



INTEGRATED WATERBORNE TRANSPORT PLANNING ON THE MEKONG RIVER SYSTEM IN CAMBODIA

The International Forum on Integrated Water
Resources Management of the Mekong River Basin

28th-29th November 2005

Chiang Rai

CONTENTS

1. Introduction: Rationale of the Project within the context of this Forum
2. Integrated Planning of Waterborne Transport in Cambodia
3. Conclusions

Rationale of this Forum:

Obtaining ideas for how IWRM principles can be applied at basin scale through ...

- Meeting the development needs

- Strengthening Cooperation
- Maintaining the ecological balance
- Building capacity

Project: Design of the Master Plan for Waterborne Transportation on the Mekong River System in Cambodia



Introduction: Rationale of the Project within the context of this Forum



Ministry of Public
Works and Transport

PROJECT



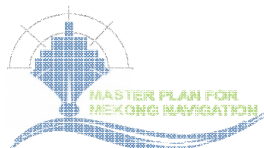
Belgische Technische Coöperatie nv
Coopération Technique Belge sa



Cambodia National
Mekong Committee



NAVIGATION
PROGRAMME



Introduction: Rationale of the Project within the context of this Forum



The project is to (Design a Master Plan that will) rehabilitate and improve the rural, domestic and international transport network using the Mekong River system in Cambodia.



The Integrated Plan will be designed, containing an efficient development programme with a short, medium and long term action plan in order to plan, monitor and implement inland waterway transport and maritime navigation.

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Important questions the project team needs to answer during the design:

- *Do we need Mekong Navigation in Cambodia ?*
- *What may happen if there is no navigation development or coordination ?*
- *And how do we ensure all aspects are taken into consideration, in a balanced way, and in close cooperation with the other Mekong countries ?*

- *Do we need Mekong Navigation in Cambodia ?*

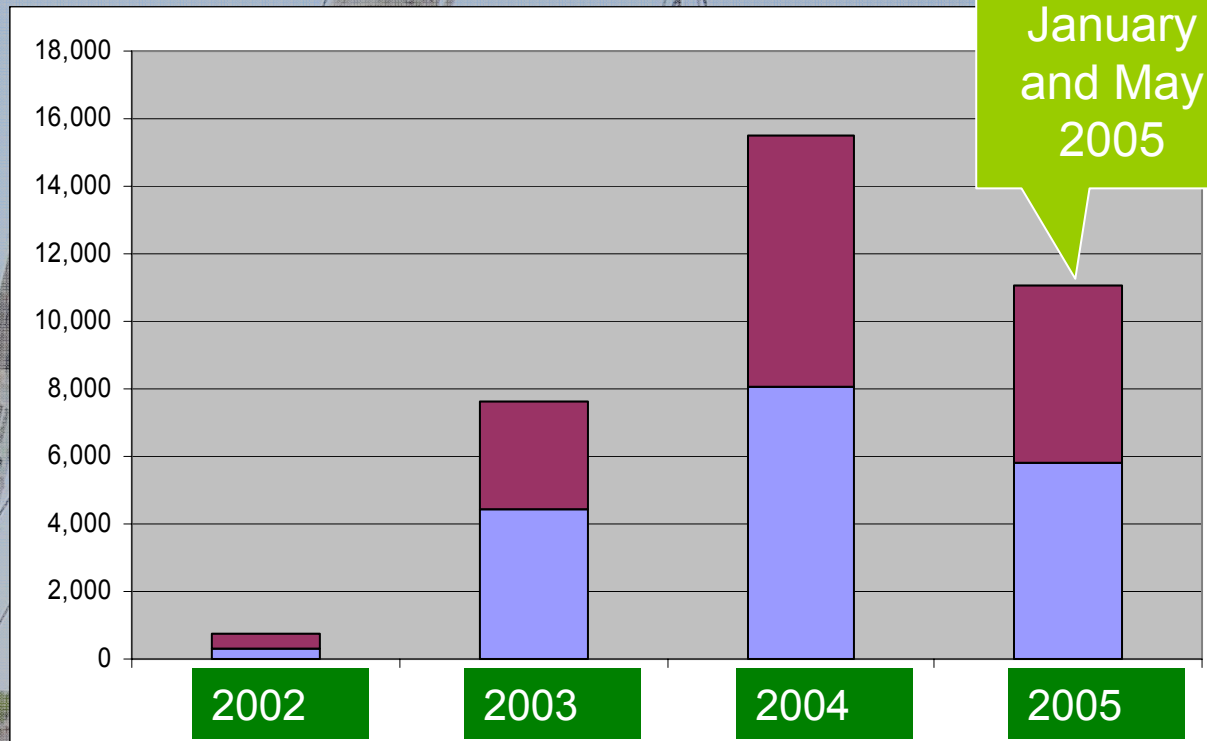
Cambodia has no alternative but to reduce the transport costs, especially for garment exports

