  - Weather
- Synchronize capacity development with national implementation programme coordinated by the regional programme.
- AWCI to match National Integrated Water Resources Management Programme and coordinated with MRC's FMMP, IKMP, DMP programmes
- Coordinate with national and regional centers of excellence , such as Natural Resources and Environment Research Institute of MoNRE, WMO's SWFDP Center in Hanoi, Vietnam, MRC's RFMMC in Phnompenh, Cambodia, and Regional Integrated Multihazard Early Warning Systems (RIMES)'s Center for Asia and Africa
- Training for not only researchers but also practitioners from top level to operator/technician's level, with appropriate standards depending on the level (various kinds of training) including trainer's training to be followed by practice and identify it as a postgraduate program in collaboration with Universities in Japan, such as Tokyo University, JAXA, JMA, ect..., as well as education institutes of neighboring countries, such as Thailand, Vietnam and other ASEAN member countries.