



Water Resources Management in Lao PDR

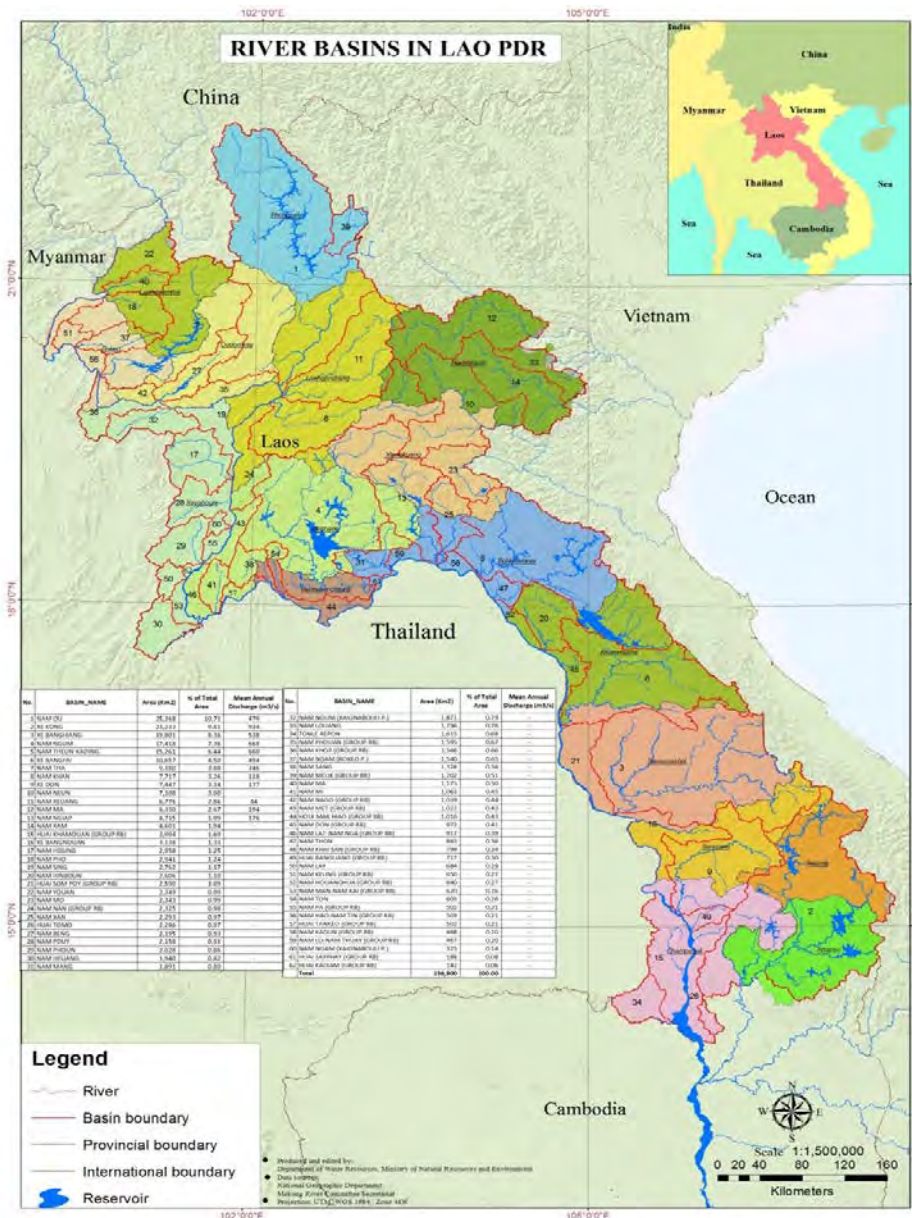
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Yangon, Myanmar, 13 December 2017

