

# Individual Report on Understanding of the IWRM

Prepare By .

**Herman Idrus, CES**

Jasa Tirta II Public Corporation

Citarum River Basin Organization - Indonesia



# Water is high on the global agenda

- ☞ Over the past 20 year more than 2.4 billion people have gained access to water supply and 600 million to sanitation.
- ☞ 1.1 billion people still lack access to improved water services
- ☞ 2.4 billion people still live without improved sanitation
- ☞ 4.0 billion people live without sound wastewater disposal
- ☞ 3.5 million children die from waterborne diseases every year

# The response

- The Dublin Principles 1992
  - Agenda 21
  - Johannesburg Summit
  - Millennium Development Goals – halving the population without access to improved water supply and sanitation by 2015
- 

# Continues

## The Dublin principles (1992)

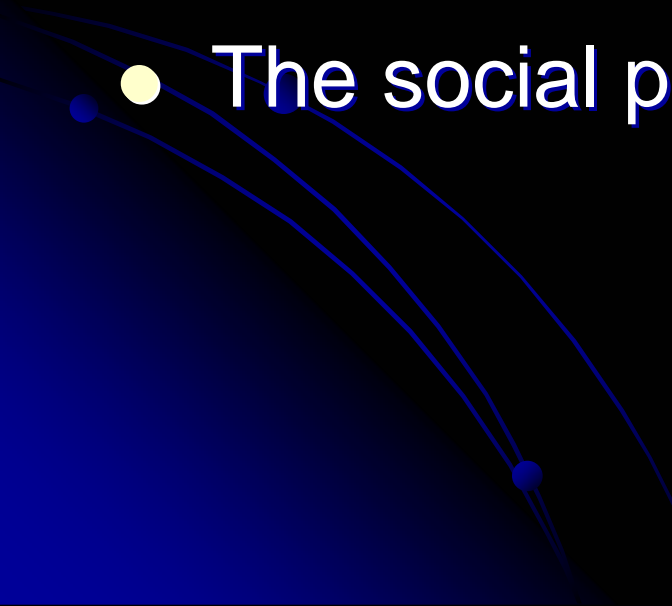
- Water is a single, finite resource
- Water management and development should include stakeholders
- Water is an economic good
- Women play a central role in management and conservation of water

*The Dublin Principles have served as guide for the global water dialogue*

# Why IWRM ?

- Globally accepted and makes good sense
- Key element in national water policy
- Incorporates social and environmental considerations directly into policy and decision making.
- Directly involves the stakeholders
- Is a tool for optimizing investments under tight financing climate.

# IWRM Principles : Rio / Dublin

- The ecological principle
  - The institutional principle
  - The economic principle
  - The social principle
- 

# Integrated Water Resources Management

A systematic process for linking water and water related policy, objectives and uses to improve decision making in :

- Operation and managements of natural resources and environmental systems;
- Design and implementation of programs and polities.

A coordinating framework for integrating sectoral needs, water and water-related policy, resource allocation, and management within the context of social, economic, and environmental development objectives

