

**INTERNATIONAL SYMPOSIUM ON HARMONISING  
ENVIRONMENTAL CONSIDERATIONS WITH SUSTAINABLE  
DEVELOPMENT POTENTIAL OF RIVER BASINS**

24-26 March 2010

**IRBM in Malaysia – DID Initiatives**

by

**Department of Irrigation and Drainage, Malaysia**

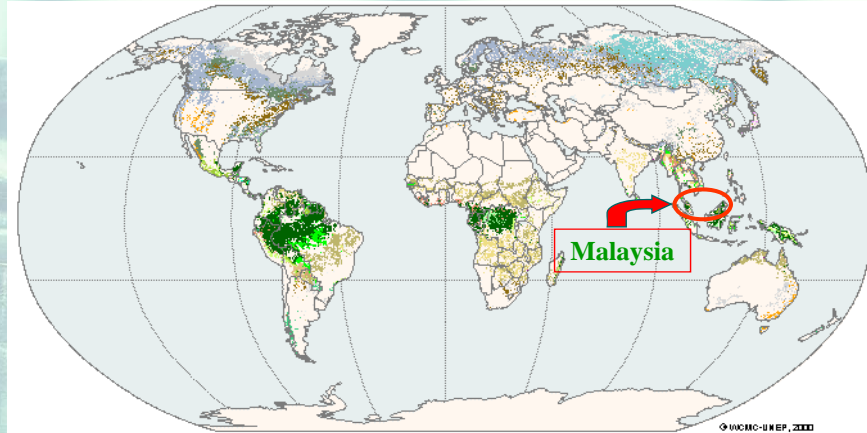
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## Introduction



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## Malaysia



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## Rivers in Malaysia



## Definitions

- “River” means any river, stream, creek or other natural water course, and/or any tributary, distributary or artificial deviation thereof (National Land Code 1965).
- “River” means a body of inland water flowing for the most part of the surface of the land but which may flow underground for part of its course.
- “River basin” means the area of land from which all surface run-off flows through a sequence of streams, rivers and, possibly, lakes into the sea at a single river mouth, estuary or delta (adapted from EU Water Framework Directive 2000).

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## River Basin



## What is IRBM?

“Integrated River Basin Management (IRBM) is the **sustainable management of *land and water*** based on ***natural geographical boundaries***, rather than administrative units.”

## IRBM

“The process of **coordinating conservation, management and development of water, land and related resources** across sectors within a **given river basin**, in order to **maximise** the economic and social **benefits derived from water resources** in an equitable manner while preserving and, where necessary, restoring freshwater ecosystems.”

(Adapted from Integrated Water Resources Management, Global Water Partnership Technical, Advisory Committee Background Papers, No. 4, 2000)

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## IRBM (continued)

- Objectives of IRBM Plan
  - Ensure Clean Water
  - Ensure Sufficient Water
  - Reduce Flood Risks
  - Enhance Environmental Conservation

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## Issues

- Institutional issues:
  - coordination among agencies
  - coordination between states
- River basin planning is not mandatory
- River sand mining
- River pollution
- Erosion and sedimentation
- Construction of bridges and jetties
- Abstraction of water

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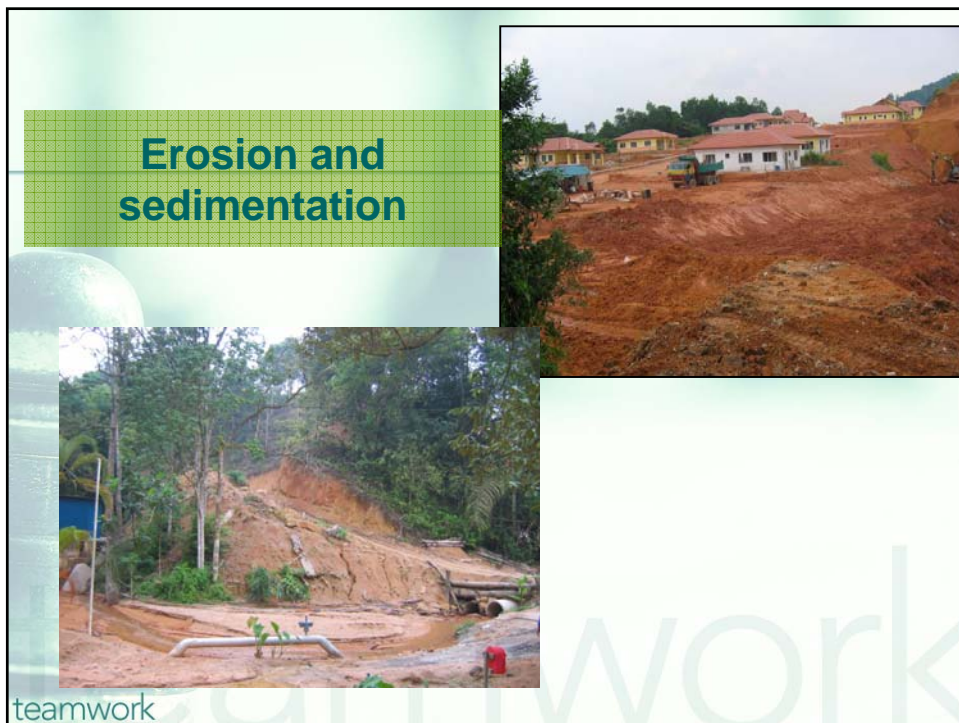
## Coordination

