Discussion Points for Cambodian Working Group

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

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.

<table>
<thead>
<tr>
<th>National</th>
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<tbody>
<tr>
<td>PLAN AND ASSESS</td>
<td>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)</td>
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<tr>
<td>Improve management of supply and demand</td>
<td>Consider energy supply from neighboring countries</td>
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<tr>
<td>Incentive programmes for Private sector involvement, BOT and FDI</td>
<td>Develop sectors able to economically compensate for the non-income</td>
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<td>Develop thermal (coal) plants</td>
<td>Get special support from donors on key development sectors and capacity building (agriculture, fisheries, mining, manufacturing industry, tourism, etc)</td>
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<td>Promote and Develop hydropower projects on potential tributaries in the country</td>
<td>Decentralize power supply (autonomy)</td>
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<tr>
<td>Support and Develop sources of alternative power supply (biogas, solar, wind, etc)</td>
<td>Install national power grids from the existing and under-construction of HD on the tributaries</td>
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National (cont.1)

- Encourage urban development to facilitate infrastructure provision (Rural electrification management)
- Institutional Strengthening and Capacity building
- 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.**

**PLAN AND ASSESS**
- 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 implications of peak operation
- Assess impacts on the Tonle Sap

**NATIONAL**
- 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 1993 agreement.
- Sequence LMB mainstream dam development to reduce, minimize and defer potentially significant livelihood impacts

**REGIONAL**
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- Sequence LMB mainstream dam development to reduce, minimize and defer potentially significant livelihood impacts

2. **cont.**

**NATIONAL**
- Conduct more study/research on the impacts of dam (environmental, 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

**REGIONAL**
- 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**

**PLAN AND ASSESS**
- 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 Sambor 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
- Adapt 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

**NATIONAL**
- Institutional arrangements for regional coordination
- Set of regional principles and actions, including national benefit sharing arrangements
- Sequence dam development to defer impacts
- Determine coordinated operation for a cascade of dams (joint operation body)
- Reassess upstream dam impacts

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- Reassess upstream dam impacts

**MANAGE**
- Strengthen human Resources Development and capacity building (institutional, management, technical)
- Identify debt management options (buying equity stakes)
- Ensure sustainable well-coordinated dam 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 sector benefits for irrigation/ navigation, trade and tourism).

3. **Cont.**

**NATIONAL**
- Prepare a framework for compensation in agriculture and fisheries sectors.
- Enhance human capacity and policy framework to get ready for dam development

**REGIONAL**
- 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

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### 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

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<td>Reassess loss of downstream floodplain habitats and loss of fish production</td>
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### 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.