



Learning from our activities

Coordination of Research on Hydropower Development in the Lower Mekong Basin

Introduction

Hydropower is the most important energy source in the Mekong region. It is estimated that 30,000MW of the 53,000MW total potential capacity is within the Lower Mekong Basin (LMB) (MRC, 2010). Although hydropower is a clean energy source, it can have negative impacts on the environment, on health and society.

The Ministry for Foreign Affairs of Finland supported SPLASH partners - DWF, NVE and SYKE - working with local partners, to investigate the status of research, knowledge transfer and capacity building at the academic level on hydropower development within Cambodia, Lao PDR, Thailand and Vietnam. Focus areas were:

- the educational and research capacity in hydropower development (and related disciplines);
- existing knowledge, tools and methodologies for sustainable private sector involvement, including national legislation, Public-Private Partnerships and corporate social responsibility; and
- the interaction between the research and development communities active within the sector.

To improve knowledge of planning tools such as multi-criteria decision analysis (MCDA) an online questionnaire and interviews on hydropower development in the LMB were carried out and results presented at a workshop.

Rationale

A key objective of SPLASH is to understand good research management practice and ensure that this is both known and used. SPLASH findings show the critical importance of effective engagement with key stakeholders throughout the research process in order to make sure that research responds to articulated demand and also that results are communicated to, and understood by, those who will use them. A further objective seeks to improve coordination between ongoing research initiatives in order to minimise duplication and promote potential synergies.

Mekong River Commission data from 2008 indicates that 135 schemes above 10MW are operational, under construction, or planned within the LMB. Responsible hydropower development requires collaboration between various disciplines, and must manage the needs and interests of different stakeholders in a fair and transparent way. The synthesis of current research and pedagogic capacity in the sector, and an initial attempt at coordination between stakeholder groups was therefore considered to be a good 'fit' with SPLASH objectives.

Resources

A Regional Workshop for Coordination of Research on Hydropower Development in the Lower Mekong Basin took place in Vientiane, Lao PDR in September 2010. This was to share knowledge and develop recommendations, to establish links and initiate coordination among sector stakeholders. It was hosted by the Mekong River Commission and funded by the Ministry for Foreign Affairs of Finland. There were 58 participants, mainly from the four LMB countries, Cambodia, Lao PDR, Thailand and Vietnam, with a small number from Europe, Australia and Africa. 17 presentations were made by participants from different groups of society, including NGO's, academics, and practitioners.



What have we learnt?

The majority (74%) of future hydropower schemes larger than 10MW are planned to be in Lao PDR; a further 10% are planned in both Cambodia and Vietnam. There are no future hydropower projects planned for Thailand.

The Mekong fisheries are also important as a source of protein and food security to many in the region. The river also bestows other important benefits, including navigation and agriculture.

All countries in the LMB need to increase knowledge of physical, environmental and socio-economic impacts of hydropower as well as climate change.

Capacity and skills in Integrated Water Resource Management (IWRM), hydropower and related environmental and social disciplines are very weak in Cambodia and Lao PDR, and these subjects are not included in local tertiary curricula. This hinders local planning and control in hydropower development. Whilst curricula in Thailand and Vietnam are comparatively strong, decision-making tools to assist in the evaluation of alternative resource management strategies, or cost benefit analysis remain weak.

Private sector involvement is vital as private developers are key actors for hydropower and for economic and social development; however linkages between researchers and the private sector are weak within hydropower development.

Interaction and coordination among stakeholders involved in hydropower development within the region are limited.



Recommendations for the future

There is significant hydropower development planned in both Lao PDR and Cambodia, yet both countries lack the technical skills and capacity to support this development locally. Technical skills and expertise are however available within the region. Intra and inter-regional support to develop and strengthen curricula between universities could help to address this capacity gap, potentially through fellowship and exchange efforts.

The impacts of hydropower to environment, society and health are little understood. Multi disciplinary research in these areas, including the use of decision support tools could help the development of this knowledge base. This should include and promote participatory planning and working methods to further develop collaborative relationships between sectors and stakeholder groups.

There is a need to improve coordination of a currently fragmented knowledge base within the region.

Further information and presentations from the workshop are available here:

www.splash-era.net/news_events3



Further information

This is one of a series of SPLASH learning notes available on the SPLASH website www.splash-era.net

If you would like to receive the quarterly SPLASH newsletter 'Making a SPLASH' please go to www.splash-era.net/enquiries

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