... in particular in their overseas trade –

this is where the regional aspects come in



Imports
Exports



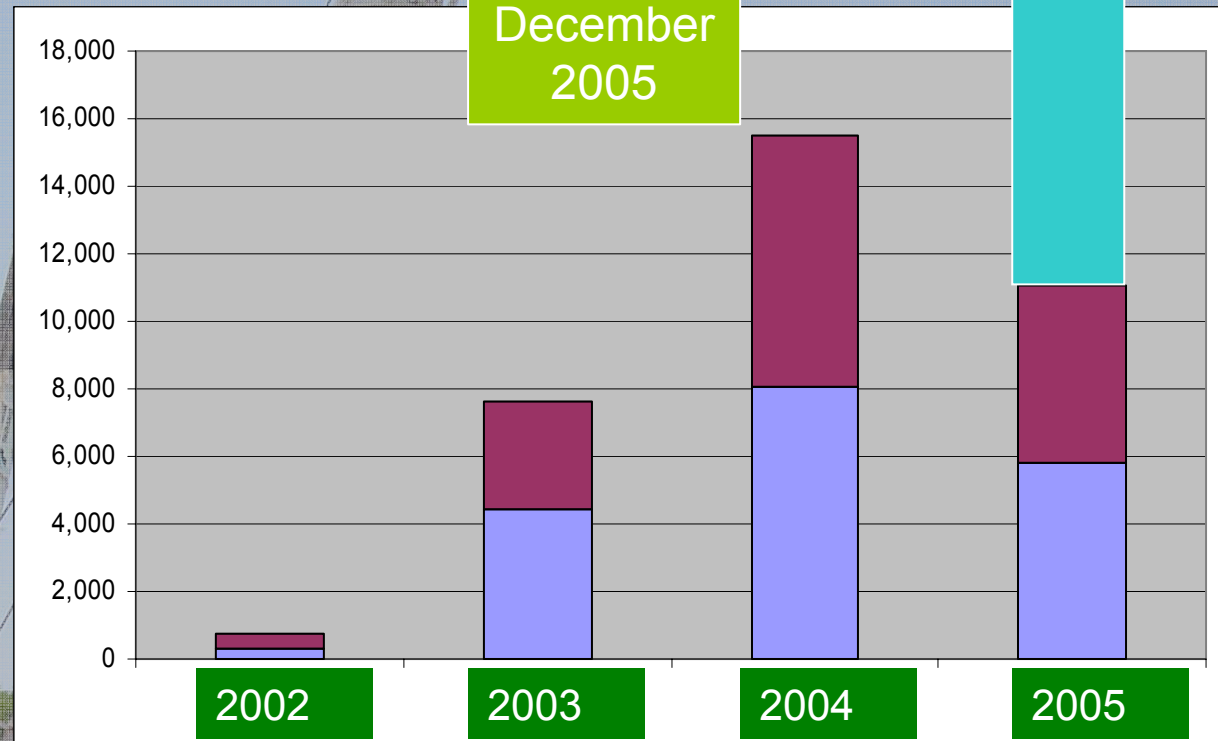
Only
between
January
and May
2005

Container throughput in Phnom Penh Port



