

# WEPA

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## The Water Environmental Management in Cambodia

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### 1- Water Environment Status -1 / 3



- ☛ Mekong River (MR) is across Cambodia for 480 km
- ☛ Areas approximately 5/6 are land and 1/6 are coast.
- ☛ 86% of the country area is the Mekong catchment.
- ☛ MR discharge in Cambodia approximately 300 billion cubic meters with the flow 2860 m<sup>3</sup>/s (18% of average basin's flow).

## 1- Water Environment Status – 2 / 3



☞ Water flow regimes of Tonle Sap Lake (TSL) closely link to MR:

- In rainy season (May-October), water level in MR is higher and flows into TSL through Tonle Sap River and the remaining run off to the South China sea.
- In dry season (November-April), water in TSL flows back into MR and run off to the Mekong delta – this process is very important to the agricultural practices at the Mekong Delta.

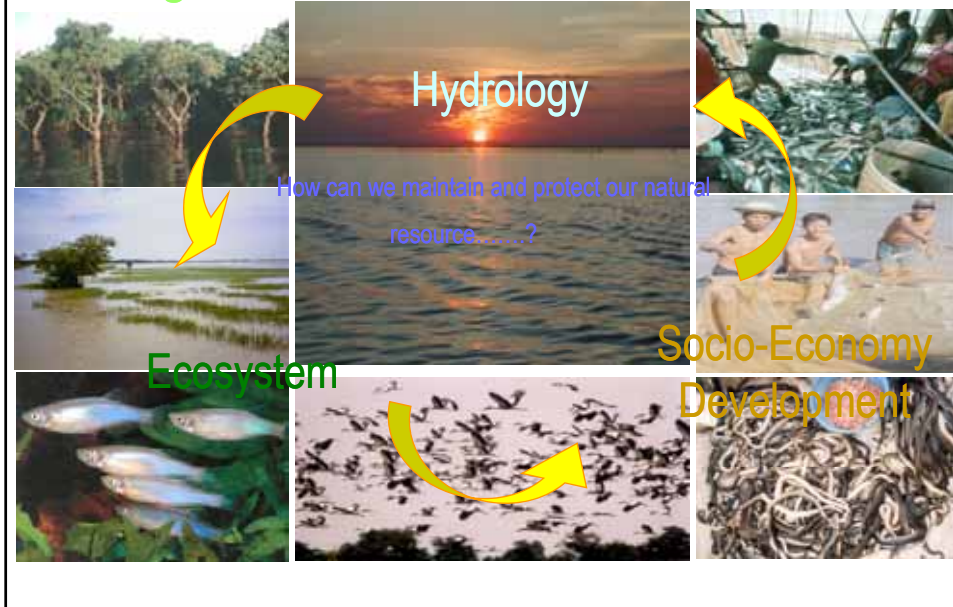
## 1- Water Environment Status - 3 / 3



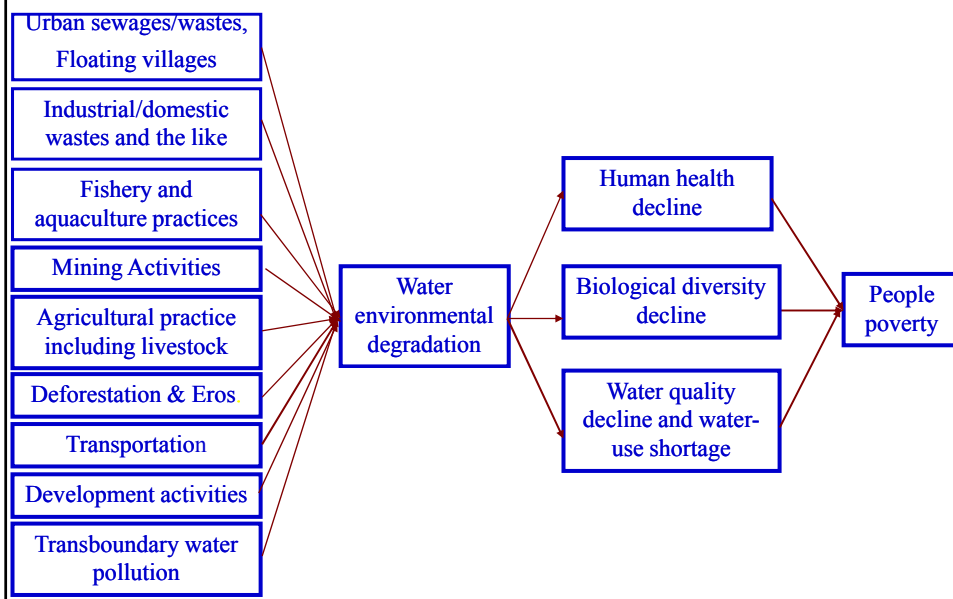
☞ The TSL is the largest permanent freshwater lake in Southeast Asia.

