



European Project
EUWI-ERANET



6th Framework
Programme



MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND

**The Research and Knowledge Transfer and Capacity
Building Programs on Assessment of Water
Availability for hydropower development and effects
of climate change on Hydropower, water footprints of
hydropower generation in the Lower Mekong Basin**

REVIEW

**Key findings from Lao PDR
A study made by
Associate Professor Souphab Kuoangvichit
Dean
Faculty of Environment
National University of Laos**



Summary of key findings

Research on Hydropower and sustainable development in Lao PDR:

Summary

The National University of Laos is under the direct responsibility of the Ministry of Education (MOE), consisting of 11 faculties. It is classified in the level 5 (tertiary education) of the education system of the Lao PDR shown below:

- | | |
|------------------------------|------------|
| ○ Primary | 5 years |
| ○ Lower secondary education | 3(4) years |
| ○ Upper secondary education | 3 years |
| ○ Post - secondary education | 1-2 years |
| ○ Tertiary education | 3-7 years. |

Other research and education institutes are Savannakhet Teacher Training College, Laovieng College, and Earth Systems Lao (ESL). Research, knowledge transfer, and capacity building within educational institution (both public and private) in hydrology, water and water-hydropower related subjects are offered only at a few faculties of NUOL. Within NUOL, the faculty of environmental sciences, the faculty of engineering, the faculty of social sciences, the faculty of sciences, the faculty of forestry, and the faculty of agriculture offer courses on hydrology and water resources with different focuses and objectives. Thus the contents (syllabi, course description) are usually different such as: Water Resources and environment, Integrated Watershed Management, Hydrology. Besides NUOL, research, knowledge transfer and capacity building programs are done by the private company, Earth System Lao, whose expertise and experience concerning water and water related topics are illustrated in the list of recently completed or ongoing projects in the full review.

Discussion:

The educational institutions as a whole (universities, colleges, public and private) are considered as the proper place for research and knowledge transfer, and capacity building. The desk study demonstrates that understanding and awareness of issues on water and water-hydropower related topics are questionable among those practitioners and decision markers. It might be said that water availability is quite well perceived, but water foot prints, water-hydropower development linkage, effects of climate change on water are unclear to many people. Training program organized with specific focuses may improve the situation of lack of knowledge, but to shift to the regional scientific arena, priority should be given to educational institutions by technical and/or expertise assistance. This may be the sustainable ways of dissemination of research results, knowledge transfer and capacity building.

Recommendation:

Information network and sharing are needed to be established along with the improvement of keys factors for the advancement of sciences and technologies, of which the outputs are the research results, courses development, materials and tools created. Throughout that approach research results, as for an example, will be discussed and presented **widely** among interested individuals to groups at all level: academia, practitioners and decision markers. In searching for promoting best practices, pilot and/or demonstration project is the most practical.