# The IWRM Process

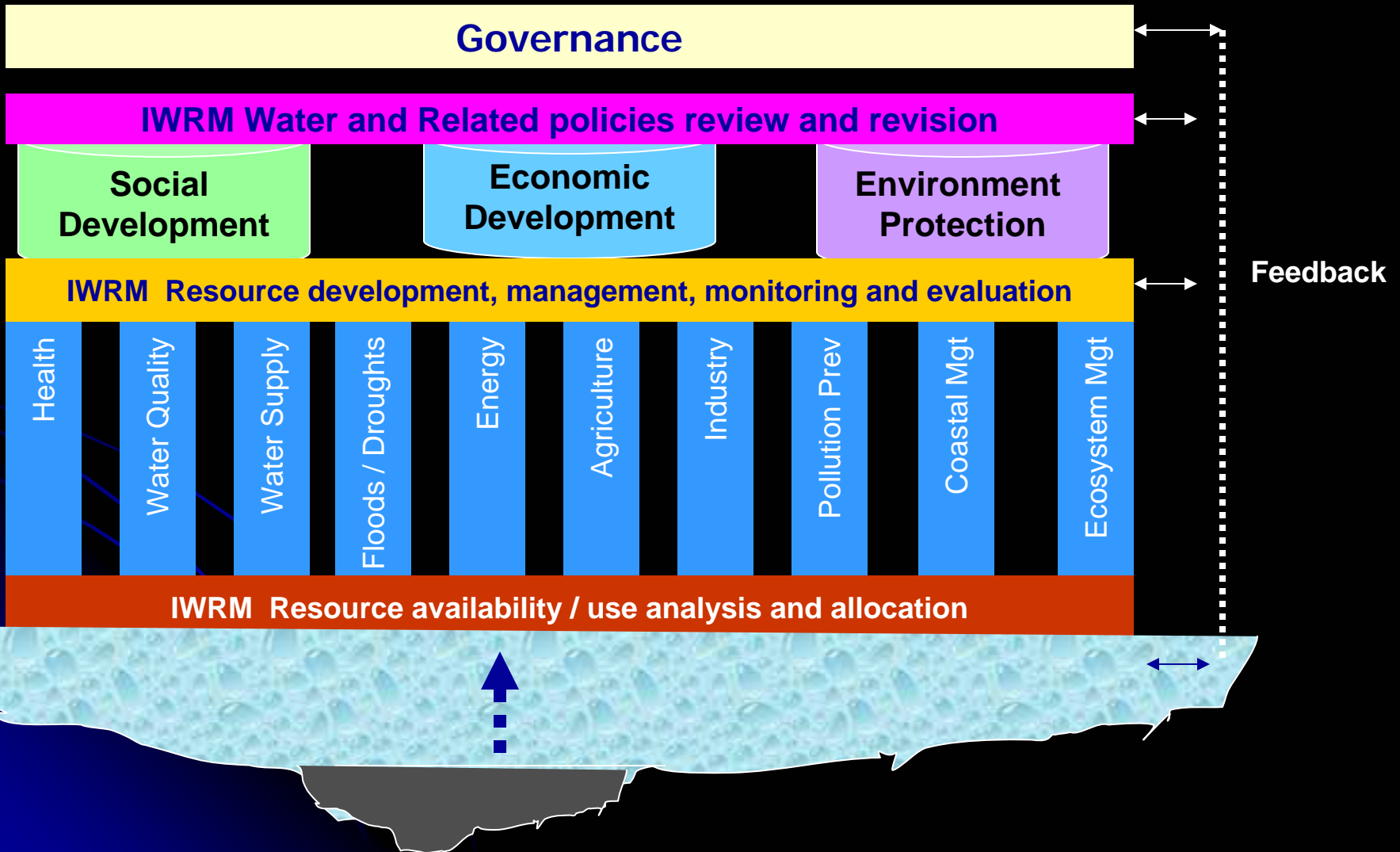
The IWRM process allows for effective and efficient management of water resources by considering :

- Sectoral interests including health, agriculture, urban and industry;
- Stakeholder participant in decision making including planning, design, implementation, ownership;
- institutional objectives and coordination;
- ecological issues environmental issues, including water quantity and quality
- gathering and sharing of hydrologic, environmental, economic and social data and information;
- sustainability of the resources base;
- economic and financial issues, including long-term costs, benefits and opportunity costs;
- Social issues
- Legislative and policy frameworks for national and trans-boundary prosperity; and
- Need for building the necessary institutional and human capacity .