☞ TSL is yearly stored waters receiving from MR and local areas approximately  $72 \times 10^9$  m<sup>3</sup>.

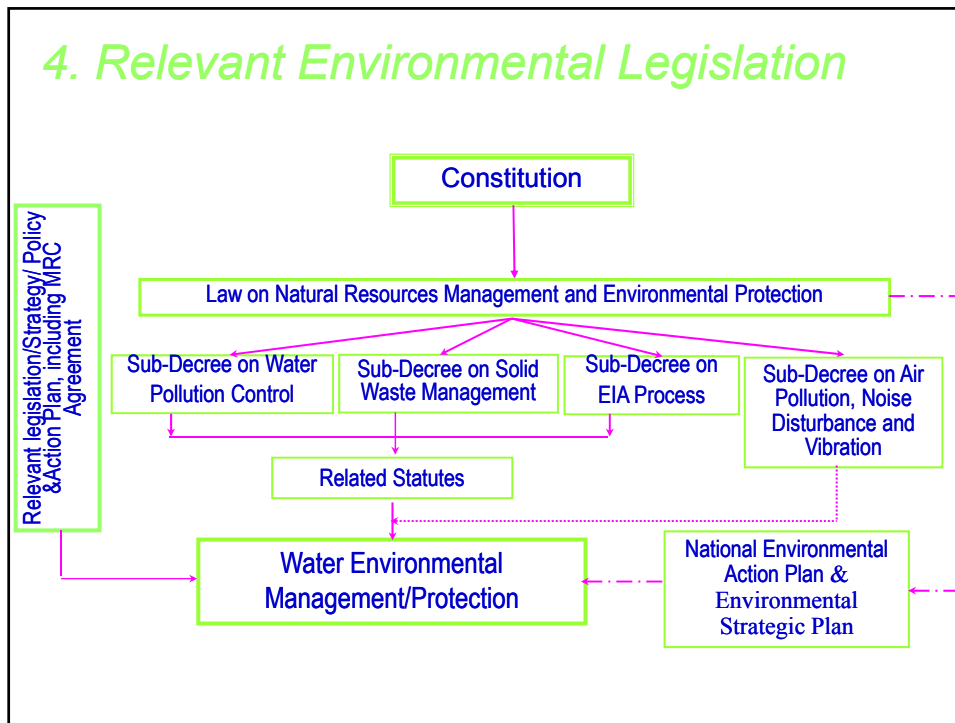
## 2- Usefulness of water environment in the Kingdom of Cambodia



