## **Global Water Partnership**

# Setting the stage for change

Second informal survey by the GWP network giving the status of the 2005 WSSD target on national integrated water resources management and water efficiency plans

February 2006

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## Acronyms

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## Acronyms

CSD Commission on Sustainable Development

CWP Country Water Partnership

EU European Union

GWP Global Water Partnership

IWRM Integrated Water Resources Management

MDG Millennium Development Goals

NGO Non-governmental Organization

PRSP Poverty Reduction Strategy Paper

RWP Regional Water Partnership

SOPAC South Pacific Applied Geoscience Commission

TEC Technical Committee of the GWP

UN United Nations

UNDP/GEF United Nations Development Programme/Global Environment Facility

WE Water Efficiency

WFD Water Framework Directive

WRMA Water Resources Management Authority

WSP/WB Water and Sanitation Programme (World Bank)

### **Preface**

Four years ago at the World Summit on Sustainable Development, world leaders from 193 countries committed themselves to the Johannesburg Plan of Implementation. It included a commitment that governments would prepare national IWRM and water efficiency plans by 2005. The survey looks at the progress in meeting this ambitious target. Preparing plans and strategies is, of course, just part of a process, hence our title: Setting the stage for change. The survey is in fact an assessment of the movement towards water management reform through IWRM plans.

The survey shows that the need for better water management is now better understood and prominent in national thinking. While it shows a growing degree of seriousness about setting national strategies and plans, there are only occasional comments related to progress in actually implementing the elements of an IWRM approach. In this sense, the survey provides a stepping stone for more thorough assessment of the implementation of improved water resource management in the future.

IWRM is a process that leads to improved planning, better governance and a balancing of social, environmental and economic goals and is not easily measured. The survey is based on a combination of qualitative and quantitative measures, and it has shown that more work is needed on how to monitor progress on achieving a more integrated approach to water resources management and development.

In addition to monitoring progress on meeting the target, the survey should provide a yardstick for governments and donors to assess where and how to target their support to ensure that those countries presently not on track will be supported in the planning process and those who have responded to the target will get support in turning their plans into actions.

The survey is informal and, like the first baseline survey published in 2004, it is based on information collected by the global network of the GWP that extends across the developing world. The survey information provided reflects the view of the stakeholders in the countries and is not the view of any one organisation or individual. Inevitably, given the nature of such qualitative assessment, some statements and analysis may be disputed or judged subjective.

There will be other surveys and possibly differing views but the GWP offers this as an informal perception by the network that we hope will be received in the spirit it is given, as was the case with the previous survey. With the absence of any global governance entity for water, and fragmentation of responsibility across several UN entities, there must be collaboration in producing useful instruments and tools for implementing and monitoring progress. GWP is thus committed to work with other organizations to make sure a cohesive and comparable set of results can be determined.

We submit this survey in the belief that such information is an important component in the effort to keep water high on the international political agenda, which is crucial to the achievement and sustainability of the MDGs.

Emilio Gabbrielli Executive Secretary



#### 1 INTRODUCTION

The global water crisis is a threat to economic development, to poverty reduction, to the environment, and to peace and security. This is why the United Nations Millennium Declaration confirms the key role of water in sustainable development, and why many of the Millennium Development Goals (MDGs) are directly related to water. Sound water management is a means to improving the welfare of populations. Sustainable development policies must therefore address the need for equitable and sustainable management of water resources. Water should be used to achieve social and economic development goals in countries, while guaranteeing sustainable vital ecosystems for future generations to meet their water needs. This is the essence of the Integrated Water Resources Management (IWRM) approach<sup>1</sup>.

The only way to accomplish these vital goals is to manage better the balance between the existing resources and the demand, and to manage water quality. While water solutions are local, future water demands will not be met unless immediate measures of support are taken at a global scale. If long lasting solutions are to be found, a more holistic water governance and management paradigm is necessary. Traditional fragmented approaches historically have proved to be ineffective or even destructive. The IWRM approach to water resources management has been internationally recognized as an effective way of finding a long term solution to this critical situation.

### WSSD Plan of Implementation

At the World Summit on Sustainable Development (WSSD), in Johannesburg, September 2002, it was confirmed that the principles of IWRM are fundamental to sustainable development. Consequently, and with the aim to stimulate the adoption of a more strategic and sustainable approach to water resources at a global scale, Article 25 of the WSSD Plan of Implementation, called on all countries to "develop integrated water resources management and water efficiency plans by 2005". Heads of state and representatives of 193 countries signed up for the Plan of Implementation which obliges them to comply with this engagement. In the Plan of Implementation there was a recognition that some countries may need help to meet the target, and some donors responded and provided funds to facilitate the preparation of plans/strategies.

The Millennium Development Goals Task Force has suggested that the language of the WSSD Plan of Implementation should be interpreted as calling for the "*initiation of a robust water resource management process*", rather than simply the creation of traditional prescriptive "Plan". It is of vital importance that the plan or strategy be a dynamic instrument which progressively identifies necessary future actions in water resources management, water infrastructure development, improved water efficiency and better water service provision. The Global Water Partnership (GWP) has responded to the WSSD call for action and committed itself to support developing countries in responding to it. GWP has published *Catalyzing Change*<sup>4</sup> and other guidance material for the preparation of strategies and plans as well as providing other forms of support, in particular, support to governments

<sup>2</sup> See Annex 2 for paragraphs 25 & 26 of the Johannesburg Plan of Implementation.

<sup>&</sup>lt;sup>1</sup> See Annex 1 for further reference on IWRM.

<sup>&</sup>lt;sup>3</sup> "Health, dignity and development, what will it take?" page 148, Millennium Development Goals UN Task Force, Earthscan, 2005.

<sup>&</sup>lt;sup>4</sup> "Catalyzing Change: a Handbook for developing integrated water resources management and water efficiency strategies, GWP, 2004.

in their creation of IWRM strategies and plans. National governments have the responsibility for development of laws and amendments to policies and legislation, and for appropriate reforms in the institutional framework to ensure that institutional and management systems contain the elements of the IWRM approach.

The IWRM plan/strategy should contain the actions that are needed to reform policies, legislation and financing frameworks, institutional roles and capacities, as well as enhanced management instruments required to deal with priority water resources issues. The links to other national plans and international processes are additional important components.<sup>5</sup>

#### 2 THE SURVEY

In 2003, the GWP conducted an "informal stakeholder baseline survey<sup>6</sup>" on the status of water sector reform, which was intended to be an operational assessment of countries' readiness to meet the 2005 WSSD action target. That report was submitted to the UN CSD 12 meeting in April 2004. The results of that survey showed that about 13% of all countries surveyed had made good progress towards a more integrated approach and were on track to meet the target, a further 47% had taken some steps in this direction and the remaining countries had hardly made any progress.

