Can a basin organization make a difference? - responding to development challenges in the Mekong

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Alternative title: Love thy neighbour. Can transboundary water resources cooperation last?
Changing land and water context – population pressure, urbanisation, hydropower, mining, plantations, tourism, agro industry, climate change...
Proposed hydropower dams

- Mainstream dams in China - changes to river flows and sediment supply

- 10 - 11 private sector proposals for mainstream dams in the Lower Mekong Basin

- More than 60 MOUs signed for tributary projects

- Total of 30,000 MW capacity projected for Lower Mekong Basin to meet regional electricity demand
Mekong River is the world’s largest inland fishery - $3 billion per year feeding millions of people
MANIPULATING THE MEKONG

The Nation, Thailand, January 2008
“Mekong river hydroelectric dam threatens livelihoods and endangered species in landlocked Laos”

Guardian, UK, 13 March 2009
MRC – Mekong spirit of cooperation

Government of Cambodia

Government of Lao PDR

Government of Thailand

Government of Viet Nam

Donor Consultative Group
Donor countries and cooperating institutions

Council
Members of Ministerial and Cabinet level

Joint Committee
Members at Head of Department level or higher

MRC Secretariat
Technical and administrative arm

National Mekong Committees (NMCs)
Line Agencies

Our Dialogue Partners

China
Myanmar
‘MRC supports sustainable hydropower development implemented within the framework of the 1995 Mekong Agreement and which serves the joint interests of its member countries’

Mainstream dams are subject to: “..prior consultation which aims at reaching an agreement..”
We can expect significant hydrological and morphological changes as a result of mainstream and tributary projects and climate change.
We are modelling salinity changes in the Delta - Mekong’s rice bowl
Diversity of fish migrations
Can they survive?

- Large & medium sized cyprinids (esp. Probarbus, Hypsibarbus, Cosmocheilus)
- Small cyprinids (esp. Henichorhynchus)
- Medium sized cyprinids multiple species
- Large cyprinids (esp. Clithinus)
- Other species
- Small pangasids
- Large pangasids
- Small & medium-sized cyprinids

Migrations:
- Upstream
- Downstream
- Laterally
Mitigation - can this be adapted to the Mekong?

Columbia River, USA

Spillway Passage
Turbine Passage
Bypass
Fish Ladder
Upstream
Downstream

McNary Lock & Dam
What are appropriate sediment management regimes?

- Sediment is mobilised from riverbed
- Flushed through bottom gate
- Coordinated flushing

Distance downstream from the Lao PDR/Myanmar border (km)

Elevation (m ASL)

- Luang Prabang city: 310m ASL
- Sayabouri Dam: 275m ASL
- Riverbed
Participation

How does an international river basin organisation covering 60 million people ensure community interests are heard?
How sustainable is hydropower?

A major challenge in one of the world’s largest undeveloped river basins

- and a major test for the 1995 Mekong Agreement
MRC’s role in relation to mainstream hydropower development

Basin-wide understanding of cumulative impacts and sustainability assessment – Strategic Environment Assessment

Implementation of Procedures under the 1995 Agreement – providing advice to government decision-makers

Building capacity, facilitating dialogue and providing technical guidance

Monitoring – river flow, water quality, sediment, salinity, fisheries, navigation
Love thy neighbour. How can transboundary water resources cooperation last?

- political commitment to cooperation
- effective legal framework
- agreed analytic tools and datasets
- independent and objective assessment capability
- mutually agreed vision of development prospects
- transparent and participatory processes
- .....
MRC – facilitating dialogue on sustainable water resources development