

IWRM-based Basin Development Strategy for Lower Mekong Basin

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## The need for a Basin Development Strategy

- Aiming to achieve the full potential of sustainable benefits from the Mekong is enshrined in the Mekong cooperation history
- Water resource development is now high in national agenda for economic growth and poverty reduction
- Increasing demand from riparian countries and project developers for the provision of an integrated basin perspective against which national plans and large projects can be assessed
- There is a need for a stronger commitment to a basin-wide IWRM approach to guide balanced water resources development





IRC. Mekong River Commission

2006 - 2010

AGREEMENT ON THE COOPERATION

FOR THE

SUSTAINABLE

DEVELOPMENT OF THE MEKONG RIVER BASIN

5 APRIL 1995

MERONG RIVER COMMISSI

# What kind of Strategy is feasible?



- In a large and complex basin as the Mekong Basin, with six sovereign countries, it is not feasible to 'force' a rigid and constraining Basin Development Plan, based on 'optimization' of water resources development at a basin scale
- Nor is it feasible to prepare an 'IWRM Strategy", which would look at the 'integration' of water related national policies, strategies and procedures of the sovereign riparian countries
- But it is feasible to prepare an IWRM-based Basin Development Strategy, which focuses on how development can proceed in a way that meets proper IWRM concepts and guidelines

#### **Purpose of the Strategy**



#### • Objectives:

- Reconfirm long-term goals and specific objectives of basin development and management
- Provide a long term view of how proposed water related developments in the LMB can be achieved in a sustainable way
- Provide a relational IWRM planning framework and guidelines for the basin, national and sub-basin levels
- Scope: Basin-wide (both mainstream and tributaries)
- Terms: 20-year outlook with review and update every 5 years

#### **Scenario-based approach**



- The most sensible option to develop guidance on how water related development can proceed in way that is sustainable from a basin perspective, and mutually beneficial to the LMB countries, *is through a basin-wide dialogue on the results of a comprehensive assessment of basin-wide development scenarios*
- The scenarios should represent different levels of water resources development in the Mekong Basin
- Each scenario should represent different combinations of sectoral development, recognizing the synergies and trade-offs between sectors

## **Considered Basin-Wide Development Scenarios**



Baseline	Definite future	Foreseeable future	Longer-term
situation	situation	situation (20 years)	future (50 years)
1. Baseline line scenario in year 2000	<ol> <li>Upper Mekong Dam Scenario</li> <li>Definite Future Scenario</li> </ol>	<ol> <li>LMB 20-Year Plan Scenario (National perspectives)</li> <li><u>Alternative perspectives</u></li> <li>LMB 20-Year Plan Scenario without Mainstream Dams</li> <li>LMB 20-Year Plan Scenario with different configuration of Mainstream Dams in the LMB</li> <li>Mekong Delta Flood Management Scenario</li> </ol>	<ol> <li>8. LMB Long-term Development Scenario</li> <li>9. LMB Very High Development Scenario</li> </ol>

Foreseeable Future and Longer Term Future Scenarios will be assessed with and without climate change

# **Assessment of scenarios**



- The scenarios will be assessed against a range of economic, social and environmental indicators that can measure how well each scenario achieves the countries' development objectives and sustains the Basin
- As well, a basin-wide 'equity' indicator is included that is to measure how well a particular scenario achieves "equitable development" between the riparian countries, taking into account benefits from existing water use
- The assessment will be implemented by a team of riparian and international experts
- Methods, data, and intermediate results will be discussed with stakeholders at the sub-basin, national and basin levels

# Example: predicted increase in dry season flow (%)





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# Assessment of scenarios – one preliminary result



- From the single perspective of water availability, the four countries could now agree to proceed with the 20-Year Development Scenario 'water consumption' projects without impacting on the present dry season flow
- Emphasizes that this does not necessarily mean that all of the 20 year developments can proceed: the economic, social and environmental impacts must still be determined, to guide what is 'acceptable'
- The present dry season flow, which is close to its natural state can be 'protected' and continue to meet the important and essential environmental and social needs

# **Selection of scenario**



- Technical capacity will be build to support national discussion and consensus building on the results of the scenario assessment; the possible trade-offs between sectors, areas, and population groups; and the selection of the preferred scenario
- Subsequently, consolidated national positions will be discussed at the basin level
- Ultimately, senior Government officials will indicate which scenario will provide the most acceptable balance between economic, environmental, and social outcomes, and would bring mutual benefits to the riparian countries

# **Use of the selected scenario**



- Subsequently, the chosen scenario will lead to the identification and preparation of:
  - The <u>'Development Space'</u> for water and related resources in the LMB, in which sovereign countries can plan and work
  - The <u>Strategic Guidance</u> for the use and management of that space
  - A package of basin-wide IWRM guidelines that will assist water managers in planning and management of water and related resources

