

Discussion Points for Cambodian Working Group

MRC SEAS REGIONAL AVOIDANCE
ENHANCEMENT & MITIGATION
HO CHI MINH CITY, 28-29 JUNE 2010

Mekong River Commission – SEA of hydropower on
the mainstream Mekong River

Strategic Options (national/regional)

1. Decision not to proceed with the mainstream projects.
2. Defer a decision on whether or not to proceed and in what form and circumstances.
3. Proceed with mainstream development on a gradual phased basis.
4. Proceed with rapid development of all 12 projects.
5. **What is your recommendations in the final report?**

In each box in the matrix consider a range of measures at regional or national level including for example:

- Institutional structural innovations
- Policy and procedural innovations
- Additional studies where there are knowledge gaps or uncertainties
- Capacities that may need to be strengthened
- Actions required to improve management and enforcement

1. Decide not to proceed with the mainstream projects

Avoid all mainstream dam development, but can pursue alternatives for power supply and export earnings for the country.

National

PLAN AND ASSES

- Reassess (National Energy Master Plan) power demand/supply and prioritize sectors/regions most in need
- Plan for supply of non-hydropower sources of energy

MANAGE (Actions)

- Improve management of supply and demand
- **Incentive programme for Private sector involvement, BOT and FDI**
- Develop thermal (coal) plants
- **Promote** and Develop hydropower projects on **potential** tributaries in the country
- **Support** and Develop sources of alternative power supply (biogas, solar, wind, etc)

Regional

- Mobilize more funding support on electricity infrastructure development and capacity and development sectors by focusing on agriculture, mining, manufacturing industry) and social (health and education in particular) development, e.g. **Mekong initiative (support by Japan)**
- Enhance current national / bilateral efforts to accelerate non-hydro renewable energy (RE) grid supply in combination with accelerated tributary hydropower.

National (cont.1)

- **Install national power grids from the existing and under-construction of HD on the tributaries**
- **Encourage urban development to facilitate infrastructure provision (Rural electrification management)**
- **Institutional Strengthening and Capacity building**

MITIGATE

- **Consider energy supply from neighboring countries**
- Develop sectors able to economically compensate for the non-income
- **Get special support from donors on key development sectors and capacity building (agriculture, fisheries, mining, manufacturing industry, tourism, etc)**
- **Decentralize power supply (autonomy)**

2. Defer a decision on whether or not to proceed and in what form and circumstances.

National	Regional
<p>PLAN AND ASSESS</p> <ul style="list-style-type: none"> Assess changes in environmental services and mitigations measures planned to compensate for these losses Reassess power demand/supply in the next five/ten years Rank project development priorities Develop national-local benefit sharing arrangement with special consideration to offset livelihood risks Assess all implications of peak operation Assess impacts on the Tonle Sap 	<ul style="list-style-type: none"> Arrange and put in place effective regulation and management of transboundary effects and benefits sharing mechanisms Enhance safeguard regime for LMB projects involving private developers/operators consist of MRC 1995 agreement. Sequence LMB mainstream dam development to reduce, minimize and defer potentially significant livelihood impacts

2. cont.

NATIONAL	REGIONAL
<ul style="list-style-type: none"> Conduct more study/research on the impact of dam (environment, social, economic) Define environmental flow requirement (sediment load/flood plain habitat loss) Reassess production of reservoir fisheries Assess the potential for reservoir aquaculture Devise operational measures to mitigate impacts on fish migrations (full scale testing) Consider Biodiversity Offset Programmes Prepare a framework for compensation in agriculture and fisheries sectors. Enhance human capacity and policy framework to get ready for dam development 	<ul style="list-style-type: none"> Improve transparent M&E mechanisms for environmental / social mitigation and management involving LMB countries especially for transboundary impacts and related development risks. Reassess production of reservoir fisheries Assess the potential for reservoir aquaculture

3. Proceed with mainstream development on a gradual phased basis

National	Regional
<p>PLAN AND ASSESS</p> <ul style="list-style-type: none"> Carefully weight pros and cons of 460 vs. 2600 MW options for Sambor and revise the plans of each project to encompass environmental considerations Assess impact of Mekong tributaries dams on sambo dam Assess changes in environmental services and mitigations measures planned to compensate for these losses Rank project development priorities Address downstream implications of peak mode operation Assess impacts on the Tonle Sap system Adopt the Sustainable Hydropower principles and guidelines Define environmental flow requirements Devise operational measures to mitigate impacts on fish migrations (full scale testing) and aquatic biodiversity Consider Biodiversity Offset Programmes 	<ul style="list-style-type: none"> Institutional arrangements for regional coordination Set of regional principles and actions, including national benefit sharing arrangements Sequence dam development do defer impacts Determine coordinated operation for a cascade of dams (joint operation body) Reassess upstream dam impacts

