



# Disaster Risk Reduction in Lao PDR

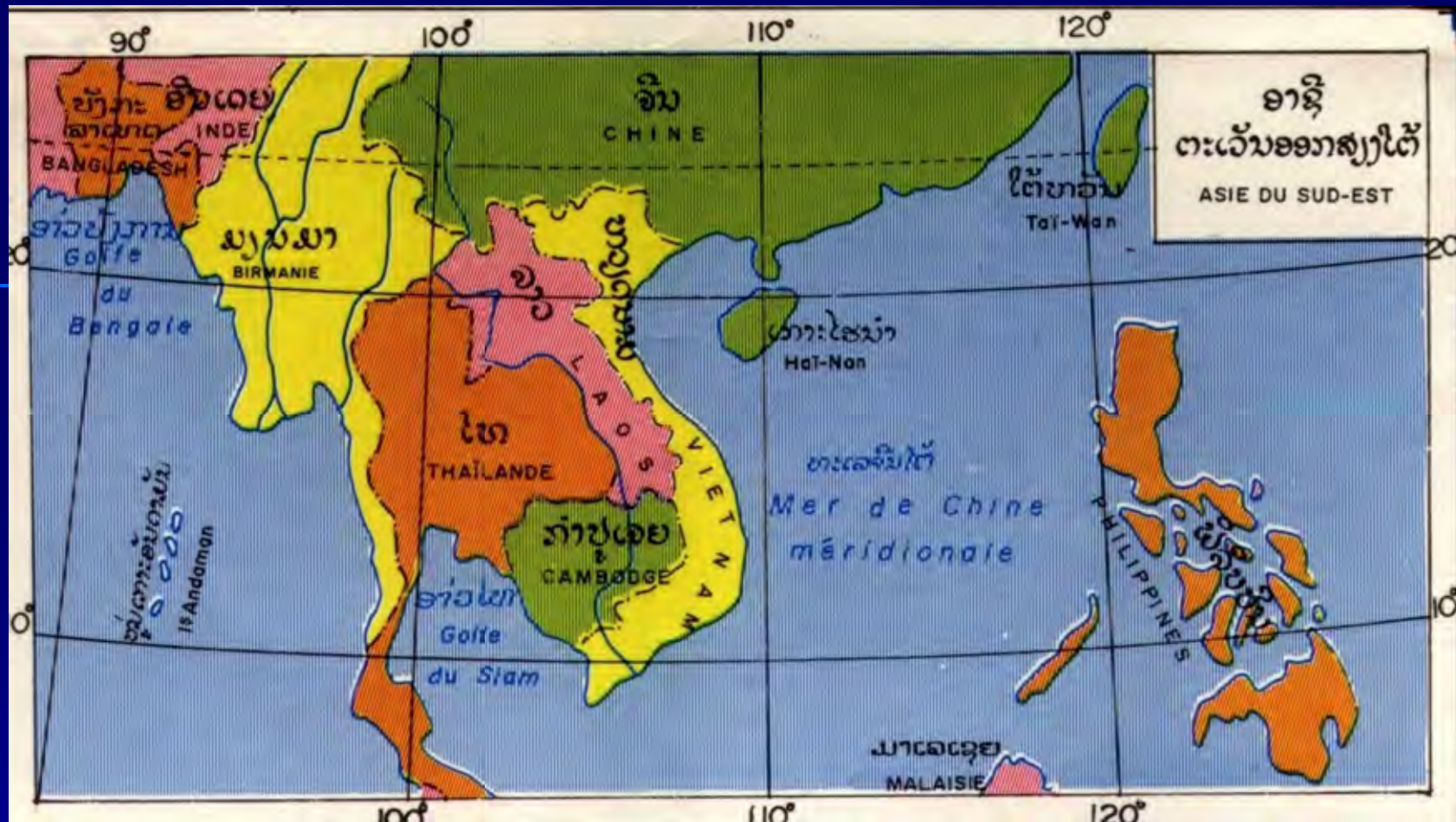
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# Overview