This new survey was carried out by the GWP in November/December 2005 to assess the progress on the Johannesburg target and to report to the Fourth World Water Forum in Mexico. Clearly, countries around the world have reached vastly different stages towards developing national IWRM plans and strategies, which makes this survey useful as a guide to progress and also helps identify future work on critical needs and the needs for support to national initiatives to finalize and implement these plans and strategies.

#### *Scope of the survey*

The survey focuses on policies, laws, plans/strategies and other planning documents<sup>7</sup> prepared to date in 95 countries in order to assess if they have initiated new measures to strengthen water resource management and if they have included IWRM elements in their policy documents. The main purpose was to collect basic facts on this issue and also to give qualitative perceptions relating to the development of IWRM plans and strategies. The questionnaire was carefully designed to capture the status of IWRM policies, laws and plans, but not at this stage to assess what is actually being implemented. This will require a different type and much more extensive survey.

This survey is to be considered a forerunner of a more comprehensive initiative on monitoring integrated water resources management that GWP and others aim to carry out with the World Water Assessment Programme during 2006-2009. Time did not allow any pre-testing of the questionnaire and the lessons learned will provide valuable input to future monitoring. This would include examination of in-country processes and evaluate in more detail the quality of the planning documents.

<sup>5</sup> "…Integrated Water Resources Management (IWRM) and Water Efficiency Plans by 2005 – Why, What and How?", Torkil Jønch-Clausen, TEC Background Paper No 10, Global Water Partnership, 2004.

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<sup>&</sup>lt;sup>6</sup> "Informal Baseline Stakeholder Survey", GWP, 2004.

<sup>&</sup>lt;sup>7</sup> The survey focused on meeting the target but did not rely solely on the existence of a document titled "IWRM Plan" as this would be too simplistic. Rather, proxy measures were used to assess whether a process was in place including policies, laws and 'public documents' (such as development plans).

The survey was conducted through the GWP network and builds on the active participation and assistance of the Regional Water Partnerships (RWP) and Country Water Partnerships (CWP)<sup>8</sup>, where they are established, as well as partners such as SOPAC in the Pacific region. The survey is therefore limited in its coverage to countries where GWP has a reasonable presence through a RWP or a CWP or an alliance partner. The geographical scope consequently relates mainly to developing countries where GWP is more actively engaged and the need for change in water management is critical. There will of course be on-going IWRM processes in countries that are not included in the survey.

### Methodology & Presentation

The RWPs and CWPs were asked to fill out a questionnaire and retrieve and submit the responses. In total 95 replies were received. The questionnaire used was divided into two parts; the first part contained factual questions related to water policies, water laws/codes, IWRM plans/strategies and cross-cutting public documents (see Annex 3) and the second part judgements on progress made. Within each country, several respondents were asked to liaise with each other and come up with a joint "country response" in order to obtain a consensus view. Respondents included academics, NGO and civil society groups, government officials from various ministries and at different levels of authority in an unofficial capacity and GWP staff in the region or country. Although the survey is informal and was carried out by stakeholders, it was done in close liaison with relevant government authorities wherever possible.

The survey results are mainly presented in a qualitative way commensurate with this subject. The data collected was evaluated by a group of GWP staff with knowledge of the countries' IWRM progress through their daily work. The assessments were cross-checked with the respondents or representatives of the RWP to clarify any doubts. With a few exceptions, such as late submissions, all information in this report has been verified at regional and/or country level before distribution.

The report first gives an overall summary of the survey results. Subsequently, the results are presented by region and sub-regions, the latter based on the countries in the GWP regional water partnerships. In this section we present the individual country assessments based on policies, laws, plans/strategies and other public planning documents. To give an overview of progress in each country the assessment is divided into four parts: Establishing the vision; the Legal framework; Catalyzing change: IWRM plans/strategies; and Change areas. The report includes maps where countries are grouped in different shades to illustrate what stage they have reached in the process of developing IWRM plans.

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<sup>&</sup>lt;sup>8</sup> The GWP comprises 14 regional water partnerships covering most of the developing world as well as over 50 country water partnerships. The partnerships comprise members from government, civil society and the private sector.

#### The groupings are as follows:

Countries that have plans/strategies in place, or a process well underway, and that incorporate the main elements of an IWRM approach.
Countries that are in the process of preparing national strategies or plans but require further work to live up to the requirements of an IWRM approach.
Countries that have taken only initial steps in the process towards preparing national strategies or plans and have not yet fully embraced the requirements of an IWRM approach.
Countries that have not submitted a survey reply, or been included in the survey.

These groupings are based on the judgement of the respondents and assessors. They provide an indication of the present situation. As there are considerable political, social and cultural differences across the world these assessments should not be used as the basis for comparison between countries or regions. The spectrum within each category is wide-ranging and multifacetted, which is a fundamental fact to keep in mind when reading the report. Annexes are included on the IWRM approach, the text from the Johannesburg Plan of Implementation (Paragraphs 25 and 26) and the survey questionnaire. The latter includes a list of terms used in the questionnaire and the report.

### Lessons from the Survey

The survey questionnaire was deliberately kept simple to facilitate rapid response as well as to avoid excessive detail. This has resulted in some limitations, for example, in federal countries the survey did not access information on specific provinces or states that have responsibility for water rather than the federal government. The analysis shows different levels of understanding of the IWRM approach. Countries involved in water resources management reform for several years and/or involved in a programme of elaboration of an IWRM strategy or plan tend to be very prudent and self-critical in the evaluation of what they have already accomplished. Countries not so deeply involved in the process or with limited practical knowledge tend to deduce that they have made considerable progress towards implementation of the IWRM elements, even though they may be far off the target and often limited to a few regulatory texts. The responses submitted also show that central concepts such as plan, strategy and policy, are interpreted in very different ways. In the future it will be important to refine the indicators and monitoring mechanisms and to determine the extent to which principles are in fact applied.

Since our objective was to study the status of the WSSD target, we have not examined the documents in detail and there quality has not been assessed. This would be a useful task for future monitoring. Again, this survey assesses whether there is an improved governance framework in place that should *enable* better water management, it does not assess the extent to which that framework is *applied* or whether practical changes have been made. As we know from experience, good words do not always lead to good deeds. A country may thus appear to have met the target, but not yet taken any steps to implement the policies or plans. This is also a key issue for the follow up to this survey.