3. Cont.

National	Regional
<ul style="list-style-type: none"> Prepare a framework for compensation in agriculture and fisheries sectors. Enhance human capacity and policy framework to get ready for dam development <p>MANAGE</p> <ul style="list-style-type: none"> Strengthening Human Resources Development and capacity building (institutional, management, technical) Identify debt management options (buying equity stakes) Ensure acceptable well-coordinated dams operation (rules and regulations) Ensure safe operations of the dams Ensure consistent approaches for project design, mitigation and enhancement approaches. Ensure provision of adequate electricity for domestic use Reconsider the Ramsar site in Stung Treng Develop procedures and methods for multiple use of reservoirs (multiple sectors benefits for irrigation/ navigation, trade and tourism). 	<ul style="list-style-type: none"> Use the first dam development process to systematically draw lessons Identify opportunities for co-management of fisheries Assess the consequences of losing 75% of sediments in the river (including on agricultural and fishery productivity) Definition and enforcement of environmental flows

3. cont.

NATIONAL

MITIGATE

- Compensate the flooding of land concessions granted in Kratie
- Structural adjustment program for the Fisheries sector (10-15 years). Who is going **pay?**
- Mitigation of the loss in project performance
- Enhance diversity of habitats in reservoirs
- **Develop emergency plan and system**

LEARN

- Use the first dam development process to systematically draw lessons
- Put a process in place to share lessons
- Identify gaps for future studies

4. Proceed with rapid development of all 12 projects

National	Regional
<p>PLAN AND ASSESS</p> <ul style="list-style-type: none"> • Carefully weight pros and cons of 460 vs. 2600 MW options for Sambor and revise the plans of each project to encompass environmental considerations • Reassess impact of Mekong tributary cascade dams on Sambor • Assess changes in environmental services and mitigations measures planned to compensate for these losses • Rank project development priorities • Address downstream implications of peak mode operation • Assess impacts on the Tonle Sap system • Define environmental flow and sediment load requirements • Devise operational measures to mitigate impacts on fish migrations (full scale testing) • Prepare a framework for compensation in agriculture and fisheries sectors. 	<ul style="list-style-type: none"> • Institutional arrangements for regional coordination • Set of regional principles and actions, including national benefit sharing arrangements • Determine coordinated operation for a cascade of dams (joint operation body) • Reassess impacts of upstream Mekong dams

4. cont.

National	Regional
<p>MANAGE</p> <ul style="list-style-type: none"> • Strengthening Human Resources Development and capacity building (institutional, management, technical) • Identify debt management options (buying equity stakes) • Ensure acceptable well-coordinated dams operation (rules and regulations) • Structural adjustment program for the Fisheries sector (10-15 years). Who is going pay? • Ensure safe operations of the dams • Ensure consistent approaches for project design, operation, mitigation and enhancement approaches • Ensure provision of adequate electricity for domestic use • Reconsider the Ramsar site in Stung Treng • Develop procedures and methods for multiple use of reservoirs (multiple sectors benefits for irrigation/navigation, trade and tourism). • Reassess lost of downstream floodplain habitats and loss of fish production 	<ul style="list-style-type: none"> • Use the first dam development process to systematically draw lessons • Well-coordinated mechanism and regulation on dams operations • Identify opportunities for co-management of fisheries • Assess the consequences of losing 75% of sediments in the river (including on agricultural and fishery productivity) • Definition and enforcement of environmental flows • Reassess lost of downstream floodplain habitats and loss of fish production

4.Cont. (national)

MITIGATE

- Compensate the flooding of land concessions granted in Kratie
- **Structural adjustment program (e.g. alternatives) for the Fisheries sector**
- Mitigation of the loss in project performance
- **Develop an emergency/disaster plan**

LEARN

- Use the first dam development process to systematically draw lessons
- Put a process in place to share lessons
- Identify gaps for future studies.

Other comments/suggestions

- SEA is to provide information and assessment for strategy and policy development, thus the ranking of the proposed Hydropower Dams is NOT APPROPRIATE in the SEA report. Without detailed individual project assessment, this can be mis-leading.
- Translate this draft SEA report in national language;
- National consultation and dissemination
- Provide final feedbacks and comments to SEA Team to be addressed in the final report
- A five-page (short and sharp) executive summary of SEA final report should be available.