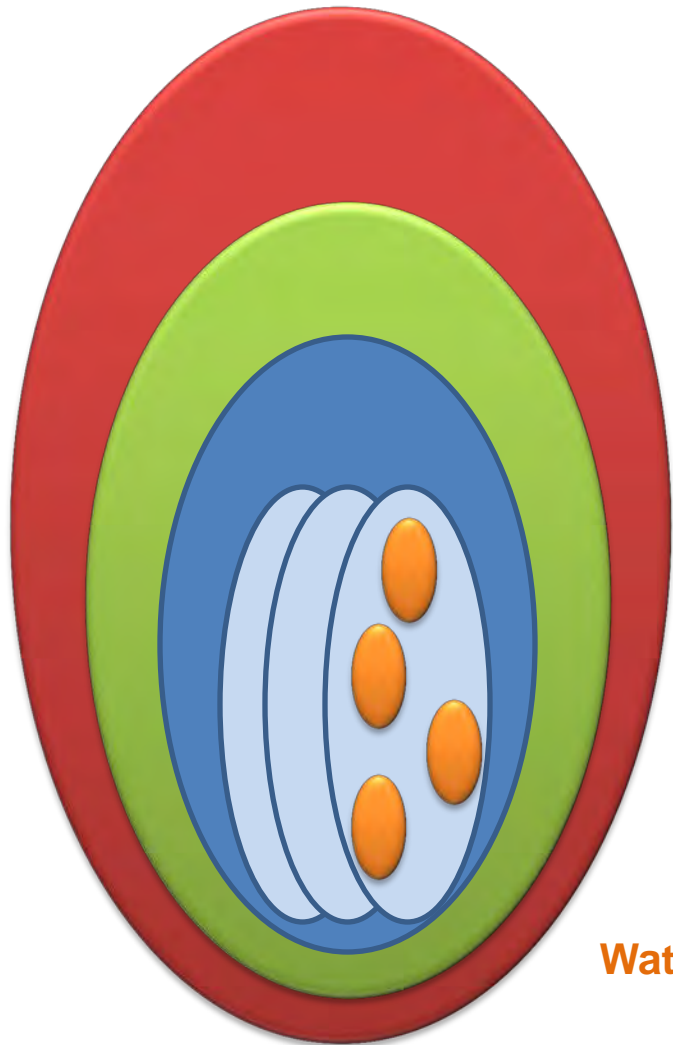
Overview-Water Resources in Lao PDR

- Lao PDR is located in South-East Asia with Area of 236,800 km², approx. 6.49 mil. People (2015);
- 90% of the country are 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 is from Lao tributaries;
- 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 sub-river basins**.



IWRM application in different river basin scale in Lao PDR



Geography

IWRM instruments

Mekong Basin

**Mekong IWRM Strategy 2020
Mekong IWRM-based BDP**



Lao PDR

**National Water Resources Strategy
2025 and Action Plan 2016-2020**



Nam Ngum RB

Nam Ngum IWRM Plan 2016-2020



Nam Ngum sub-basins

**Nam Ngum sub-basin plans
(as e.g. Nam Xong and Nam Lik)**



Watersheds/Catchment

**Integrated Watershed
Management Plans (as e.g. Nam
Po)**

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)

water quality monitoring – 180 sample points (incl. pollution control – industry, pesticide)

IWRM

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

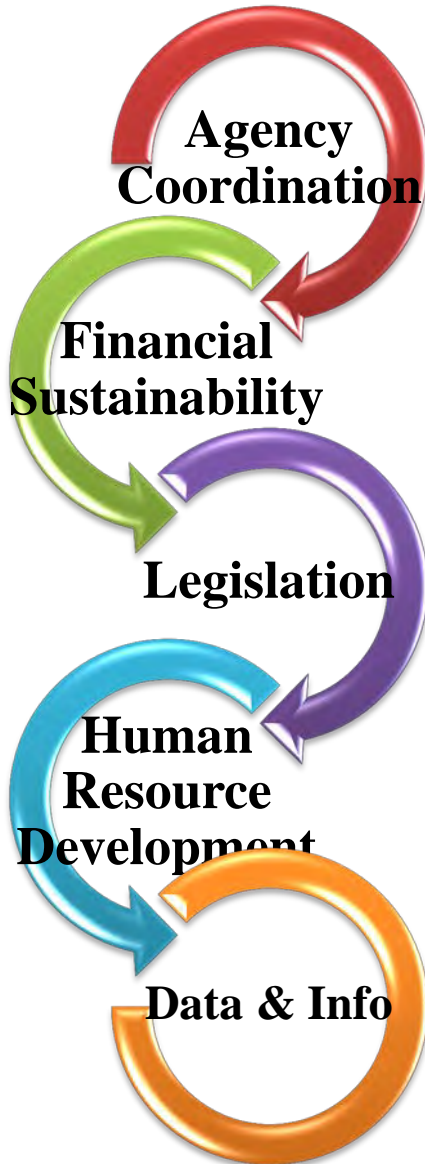
River basin atlas
62 basins, WR database (LaoWIS)

National green growth development policy is implementing

IWRM Demonstration Site Training and awareness raising on IWRM

IWRM Curriculum developed – Bachelor and Master degree

Challenges



Institutional arrangement & establishment – need to strengthen cross sector collaboration;

Limited financial support & sustainable mechanism – equipments, tools...;

Legislations, guidelines need to enforce and implement

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.

Lack of efficient & accurate WR data & information

Water Resources Action Plan 2016-2020

1. **Formulate/update and implement legislations – such as water & water resources law, meteorology and hydrology law, related regulations, technical guidelines**
2. **Develop/implement river basin management plans in the 10 priority basins (plus 52 RBs)**
3. **Water quality monitoring and management – 200 sample points & WQ assessment in RBs**
4. **Conduct groundwater assessment (national GW profiles) & implement National Groundwater Action Plan 2020**
5. **Flood control and drought/water scarcity mgt. & mitigation (*all basins*).**
6. **Develop water resources database, network, inventory, and modeling; - *link national to local levels.***
7. **Establish a national IWRM demonstration site for public awareness and education**
8. **Develop and implement wetland management plans and RAMSAR convention;**
9. **Update IWRM (Bsc & Msc) curriculums in cooperation with the universities;**
10. **Study and develop the scope for research on the hydrological, physical, chemical and biological characteristics of water bodies**
11. **Strengthen water resource sector in water resource management**
12. **Manage water resources for impact mitigation and adaptation to climate change**
13. **Strengthen financial capacity in the integrated water resource management**
14. **Capacity building and awareness raising with gender mainstreaming and participation of all stakeholders**

Thank You Very Much!



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