# The visualized approach



- Use the BDP planning cycle that has been adopted by MRC Member Countries
- <u>The "heart" of the</u> <u>approach is to define the</u> <u>"Development Space" in</u> <u>which the riparian</u> <u>countries can plan and</u> <u>work</u>



# Definition of the "Development Space"

Boundary defined

by limits of

sustainable

development



- Thus the "Development Space" is:
  - > NOT only a volume of water that can be used
  - BUT shaped by sustainable boundaries defined by acceptable socio-economic and environmental impacts and existing procedures under the 1995 Mekong Agreement
- The assessment of the scenarios will provide these boundaries
- Countries can work and plan within the "Development Space", supported by Strategic Directions for the proper use of the Development Space, and basin-wide IWRM guidelines for basin development and management
- MRC monitors, facilitates and periodically evaluates



# Examples of Strategic Guidance for basin development



This relates to providing the <u>LMB countries, private</u> investors, and project developers with strategic overviews of the most important factors that could influence how, or if, development could proceed. The key factors identified so far:

- Guidance for projects and the design of the Project Portfolio of the Basin Development Plan
- > Improve capture fisheries management
- Develop reservoir and rice fields fisheries
- Improve irrigation management
- Prevent or mitigate transboundary impacts of flood plain development
- Engage people and communities
- Develop institutional and people capacity

# **IWRM Guidelines**



- These are guidelines, or 'helping hands' <u>for project</u> <u>developers and water managers</u>, across the whole spectrum of IWRM so that planning, management and operational decisions that can have transboundary impacts, are made in accordance with 'best practice' processes and experiences. Some examples.
  - Preliminary design guidance for proposed mainstream dams in the Lower Mekong Basin
  - Best practice guidelines for integrated flood risk management planning and impact evaluation
  - Guidelines for multi-purpose development and operation of water resources development projects
  - Guidelines for river regulating works for navigation safety

### **Basin management processes**



- Regional cooperation and transboundary Governance
- Harmonization of basin and national planning
- Enabling tools and procedures
- Monitoring and periodic evaluation and updating of the Strategy
- Institutional and human capacity building

# Implementation of the Water Utilization Procedures



- The IWRM-based Basin Development Strategy will further develop capacities within MRC and the countries to utilise the existing water utilization procedures under the 1995 Mekong Agreement in a pro-active and value-added way.
- For example, a four-country agreement to a "Development Space" will create confidence that water can be allocated and used without unforeseen impacts. This should lead to projects being notified under the Procedures for Notification, Prior Consultation and Agreement (PNPCA) much earlier in the process.



#### 1995 Mekong Agreement and Procedural Rules



## **Periodic updating of the Strategy**



- The State-of-Basin Report, based on the countries' and MRC monitoring systems, will provide a regularly updated status of the Basin's resources
- The State of the Basin report should be one of the prime sources of information that informs how well the Strategy is implemented and guides whether it requires adjustment
- By adopting a five- year review period for the Strategy, there are sufficient checks and balances to adjust the "Development Space" and the associated Strategic Guidance and manage the many uncertainties.



Meeting the needs, keeping the balance

## **Implementation of the Strategy**



- Over the next few years, each country will develop measures to bring the basin perspectives within the Strategy into the national planning, decision making and governance processes, in a way that suits national policies and processes
- It will lead to the four LMB countries creating and supporting a wide range of 'networks' or 'working groups' to jointly work on ways to make the Strategy implementation most effective
- And in this way, the countries will be able to bring existing and emerging national perspectives into future updates of the Strategy
- This creates a 'loop of ownership' between MRC and the four countries and ensures that regular updates of the strategy will be fully informed and based on current and emerging trends and issues

# **Implementation of the Strategy**



- The implementation measures are guided by the priority 'strategic guidance' in the Strategy. For example:
  - A categorization procedure that identifies national projects without transboundary implications
  - An agreed approach to developing and implementing the Project Portfolio of the BDP
  - A process for cooperation on controversial projects that will be 'outside' the 'development space'
  - Incorporation of the strategic guidance from this Strategy into the MRC 2011 – 2015 Strategic Plan
  - An on-going, transparent process for engaging with development partners
  - An on-going, transparent process for engaging with civil society

# **Benefits of the Strategy**



- The "Development Space" agreed by the LMB countries, within which national plans and projects can be considered, <u>builds</u> <u>confidence</u> that water can be allocated and used without significant unforeseen impacts
- Helps attract funding for projects, since project developers are provided some certainty as to the water resources management processes against which proposals will be judged
- <u>Builds synergies</u> in water and related resources planning at sub-basin, national and basin levels
- Provides <u>incentives</u> for a more strategic implementation of the agreed water utilization procedures to benefit riparian countries and their people.

# Thank you!



