

INTEGRATED WATER RESOURCES MANAGEMENT

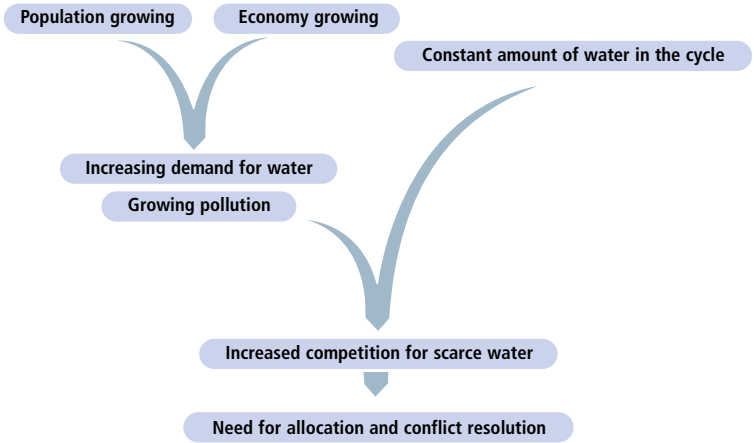
IWRM

- AT A GLANCE



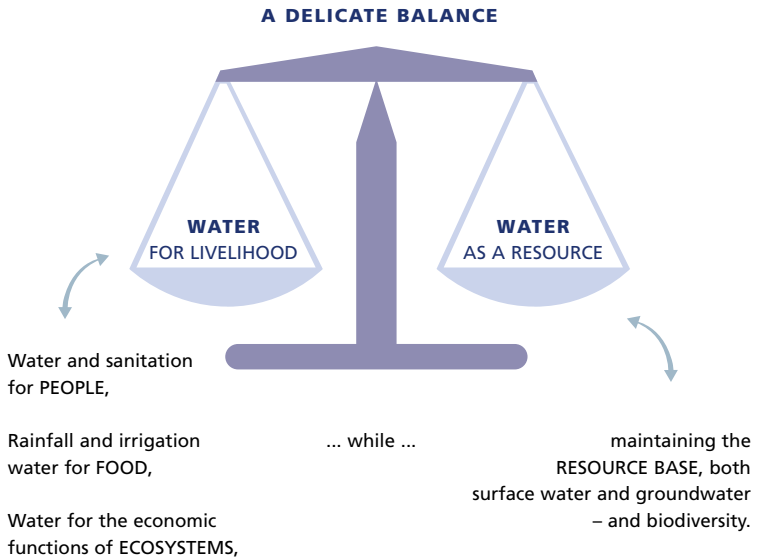
**Global Water Partnership (GWP)
Technical Advisory Committee (TAC)**

Why is water resources management critical ?



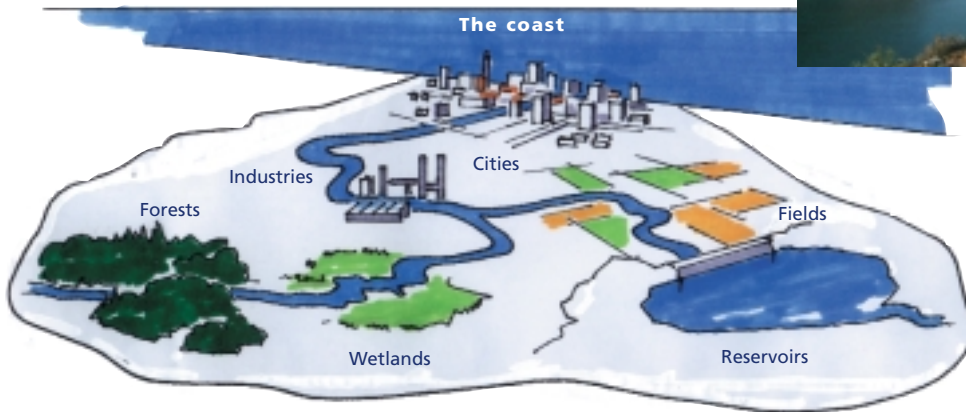
Water resources management is prevention and resolution of conflicts

What are the main challenges ahead ?



A 'blue revolution' to ensure more jobs and more crops per drop

What makes water so special to manage ?



All life and all sectors of the economy depend on water.

We all live in - and with - the hydrological cycle: water is constantly being recharged, used, returned and reused. So we all depend on each other.

We all live downstream ! We are all interdependent.

Interdependence calls for integration

Integration in the NATURAL SYSTEM:

- between land and water use
- between surface water and groundwater
- between water quantity and quality
- between upstream and downstream
- between the freshwater system and the coastal waters

Integration in our management of the natural system

- in the HUMAN SYSTEM:

- mainstreaming water in the national economy
- ensuring co-ordination between sectors
- ensuring partnership between public and private sector management
- involving everybody !