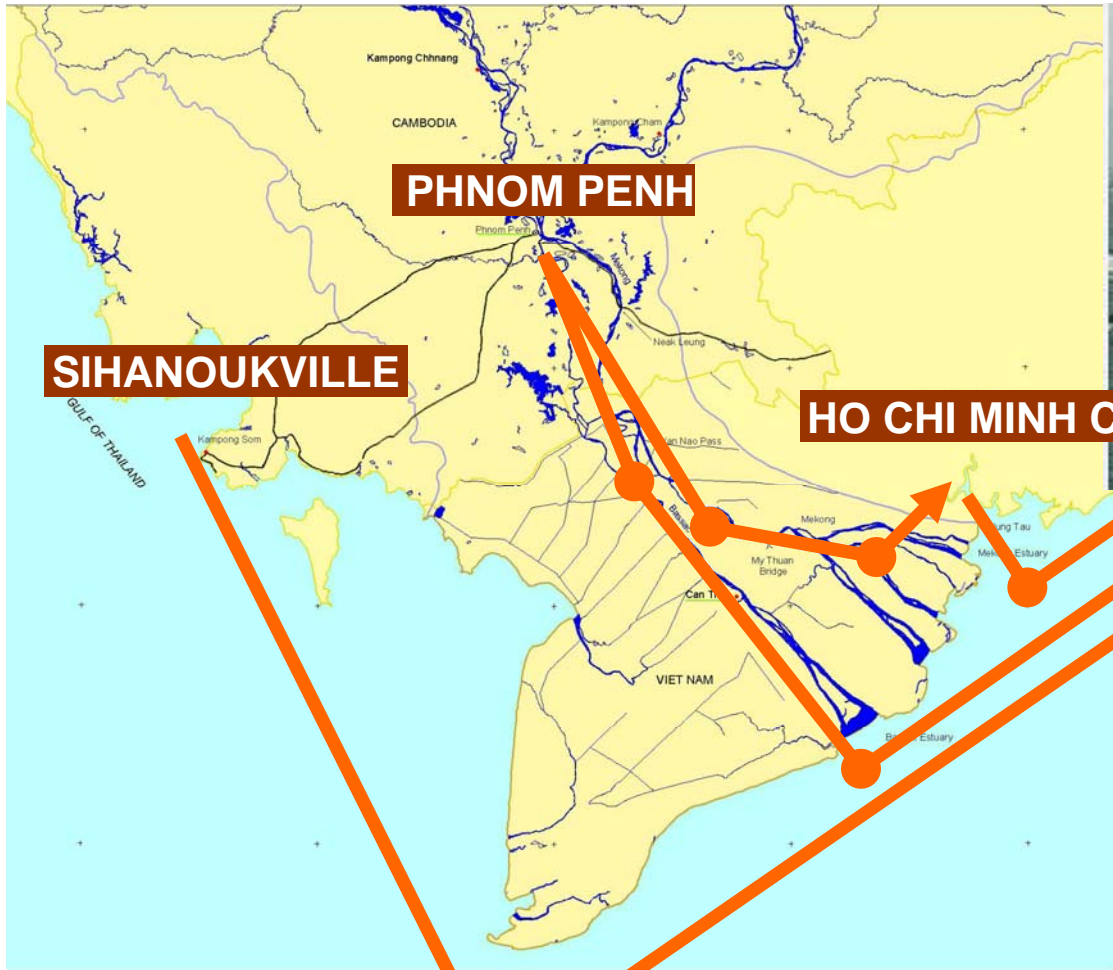
Imports

Exports



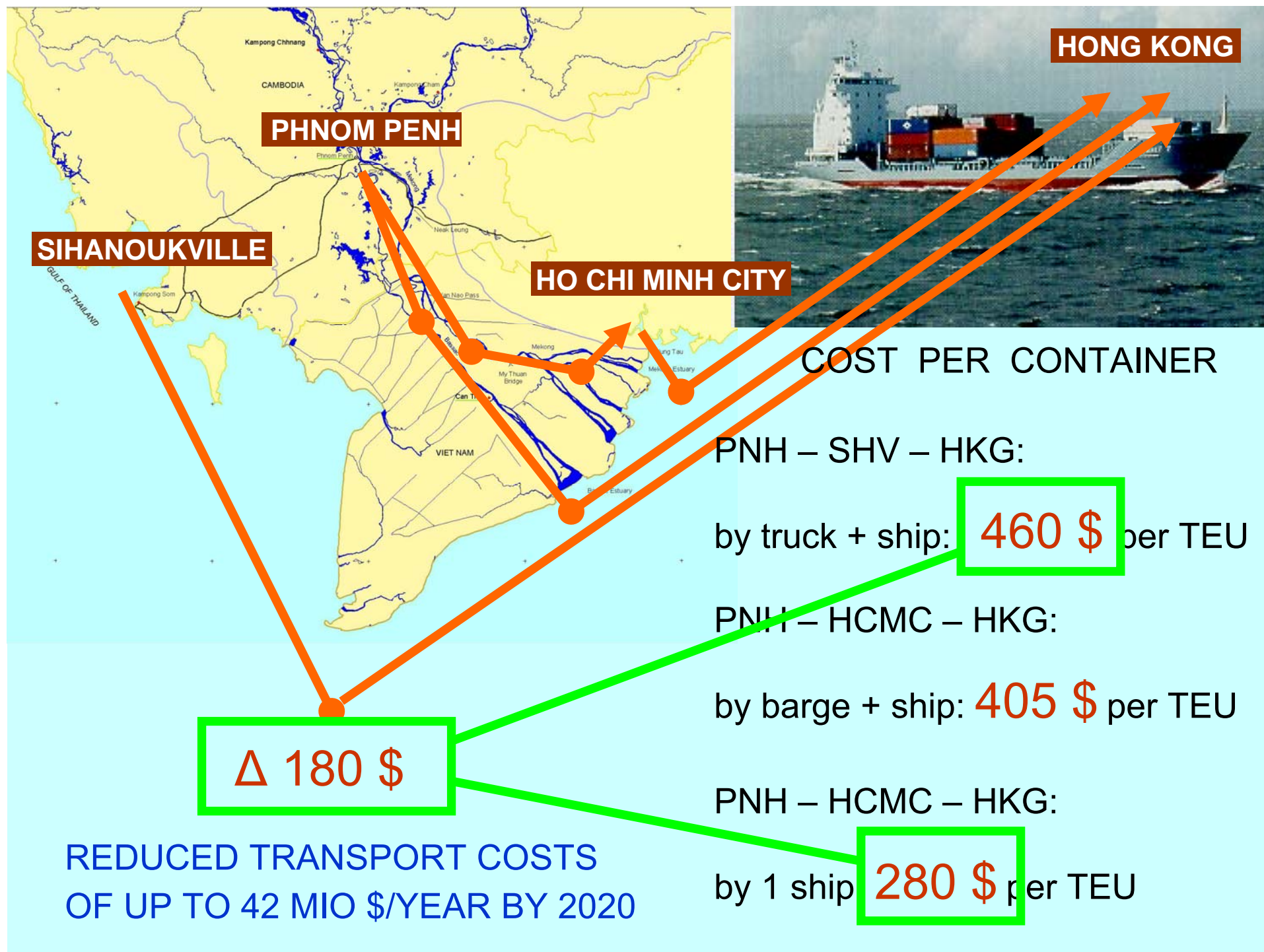
Container throughput in Phnom Penh Port





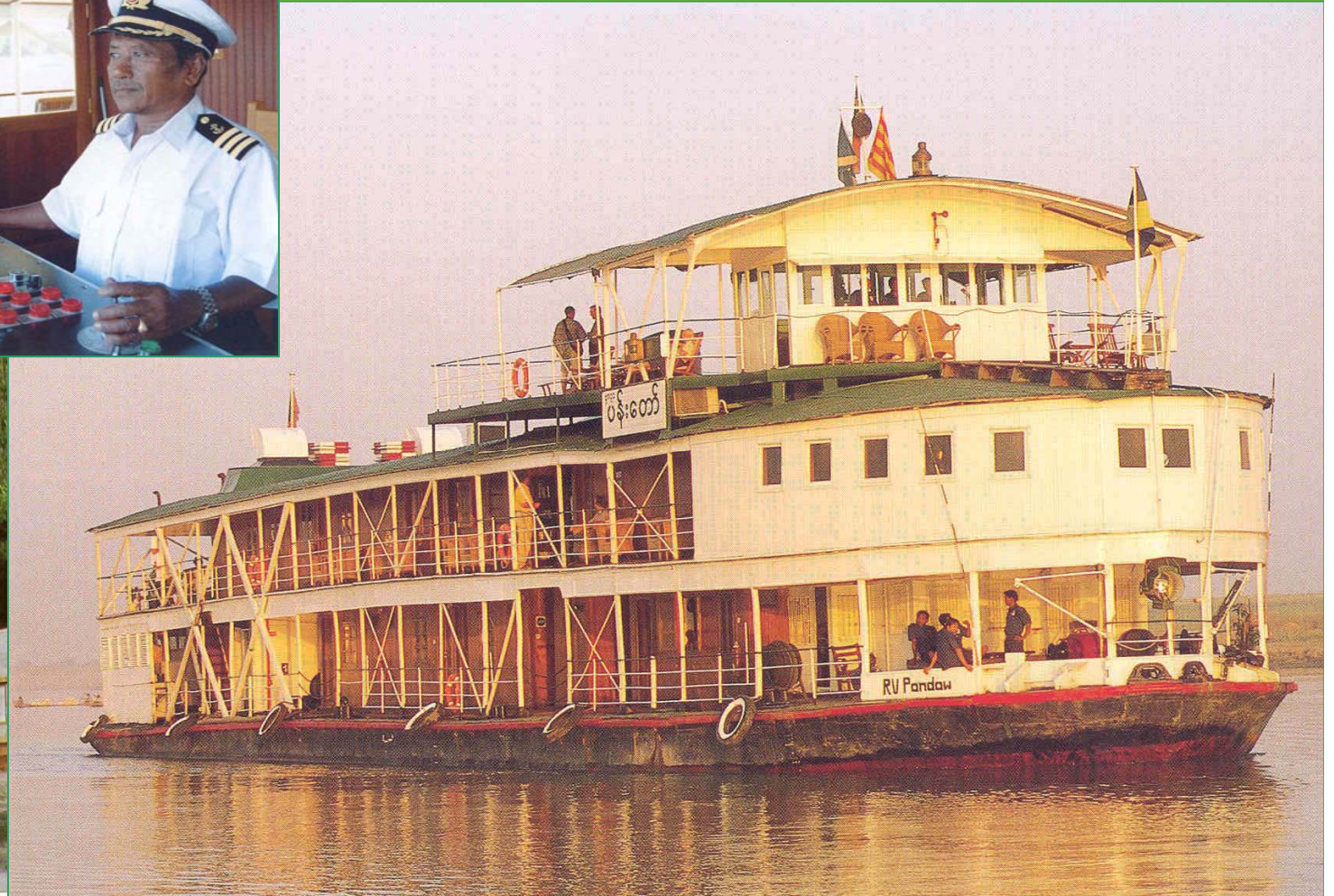
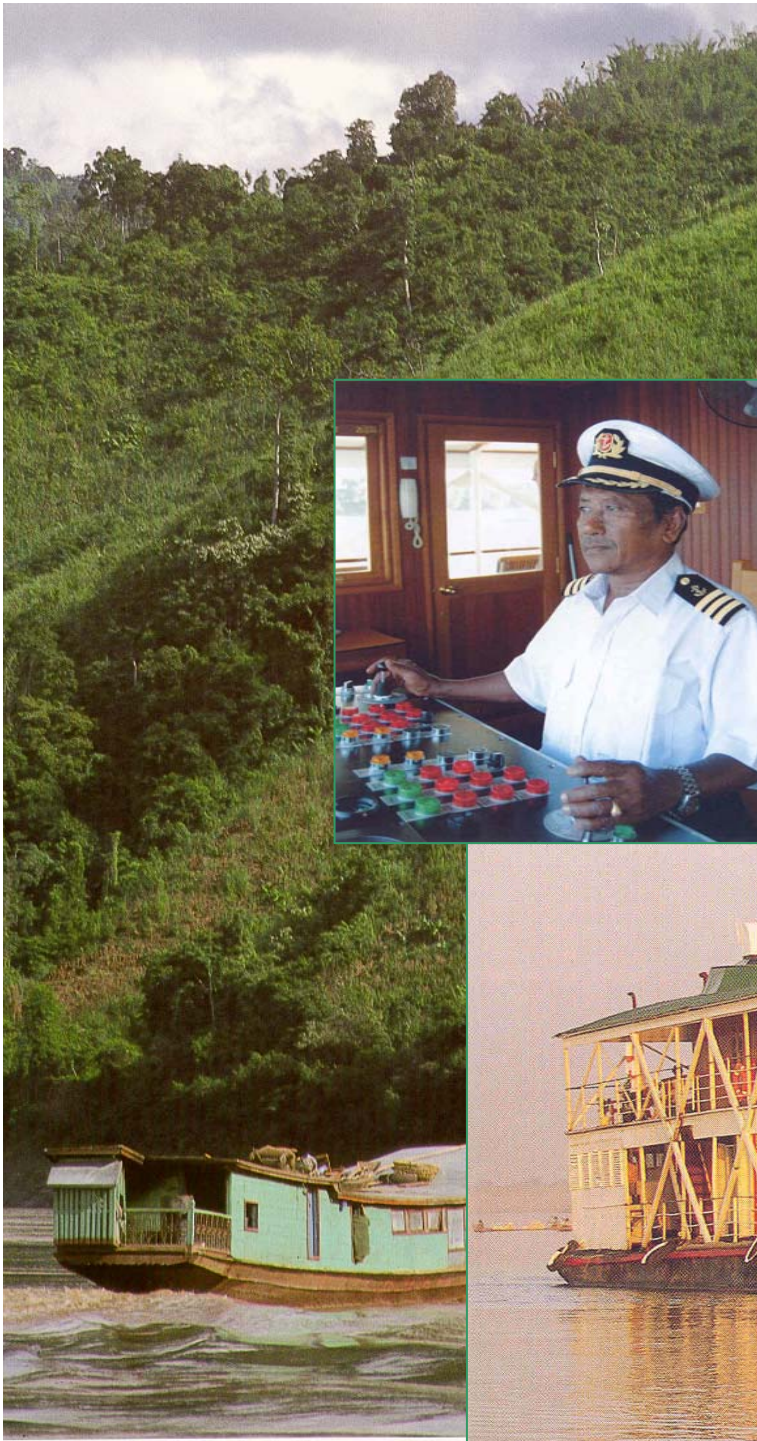
HONG KONG