- \* **Country Profile**
- \* **Hazards and Disasters in Lao PDR**
- \* **Government Policy on DRM**
- \* **Good Practices on DRM**
- \* **Lesson Learned**
- \* **Conclusion**



- **Population of 6 mil (2006 est)**
- **Capital City – Vientiane**
- **Land area of 236,800 sq. km.**
- **Covered by forest 46%**
- **Mountainous 70 %**

**Two Seasons: (Dry and Rainy)**

- \* Dry: Mid October to Mid April with low humidity and temperature (Northeast Monsoon Effect).
- \* Rainy: Mid May to Mid October with heavy rainfall and high humidity (Southwest monsoon).
- \* Annual rainfall ranges from 1,400 – 3,500 mm.

# Hazards and Disaster in Lao PDR



In mountainous areas, flash floods washed away paddy fields and destroyed irrigation systems.



## Natural Disaster:

**Flood ( river flood and flash flood)**  
**Drought**

**Local Storm ,**  
**Hail**

**Tropical Cyclone, Southwest**  
**Monsoon,**  
**Landslide**  
**Birth flu**

**Earthquake**  
**Epidemic (human and animal**  
**Disease) Pest**

## Man-made

**UXO**  
**Fire**  
**Road Accidents**



Agriculture was badly hit with many farms flooded.





**Severe flooding has occurred in 1966, 1976, 1978, 1995, 1996 and 2000.**



## Flood 2008:

- Provinces affected 11
- Districts affected 53
- Villages affected 865
- People affected 204,199
- Rice fields damaged 75,000 Ha
- **13 people dead**





**In mountainous areas, flash floods washed away paddy fields and destroyed irrigation systems.**



Livestock sought an escape from hunger and disease on higher ground.





While some families had time to protect their stored food from the flood waters...



Agriculture was badly hit with many farms flooded.