Water is everyone's business



The Dublin principles show the way

Four simple, yet powerful messages were provided in 1992 in Dublin. They were the basis for the Rio Agenda 21 and for the millennium Vision-to-Action.

The four principles are:

Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment

i.e. one resource, to be holistically managed.

Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels

i.e. manage water with people - and close to people

Women play a central role in the provision, management and safeguarding of water

i.e. involve women all the way !

Water has an economic value in all its competing uses and should be recognised as an economic good

i.e. having ensured basic human needs, allocate water to its highest value

and move towards full cost pricing to encourage rational use and recover costs.

Poor water management hurts the poor most!

The Dublin principles aim at wise water management with focus on poverty.

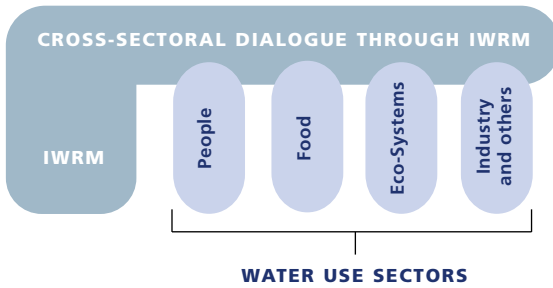


The 'political' law of hydraulics: water flows upwards towards power.

Towards a new paradigm

– from sub-sectoral to cross-sectoral water management

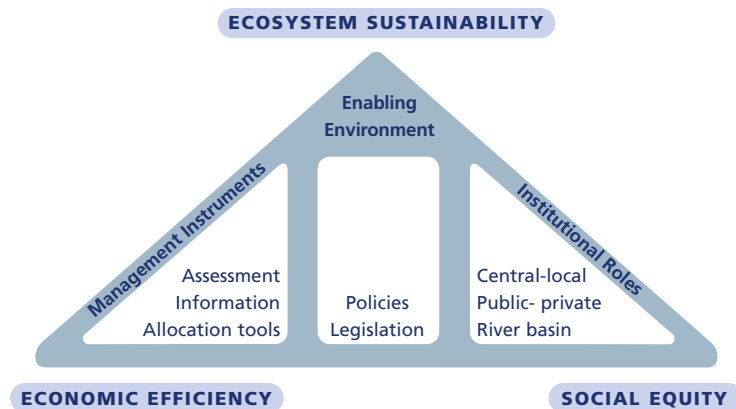
IWRM is the 'integrating handle' leading us from sub-sectoral to cross-sectoral water management.



IWRM is a process which promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems (GWP/TAC).

How do the Dublin principles translate into action ?

The ENABLING ENVIRONMENT sets the rules, the INSTITUTIONAL ROLES and functions define the players who make use of the MANAGEMENT INSTRUMENTS.



All this depends on the existence of popular awareness and political will to act!

What constitutes the 'enabling environment' for water resources management?



First of all the right attitude: government as an enabler, rather than a top-down manager.

Governments:

- formulate national water policies
- enact water resources legislation
- ensure separation of regulating and service provision functions
- encourage and regulate the private sector
- encourage dialogue with neighbouring countries
(50 % of all land lies in shared river basins!)

What are the appropriate institutional roles ?

First of all organisations and agencies at all levels and across sectors are participating and talking to each other.

How?

- by anchoring the coordination at the highest apex level
- by creating coordination bodies at the river basin level
- by devolving responsibility to the lowest appropriate level and

and by developing human and institutional capacity



What are the practical 'management instruments'?

Water managers need practical 'tool boxes' in order to work !

Water resources assesment

- data collection networks and assessment techniques
- environmental impact assessment (EIA) techniques
- risk management tools, for instance for floods and droughts

Communication and information:

- raise awareness - a 'water movement'
- informed stakeholder participation !

Allocation and conflict resolution:

- allocation through market instruments
- allocation based on the valuation of costs and benefits
- tools for conflict resolution: upstream versus downstream, sector versus sector, human versus nature

Regulatory instruments (3 types):

- direct controls - regulations, rights, standards, land use plans
utility regulation, etc
- economic instruments - prices, tariffs, subsidies, incentives,
fees, charges, markets, taxes, etc

3 Basic Principles:

- user-pays principle
- polluter-pays principle
- subsidise the good, tax the bad !

- encouraged self-regulation - transparent benchmarking,
product labelling, etc

Technology:

- research and development
- technology assessment guidelines
- technology choice guidelines

And last but not least: Financing!

Investment in IWRM - by users, governments, private sectors and donors / banks – provides high returns to society ...



*This folder summarises the TAC Background Papers No 4
'Integrated Water Resources Management'.*



The full paper is available through:
Global Water Partnership



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