COST PER CONTAINER



and the potential of the
Tourism industry





Domestic Waterborne Transport and Poverty Alleviation




It is not only about rural navigation for commercial purposes*

** Reference is made to Session 1 question: what are the main target groups – priority areas*





It is also about
accessibility to
schools and
hospitals

A photograph showing a muddy, rutted dirt road on the left side of a body of water. A person is standing on the road, looking towards the water. The background is filled with dense green trees and palm trees. The foreground shows deep ruts in the mud, with some water pooled in them. The sky is overcast.

Maintaining 1 km of road is
12 times more expensive than
maintaining 1 km of waterway

Accessibility during floods



- *What may happen if there is no navigation development or coordination ?*



Currently there are:

no “rules of the road”

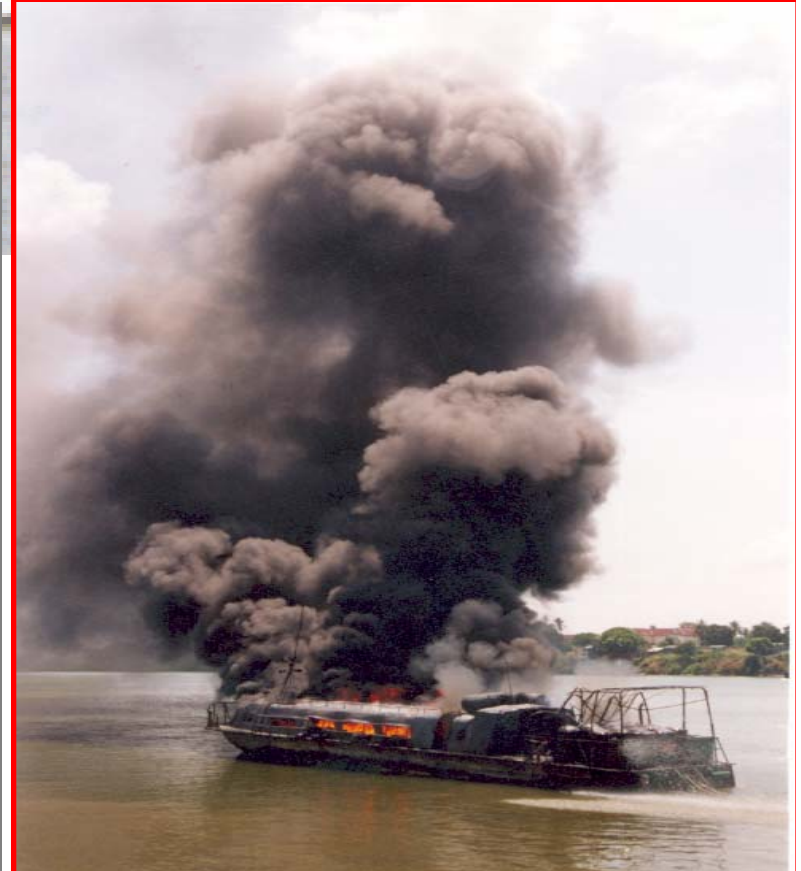
no regulations for carriage of dangerous goods – no proper facilities

no contingency plans

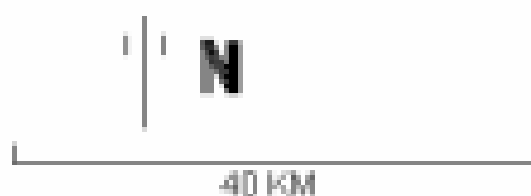
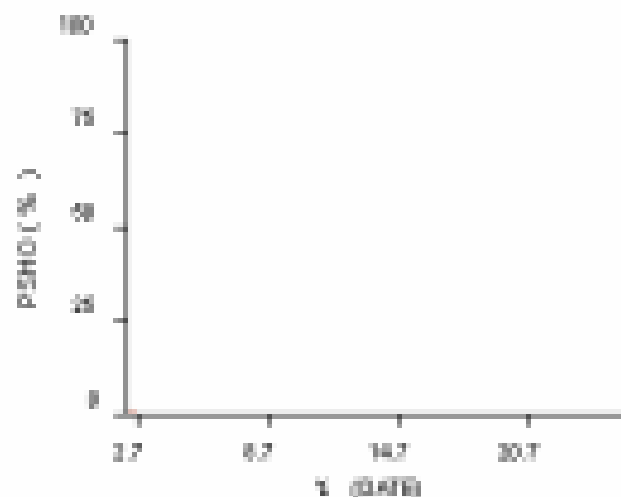
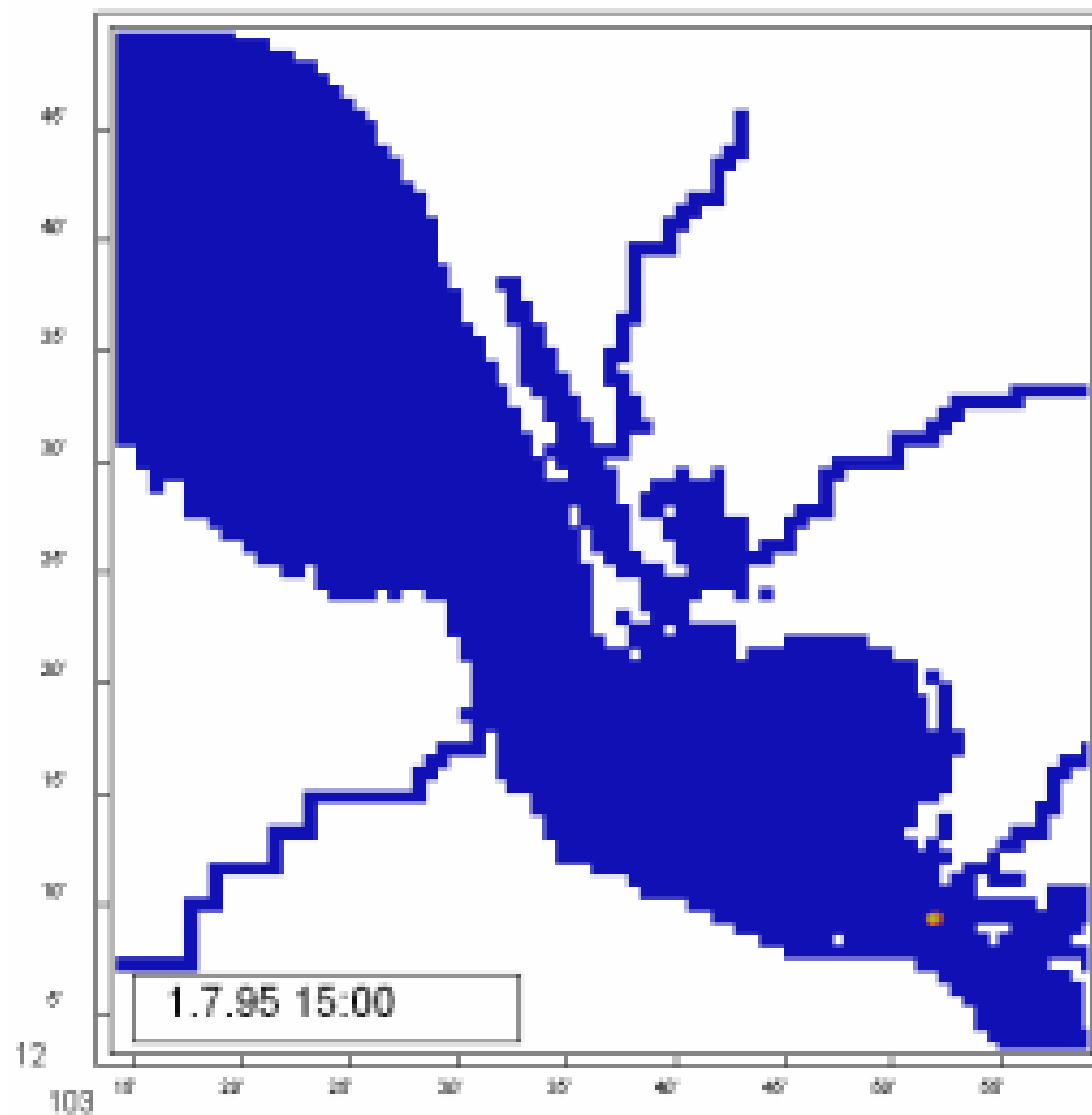
no means to combat oil pollution

