By: Dr. Richard J. Frankel, 3 June 2017

Economic Evaluation of Hydropower Projects in the Lower Mekong Basin

We would much appreciate your consideration of the following recent paper which can be downloaded as PDF using the link below – Economic Evaluation of Hydropower Projects in the Lower Mekong Basin. The paper focuses on economics and the main findings are:

1. The overall economic impact of planned mainstream Mekong hydropower projects would be negative mainly due to the economic value of capture fisheries loss being much larger than benefits from hydropower electricity.
2. The current value of Mekong capture fisheries is approximately $8 billion/year. A small percentage reduction (say 1%) in capture fisheries due to mainstream dam barrier effects would result in a Net Present Value of minus $800 million.
3. Social mitigation costs and environmental costs, including the forecast loss of sediment/nutrients, also have a significant negative economic impact.
4. The economic impact of planned mainstream projects on Lao PDR and Thailand is forecast to be positive, with Thailand being the main beneficiary. Vietnam and Cambodia are forecast to suffer large negative economic impacts.

The above findings are contrary to Mekong River Commission reports (Basin Development Plan 2 – BDP2) which forecast a large benefit from the mainstream projects (more than $30 billion for the 11 dams scenario) which would mainly accrue to Lao PDR. However, it seems that BDP2 grossly overestimated the hydropower benefit from electricity sales and underestimated the loss of capture fisheries.

The paper recommends to delay construction of other mainstream dams until Xayaburi is completed and the effectiveness of mitigation measures including fish passes and sediment sluice gates has been demonstrated. In view of uncertainties in fish pass technology and potential loss of capture fisheries, this recommendation would be prudent for Pak Beng. Click to view English »

Show response from the MRC Secretariat »
The Mekong River Commission (MRC) would like to confirm receipt of the comment by Dr Richard J. Frankel, Ph.D, Former Adjunct Professor NREM Research and Training Center, School of Management, Mae Fah Luang University and the report on Economic Evaluation of Hydropower Projects in the Lower Mekong Basin developed by the faculty. The report will be shared with our relevant experts.

The Prior Consultation for Pak Beng Hydropower Project concluded on 19 June 2017, where the Member Countries endorsed a Joint Statement to avoid, minimise or mitigate potential transboundary impacts. Moving forward, the Member Countries and the Secretariat will develop a Joint Action Plan that outlines a post six-months prior consultation process.

The MRC will host several regional stakeholder forums later this year, including the Stakeholder Forum for the Council Study, and we welcome all interested stakeholders.
MRC Response to Dr. Richard J. Frankel

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