**Much of Laos' most productive agricultural land will lose at least one harvest.**

# National Disaster Management Framework in Lao PDR

## ■ **Legal Framework**

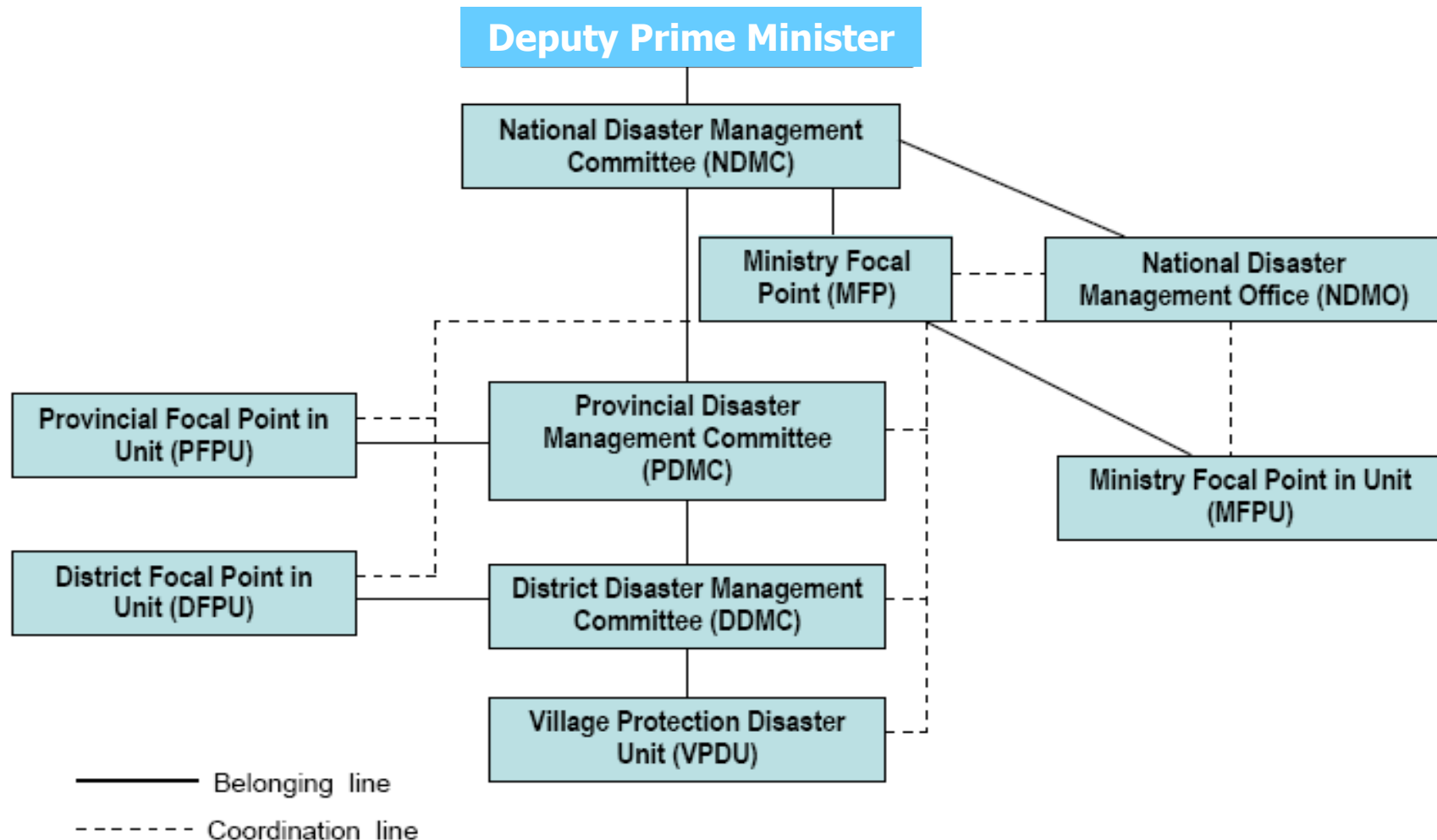
- **National Disaster Management Committee**
- **National Disaster Management Office Provincial**
- **Disaster Management Committee District**
- **Disaster Management Committee Focal point at all levels**
- **Strategic Plan on Disaster Risk Management**

# Disaster Management Institutions

- *The NDMC consisting of representative from 12 key ministries and Lao Red Cross:*
  - **Minister of MLSW** **Chairman**
  - **Vice-Minister of MAF** **Vice-Chairman**
  - **Chief of Cabinet of MFA** **Vice-Chairman**
  - **Chief of Cabinet of MOD** **Member**
  - **Chief of Cabinet of MOI** **Member**
  - **Chief of Cabinet of MOE** **Member**
  - **Director of Budget Dept. MOF** **Member**
  - **Director of Transport Dept. MCTPC** **Member**
  - **Director of Industry Dept. MIH** **Member**
  - **Director of Hygiene Dept. MOH** **Member**
  - **Director of Mass Media Dept. MIC** **Member**
  - **Director of Social Welfare Dept. MLSW** **Member**
  - **Chairman of Lao Red Cross** **Member**

# National Disaster Management Framework

## The NDMC Diagram



# Policy-Strategy Aims:

- Safeguard sustainable development and reduce the damage of natural or manmade disasters to community, society and country economy.
- Shift strategy from relief and mitigation after disaster impact to community, society and economy of government organizations to preparedness before disaster strike emphasizing on flood, drought, landslide and fire parallel with continuing mitigate in post disaster period.
- Turn from responsibility of only government agency to people centered in dealing with disaster by building capability for community
- Promote forever protection of the environment and country natural resources rich such as: forest, land and water.

