Water Resources Management in Lao PDR

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Department of Water Resources
I. Overview-Water Resources in Lao PDR

- Lao PDR is located in South-East Asia with total land area of 236,800 km², approx. population 6.49 mill. (2015);
- 90% of the country territory is located in the Mekong Basin
- Water resources per capita is around 55,000 m³ per year;
- 35% of annual flow (or equal 270,000 mil. m³) in Mekong flow is from tributaries in Laos;
- The monthly rivers flow by the pattern of rainfall is around 80% (flood season) during the rainy season and 20% (drought season) in the dry season.

Lao PDR has abundance of water resources which there are total 62 river basins.
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<td>- Traditional management/practice</td>
<td>- Water and water resources law, 1996</td>
<td>- IWRM principle introduced</td>
<td>- Ministry of Natural Resources and Environment established 2011 (Dept of Water Resources)</td>
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<td>- No clear institutions and specific legislations on IWRM</td>
<td>- Mekong Agreement 1995</td>
<td>- Water Resources Coordination Committee and its secretariat established</td>
<td>- Water &amp; water resource law revised &amp; approved (May 2017)</td>
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<td>- Local knowledge and some regional and international applied</td>
<td>- Water Resources and Environment Agencies established 2007 (including Department of Water Resources)</td>
<td>- Water Resources Sub-sector working group established</td>
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<td>- Integrated River Basins Planning</td>
<td>- Expand IWRM into 10 priority river basins</td>
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<td>- Local knowledge + regional + international experiences</td>
<td>- Technical guidelines developed</td>
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<td>- Up scale local knowledge + regional + international experiences</td>
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IWRM application in different river basin scale in Lao PDR

**Geography**
- Mekong Basin
- Lao PDR
- Nam Ngum RB
- Nam Ngum sub-basins
- Watersheds/Catchment

**IWRM instruments**
- Mekong IWRM Strategy 2020
- Mekong IWRM-based BDP
- River Basin Management Strategy 2030
- Nam Ngum River Management Plan 2016-2020
- Nam Ngum sub-basin plans (as e.g. Nam Xong and Nam Lik)
- Integrated Watershed Management Plans (as e.g. Nam Po)
II. Achievement and Progress

- Water & water resources law and 8 legislations
- Water strategy 2025 and action plan 2020

Developing 9 technical guidelines, eg. River basin planning

IWRM applied in river basins and sub-basin (profiles & integrated plans, WR modeling being developed & implemented)

Groundwater:
- Conduct GW assessment/profile
- Action plan 2020 developed
- Pilot in major basins

Financial mechanism:
- Water use fee put in the Presidential Ordinance 001, in 2015

SDG 6

IWRM Demonstration Site
Training and awareness raising on IWRM

River basin atlas
62 basins, WR database (LaoWIS)

National green growth development policy is implementing

IWRM Curriculum developed – Bachelor and Master degree
III. Problems and Challenges
Challenges

**Agency Coordination**
- Institutional arrangement & establishment – need to strengthen cross sector collaboration;

**Financial Sustainability**
- Limited financial support & sustainable mechanism – equipments, tools...

**Legislation**
- Legislations, guidelines need to enforce and implement

**Human Resource Development**
- Limited capacity of concerned staff on RB planning & management + public awareness & local participation on IWRM. – thus need to strengthen staff capacity and more on-the-job training, etc.

**Data & Info**
- Lack of efficient & accurate WR data & information
IV. Way Forward

To address those challenges....we have to implement Natural Resources and Environment Sector Vision towards 2030

“Keeping Lao PDR Green, Clean and Beautiful based on green economic growth, to achieve sustainable development toward industrialization and modernization and to ensure the resilience to climate change impacts and disaster risks”

Draft Water and Water Resources Management Strategy 2030
Water and Water Resources Management
Strategy Programs

1. Protection
2. Development
3. Disaster Risk
4. Institutional Arrangement
Thank You