

# UN-Water and Global Water Partnership (GWP) Roadmapping for Advancing Integrated Water Resources Management (IWRM) Processes

Based on the Copenhagen Initiative on Water and Development<sup>1</sup>  
prepared jointly by UN-Water and the Global Water Partnership<sup>2</sup>

<sup>1</sup> The Copenhagen Initiative is an outcome of the International Conference on "Managing Water Resources Towards 2015", which was hosted by the Danish Government in cooperation with UN-Water and the Global Water Partnership and held in Copenhagen on 13 April 2007. The Conference Summary can be found at [www.ucc-water.org](http://www.ucc-water.org).

<sup>2</sup> This statement has been prepared to support countries in their efforts to improve water management through an IWRM approach, and to stimulate the development of a robust framework for monitoring, evaluating and reporting on the outcomes of such an approach.

# Introduction

The goods and services provided by water play a central role in achieving the Millennium Development Goals (MDGs) adopted at the Millennium Summit in New York in 2000. Good water governance - in an Integrated Water Resources Management (IWRM)<sup>3</sup> framework - is a critically important contribution to the achievement of the MDGs. IWRM improves cross-sectoral efficiency and cooperation at all levels on sustainable water resources development and management<sup>4</sup>, including specific sector interventions. The importance of water management has been further highlighted by the recent reports of the Intergovernmental Panel on Climate Change (IPCC) and others that have warned that climate change will have extensive impacts on water resources.

The IWRM approach facilitates mainstreaming water issues in the political economy of a country, and as such in all societal sectors. It focuses on better allocation of water to different water user groups and in so doing stresses the importance of involving all stakeholders in the decision-making process. It also calls for gender mainstreaming in land and water management decision making. And it supports the integration of water supply and use with the management of waste, sewage and groundwater protection, while recognizing that the protection and quality improvements of water are preconditions for sustaining both human livelihoods and natural ecosystems. This approach is also recognized as a framework for the adaptation of water management to climate change and the management of floods and droughts.

Improved development and management of water resources, based on a true and inclusive stakeholder involvement, provides a direct link to the MDGs addressing poverty, hunger, gender equality, health, education and environmental degradation. In recognition of this link, an important short term target was agreed upon at the World Summit for Sustainable Development in Johannesburg in 2002 and included in the Johannesburg Plan of Implementation: "To develop integrated water resources manage-

ment and water efficiency plans by 2005, with support to developing countries", or in short the "IWRM Target"<sup>5</sup>. This target was intended to highlight the vital role of improving water management through IWRM as a means towards the achievement of the Millennium Development Goals.

Since 2002, many countries have progressed towards this target, as reported by the Global Water Partnership (GWP), UNEP, UNDP and the Japan Water Forum in survey reports presented at the 4<sup>th</sup> World Water Forum in 2006. By the end of 2005, 25% of the 90 countries surveyed had made "good progress", while 50% had made "some progress" and 25% had made limited or no progress towards the IWRM Target. Although the surveys recognized that considerable progress had been made, it was clear that many countries still had a long way to go in achieving the target, and most countries still faced considerable challenges in implementation. Experience to date suggests that the problems encountered by developing countries in both planning and implementation of IWRM approaches include the lack of political will to seriously engage in water policy change, financing and national resource allocation for water related development, awareness of water issues, weaknesses related to human and institutional capacity, and discontinued support programmes.

At the Thirteenth Session of the Commission on Sustainable Development (CSD) in 2005, all countries were called upon to accelerate the preparation of nationally-owned IWRM and water-efficiency plans. In the Commission's decision, UN-Water was requested to give equal consideration to the CSD-13 thematic issues of sanitation and water and to promote system-wide interagency cooperation and coordination among relevant UN agencies, funds and programs on these issues. The UN Secretary General was requested to include in his report to the CSD the activities of UN Water as they relate to these thematic areas.

In addition, in 2006 all countries were requested by the UN Secretary General to "report on progress on IWRM and Water Efficiency Plans" at the CSD16 in 2008, in keeping with a recommendation of the UN Secretary General's Advisory Board on Water and Sanitation.

<sup>3</sup> GWP TEC Paper 4 defines IWRM as "a process 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".

<sup>4</sup> In the remainder of this document, we sometimes use the short form "water management" instead of "sustainable water resources development and management".

<sup>5</sup> Chapter IV, Paragraph 26 of Johannesburg Plan of Implementation

Although IWRM provides a framework of principles and good practices for water governance, the details in planning and implementation must reflect local water issues and management conditions. Thus, it is envisaged that each country would make its interpretation and design its own roadmap for improving water management. Nevertheless, in doing so, countries would likely monitor their plans to implement IWRM and the MDG-related water resource

management priorities that they have identified by keeping a watching brief of three key inter-related processes: (1) the extent to which key enabling conditions for the implementation of these priorities have been addressed; (2) the progress of specific IWRM change processes; and (3) the extent to which improved water management through IWRM has successfully contributed to the achievement of the MDGs.