no insurance requirements

...



Oil Accident



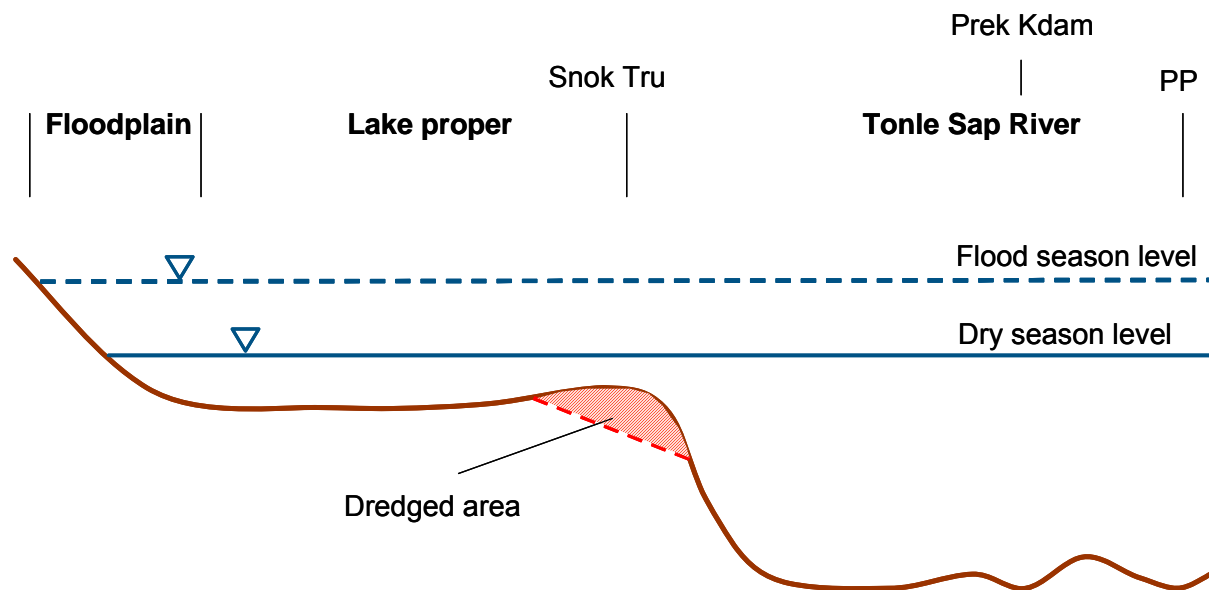
OUTPUT DEPTH: 1.16 M
SCALE (1:10 m)



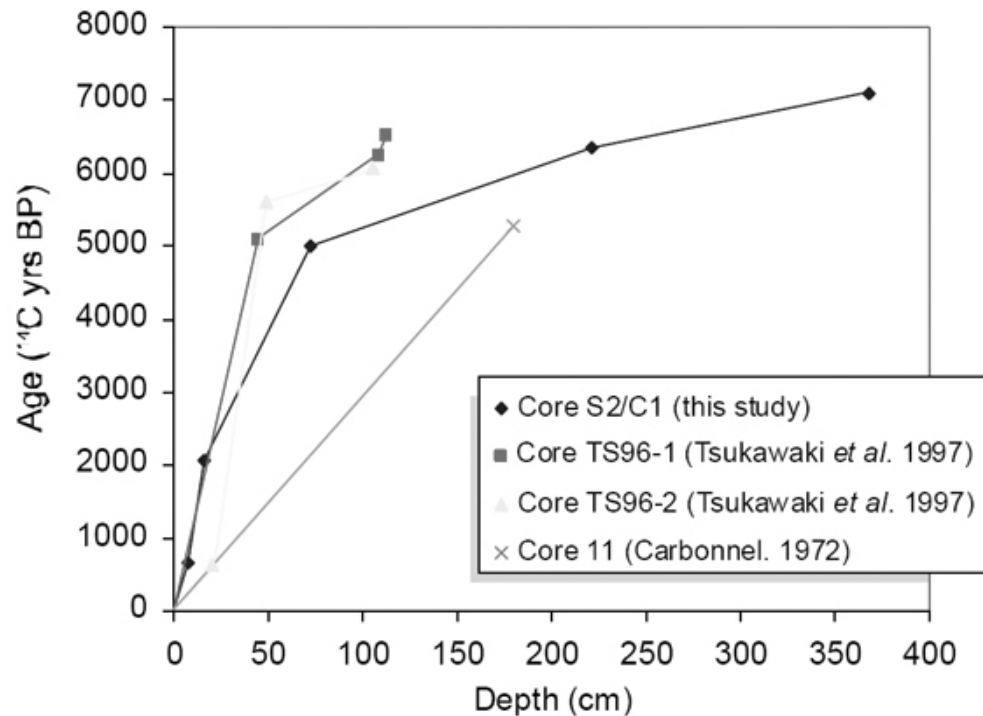
The Ministry of Public Works and Transport in Cambodia asked the team to study the feasibility and impacts of dredging a navigation channel in the Tonle Sap Lake

