LMI: Strengthening Water Resources Planning in the Mekong Basin

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BACKGROUND
The Mekong basin is the world’s most productive inland fishery, accounting for up to 25 percent of the global freshwater catch. The confluence of rivers in the area provides vital food security and livelihoods for over 60 million people in four countries situated along the basin—Cambodia, Laos, Thailand and Vietnam. At the same time, the Lower Mekong Basin (LMB) is one of the world’s most active regions for hydropower development. As new dams are being planned on the Mekong River, water resource needs for agriculture, irrigation, flood management and navigation must be considered.

Water resources planning in the LMB is a highly complex and complicated issue. The governments of countries along the LMB face a major challenge in making decisions about hydropower development based on multiple competing water uses, costs and benefits, as well as the economic, environmental and social impacts of projects on the livelihoods of millions of people. As an advisory body to the LMB governments, the Mekong River Commission (MRC) promotes coordinated water resources development by using the principles of Integrated Water Resources Management through its Basin Development Plan.

APPROACH
Participating Countries: Cambodia, Laos, Thailand, and Vietnam

Through the Environmental Cooperation - Asia (ECO-Asia) project, USAID works to strengthen the capacity of the MRC and the LMB governments to develop and improve planning tools, while adopting innovative analyses and approaches for improved water resources planning. The USAID-supported ECO Asia project is a seven-year effort which began in September 2005.

REPORT EVALUATING BASIN PLANNING
In February 2011, through the ECO-Asia project, USAID commissioned Portland State University (PSU), in collaboration with Mae Fah Luang University in Thailand, to produce a report on water resources development in the LMB.
The objective of the report was to demonstrate relevant approaches such as how to address risk and uncertainty in cost-benefit analysis for hydropower projects, and to drive new techniques to better address these gaps in the MRC’s Basin Development Plan.

**Major report findings:**

- Risk and uncertainty can be addressed by using enhanced analytical techniques, as well as a broader set of assumptions for the cost-benefit analyses.

- By changing only a few key assumptions in the original Basin Development Plan analyses – e.g., assigning higher values to lost ecosystem services including fisheries and wetlands, and reduced capacity of aquaculture to replace river fish catch – the estimated benefits from proposed development projects for the Mekong basin, including hydropower dams, could change from highly positive outcomes to largely negative ones for countries in the basin.

The report findings reaffirm the need to better address risk and uncertainty in the context of water resources planning, especially with regard to hydropower in the LMB. Based on the findings, the report calls for a precautionary approach for the LMB and provides recommendations on how MRC planning efforts can be improved by incorporating the new approaches.

Since its release in July 2011, the report has been widely quoted by organizations and practitioners, making a strong impact in the policy debate on hydropower development in the LMB. The report has been widely disseminated via PSU’s website, and is available at http://pdx.edu/sustainability/lower-mekong-report.

Apart from raising awareness among many stakeholders, the report also generated interest from the MRC to further collaborate with USAID on innovative approaches for scenario assessment and integrated planning. In June 2012, building on the findings of the PSU report, USAID organized a workshop in Bangkok, Thailand on scenario planning for the MRC and the Mekong National Committees, bringing in the relevant technical expertise from the U.S. Army Corp of Engineers.

**PARTNERS**

**Implementing Partner:** AECOM International  
**Cooperating Partners:** Portland State University, USA; Mae Fah Luang University, Thailand