## **3 OVERALL SUMMARY**

The survey was carried out at the end of 2005 to determine what stage countries have reached in the IWRM planning process – i.e. the degree to which they have met the WSSD target. The survey thus aims to provide an indication of the present status of the development of the IWRM plans/strategies in the countries surveyed. In total 95 responses were submitted.

The scope of the survey is limited geographically and covers mainly the GWP constituency, therefore mainly developing countries. The survey focussed on parts of the governance system, with a specific focus on policies, laws and plans, to determine if they incorporate the IWRM approach and, where possible, to identify the main challenges they face in achieving better water resources management.

#### **Summary table**

(See legend on page 4)

				Total
Number of countries	20	50	25	95
Percentage	21%	53%	26%	100%

The survey indicates that approximately 21% of the countries have plans/strategies in place or well underway and a further 53% have initiated a process for the formulation of an IWRM strategy/plan. Therefore, according to the definition provided by the MDG Task Force it can be concluded that about three-quarters of the countries surveyed have met the target of initiating a process for the development of national strategies/plans. In these countries the survey indicates that the IWRM approach appears to be well accepted as the way forward for better water resources management and use. The remaining 26% have made only limited progress and in many cases have expressed a wish to move forward but need support in this process.

#### What does it all mean?

IWRM is a process that covers a wide spectrum of activities that take place in sequence over time. Countries are at various points along this spectrum. Improving water resources management and the sustainable development of resources is not an absolute state but a continuing and dynamic process.

The surveys of 2003 and 2005 are not directly comparable as they include different countries and used different questionnaires. However, they do indicate a trend with an increase from 60% to 74% in those countries that have taken steps towards better water resources management through the IWRM approach.

The survey assesses whether a country has taken steps to meet the target set in Johannesburg. A country may have fully met the target (by having prepared a plan or strategy and relevant policies and laws etc) but may still be only at the beginning of establishing a truly integrated approach which takes many years.

In some cases the process was well advanced before the target was set, however, the preparation of a policy or plan has not led to change due to a lack of finance or human capacity. Policies and plans are the beginning of a process and without application will have no impact.

The target has clearly triggered a response from countries and stakeholders and, given the short period since Johannesburg, progress has been made and many countries are likely to complete the preparation of plans within the next two years.

The survey focussed on planning and assesses whether steps have been taken to establish an enabling environment. Further development of indicators and monitoring mechanisms is needed to assess the practical application of the IWRM approach.

The main obstacles given are a lack of capacity and human resources, a lack of finance for both policy and plan formulation and the time needed to assimilate concepts and adapt them to specific national conditions. Also, governments and donors often search for an increasing level of perfection in policy formulation that becomes an end in itself – or perhaps a means to avoid difficult practical decisions. Many countries started policy or legislative reform four or five years ago which is not yet finalized. Similarly, policies and laws are sometimes completed but there is no action plan or means for implementation.

The Johannesburg target has clearly boosted the preparation of IWRM plans and there is an urgent need to capitalize on the interest it has generated with a focus on plan implementation to carry out the reforms needed now, rather than further refine policies. Urgent support is also needed to assist those countries that have not yet made progress in formulating their IWRM plans.

Overview by region (Based on the information provided by the respondents and the analysis of the questionnaire made by GWP staff)

Region				Total
AFRICA				
North Africa	0	3	2	5
Central Africa	0	1	4	5
Eastern Africa	1	4	3	8
West Africa	1	6	1	8
Southern Africa	3	7	2	12
Regional total	5	21	12	38
ASIA & OCEANIA				
China	1	0	0	1
Central Asia & Caucasus	2	4	2	8
South Asia	1	4	1	6
South East Asia and Oceania	2	3	3	8
Regional total	6	11	6	23
EUROPE				
Central & Eastern Europe	7	3	0	10
Regional total	7	3	0	10
LATIN AMERICA				
Central America	0	5	2	7
South America	1	5	3	9
Regional total	1	10	5	16
SMALL ISLAND STATES				
Pacific	1	2	2	5
Caribbean	0	3	0	3
Regional total	1	5	2	8

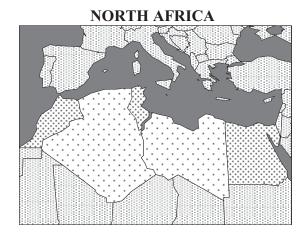
#### 4 REGIONAL SUMMARIES

#### 4.1 AFRICA

### **North Africa**

Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a
	process well underway, and that incorporate the main
	elements of an IWRM approach.
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	strategies or plans but require further work to live up to
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	Countries that have taken only initial steps in the
	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.



#### Algeria



#### Establishing a vision

Algeria considers the National Plan for Water (2005) to be its water policy. The Plan includes some aspects of IWRM.

#### Legal framework

The legal framework includes an obligation to prepare an IWRM Plan, and several laws and public documents refer to elements of the IWRM approach. Algeria has a new Water Law (2005) that obliges the state, as guardian of the public property of water, to follow water resources management principles such as participation of stakeholders and management at basin level. It encourages cost recovery and water use efficiency and includes polluter-pays principle. The water law is partly harmonized with legislation for other relevant sectors relating to the environment, land-use, agriculture and health.

#### Catalyzing change: IWRM Action Plan/Strategy

Algeria is preparing an Action Plan for implementing an IWRM framework. The Action Plan is expected to be finalized in 2006.

#### Change areas

The Ministry of Water Resources governs the water sector in Algeria. The Directorate of Studies and Hydraulic Schemes in the Ministry manages the water resources studies, hydraulic schemes and is responsible for the development of the IWRM Plan. Various departments and authorities with the Ministry of Water Resources are involved in implementing water regulations: the National Agency of Dams and Large Transmission Mains (ANBT), the Algeria Water Company (ADE) for the distribution of drinkable water, the National Office of Purification (ONA), the National Office of Irrigation and Drainage (ONID), and the National Agency of Hydraulic Resources (ANRH). The role for the involvement of the private sector is not taken into consideration in the National Plan for Water, but this is treated in the Water Law, together with the participation of stakeholders, and management at basin level. There is a need to raise awareness on IWRM among both political and professional actors. Challenges in Algeria's pursuit towards IWRM include a lack of human and institutional capacities within water-related organizations.

## Egypt

#### Establishing a vision

The National Water Resources Plan (NWRP) was developed in 2005. The Plan has three main objectives: developing additional water resources, better use of existing water resources, and protecting the public health and environment. It clearly states and defines an IWRM approach.