# Regional and Global Evaluation

So far we have pointed towards the need for each country to develop its unique implementation plan or roadmap. Nevertheless, regular reporting and discussion at regional and global levels can play an important role to encourage and support such in-country processes and address the barriers to progress. Towards this end, in 2008 country reports to the Commission on Sustainable Development will focus on country progress in establishing plans to implement IWRM and to address their identified MDG-related water resource management priorities. Beyond 2008, it would be useful for countries to monitor on a continuing basis and in an integrated (process and outcome) way, on all three key inter-related processes outlined above. To facilitate meaningful discussion and comparison, it is recommended that such monitoring may be carried out within a structured framework under which, every three years, a specific set of indicators or theme is chosen. Suggested themes:

- 2009: Focus principally on reviewing the extent to which key enabling conditions for the implementation of national IWRM priorities have been addressed. Note progress on specific IWRM change processes and the realization of the water-related MDGs
- 2012: Focus principally on reviewing the progress of specific IWRM change processes. Note progress on enabling conditions and the realization of the water-related MDGs
- 2015: Focus principally on assessing the extent to which improving water management through IWRM has successfully contributed to the implementation of the MDGs. Note progress on enabling conditions and on specific IWRM change processes

An evaluation mechanism along these lines would encourage all countries to report their progress in an integrated process and outcome way, while enabling global and regional discussion every three years on a specific theme as well as the inter-connections among them. Such a system would also enable the global community to get a more realistic picture of how the IWRM approach is being developed in different contexts and to identify needs, while at the same time encouraging and learning from those who are most ahead of the game -- clearly adding value to advancing IWRM at country level, rather than being yet another useless reporting burden. The contents of each of the proposed set of indicators are illustrated by way of examples below.

## **1<sup>ST</sup> SET OF INDICATORS (FOCUS FOR 2009): ENABLING CONDITIONS IN PLACE**

Here, the focus would be on ensuring that enabling conditions are in place, and that change processes have been initiated in accordance, with a politically supported and approved legal framework and with allocation of appropriate financing sources for management functions. To illustrate the way in which countries might monitor progress in these areas, here are some possible examples of process indicators that could be used:

### **Changes in enabling environment:**

- Revision and amendment of policies and laws;
- Water is mainstreamed into national development policies, strategies, plans
- Allocation of appropriate and sustainable funding in national budgets.

### **Changes in institutional framework:**

- Establishment of cross-sectoral coordination frameworks;
- Change of ministerial and departmental mandates;
- Formal involvement of stakeholder groups;
- Launching of awareness and mobilization campaigns;
- Decentralization and delegation of decision making at the river basin, provincial/local and community levels;
- Capacity development of government staff and stakeholder groups.

### **Changes in management instruments:**

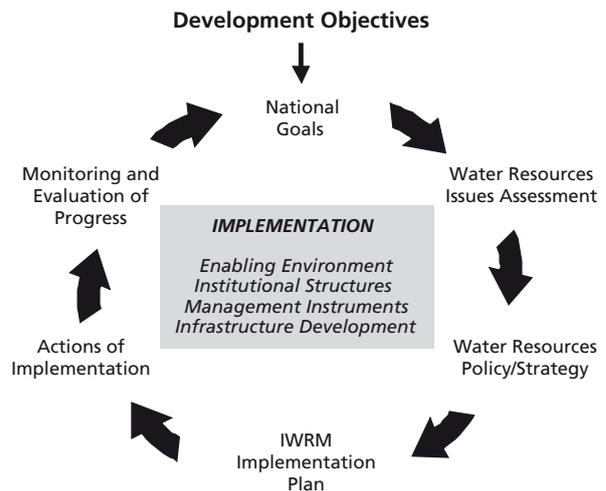
- Improvements in information management;
- Water resources issue assessment;
- IWRM strategy and plan development
- Countries produce coherent water resources development and management plans that support the achievement of the MDGs;
- Demand management of user behaviour and water use efficiency ;
- Social change instruments for public awareness, mobilization and conflict mediation;
- Regulatory instruments and associated enforcement frameworks;
- Economic instruments for behavioural change.

# Roadmaps

If the IWRM approach is to support the achievement of the MDGs and adaptation to climate change, the implementation of water policy changes must be linked to efforts to achieve the MDGs and proceed at a pace in keeping with the MDG's 2015 deadline. In principle, national IWRM plans and strategies should have associated programmes of implementation with timeframes and milestones -- i.e., "a roadmap". Nationally-owned roadmaps for improving water management through IWRM could help galvanize countries and supporting organisations in the timely realisation of outcomes. Rather than focus narrowly on the "developing" of IWRM plans and strategies, roadmaps should focus on the steps to be taken towards better water management, drawing inspiration from the IWRM principles and the plans and strategies that countries have prepared to help catalyze change. At regional<sup>6</sup> and global levels, the roadmaps could serve as benchmark for monitoring progress in improving water resources management through IWRM and the achievement of the ultimate objectives of the IWRM target. Further, through indicators and monitoring, better assessment of the needs to advance in their implementation of IWRM.