# Partnership and Cooperation on DRM

## Within the Country:

- UNDMT, IASC.
- UNDP, WFP, UNICEF, UN Avian Influenza Coordination, MRC
- Oxfam Aus, WVU, Care International, CWW, SCA,

## Outside the Country:

- *ACDM (ARPDM, AADMER).*
- UNOCHA, UNDAC, UNISDR, UNESCAP, ADPC, ADRC, JAXA,



# Programs and Activities on DRM in Lao PDR

- In implementing National Strategy, NDMO has initiated, persuaded and helped to insert and integrate DM concept and main ideas of CSN into sector's works and projects
- Building strong Network with country's stakeholders and partners
- Actively participated in ARPDM (ASEAN), regional and international activities on DM
- Working very closely with UN Agencies, InterNGOs, NGOs and others.....

# Capacity Building



## Training courses:

- Basic on DRM for DM committee at all levels.
- CBDRM for DDMC and Village DM Units.
- DRR for specific sectors such as: police, army, teachers, health, mass media, fire prevention dept., women union.
- Other specific courses such as flood preparedness planning, etc...



# Public Awareness and Education

- ❑ **Celebration of ASEAN Day on DM and International Day on DR 10 Oct.**
  - ❑ Meeting and Walking for health.
  - ❑ Advertising through media means: Radio, Newspaper, TV.
  - ❑ Pictures exhibition, questionnaires and fire fighting simulation exercise.
  - ❑ Banner posting along the major road in Vientiane Capital.



# Raising Awareness on DM for School Children

Fire Drill exercise



Teaching on DM in primary school



# Disasters Preparedness and Mitigation Activities



# Flood Preparedness Project Nongbok, Khammouane province

- ❑ Publish Training Manual on Flood Preparedness in Lao language and distributed
- ❑ Conducted one Provincial Training Course on Planning and Implementation of Flood Preparedness Program for Khammouane PDMC
- ❑ Preparation of Flood Preparedness Program in Khammouane Province and Nong Bok district
- ❑ National and Regional Experience Sharing Workshops



# Mainstreaming DRM into School Curriculum

- Implementing the project on Mainstreaming Disaster Risk Reduction into Education Sector in Lao PDR, project cooperative with ADPC. The project theme is to:
  - Incorporate DRM modules into the school curriculum.
  - Construct all new schools located in hazard-prone areas to higher standards of hazard resilience.
  - Add features in schools in hazard prone areas for use as emergency shelters such as facilities for water, sanitation and cooking.



# Up Coming Projects (2007 - 2011)

- **Under the LANGOCA PROGRAMS:**
- **Cooperation with SCA, ADPC, WVL and Oxfam Aus:**
  - **SIHMP - Sayaboury Integrated Hazard Management Program (Long Term)**
  - **TDRA - Tools for District Risk Assessment (Short Term)**
  - **DREC - Disaster Risk Education for Children (Short Term)**
  - **CBDRR project (Long Term).**
  - **Remote Areas Disaster Risk Reduction Project (Long Term).**





# Lesson Learned

- The structure of disaster management system is created from central to local and village level .
- The implementing of DRM activities, **we have paid more attention on building strong partnerships** at internal and external particularly the **disaster management network**.
- Currently the community at the hazard prone areas is regularly received needed information on disaster risk reduction counter measures to cope with disasters but it requires more expanding to wider areas, **particularly to remote areas**.
- Still many **provincial disaster management committee** (PDMC) and its contact persons **have not been well trained** and **unclear on their roles and responsibilities in disaster management**, district committee on DM, and village disaster protecting units **have not improved** and created, especially, the provinces where disaster management project is not functioning.