Dredging of Snok Tru will not empty the Tonle Sap Lake

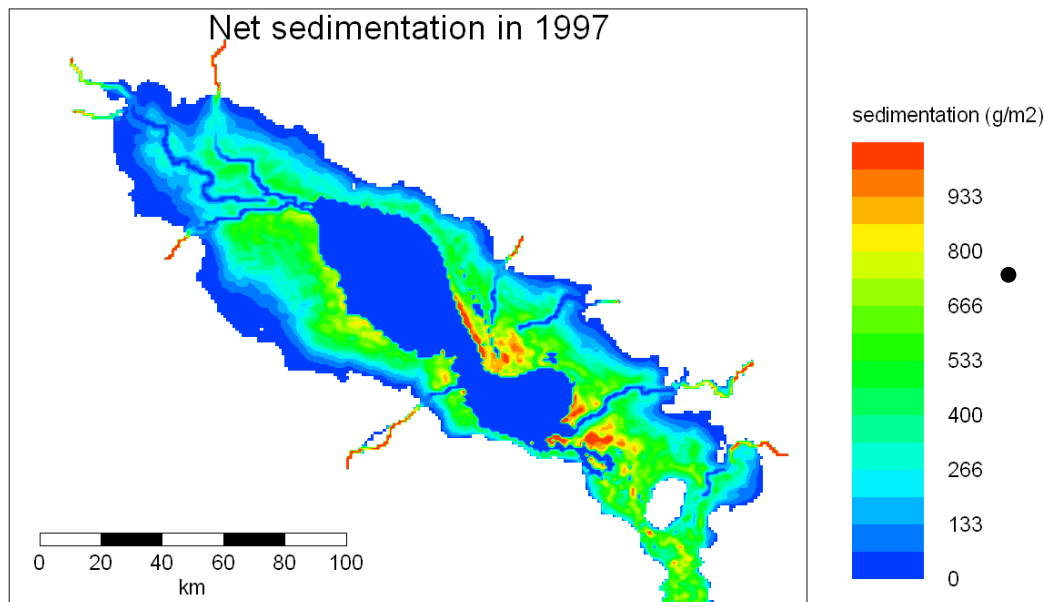
- Water level of Tonle Sap Lake is controlled by the Water Level in Mekong
 - During the dry season, WL in Phnom Penh is controlled by upstream discharge and sea level
- Dredging of Snoc Trou will not have an impact on the TSL water levels