#### Legal framework

Several laws adopted between 1982 and 1994 relate to water. The Water Law (Law12/1982) of 1982 has been updated. The Water legislation is harmonized with legislations for sectors such as: the environment, land-use, agriculture and health.

#### Catalyzing change: IWRM Action Plan/Strategy

Egypt considers the National Water Resources Plan (NWRP) as a main pillar to achieve the MDGs. At the

same time they consider the Plan to correspond to an IWRM Plan. The NWRP was developed over a period of six years with extensive involvement of stakeholders. Several actions have already been included in polices and plans of various Ministries. The NWRP proposes an ambitious implementation schedule and the implementation framework is presently under preparation.

#### Change areas

The Ministry of Water Resources and Irrigation is responsible for the management of water resources and irrigation, and the Ministry of Housing is the responsible institution for drinking water and sanitation. However, the National Water Resources Plan relates also to the Ministries of Agriculture, Energy and Environment. The national body where cross-sectoral coordination takes place is the High Ministerial Committee (established 2005). The Egyptian Water Partnership serves as a platform for the interaction of stakeholders from Ministries related to water, NGOs and civil society. There are specific IWRM training activities taking place, such as: "Shared Water Resources Management Diploma" organised by the Ministry of Water Resources and Irrigation in coordination with Cairo University. Representatives from the Nile basin countries are involved in this training. Additionally there are training programs held at the Regional Center for Training and Water Studies.

## Libya

#### Establishing a vision

The National Strategy for Water Resources Management 2000 - 2025 (1999) sets the platform for the Libyan water policy. It partly states the IWRM principles and includes the "polluter pays" principle.

#### Legal framework

The legal framework includes an obligation to elaborate an IWRM Action Plan/Strategy.

#### Catalyzing change: IWRM Action Plan/Strategy

No information is available on the preparation of an IWRM Plan.

#### Change areas

The General Water Authority governs all water resources assessment and monitoring in the country, while the Secretariat of Agriculture and Animal Wealth is responsible for the development of irrigated agriculture and implementation of major projects. A special authority called: "The Great Manmade River Water Utilization Authority" is responsible for the use of agricultural purposes of the water transported from the desert to the coast. Currently, the country is organizing awareness campaigns to educate farmers on efficiency practices.

#### Morocco

#### Establishing a vision

Morocco has developed River Basin Action Plans (1997) which serves as a water policy. IWRM is explicitly stated but not further defined.

#### Legal framework

The Water Law was published in 1995 and takes into account aspects of the IWRM approach. The water law is harmonized with several national legislations for other sectors. The legal framework includes an obligation to prepare an IWRM Plan.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM Plan is being developed and is expected to be completed by 2006. Morocco is facing challenges in the planning process to develop IWRM plans and there is a need for capacity building and institutional support.

#### Change areas

The National Water Council is headed by the King and coordinates multi-sectoral water activities. The institution that has the overall responsibility for the sector is the Ministry of Territory Development, Water and Environment, which ensures sectoral coordination between these three major sectors. There are River Basin Action Plans. Full cost recovery is not practiced and the state subsidizes water services and funds them through the taxation system. The polluter pays principle has not been adopted. There is a need to build on awareness of IWRM, especially among civil society.

#### Tunisia

#### Establishing a vision

The Long Term Strategy for the Water Sector was published in 2003 by the Ministry of Agriculture. It refers to the IWRM approach but does not define it. The Long Term Strategy for the Water Sector (2003) and the State of the Environment Report (2002) refers to the importance of developing an IWRM plan in order to reach the MDGs.

#### Legal framework

The water legislation takes into account principles on: public hearings, participation of stakeholders, management by river basin and the polluter-pays principle. The water legislation is harmonized with several national laws related to the environment, land-use, agriculture and health.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM plan is being prepared and is expected to be completed by 2006. The Ministry of Agriculture and Water Resources is leading the planning process.

#### Change areas

The Ministry of Agriculture and Water Resources governs the water sector in Tunisia and is the national body responsible for cross-sectoral coordination at national level. The same Ministry is also responsible for river basin management. There is a need for capacity building within water-related institutions to meet the water challenges in Tunisia. CEDARE currently provides training on IWRM in the Arab region. The Long Term Strategy for the Water Sector does not specify the role of the private sector.

## Central Africa

#### Status IWRM & WE plans development process

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	been included in the survey.

#### CENTRAL AFRICA



## Cameroon

#### Establishing a vision

A national water policy exists through the water law which was adopted in 1998. There is a strong political will for reaching the WSSD target and many activities have been developed during 2005 towards this end.

#### Legal framework

A water law was adopted in 1998 which complements the law on the environment (1996). The principles of polluter and user pays and participation are not considered in the water law, but these issues are considered in the environment law.

#### Catalyzing change: IWRM Action Plan/Strategy

The country has started the preparation of an IWRM plan, with help from GWP, which should be finalized in 2007.

#### Change areas

The following four Ministries have a mandate for cross-sectoral water resources management: Energy and water, Environment, Public health, and Agriculture and rural development. In June 2005 a Country Water Partnership was created to help the government elaborate the IWRM plan and to ensure a good participation of stakeholders. This platform of stakeholders supports the government in the planning process for the IWRM plan. Additionally, there is an extensive capacity building project planned for 2006. The 1998 water law states that the government is responsible for water management but that they may decentralise part of this responsibility to local authorities. However, the concept of lowest appropriate level is not mentioned.

## Central African Republic

#### Establishing a vision

There is a national water policy entitled *Policy and National Strategy for Water and Sanitation Sectors* from 2005. The water policy states that IWRM is the basis for water resources management.

#### Legal framework

A water law was formally proposed in October 2005. The draft law includes the obligation to develop an IWRM plan and refers to the separation of responsibilities between use and management, decentralization of water management, participation of stakeholders and financial contribution of users.

#### Catalyzing change: IWRM Action Plan/Strategy

The Central African Republic has not yet started the IWRM planning process. Although there is no specific date for the initiation of such process, the government has initiated discussions which will serve as a tool to start the planning process. Although the country has been given initial support, additional financial support is needed to develop an IWRM plan. This could be finalized by 2007 at the earliest.