- ◆ Coordination among agencies and between states
- ◆ Sustainable use of resources
- ◆ Effective management of water resources

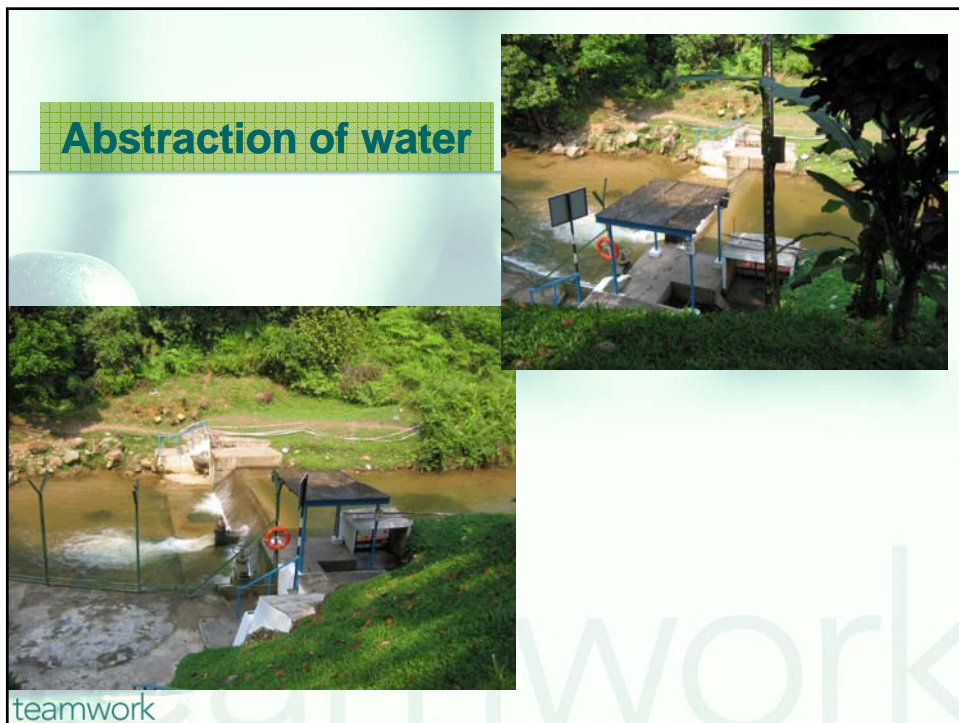


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## Issues (continued)

- Stormwater management
- Diversion of water
- Groundwater management
- Drought management
- Control of river reserve
- River front development
- Recreation

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## DID's Roles

- Under the Ministerial Functions Act 1969 (Act 2), Ministers of the Federal Government Order 2009 (P.U.(A) 222), the Minister of NRE shall be charged with the responsibility for DID in the following subjects;
  - Planning and development of flood and drought forecasting systems, management of hydrological data and information and assessment and management of national water resources,
  - Planning and management of river basins,

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## DID's Roles (continued)