Tonle Sap is NOT silting up with sediment

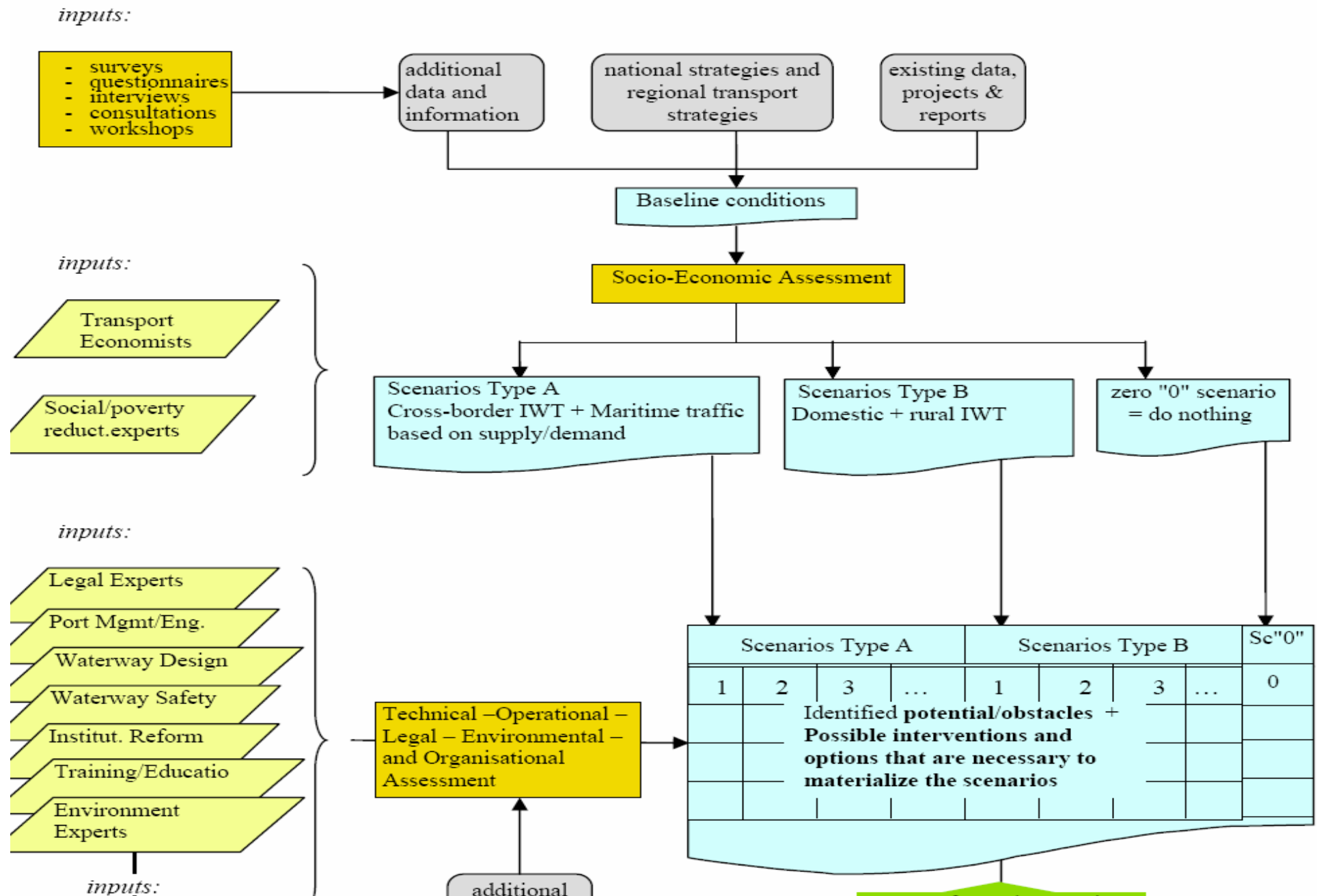


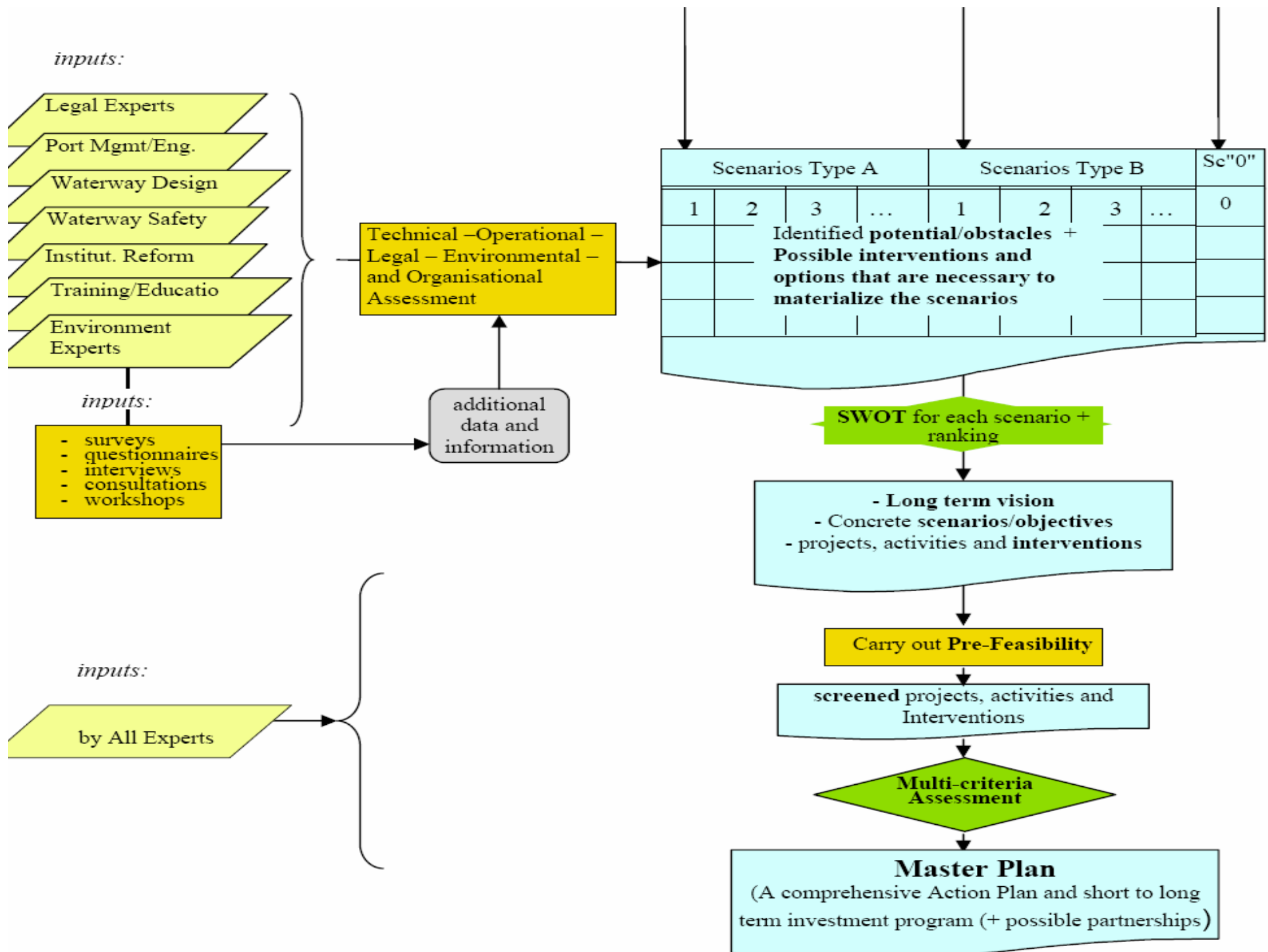
- Latest studies show that sedimentation in lake is 0.1 mm / year (*Tsukawaki et al., 1997 & Penny et al., 2005*)
- Supported by modelling → sediment trapped by floodplain vegetation (WUP-FIN, 2003)



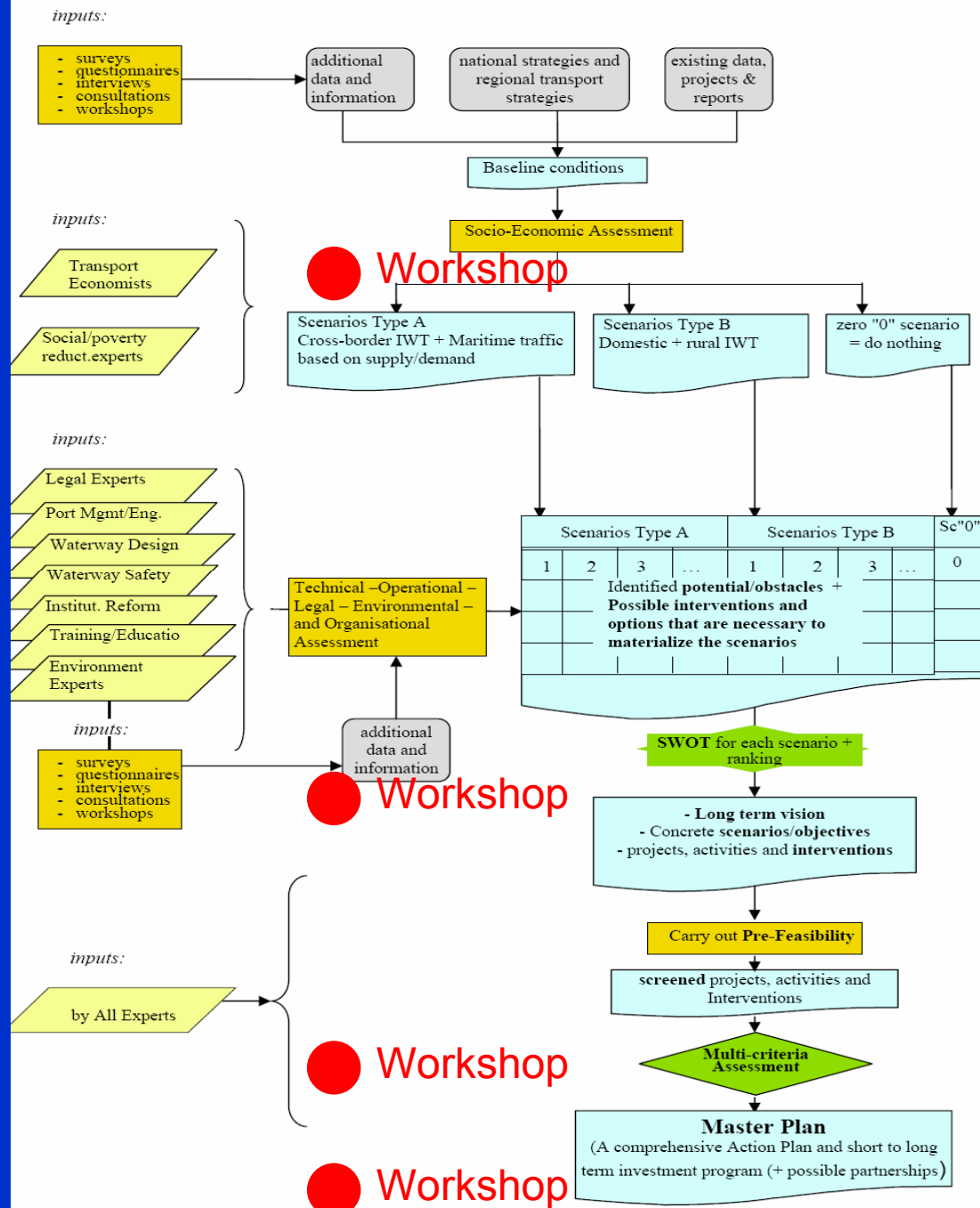
- *And how do we ensure all aspects are taken into consideration, in a balanced way, and in close cooperation with the other Mekong countries ?*