#### Change areas

The IWRM approach is absent in the various sectoral plans and programmes relevant to water. The newly adopted national water policy does not cover issues such as private sector participation and the polluter/user pays principles. The Ministry of Mines, Energy and Water Resources, and the Ministry of Forestry and Environment have a mandate to develop cross sectoral management and to ensure stakeholder participation. There is no specific budget for IWRM but there is a budget head for the functioning of the Ministry, which could be used for IWRM related activities. However, these funds were not available in 2005 due to the difficult financial situation of the country. Immediate projects for 2006 include the creation of a platform for stakeholders and enhanced political awareness about the IWRM approach.

## Democratic Republic of the Congo

#### Establishing a vision

The Democratic Republic of Congo (DRC) has a Water Supply and Sanitation Policy but no specific Water Resources Policy. The country has several national planning documents that address water issues: *Document de Strategie pour la reduction de la pauvrete* (Poverty Reduction Strategy); Roadmap to achieve MDGs that will be launched shortly with the assistance of WSP (Water and Sanitation Program)/World Bank; *Directeur de Développement de l'Agriculture en RD Congo* (Agricultural Development Plan for DRC) (2000); *Plan Directeur de l'Energie* (Energy Master plan); *Plan National d'action environnementale* (National Plan for environmental actions) (1997); *Plan National de development du secteur de l'eau potable et de l'assainissement à l'horizon 2015* (1994); National Drinking Water and sanitation Master Plan (1996-2015).

#### Legal framework

The Economic Legislation-Water-Obligations (1953) presently constitutes DRC's law for water; however, a national water code has been drafted and is pending endorsement by Parliament.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM Action Plan preparation process is on the agenda and required consultations have recently started. **Change areas** 

The government is implementing a project to reform the water sector with the support of the World Bank. The goal is to reorganize the water and sanitation sector, elaborate a national water policy and a law for the management of water resources. DRC has a drinking water strategy supported by CNAEA (Congo National Action Committee for Water and Sanitation) and the national water supply company (Regideso) under the Ministry of Energy. The new legislation will provide for a dialogue with stakeholders and their involvement. In addition it will provide for the separation of responsibilities for management and use of water. The Democratic Republic of Congo faces many challenges and would benefit from assistance to deal with issues such as: decentralisation, management at catchments level and users' contributions towards water resources management and water efficiency. Increased political involvement, political will and awareness, would facilitate the necessary water sector reforms and the institutional changes required for a cross sectoral approach.

## Republic of the Congo

#### Establishing a vision

By the end of 2004, a water policy was formally proposed by the Ministry of Water and Energy. The Ministry in charge of water resources is currently selecting a consulting firm that can help them to prepare a new national water policy. The IWRM principles are absent in the various official cross-cutting planning documents relevant to water.

#### Legal framework

Congo has a water law from 2003.

#### Catalyzing change: IWRM Action Plan/Strategy

There is currently no IWRM plan/strategy in place in Congo. However, discussions on how to apply an IWRM approach have been initiated. The planning process will most likely start during 2006 and the WSSD target could be met by 2007 the earliest. However, there is a need for financial support.

#### Change areas

The Ministry of Water and Energy, the Ministry of Forestry and Environment and the Ministry of Planning, Regional Development and Economic Integration, all have a mandate for cross-sectoral water resources management and stakeholder participation. The legal framework covers the participation and empowerment of stakeholders, financial contribution by users, and management at river scale level, but does not take into account key issues such as the separation of use and management of water resources, information sharing on infrastructure, decentralisation, or the responsibility of the elaboration/maintenance of an IWRM plan. A platform for stakeholders is planned to be established during 2006, with the aim to assist the government with the development of an IWRM plan. External support is needed to assist Congo in understanding the IWRM approach and to strengthen political awareness.

## Chad

#### Establishing a vision

There is no national water policy as such, but the Water and Sanitation Master Plan (2003-2020), published in 2003, is considered to serve as a water policy. The Water Master Plan thus combines the water policy and the strategies for implementation. These strategies guide sustainable development actions related to water resources and the provision of water. The plan states that IWRM is the base for water resources management but it does not further define the concept. With the exception of the National Development Strategy to achieve the MDGs, all other sectoral plans or national planning programmes do not address the IWRM approach.

#### Legal framework

A water law was published in 1999. It includes the need for IWRM planning.

#### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM plan/strategy in place, but initial discussions to understand the IWRM approach began in 2005. A positive sign is the existing awareness that the political will and understanding on IWRM needs to be

enhanced. Additional financial support will be needed for the development an IWRM plan, which could be finalized in 2007 or 2008.

#### Change areas

The Ministry of Environment and Water Resources is the main authority responsible for cross-sectoral issues and ensuring stakeholder participation. A stakeholder platform is presently being created. The legislative framework covers the participation of stakeholders, the separation of responsibilities between use and management, management at basin scale and the financial contribution of users. The water law of 1999 does not mention the need for information sharing or the decentralisation of water management. In the Water and Sanitation Master Plan, the role of the private sector is specified in detail and the principles for polluter/user pays are included.

### Eastern Africa

#### Status IWRM & WE plans development process

***************************************	Countries that have plans/strategies in place, or a
	process well underway, and that incorporate the main
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	-

#### EASTERN AFRICA



## Djibouti

#### Establishing a vision



Djibouti has a water policy framework paper (1999-2002) in place, where the IWRM principles are taken into consideration. There is also a Poverty Reduction Strategy Paper (2004), where water management is covered.

#### Legal framework

There are no specific water laws/water codes.

## Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM Action Plan or strategy in place.

#### Change areas

Djibouti has taken the first steps towards the creation of a more integrated way of dealing with water issues, but substantial support will be needed to advance the process. In the water policy framework paper, the role of private-sector participation is considered and it provides for the application of the polluter and user pays principles.

#### Burundi

#### Establishing a vision



Burundi has a national Water Action Plan from 1992, and is presently preparing a national water policy. Burundi has incorporated principles of water resources management in a limited number of official documents for cross-cutting sectors, including the Interim Poverty Reduction Strategy Paper (2004), and the Agriculture Research Plan (serving both as action plan and master plan).

#### Legal framework

There is a legal framework for water from 1992, which covers some aspects of IWRM including an obligation to elaborate an IWRM Plan/Strategy.

#### Catalyzing change: IWRM Action Plan/Strategy

There is currently no IWRM plan in place.

#### Change areas

Burundi has recently formed a national government after a long period of civil strife and political tension. The government agencies with a mandate for water resources management are: the Ministry of Water Resources, the Ministry of Agriculture, the Ministry of Energy, and the Ministry of Local Government. The legal framework includes obligations for the exchange of information with the public, participation and empowerment of stakeholders, management at river basin scale, decentralization of management of water resources, financial contribution by the users, separation of responsibilities for management and use of water. There is a need to consider cross-sectoral linkages required for a successful IWRM approach.