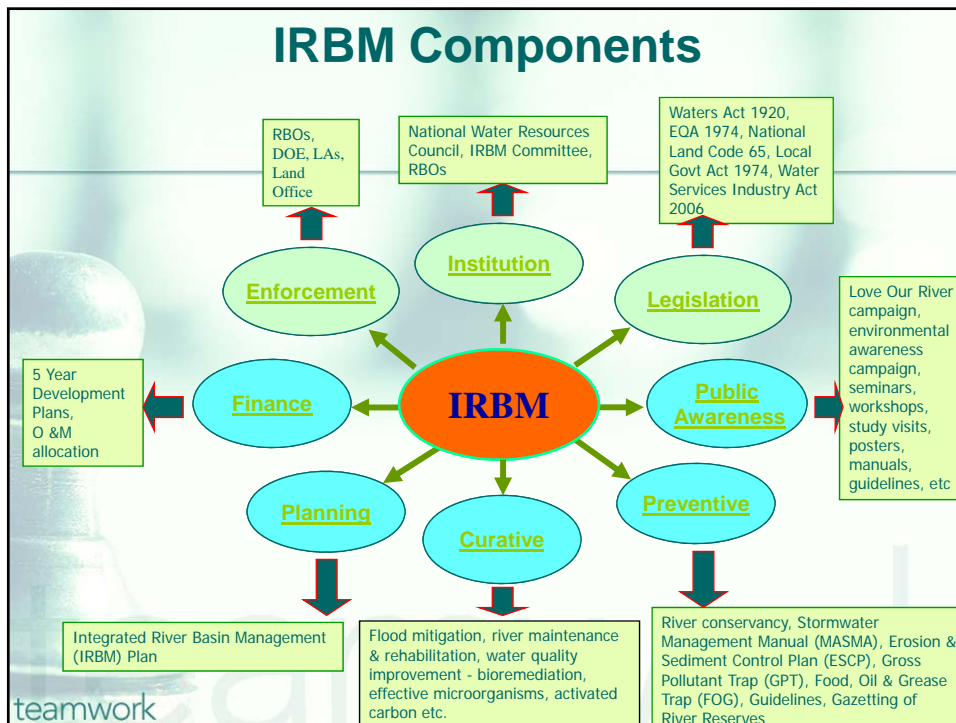
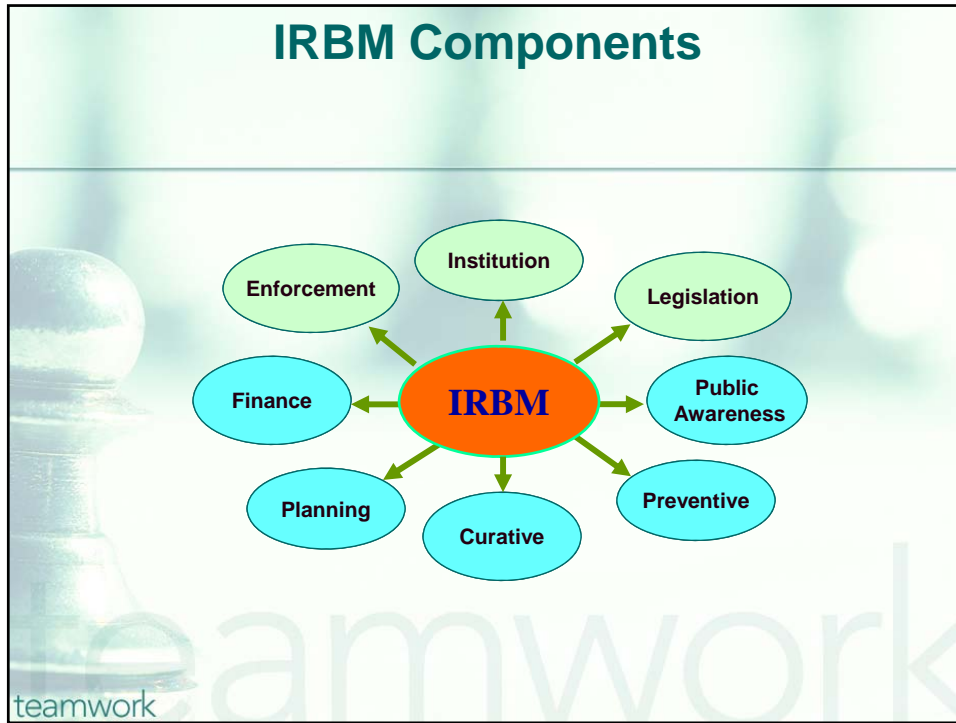
- Planning and development of infrastructure as well as water management for crops and other agricultural needs.
- Planning and management of flood mitigation programmes,
- Development and management of coastal zones to reduce coastal erosion and sedimentation problems at river mouths,
- Managing and regulating the implementation of storm water management programmes in town areas.

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## What has been done by DID

- Promoting IRBM since the 1990's
- IRBM Components

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## Other Initiatives

# 1 State 1 River Programme

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## Langat River Basin

- IRBM Plan for Langat River Basin was completed in 2005,
- It comprises the following components:
  - Catchment Management and Monitoring Plan
  - River Corridor Development and Management Plan
  - Water Resources Development and Management Plan
  - Flood Mitigation Master Plan
  - Environmental Management Plan

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## Recommendation

- Langat River is a transboundary river
- Langat River Basin falls under
  - Category 2 - shared by more than one state
    - Selangor (78%)
    - Negeri Sembilan (19%)
    - Federal Territory of Putrajaya (3%)
- Therefore, it is recommended to establish an RBO as follows:
  - Langat River Basin Management Committee
    - Langat River Basin Technical Management Committee
      - Langat River Basin Taskforce (State Of Selangor)
      - Langat River Basin Taskforce (State Of Negeri Sembilan)

## Conclusion

- ◆ IRBM is the way forward in managing our river basins.
- ◆ The legislation and institution components need to be strengthened and more made comprehensive in order to ensure the effective implementation of IRBM.
- ◆ Everyone must work together to ensure sustainable water resources management for our future generations.