# Conclusion

- Disaster Risk Reduction is **essential** and **priorities** to the **national development plans** and programs.
- Current systems and initiatives on DRM need to be **enhanced and strengthened**.
- **Building community** disaster preparedness and response capacity are particularly **important**.
- Government and non-government alike **work together with clear goals, roles** and designated responsibilities.
- Partnerships and linkages with the international community should be pursued **to ensure a rapid and substantive response in the event** of a major disaster that overwhelms Lao PDR' capacity.
- **Training is an important aspect of disaster preparedness**; as such it should be carried out at every level in a coordinated, standardized and consolidated manner, utilizing the considerable experience and expertise readily available in-country.
- **Strategies** prioritizing the acquisition and upgrading of current equipment will **need to be developed**.

# Climate Change Adaptation in Lao PDR

Water Resources and Environment Research Institute, WREA

April, 2009

## Environment and Social impacts

- Average river runoff and water availability are projected to decrease by 10-30% over some dry areas; drought-affected areas will likely increase in extent; heavy precipitation events, which are very likely to increase in frequency, will augment flood risk
- Affect the health status of millions, those with low adaptive capacity (increases in malnutrition and injury due to heat waves, floods, storms, fires and droughts)

## Government Efforts

- Ratified the UNFCCC in 1995 and Kyoto Protocol in 2003
- Inter-agency National Steering Committee on Climate Change was set up in 2008
- Submitted Initial National Communication (INC) in 2000
- In the process of preparing the Second National Communication (SNC), completion by 2011

## Government Efforts (Cont'd)

- National Adaptation Plan of Action (NAPA) was released in April 2009
- CDM decree was proclaimed in 2008
- National Climate Change Strategy and Action Plan (upgrading the policy and institutional framework, by strengthening mitigation and adaptation actions by forging closer relationships with international partners)

# Climate Change Priority

NEC

WREA

DoE-UNFCCC Focal Point

## Adaptation

### NAPA

Key impacts:  
flood & drought  
46 pp, 4 Sec:  
1. Agriculture  
2. Forest  
3. Water Res.  
4. Pub. Health

Follow Up phase

## Mitigation

### CDM

- Drafted regul.
- Established DNA
- Energy eff. at Beer Lao factory is the first CDM

Energy efficiency  
Promotion  
activities

### NCSA:

- UNFCCC
- UNCBD
- UNCCD

### SNC:

GHGI  
V&A  
Mitig.  
Scenario

## Government Policy

NSCCC

WREA

## NSCC Secretariat-DoE

1. National In-dept Study on CC impact in 8 focal areas
2. Drafting three doc.:
  - National Strategy on CC up to year 2020 (end of 2009).
  - Interim Plan for 2009-2011
  - First National Action Plan for period 2011-2016 aligned with the 7th National Socio-Economic Development Plan

