



# **SOME DRIVERS OF CHANGE THAT PRESENT CHALLENGES FOR THE LOWER MEKONG BASIN**

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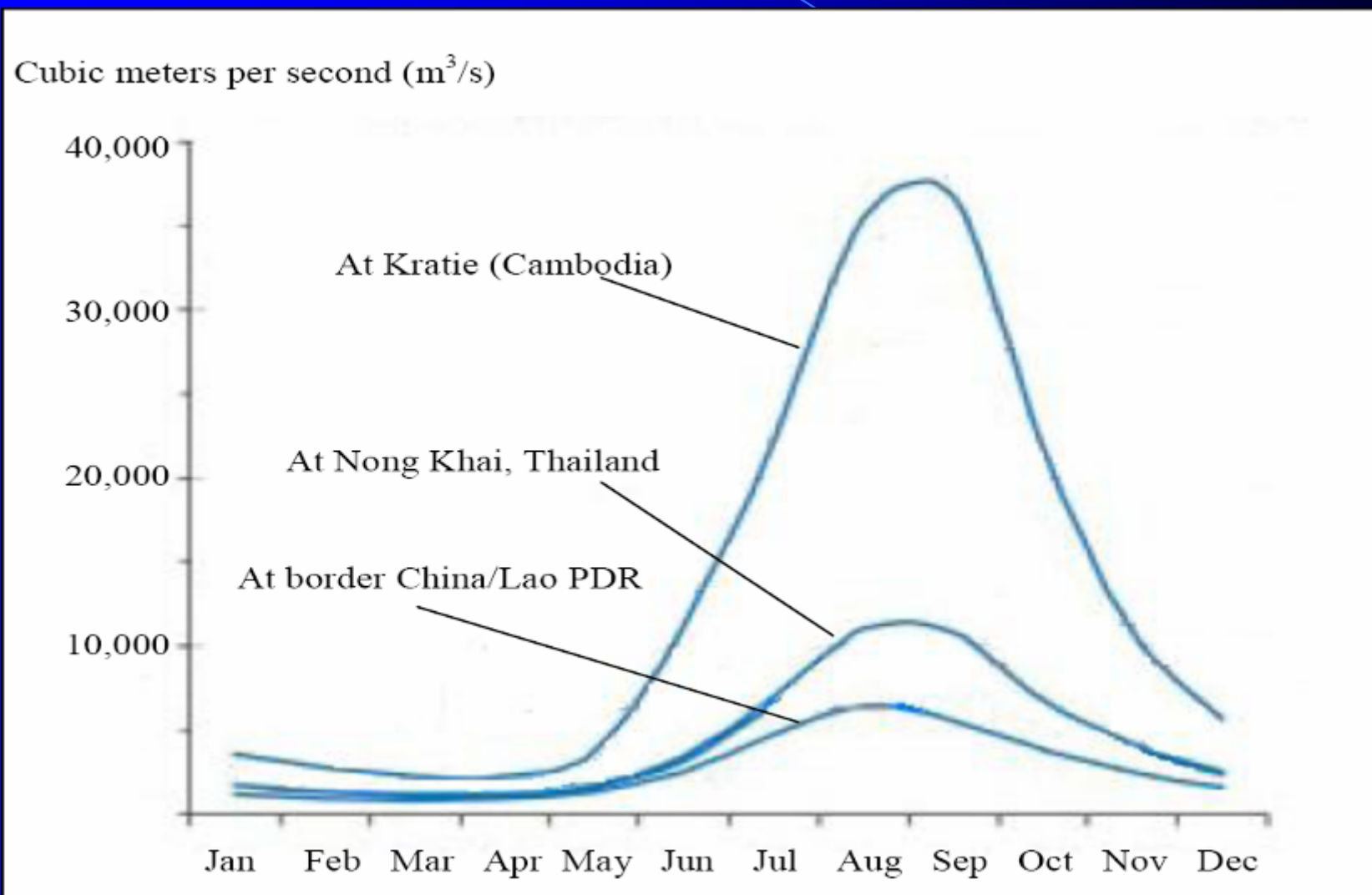
# STRUCTURE OF PRESENTATION

- Resource situation
- Drivers of change
- Implications

# IMPORTANT FEATURES OF THE MEKONG BASIN

- Large difference in wet and dry season flow
- Rich riverine ecology and fisheries
- Low level of water resources development compared to most other large river basins

