



Transboundary Environmental Security in the Mekong River Basin

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A Transboundary Water Resource Shared by Six Countries

- **Upper Mekong:**
 - China's Lancang Cascade (7 or 8 Dams)
 - Two among world's largest
 - Myanmar: No Dams
- **Lower Mekong:**
 - Upper Reaches: Laos (6)
 - Middle Reaches: Lao-Thai (2)
 - Lower Reaches: Lao (2) and Cambodia (2)

Chinese Dams

- Nearly 30 billion cubic meters storage capacity—enough to regulate river
- Will capture 80 percent of nutrient-rich sediment from Yunnan (historically 50 percent of total reaching Mekong Delta)
- Not a member of MRC-- no transparency or coordination with downstream neighbors
- “Enabler” of Lower Mekong dams (but reduced flows while its dams are filling)
- Possibly not enough water (due to climate change)



12 Lower Mekong Dams

- **Extreme impact on migratory fisheries, livelihoods, Tonle Sap and Delta**
- **Economic viability will depend on augmented flow from China during 4-5 month dry season**
- **Thailand main power purchaser**
- **Profit-driven commercial opportunities by non-national companies (China, Thailand, Malaysia, Vietnam)**

Xayaburi Dam Site



Tributary Dams Can Also Have Transboundary Impact (Vietnam's Sesan 3 Dam)

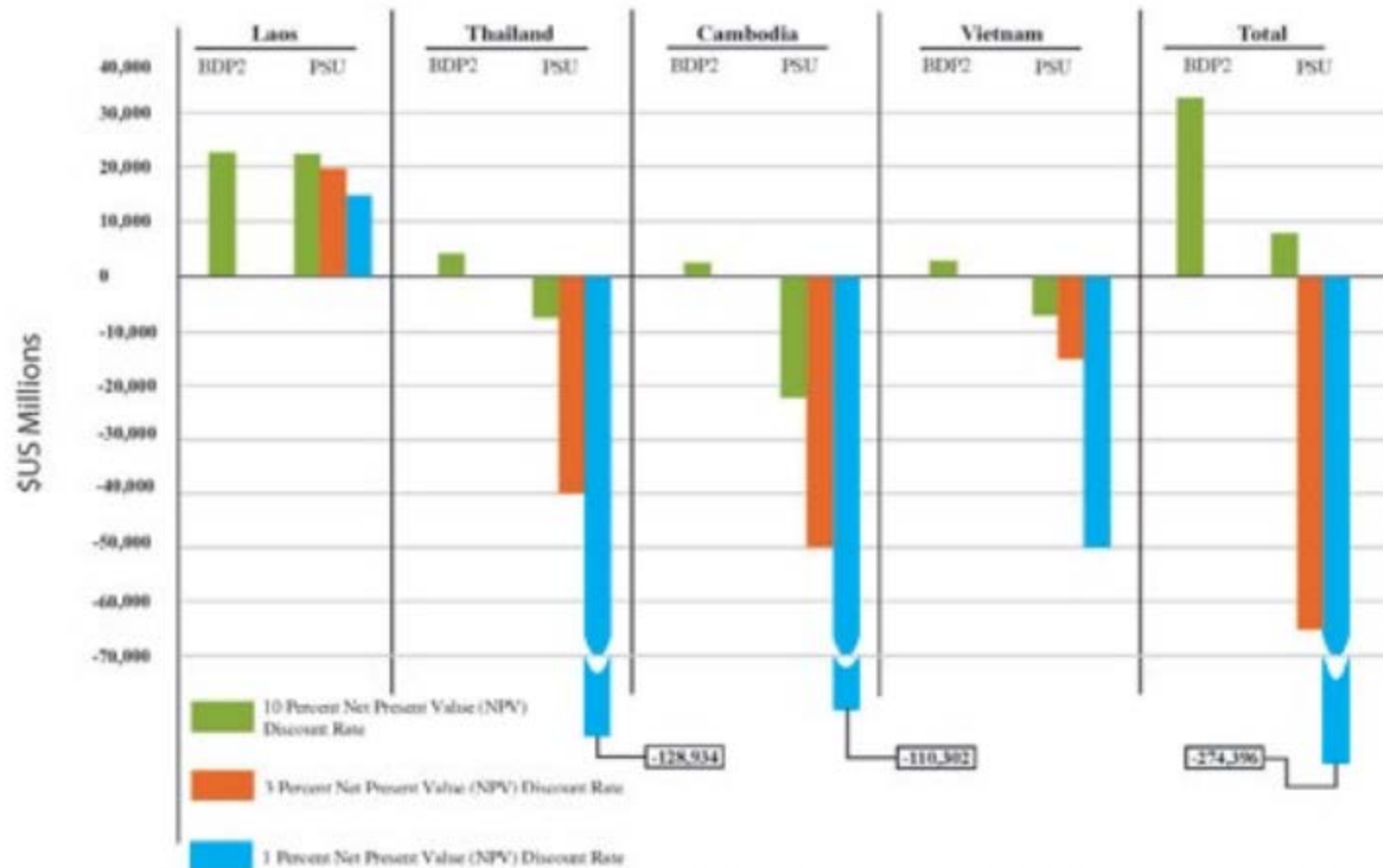




Mekong Myths

- **Big dams needed for development**
 - Discredited 1930s concept
 - More people impoverished than benefit
 - Low value added and revenues disproportionately small compared to environmental and other costs
- **Hydropower “clean” – major methane source**
- **Critical to future power needs**
 - Thailand constantly overestimates future demand
 - All mainstream dams only 6-8 percent of projected power demand in LMB in 2030

Expected Gains/Losses by Country from Mainstream Dam Scenarios under Revised Assumptions
LMB 20-Year Plan Scenario-Chinese Dams plus 11 dams; Laos (9) Cambodia (2)



Source: Portland State University, Institute for Sustainable Solutions, Planning Approaches for Water Resources Development in the Lower Mekong Basin (With Mae Fah Luang University, Thailand), July 2011

Urgent Action Issues

- Effectively engaging China collectively (success highly doubtful)
- Securing Future of MRC and Lower Mekong cooperation for sustainable, equitable water management
 - upholding treaty-based PNPCA protocol
 - credible, transboundary EIAs and SIAs
 - sustainable, equitable water management
- Adopting “Mekong Standard” for maximum acceptable transboundary damage

Critical Needs for Regional Peace and Stability

- **Institutional framework for Transboundary Cooperation—MRC or ?**
- **Bring water issues into the GMS (China + 5)**
- **Better governance and capacity in LMB**
- **More empowered civil society**
- **International donor support for sustainability**
 - “Friends of the Mekong” group
 - US Lower Mekong Initiative (LMI)
- **More responsible ADB and World Bank**

Thank You!

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