## Eritrea

#### Establishing a vision

Eritrea has a draft water policy from 2004. The draft addresses IWRM but does not define it. The national water policy is expected to be completed in 2006. Sound water management principles are not mentioned in any of the official documents relating to cross-cutting water using sectors.

#### Legal framework

There is a draft water law (2004) and a draft water and sanitation law (1997). Both are expected to be finalized in 2006.

## Catalyzing change: IWRM Action Plan/Strategy

Eritrea started the process of preparing an IWRM plan in mid-2005, with help from GWP, and the plan is expected to be finalized by the end of 2007.

#### Change areas

Eritrea is faced with the challenge of establishing institutions for good water governance. The following government agencies have a mandate for cross-sectoral water resources management: the Water Resources Department at the Ministry of Agriculture, the Ministry of National Development, the Ministry of Health, the Ministry of Trade and Industry, and the Ministry of Justice. To advance in the planning process, the country needs support to deal with issues such as high population growth rates due to the number of returnees, scarce rainfall, and the dependency on agriculture where 80% of the population depend on subsistence farming and livestock breeding.

## Ethiopia

#### Establishing a vision

The Ethiopian Water Resources Management Policy was published in 1999. Water resources management principles are articulated in several national plans such as: the Sustainable Development Programme for Reduction of Poverty (2002 and 2005), the Agricultural Development led Industrial Strategy, the Power Strategy, the Conservation Strategy of Ethiopia National Environment Policy, and the National Water Sector Development Programme (2002).

#### Legal framework

The Ethiopian Water Resources Management Proclamation of 2000 was followed by related regulations in 2005. Together they address IWRM principles and include obligations for their implementation. They were further reinforced by the Council of Minister Regulations in 2005. There is also a Water Resources Management Proclamation and Regulations (FDRE 197/2000) and Council of Ministers Regulation (No. 115/2005).

#### Catalyzing change: IWRM Action Plan/Strategy

Two documents comprise Ethiopia's IWRM plan: the Water Sector Development Strategy (2001) and the Water Resources Development Programme (2002). They have been approved at federal level of regional states and include an ambitious capacity building programme.

#### Change areas

The following units have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Water Resources, the Ministry of Agriculture and Rural Development, the Ministry of Mines and Energy, the Environmental Protection Authority, the Ministry of Finance and Economic Development. The Ministry of Water Resources is the agency responsible for the implementation of the IWRM plan although no specific arrangements have as yet been made. The federal system of government enables water management to take root from the provincial level, while the Ministry of Water Resources provides strategic guidance at national level. Ethiopia shares river basins with other countries and is a member of the Nile Basin Initiative, which is a regional partnership aiming at developing the water resources of the Nile. Transboundary issues remain a challenge where support is needed. The Ethiopian Water Resources Management policy defines IWRM and outlines a role for private sector involvement.

## Kenya

#### Establishing a vision

Kenya's National Policy on Water Resources Management and Development was published in 1999. Although it does not specifically define IWRM, it addresses the main principles of the approach. The current National Water Strategy (2003) embarks on major sector reforms where the lead body is the recently established Water Resources Management Authority. Good water resources management principles are mentioned in the following official documents relevant to water: the National Poverty Eradication Plan (1999), the National Development Plan (1997), the Energy Policy (2002), and the National Environmental Action Plan (1994). **Legal framework** 

## The new 2002 Water Act was adopted in March 2003 and includes obligations for key elements of IWRM. **Catalyzing change: IWRM Action Plan/Strategy**

Kenya has started the process of preparing an IWRM plan, with help from GWP and others, and the intention is to finalize it by end 2006.

#### Change areas

The water sector has undergone institutional reforms with the aim to creating a decentralized system comprising three different levels (National, Basin and Sub-basin). These reforms resulted in the establishment of the Water Resources Management Authority as the main responsible agency for implementation of cross-sectoral water resources management. Its first priority is the finalization of the IWRM plan. The water law covers obligations for participation and empowerment of stakeholders, management at river basin scale, decentralization of management of water resources, and the separation of responsibilities for management and use of water resources. There is a programme for IWRM capacity building run by the Water Resources Management Authority. Government agencies with a mandate for cross-sectoral water resources management and stakeholder participation are: the Ministry of Water and Irrigation, the Ministry of Agriculture, the Ministry of Energy, and the Ministry of Local Government. Key challenges include horizontal integration and improving financial sustainability in the country. Kenya requires assistance for capacity building and help in prioritizing the required investments for proper sector development. In particular, the WRMA requires additional skilled

staff to be effective. There is a need to harmonize overlaps of regulatory and management functions which could be achieved through development of guidelines/regulations to back the existing laws.

## Rwanda

#### Establishing a vision

Rwanda has a National Policy Paper on Water from 1996. Water resources management issues are covered in the following national planning documents relevant to water: the Poverty Reduction Strategy Paper (2002), the Rwanda Agriculture Strategy and Action Plan (2004), the National Environment Action Plan (1994), and the National Strategy and Plan of Action on Biodiversity (1997).

#### Legal framework

There is a legal and institutional framework from 1996.

#### Catalyzing change: IWRM Action Plan/Strategy

Rwanda has not developed an IWRM plan or strategy.

#### Change areas

The National Policy Paper on Water states IWRM as the basic framework for water resources management in the country. It specifies the role of private-sector participation and provides for application of the polluter/user pays principles. The legal framework includes obligations for information sharing with the public, participation of stakeholders, management at river basin scale, decentralization of management of water resources, and the separation of responsibilities for management and use of water resources. It also states the obligation to elaborate an IWRM plan/strategy. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Lands, Environment, Forests, Water and Natural Resources, the Ministry of Agriculture, the Ministry of Energy, and the Ministry of Local Government. Rwanda has made some progress but is still recovering from the difficulties experienced in the country during the last decade. Rwanda would benefit from assistance to raise the human and institutional capacity to effectively meet the 2005 WSSD target. An enhanced coordination among stakeholders is a key issue to consolidate nation building. The lack of human and institutional capacity is a severe constraint to improving water resources management.

#### Sudan

#### Establishing a vision

The Sudan Water Policy (2005) explicitly states and defines IWRM. Water resources management is treated in the Sudan National Poverty Reduction Strategy Paper (food security, water supply and sanitation), and in national planning documents related to the National Development Strategy to achieve the MDGs, the Agricultural Mater Plan, the Energy Master Plan, and the National Environmental Action Plan.