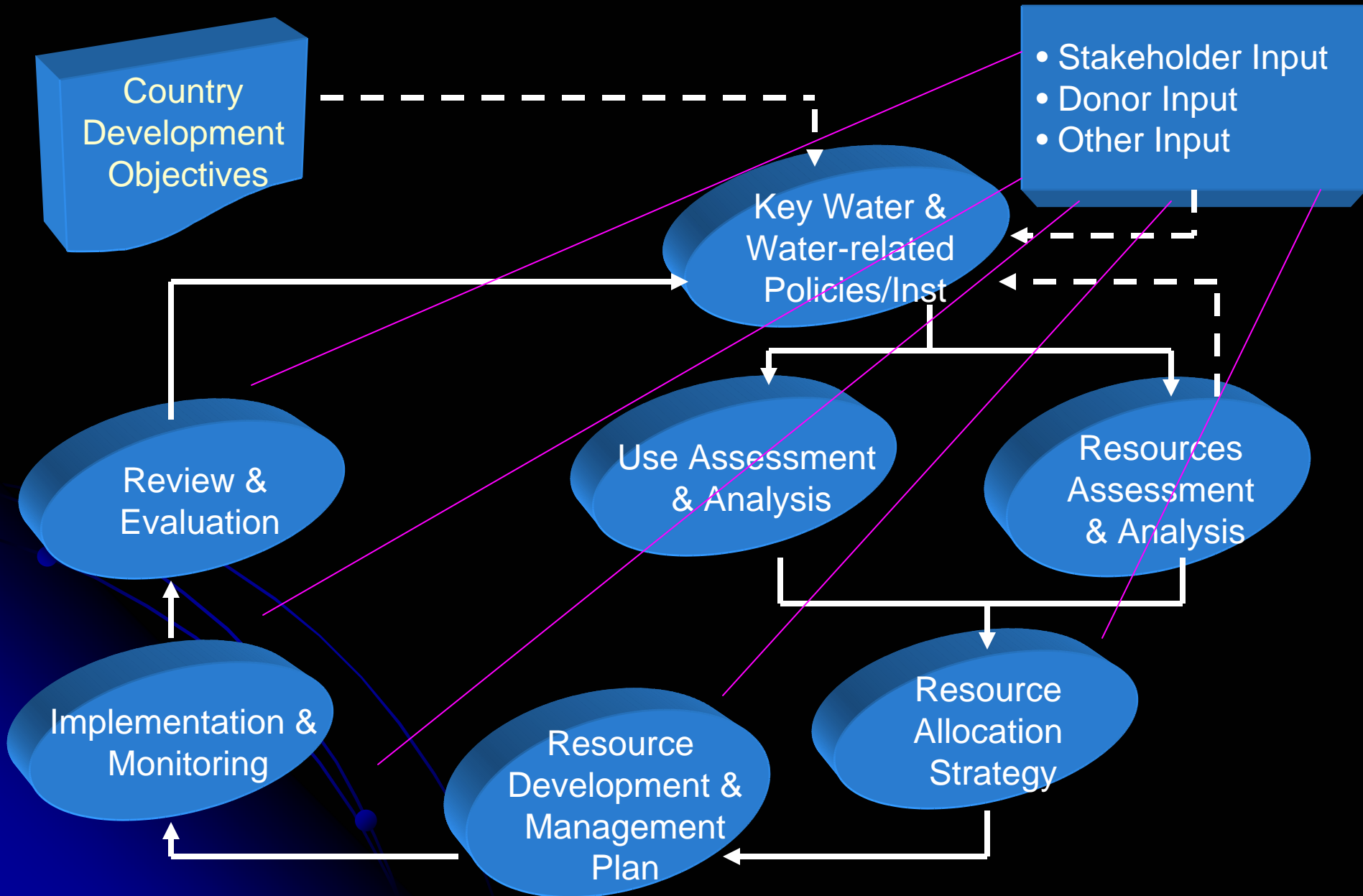


# Water Resources Development: The IWRM Process

**Prosperity**



# Schematic of the IWRM Process




# Key Elements of IWRM

- Sound water policies (based on overall development objectives, stakeholder input, donor input, etc).
- Legal, institutional, and regulatory framework (Governance)
- Stakeholder participation
- The critical role of women
- Perception of water (cultural, religious, political)
- Value of water (economic, social, environmental)
- Equitable allocation of water resources
- Decision making at the lowest level appropriate

- Decentralized responsibility for managements and delivery of water and ecosystems service.
- Sound scientific and technical approach
- Data/information system and knowledge base.
- Analytical tools for assessment of resources (value, use cost, tradeoff, pay-back, allowable risk, water pricing)
- Framework for monitoring and enforcement
- Institutional and human capacity
- Conflict management

# Approaches to Water Management

- Ad hoc
  - Economic Analysis – Single Project or Basin
  - Multi-Objective Planning
  - Comprehensive Multi-Purpose River basin planning and Management
  - Strategic Planning and Implementation through IWRM
- 

# Conclusion

- A process, not a product
- Scale independent – applies at all levels of development
- A tool for self assessment and program evaluation
- A tool for policy, planning and management
- A mechanism for evaluating competing demands, resource allocation, and tradeoffs