# MEAN MONTHLY DISCHARGE AT VARIOUS SITES ON THE MAINSTREAM



# CURRENT WATER RESOURCES DEVELOPMENT



- Water use is concentrated in the most downstream portion of the basin: the Vietnam Delta with an irrigated area of some 2 million hectares
- Other actively irrigated areas in the Basin amount to less than 1 million hectares
- Significant diversions from the mainstream above the Vietnam Delta are so far absent
- Laos and Cambodia hardly divert 1% of their annual renewable water resources
- Existing storage of water resources amounts to 2% of the average annual flow

# STATE OF THE BASIN

- Environmental situation in the Mekong Basin is generally good compared to most other large river basins
- Local problems do exist but they can be managed if there is commitment to do so
- However, there are some drivers of change that may present larger challenges for the state of the Mekong Basin

# DRIVERS OF CHANGE

Drivers of change manifest themselves at different levels:

- Global developments
- Basin level developments
- National level developments
- Development partners

# GLOBAL DEVELOPMENTS



- Global developments that may affect land and water use decisions and, as a result, the state of the Lower Mekong Basin and its resources and users include:
  - High energy prices
  - Other global market trends on the basin's export industries
  - (Global climate change)
- These factors drive policies and plans at the basin and national levels



# BASIN DEVELOPMENTS

- Basin level factors that may affect land and water use decisions include:
  - The development of water storage by China in the Upper Mekong Basin
  - Population and economic growth, in particular the projected electricity demand
  - Decisions made at the regional level, such as the development of transboundary transport and electricity transmission networks
- These factors present opportunities and challenges for basin development and management
- IWRM can help seize opportunities and avoid unwanted changes

# NATIONAL DEVELOPMENTS

- Relevant national level factors that may affect the state of the Mekong Basin and its resources and users include:
  - Socio-economic and sector policies and plans that support major water related projects for navigation, flood control, hydropower, irrigation etc.
  - Political commitment for the implementation of IWRM, including the strengthening of resource managers at the national and sub-basin levels
  - Knowledge of civil society groups and NGOs
- These factors present opportunities and challenges for Mekong basin development and management
- IWRM can help seize opportunities and avoid unwanted changes

# DEVELOPMENT PARTNERS

- The role of the private sector in the development of water and related resources has been increasing, which present opportunities and challenges:
  - Private project developers bring funding and expertise
  - However, they have disincentives to comply with time-consuming and costly safeguard policies
  - They have disincentives to develop projects through processes open to public scrutiny and may be less sensitive to arguments and advocacy civil society and NGOs
- This development calls for adequate laws and associated regulations, and their enforcement by the resource managers

# CURRENT KNOWLEDGE ON POSSIBLE IMPLICATIONS



- In the foreseeable future, the main flow changes in the Lower Mekong Basin may come from the Upper Mekong Basin
- The hydropower projects that are being constructed and planned in the basin may likely offset increases in future irrigation demand in the Lower Mekong Basin
- The main trade-off of water resources development in the Lower Mekong Basin may be between hydropower and irrigation development on the one hand and the capture fisheries on the other
- Adverse effects of tributary projects may be significant on the tributaries; their cumulative impact on the mainstream need to be determined

# ASSESSMENT OF DEVELOPMENT OPTIONS IN BDP (1)

- BDP will assess the possible implications of these and other drivers of change through the formulation and assessment of basin-wide development scenarios
- The scenarios will assess the benefits and costs of various levels of water resources development during the next few decades to the various beneficial uses and to each of the four countries in the Lower Mekong Basin.

## ASSESSMENT OF DEVELOPMENT OPTIONS IN BDP (2)

- The resulting strategic options for meeting the water needs of all sectors, and those of the Mekong Basin itself, will be subjected to basin-wide discussions with the various interest groups
- Ultimately, senior government officials of the MRC member countries must make choices and reach a consensus on the options that most likely will achieve an optimal balance between economic, environmental, and social outcomes in the Lower Mekong Basin.

# ASSESSMENT OF DEVELOPMENT OPTIONS IN BDP (3)



- Given, the fact that many of the poor people rely on the basin's rich natural resources for their livelihood, decision making on the water resources development must be participatory and transparent

# Thank You