#### Legal framework

There is a Water Resources Law from 1995. There are also IWRM-related regulations that target use of pumps on the Nile, pollution control and irrigation.

#### Catalyzing change: IWRM Action Plan/Strategy

Sudan established an Integrated Water Resource Management plan in 1999, which was approved at Federal and State levels. The IWRM plan was prepared by the Ministry of Irrigation and Water Resources, the Ministry of Agriculture, the Ministry of Energy (Electricity) and the Ministry of Finance and Economy. The plan includes a financing strategy and monitoring tools. The Ministry of Irrigation and Water Resources and Ministry of Agriculture are the agencies responsible for its implementation. It also includes a recurrent capacity building programme.

#### Change areas

The government realises the critical role water has in national security and has pledged to improve IWRM and equitable access to natural resources. The legal framework covers the role of private-sector participation to include investment, consulting firms and contractors. It also includes obligations for participation and empowerment of stakeholders, management at river basin scale, decentralization of management, and the separation of responsibilities for management and use of water resources. There is a recurrent capacity building programme run by the Training Directorate in the Ministry of Irrigation and Water Resources, and by the Nile Basin Initiative. Under the Nile Basin Initiative and with peace in the south of the country there is a need to provide support to turn policies into practical application. There is general lack of institutional and human capacity and unfavourable working conditions that lead to human resource constraints.

## Uganda

#### Establishing a vision

The National Water Policy was published in 1999 and includes IWRM principles. Water resources management is covered in the following official planning documents: the Plan for Eradication and Alleviation of Poverty (1997), the Plan for modernization of Agriculture (2001), the Energy Policy (2002) and the National Environment Action Plan (1995).

#### Legal framework

Uganda's Water Statutes were published in 1995. They include most aspects of IWRM. There are regulations for both water resources and wastewater that relate to IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

Uganda established the National Water Action Plan in 1995. The Plan adopts some of the principles of IWRM although it lacks monitoring mechanisms for its implementation.

#### Change areas

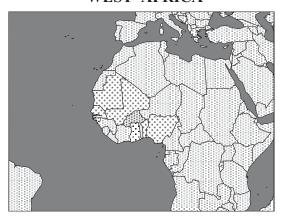
The National Action Plan was prepared by the Ministries of Water, Agriculture, Works, local government representatives, NGOs and representatives from the private sector. The Action Plan has formed a basis for policy formulation and the current legal framework for water resources management. The Water Resources Management Department is in charge of a programme for capacity building on implementation of the IWRM plan. The following units have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Water, Lands and Environment, Water Resources Management Department, Meteorology Department, the Ministry of Agriculture, Animal industries and fisheries, the Ministry of Energy, and the Ministry of Local Government. The unit mainly responsible for implementation of cross-sectoral water resources management is the Water Resources Management Department. The role for private sector involvement is specified in the National Water Policy and includes; design and construction of water development projects, operation and maintenance of systems, training and capacity building, and commercial services. Uganda started some ten years ago to develop an IWRM approach with strong donor support. The country has initiated a long process of reform of water resources management, which is still on-going. Uganda would benefit from assistance to speed up the implementation process by increased financial resources and strengthened human and institutional capacity. The policy of devolution suffers from a lack of qualified staff at local level, as well as a lack of mechanisms for reconciling different development activities by upstream districts. This has been a stumbling block to well meaning national policies and initiatives.

## West Africa

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a
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#### WEST AFRICA



## Benin

#### **Establishing a vision**

A national water policy has been in preparation since September 2004. The policy is expected to be adopted in June 2006. Benin started developing a Water Resources Management Strategy in 1997. In 2000 a Water Vision was created, and in 2003 a Programme for Sanitation was established. Water resources management issues are included in the Poverty Reduction Strategy Paper and in the Strategy for the MDGs. However, these issues are not treated in the national Master Plans for Agriculture, Energy or Environment.

#### Legal framework

A water law was prepared in 2003, and should be applicable at the end of 2006 when the water policy is expected to be adopted. The water law states IWRM as a basic approach for water resources management.

#### Catalyzing change: IWRM Action Plan/Strategy

The country has started the preparation of an IWRM plan with assistance from GWP. The plan is expected to be finalised in 2007. The Country Water Partnership and the government, both play a fundamental role in this process. With the existing external support, Benin is expected to have an IWRM plan in place by late 2006 or early 2007.

#### Change areas

The legal framework regulates the role of the private sector and addresses the polluter/user pays principles. Aspects such as information sharing with the public, participation of stakeholders, decentralisation of water management, management at basin level, and the financial contribution of users, are all treated in the law. The IWRM framework is well known in Benin since 1997 when the country started workshops and other activities related to IWRM. Financial support for implementation of the plan is presently being negotiated.

#### Burkina Faso

#### Establishing a vision

There is a national water policy entitled Policy and Strategy for Water (1998). Water resources management is considered in the official planning documents related to poverty reduction, the national strategy to reach the MDGs, the rural development strategy etc.

#### Legal framework

A water law covering water resources management was approved in February 2001. This law is accompanied by 16 decrees which cover many aspects of water management.

#### Catalyzing change: IWRM Action Plan/Strategy

Burkina Faso has an IWRM plan in place since 2003.

#### Change areas

The national water policy defines IWRM and supports the creation of local committees for water, includes the role of the private sector and calls for enhanced IWRM awareness among the population and the organization of training programmes. The polluter and user pays principles are also included. The planning process of the IWRM plan was characterized by stakeholder participation and was finally approved at national level. A strategy for financing the actions is included in the plan and a permanent secretary has been appointed to follow implementation of the plan. Capacity building plays a key role. The water law (2001) treats issues like participation of stakeholders and the exchange of information. The law also covers management at basin level and decentralisation of water management. Financial aspects and user's contribution are also taken into account. The following units have a mandate for cross-sectoral water resources management and stakeholder participation: *Conseil Nationale de l'Eau, Comité technique de l'Eau, Cadre permanent de concertation dur la recherche dans le domaine de l'Eau, Comité inter service sur l'Eau, Comité locaux de l'Eau.* Although Burkina Faso finalized an IWRM plan nearly three years ago implementation is slow and additional support is needed to make it effective.

#### Cape Verde



#### Establishing a vision

There is Master Plan for Water Resources (1994-2004) and a National Vision for Water (2025) which was elaborated in 2000. Additionally there is a government programme (2002-2005) which addresses water issues. However, water resources management is not considered in the Poverty Reduction Strategy Paper (PRSP), the Strategy for MDGs, or in the Master Plan for Agriculture. The National Plan for Environment (2004) does include a water resources component.