In order that policy changes can be put into place to support the achievement of the national goals, it is helpful to consider the stages involved in improving water management through an IWRM approach. Figure 1 illustrates some of the stages involved in both planning (right side), where many countries have made much progress, and implementation (left side), where more attention is needed. IWRM needs to be more than just a planning mechanism. Increased attention needs to be given to the mainstreaming of water issues in national political economies, in order to ensure broader political, economic and social sustainability.

FIGURE 1  
Stages in IWRM planning and implementation<sup>7</sup>



Nationally-owned roadmaps for improving water management through IWRM could include a set of milestones to help countries translate their IWRM plans into specific actions and interventions on the ground, as well as to monitor the impact of actions taken or interventions made. Such roadmaps could be developed around outcomes to be achieved through implementing IWRM policy changes aimed at the achievement of the MDGs and the adaptation to climate change. Countries are at different stages of their water development and management, and institutional and policy changes to be effective for some countries will need substantial capacity building and time. The timeline of individual national processes will, therefore, vary widely according to existing plans and points of departure.

These roadmaps would serve as monitoring instruments, inspiration and guidance for countries and development partners striving to improve water resources management for development. On the assumption that water management policy changes should be directly related to the milestones for the achievement of the MDGs, roadmaps could have MDG-linked indicators, monitored every three years - 2009, 2012 and 2015. The publication by UN-Water of the World Water Development Reports (WWDR) provides a further opportunity to make status reports on implementation.

<sup>6</sup> Including such sub-regional groupings as SADC, ECOWAS, ASEAN, etc

<sup>7</sup> Adapted from Global Water Partnership Technical Committee (2004) *Catalyzing Change: A handbook for developing integrated water resources management (IWRM) and water efficiency strategies*

## **2<sup>ND</sup> SET OF INDICATORS (FOCUS FOR 2012): IWRM CHANGE PROCESS TAKING EFFECT**

Here, the focus would be on ensuring that actual implementation of change processes takes place and that changes begin to take effect in the way “water managers” at all levels deal with water. To illustrate the way in which countries might monitor progress in these areas, here are some possible examples of performance indicators that could be used:

### **Enabling environment:**

- New legislation and standards, institutional capacity building is taking effect;
- Water resources agencies are starting to administrate according to new IWRM principles

### **Institutional framework:**

- Sector ministries are actively promoting and implementing the IWRM approach;
- Water use organisations and the private sector is increasingly coordinating water use in cooperation with government authorities;
- Awareness and management capacity is growing measurably in government and user groups.

### **Management instruments:**

- Monitoring and research programs are documenting the impacts and causes of major water issues;
- Transparent, coherent and consensus-based planning and strategy making is taking effect in all sectors;
- Social, economic and regulatory instruments are changing inappropriate water allocations and uses;
- Water conflicts across the sectors are mediated through participation of appropriate stakeholder groups.

## **3<sup>RD</sup> SET OF INDICATORS (FOCUS FOR 2015): MITIGATING KEY WATER CONSTRAINTS RELATED TO ACHIEVEMENT OF MDGS**

Here, the focus would be on reviewing the extent to which required water infrastructure has been developed and water resources management issues addressed, in accordance with the strategic goals and targets in water resources development and management plans -- and thus in support of the achievement of the MDGs. To illustrate the way in which countries might monitor progress in these areas, here are some possible examples of process and outcome indicators that could be used:

### **MDG 1: Poverty and Hunger:**

- Infrastructure to store surface water, and further develop groundwater resources, is put in place
- The health and productivity of aquatic ecosystems - in particular related to fish productivity - is optimized and protected;
- Rural poor populations are protected against flood risks.

### **MDG 4-6: Health:**

- Discharges of human waste waters are treated for bacterial contamination to prevent diarrhoea outbreaks;
- Toxic emissions from industrial enterprises are controlled within international health standards;
- Pesticide release to groundwater, wetlands and surface water is controlled.

### **MDG 7: Environmental sustainability:**

- Appropriate environmental flows are ensured to maintain wetlands goods and services;
- Safe water supply and sanitation expansion has reached or exceeded target 10;
- Urban slum dwellers are protected against flooding.
- Social, economic and regulatory instruments are changing in-appropriate water allocations and uses;
- Water conflicts across the sectors are mediated through participation of appropriate stakeholder groups.