FLOWCHART FOR DESIGN OF THE MEKONG NAVIGATION MASTER PLAN





FLOWCHART FOR DESIGN OF THE MEKONG NAVIGATION MASTER PLAN

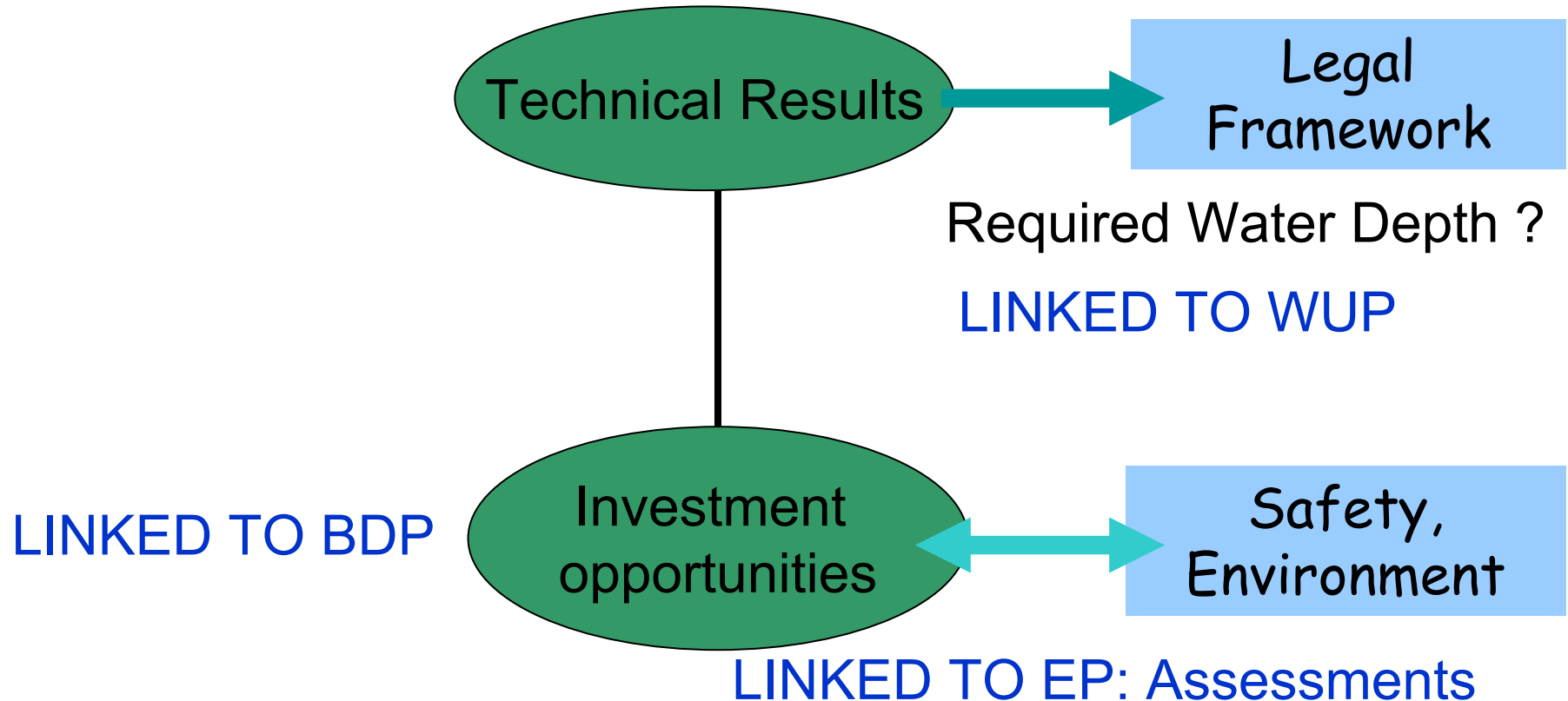


Cooperation with MRC Programmes: Analysis and Planning

Economic viability:
Multimodal transport
model

Technical viability of
the channel and port
improvements ?

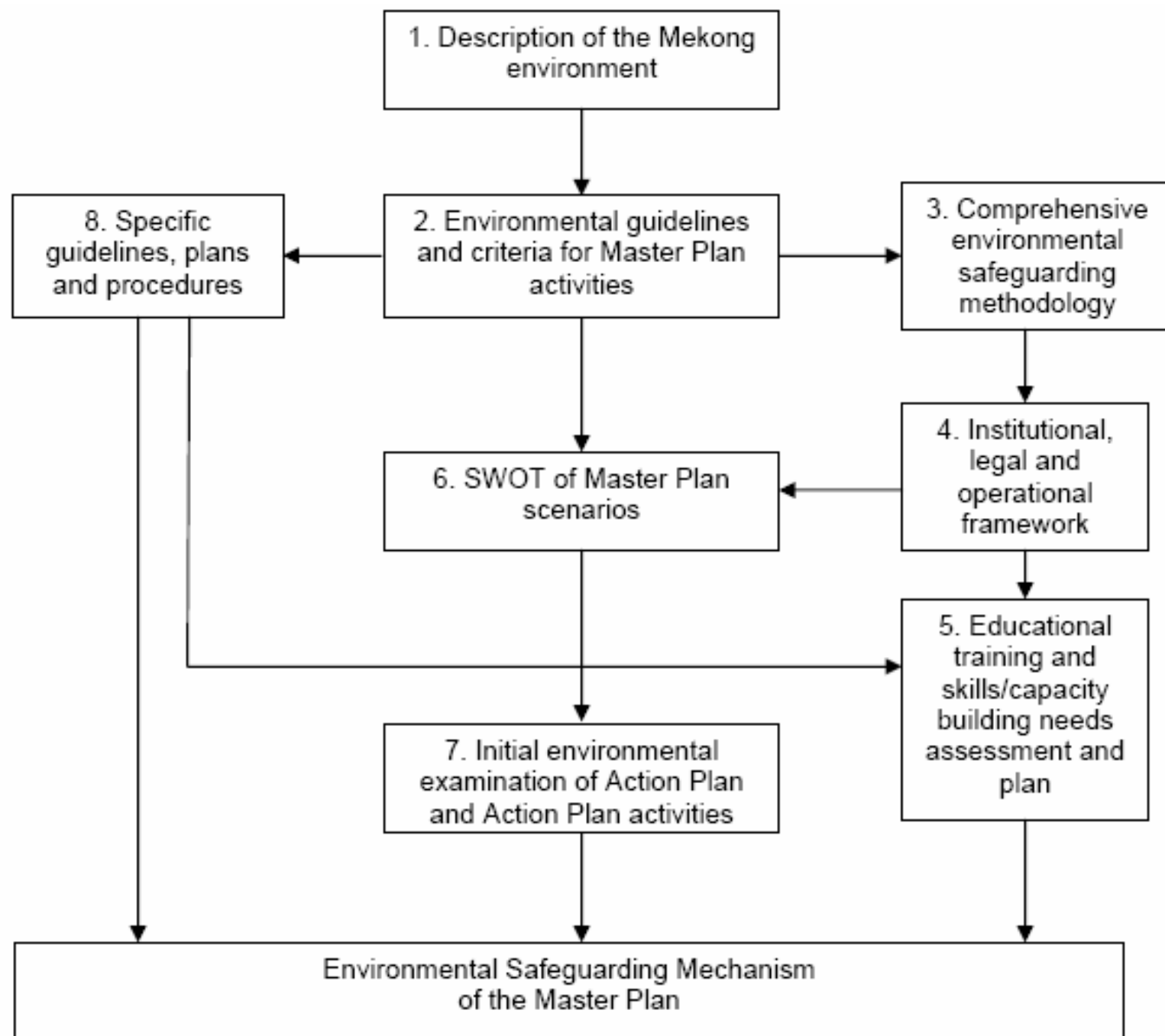
Social Improvements:
country craft, bank
erosion issues





CROSS-BORDER NAVIGATION:

- The project prepares ingredients for a bilateral Navigation Agreement (CA-VN)
- A road map for assisted negotiations (through MRC)
- Schemes to enforce common rules



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Inland waterway transport is a historical feature in the Mekong Basin, with proven diverse and far-reaching social and economic benefits

Coordination is essential to control the navigation system and make it a safe and regulated mode of transport

Public/private participation is much more than just a “cosmetic” chapter in the project design process

Regional cooperation between the Mekong member states through MRC, ASEAN, WB, ADB and international NGOs – but efficient coordination is still very difficult – **who is actually the coordinator ?**

Report: “Incorporation of Navigation into the Integrated Water Resources Management Strategy (IWRM)” – MRC Navigation Programme, January 2005



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