WG 1: Agriculture

WG 2: Forest

WG 3: Energy

WG 4: Hydrology

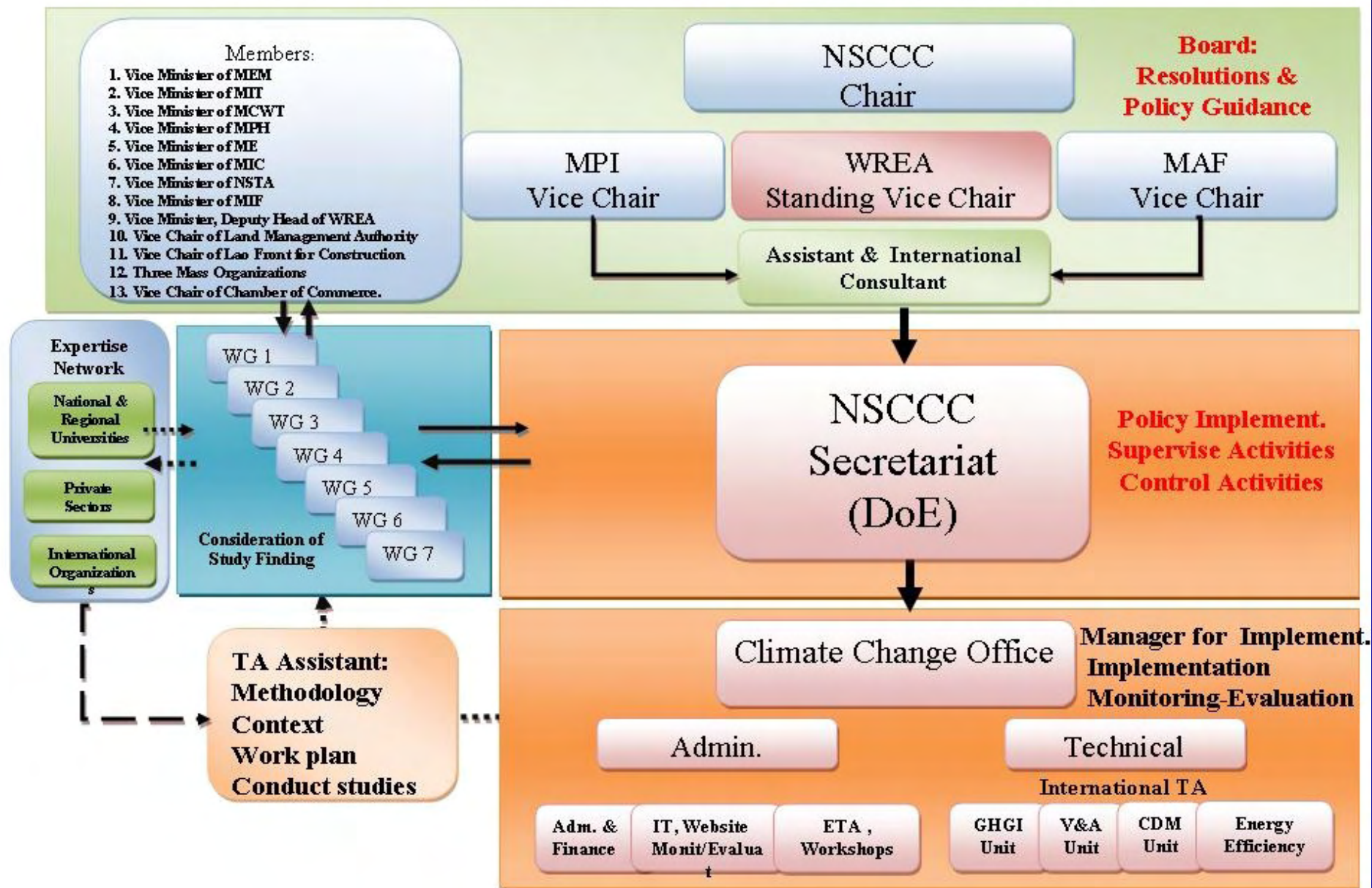
WG 5: Industry-urban

WG 6: Economy

WG 7: Financial

# Proposed Institutional Arrangement for Climate Change, Lao PDR

DRAFT Oct. 08











## Climate change as a new development challenge

- Long term National Development Goal: 1) Moving consistently towards a market-oriented economy; 2) Building up the needed infrastructure throughout the country; 3) Improving the well-being of the people through greater food security and extension of social services;
- To date there has been limited assessment, analysis or prediction of the potential impacts of climate change on physical and social environment , long term climatic data do not exist

## Climate change as a new development challenge (Cont'd)

- Evidence has shown that the dry season is becoming longer, droughts are more frequent and severe, unusual and extreme flood events is increasing
- Flood in August 2008, over 200,000 people were affected, 75,000 ha of agriculture land were submerged -> crop losses on 50,000 ha of land
- 80% of Lao population, which live in rural areas will have serious consequences

# Mitigating

- GHG emission
- Agriculture
- Land use change and forestry
- Energy
- Industrial processes
- wastes

# Adapting to Climate Change

- NAPA (supported from GEF, UNDP)
  - agriculture,
  - forestry,
  - water resources,
  - human health

LAO LADY'S DRESS



-๐®Ã¥ Khob chai Thank You