

Integrated Water Resources Management (IWRM)

by

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The Overall problem :

- **Resource under pressure**
- **Populations under water stress**
- **The impact of pollution**
- **Water governance crisis**

The Main Challenges :

- **Securing water for people**
- **Securing water for food production**
- **Developing other job creating activities**
- **Protecting vital ecosystems**

- **Dealing with variability of water in time and space**
- **Managing risks**
- **Creating popular awareness and understanding**
- **Forging the political will to act**
- **Ensuring collaboration across sectors and boundaries**

IWRM Principles :

- **Dublin principles as a guide**
- **The four Dublin principles**
 - I. Fresh water is a finite and Vulnerable resource , essential to sustain life , development and the environment.
 - II. Water development and management should be based on a participatory approach, involving users , planners and policy markers at al levels
 - III. Women play a central part in the provision ,management and safeguarding of water.
 - IV. Water has an economic value in all its competing uses and should be recognized as an economic good.

Principle I : **Water as a finite and vulnerable resource**

- **A holistic approach**
- **Resource yield has natural limits**
- **Effect of human activities**
- **Upstream – Downstream user relations**
- **A holistic institutional approach**

Principle II : Participatory approach

- Real participation
- Participation is more than consultation
- Achieving consensus
- Creating participatory mechanisms and capacity

Principle III : The important role of women

- **Involvement of women in decision making**
- **Women as water users**
- **IWRM requires gender awareness**

Principle IV : Water as an economic good

- **Water has a value as an economic good**
- **Value and charges are two different things**
- **Useful water value concept**
- **Useful water cost concepts**

- **The goal of full cost recovery**
- **Managing demand through economic instruments**
- **Financial self-sufficiency versus water as a social good**

Definition of IWRM :

IWRM is a proceed which promotes the co-ordinated development and management of water , land and related resources , in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

Overriding Criteria :

- **Economic efficiency in water use**
- **Equity**
- **Environmental and ecological sustainability**

Important element :

- The enabling environmental
- The institutional roles
- The management instruments

Ecological sustainability

Enabling Environment

- Allocation
- Regulations
- Economic tools
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- Policies
- Legislation
- For a and mechanisms for participation
- International Cooperation
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- Level of action
- Management boundaries
- Capacity building
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Economic efficiency

Social equity

Cross – sectoral integration

- Enabling Environment
- Institutional roles
- Management instruments

**Water
For
People**

**Water
For
Food**

**Water
For
Nature**

**Water
For
Industry
And
Other
uses**

IWRM and its relations to sub sectors