THE VISION

Hydropower development based on integrated water, land and ecosystem planning, reconciling a range of natural resources uses and priorities to achieve a balance between economic development, environmental sustainability and social equity.

IUCN, 2015
PLANNING CHALLENGES

- Dealing with pipeline hydropower projects whilst setting a long-term pathway for balanced hydropower development
- Dealing with limited E&S baseline information on some key features
- Reconciling the diverse views and interests of a myriad of stakeholders to achieve broad stakeholder agreement on balanced hydropower development
- Cross-border influences on some watersheds
| National power generation and electricity supply targets | • Increase national power generation  
• Increase domestic electricity supply from 30% (2012) to 100% (2030)  
• Power export to increase foreign earnings |
| --- | --- |
| Preferred national generation mix | • Achieve year-round supply reliability  
• Reduced dependence on hydropower |
| Strategic Environmental Assessment (SEA) | • Collection of initial baseline information on significant ecosystem and social values  
• Multi-stakeholder consultation  
• Identification of stakeholder development priorities  
• Broad agreement on priorities  
• Pipeline project proposal screening  
• PP recommendations |
| Improvement of and new PP | • Additional baseline studies/assessments  
• Improvement of PP in line with agreed sustainable hydropower priorities  
• e.g. delineation of watershed reservation and development zones |
| Basin-by-basin hydropower planning | • Identification of basin E&S values by river zone  
• Screening of each project based on zone values  
• Cumulative impact assessments |
| Project approval | • ESIA preparation for each proposed project  
• Government project approval/non-approval |
| Project implementation | • Construction and operation of each approved project in accordance with approval conditions  
• On-going project monitoring |
STRATEGIC ENVIRONMENTAL AND SOCIAL ASSESSMENT

A systematic process for evaluating and anticipating the consequences of decisions taken prior to the project stage, ensuring that environmental and social considerations and alternatives are addressed as early as possible and on a par with economic factors in policy, program and plan development.

Main advantages over an ESIA:
- occurs before major decisions are made, thereby seeks to prevent impacts
- focused on sustainability
- considers a broader range of alternatives
- can analyse cumulative, cross-border and indirect impacts
AIM OF THE SEA

• To identify and achieve broad consensus on a balanced, equitable and sustainable development pathway for hydropower in Myanmar over the next 20 years and beyond, based on environmental, social and economic considerations

• To deliver long-term economic development and the sustainable use and protection of natural resources and ecosystems
SEA BENEFITS

1. Improves the **performance and efficiency of policy and planning** by minimizing adverse impacts on environment and society

2. Helps to **avoid costly mistakes** and missed opportunities caused by inadequate information about impacts and trade-offs

3. Provides a framework for project-level assessment and coordination, in particular to **understand cumulative impacts** and reduce duplication

4. **Builds consensus and public trust** through its multi-stakeholder and participatory focus

ADB, 2015.
PROJECT SITING AND INSTITUTIONAL ISSUES

Siting issues
- Pristine or underdeveloped watershed/natural habitats
- Approx. 132 Key Biodiversity Areas (KBA) nationally
- Remote areas, generally located near rural communities, with diverse levels of vulnerabilities, ethnicities and languages, & land tenure uncertainties
- Conflict zones
- Difficult access, few transmission lines for energy evacuation & limited distribution lines for electric distribution to communities in the area of impact

E&S institutional and regulatory capacity
- Still emerging
- Streamlined stakeholder engagement & consultation process not standard practice
- Concession process not linked to environmental & social criteria or assessment
- Limited watershed level /strategic resource management
- No guidance on cumulative impact assessment
- No benefit sharing schemes
PROPOSED SEA METHODOLOGY

- Collection of Initial Baseline Information
- Stakeholder Analysis and Engagement Planning
- Identification of Sustainable Development Priorities
- Profiling of Existing Project Proposals
- Prediction & rapid assessment of Business-as-Usual Hydropower Development
- Framing the Sustainable Hydropower Development Pathway
- Sustainable Development Recommendations
Expert Groups

• Advisory Group – supervise execution of the SEA

• Small expert technical groups of in-country professionals

• Established to explore key subjects
  i.e. aquatic ecology, river use, terrestrial ecology, hydrology

• Facilitating discussions on:
  - available baseline data sources
  - determination of the significance of baseline values
  - likely hydropower impacts
  - review of SEA methodology, assessment and findings
Stakeholder Consultation

- Open dialogue stimulating discussion among decision-makers & other stakeholders

- Seeking the opinions, perspectives & priorities of a broad range stakeholders
  - scope the SEA
  - identify sustainable development priorities
  - inform stakeholders of the priorities of other stakeholders
  - influence stakeholders about a shared vision for equitable & sustainable development

- Identify and cluster interested and affected stakeholders by
  - degree of influence over decision making, and
  - relevancy to the SEA, based on significance of expected impact on their interest/s and capacity to provide relevant information to the process

- Consultation shall include, but not be limited to:
  - discussions with individual stakeholders
  - workshops with multiple key stakeholders

- Recognising that if key stakeholders endorse SEA recommendations they are likely to support resulting policies/programs/plans & projects emerging from this process
E&S RISK PROFILES

- Identification of existing operational and under construction HPPs
- Consideration of individual project pipeline
- Rating river stretches / sub-basins on significant existing E&S values that may be compromised by HPP development
  
  e.g. 3 classes such as:
  - “low” - ideal for development
  - “medium”
  - “high”
INTENDED SEA OUTCOMES

(i) improved dialogue between stakeholders

(ii) a greater understanding by decision makers and other stakeholders of the range of values and priorities that have to be taken into account in formulating the sustainable hydropower development pathway

(iii) a shared development pathway that accounts for stakeholder priorities

(iv) clear policy/program/plan recommendations based on trading off different values and outcomes

(v) clear recommendations on additional baseline data gathering
BENEFITS OF LARGE SCALE PLANNING

• **Less uncertainty and controversy.** Projects developed after a wider planning and consultation exercise are likely to be less controversial, and thus represent lower risk for developers and funders.

• **More streamlined project-level review.** There will be greater certainty during the review process because many of the issues will have been identified and avoided or addressed at higher levels of planning.

• **Less expenditure on assessing impacts.** Many of the studies needed, including the EFlow assessment and mitigation strategies, are river/basin specific rather than project specific and so the costs could be shared by all developers in a basin.

• **Fewer operational constraints.** Mitigation obligations of an individual project will be accomplished through contribution to basin-scale mitigation.

• **Economically favourable outcomes.** The approach encourages innovative solutions that can increase profitability,

• **Positive public recognition.** Should lead to better energy, sustainability and biodiversity outcomes, thus meeting the standard that the public increasingly demands of development.
For more information:
www.ifc.org/mekonghydro
QUESTIONS FOR DISCUSSION (GUIDELINES)

• Who should be involved in the development of the guidelines?
  • E&S Risk Management for hydropower
  • Cumulative Impact Assessment and Management
  • Benefit Sharing
  • Downstream Flow Regimes
  • Stakeholder Engagement
• Is there a guideline that should be developed first and why?
• Are there any other guidelines that are missing and should be prioritized?
QUESTIONS FOR DISCUSSION (SEA)

• Who should be involved in the SEA and how?

• How do we bridge the current planning process with the SEA study? How can the SEA still influence hydropower development?

• Do you agree with this rating approach (low-med-high)? What are the pros and cons?