

Monitoring of progress in IWRM reforms

UNEP Collaborating Centre on Water and Environment
(UCC-Water)

Global surveys on the IWRM target

	2003	2005	
Level of progress toward meeting WSSD target for IWRM	GWP	GWP	Japan Water Forum
<i>Sample size:</i>	<i>108 countries</i>	<i>95 countries</i>	<i>85 countries</i>
Good progress	13%	21 %	28 %
Some progress	47%	53 %	57 %
Initial stages	40%	26 %	15 %

Order of indicators

1st order / process / indicators

- Political will, agreements on strategy development, content of strategies, plans, legal documents
- "IWRM is coming on paper" or in the "heads"

2nd order / efficiency of process

- Reforms in the management system take place – behavior changes

3rd order / impact indicators

- IWRM has "hit the ground"
- Water resources better managed

4th order / impact indicators

- 3 E's

Key 1st order /process indicators

- Enabling environment
 - Government and other stakeholders aware of IWRM, political will for reforms, donor agreements
 - Policies – completed or under preparation, based on IWRM principles, coherence with legislation, compatible with the national development status/realistic, coordinated with sector policies - agricultural, hydropower, industry, fisheries etc.
 - Legislative framework – completed or under preparation, supporting the policy, based on IWRM principles
 - Financing and incentive structures identified,

Key 1st order /process indicators

- Institutional roles
 - Institutional reforms described and planned for
 - Institutional responsibilities defined according to policy and legislation
 - Coordination and participation mechanisms identified
 - Capacity building needs identified

- The IWRM 2005 plan (or its content) in place

Key 2nd order indicators - efficiency of process - performance

- Financial mechanisms for IWRM established
- Legal system developed with all essential regulations and enforcement begun (permit system, control etc.
- Planned institutions and coordination mechanisms created and commencing their functions
- Capacity being built in institutions to handle management instruments (planning, legal, economic, technical)

Key 3rd order indicators of impact of process

The IWRM process has an impact, when the basic priority issues, identified when formulating the IWRM process (plan), are effectively addressed.



Key 3rd order indicators - impact of IWRM

Water resources issues can be structured in categories and checklists (WRIAM*) for planning and for monitoring

- Impact issues – where human activities lead unwanted changes in quantity or quality of the water resources
- User requirement issues - where the existing availability or quality of the resource does not correspond with the requirements of the users
- Physical mobilization issues
- Issues related to risks and harmful effects of the resource (floods, water borne diseases etc.)

* Water Resources Issues Assessment Method (developed at DHI)

Key 3rd order indicators - impact of IWRM

Examples:

- MDG target on water supply fulfilled
- Water shortages occurs less frequently
- Concentrations of pollutants reduced
- Ecosystem health and productivity maintained
- Groundwater levels stabilized
- Land use changes environmentally balanced
- Sediment deposition controlled
- Wetland encroachment reduced
- Irrigation efficiency improved
- Income of communities improved
- Etc..

Key 4th order indicators - impact of IWRM

The IWRM process has an impact when:

- Water resources are utilised equitably
- Social and economic welfare is supported
- The environmental quality and productivity is sustained

Challenges

- IWRM 2005 Plan target ?
 - A good IWRM plan can exist without without being implemented on the ground
 - A completed framework and IWRM decisions with positive impact on the ground can exist without a proper IWRM 2005 Plan (South Africa)

Challenges

- The spirit of the target is "let us all implement IWRM"
- So evaluating achievement must include indicators of at least 1st and 2nd order
- And soon impact monitoring must follow

Challenges

Substance – indicators

- what are the relevant indicators within each group?
- Testing is a must

Next steps in monitoring

- **CSD 16, 2008 UN request to monitor progress on reporting categories on progress of the IWRM 2005 Plans**
- **UN Task Force on Monitoring – initiated during Stockholm WWW**
- **First teleconferences held, September and October 2006, UUC participates on behalf of UNEP Collaboration with UNDP, WWAP, GWP,**
- **UN Water meeting in Addis Abeba in Africa, January 2007**
- **World Water Development program will develop IWRM indicators for 2009 report.**