## 3. Current Issues toward Water Env-tal Degradation

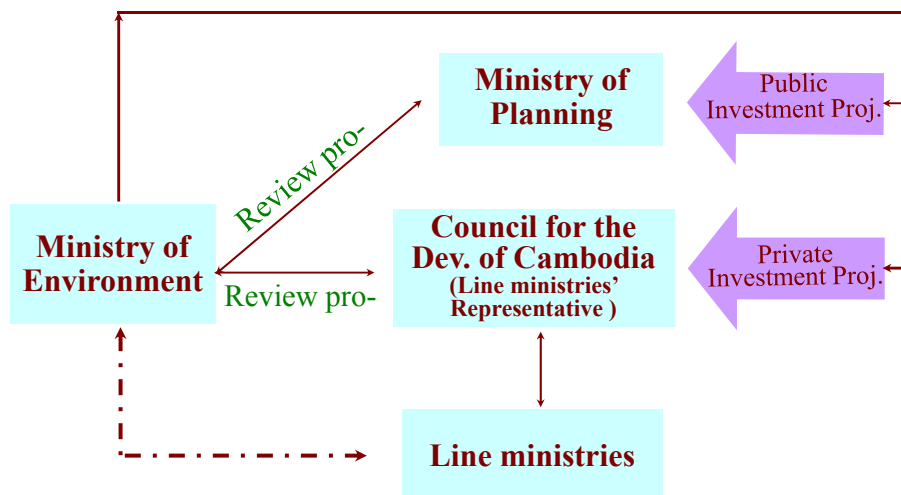


## 4. Relevant Environmental Legislation



## 5. The Man-ment Pro-res and Act-ties-1 / 3

### Decision process



EIA/IEIA Processing for the proposed investment project in Cambodia

## *5. The Man-ment Pro- and Act-ties - 2 / 3*

- ☞ Decentralization process is being applied at provincial level within the environmental sector:
  - EIA report reviewing for the project less than two million USD.
  - Environmental pollution controlling and/or monitoring by local authority.
  - MoE central office will provide technical support, including capacity strengthening as well.

## *5. The Man-ment Pro- and Act-ties - 3 / 4*

- ☞ The related works of water environmental pollution control/monitor, which implemented by the MoE include as follows:
  - monthly freshwater monitoring at designated water bodies (through sampling points);
  - routine control/monitoring at pollution sources and evaluating the environmental pollution level; and
  - conducting educational environmental quality management programmes for the Environmental Provincial and Municipal Dept. and other key stakeholders.

## 5. The Man-ment Pro- and Act-ties - 4 / 4

- ☞ Promoting the public awareness through media systems and the like for increasing public participation.
- ☞ Applying the legal instruments for:
  - Permitting to treated wastewaters for discharging into receiving sources, including licensing within a specific period.
  - Fining violators who committed opposing the stipulations of law and related statutes.
- ☞ The celebration of National Environmental Day on 5th June for every year.

## 6. Constraints 1 / 2

- ☞ Many constraints are occurred during the implementing periods as follows:
  - Lack of particular national strategic plan to mitigate and eliminate water environmental pollution.
  - Inadequacy of expertise staff, especially, in the field of wastewater management and their treatment engineering.
  - Inadequacy of supporting tools like particular legal tools, budget and analytical facilities.
  - Local and international net working, for instance, data and information dissemination and exchange is limited.

## 6. Constraints 2 / 2

- There is no central wastewater treatment plant, except onsite treatment system in some pollution sources.
- The participation of educational institutes, NGOs, etc., has not widely occurred yet.
- Public awareness in the context of water environmental management is limited.
- Insufficiency of other means of medias for public dissemination.

## 7. Conclusion 1 / 2

- ☞ To promote these constraints, Cambodia, especially, the Ministry of the Environment step-by-step efforts as possible for capacity building and institutional strengthening, including public awareness promotion for all stakeholders.
- ☞ To promote and strengthen the cooperation and understanding among riparian countries and countries in the region/world.

## 7. Conclusion 2 / 2

- ☞ Cambodia, however, still requires :
  - expanding monitoring activities and educational programme throughout main cities and urban areas.
  - Technological transfer and LAB/concerned staffs' capacity strengthening.
  - Experience exchange and closed cooperation among GMS countries, and especially, with adjacent countries.
- ☞ To accomplish these challenges, Cambodia would ask for technical assistance from international organizations and donors.

Thank you very much for your  
attention ! Arii-gaa-too  
gosai-imasu !