#### Legal framework

Cape Verde has a water code from 1999. The code emphasizes participation of stakeholders, decentralization of water management including at basin scale. It also addresses the financial contribution of users and establishes the principle of separation between use and management. The code does not address information sharing, nor does it include obligations about efficient use of water.

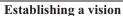
#### Catalyzing change: IWRM Action Plan/Strategy

Cape Verde has no IWRM plan but the process of elaborating a plan started at the end of 2005 with help from GWP. Cape Verde is expecting to reach the WSSD target in 2007.

#### Change areas

A Country Water Partnership was created by the end of 2005 in order to support the government with the development of an IWRM plan and to ensure a cross sectoral and participatory approach. The main agency responsible for the IWRM planning process is the National Water Council, while the National Institute for Water Management is responsible for implementation. A participatory approach was used during the preparation of the Plan for the Environment. This experience will facilitate the IWRM planning process. All conditions are thus in place for the development of an IWRM plan. Given the particular geographical features of Cape Verde, special support will be needed to adapt the IWRM planning process to these circumstances.

#### Ghana





Ghana started the elaboration of a water policy in 2002. The policy is expected to be finalized shortly. The policy explicitly states IWRM as a basic framework for water management, but it does not define the concept. The Growth and Poverty Reduction Strategy II (2006-2009) drafted in September 2005, refers to IWRM as the base for wise water management. On the other hand, the Agricultural Master Plan and the National Environmental Action Plan do not refer to water resources management.

#### Legal framework

There is a water law entitled the Water Resources Commission Act from 1996. The participation and empowerment of stakeholders are regulated in the law but there are no obligations related to sharing information. The Act emphasizes decentralization of management of water and financial contribution by users for management of resources. Efficiency of use of water is also mentioned in the text but there is no information about the separation of responsibilities for managing and use of water. Water Use Regulations for application of the Act are related to IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

Ghana initiated the preparation of an IWRM plan in June 2004, but is not expected to be finalized until the end of 2007.

#### Change areas

While the Water Resources Commission is the main responsible agency for implementation of cross-sectoral water resources management, the following units also have a mandate for cross-sectoral water resources management and stakeholder participation: the Water Directorate (Ministry of Water Resources, Works and Housing), and the Water Research Institute. In the water policy, the role of private sector participation is described, emphasizing the development of technologies, the development of irrigation infrastructure, and water supply and sanitation services. The principles of polluter/user pays are also applied. Several key actors are involved in the development of IWRM in Ghana. The main agencies are: the Water Resource Commission, the Water Directorate and the Water Research Institute. A Country Water Partnership was established in 2002 and is playing an important role in promoting IWRM and ensuring stakeholder involvement. There are several on-going activities with basin organizations which could constitute the base for the development of a national plan. Financial support is needed for the successful development of the IWRM plan.

#### Mali



#### Establishing a vision

A national water policy was formally proposed in November 2005. The draft includes IWRM principles and explicitly defines the approach. Water resources management issues are to a varying extent incorporated in key national planning documents such as the Poverty Reduction Strategy (2002), the National Plan for Drinking Water (2004), and the National Policy for Wetlands.

#### Legal framework

There is a water code which was adopted in January 2002. Additionally, there is an important number of regulations which were adopted in 2002-2003 that relate to the National Water Council, the National Water Funds and the Basin Committees.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM Plan has been in preparation since June 2004. A draft plan is expected to be available in June 2006, and contributions from the regions and the departments will be available in November 2006. The IWRM Plan is expected to be approved in March 2007.

#### Change areas

Several Ministerial Departments are involved in the IWRM planning process coordinated by the National Direction of Hydraulic (Ministry of Agriculture and Hydraulic). The Country Water Partnership facilitates stakeholder participation and plays an important role in the planning process. In the national water policy the role of the private sector is defined and allows for an involvement in the provision of water service including the development of hydraulic infrastructure with regulation by the state. The polluter and user pays principles are also considered. The legal framework regulates key issues such as the exchange of information with the public and the participation of stakeholders is treated as well as decentralisation and management at basin level. Financial aspects are taken into consideration together with the separation of responsibilities between management and use of water. Mali is well on the way to completing its IWRM plan. A key step in 2006 will be to prioritise actions in the short and long term and include a financing strategy to ensure implementation.

#### Mauritania

#### Establishing a vision

Mauritania has a national water policy since 1998. The policy covers water and energy development including both resource management and water supply and sanitation. It partly addresses IWRM that is defined as global, sustainable and equitable development. Water resources management is considered in the PRSP and in the National Development Strategy to reach the MDGs. Water resources management is not considered in the Agriculture Development Plan or in the Energy Plan.

#### Legal framework

Mauritania has a Water Act from February 2005. The act clearly states the IWRM principles and addresses the ownership of water. During the development of this Water Act, the following Acts were revised: the Environmental Act, the Hygiene Act, the Pastoral Act and the OMVS (Office pour l'Aménagement de la Vallée du Fleuve Sénégal) Act. Nine decrees of implementation are in process of finalisation and are still to be adopted. The legislation takes into account the participation of stakeholders, public hearings, decentralisation, the separation between management and provision of water and the role of the private sector. River basin management is not included as it is not considered relevant for Mauritania. Issues such as polluter and user pays principles are included in the law.

#### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM Action Plan in place, but there is a proposal for elaborating a Plan during 2006-2007. There is also a programme of capacity building.

#### Change areas

In Mauritania, water management is the responsibility of an autonomous structure called the National Water Resources Centre, which is dependent on the Water Ministry since the water sector reform in 2001. The water law is harmonised with legislation relating to land-use, agriculture and health, and the environmental act is partly related to the water law. The water law is also harmonised with the Senegal River Basin Authority (OMVS, transboundary basin authority). The National Water Resource Centre is the government entity responsible for cross sectoral action but there is no national stakeholder platform. A decree for organising a National Water Council is under preparation. Many structural elements are established and the conditions for developing an IWRM Plan are in place; however the plan does not exist and is dependent on funding and development of capacities on IWRM. In order to facilitate the process, a country water partnership is needed to mobilise partners and stakeholders to ensure broad ownership and help the government to elaborate the IWRM plan.

#### Nigeria

## Establishing a vision



Nigeria has a Water Supply and Sanitation Policy (2000). The Federal Ministry of Water Resources and the National Council on Water Resources formally proposed a National Water Resources Management Policy in 2000. A second draft of the new water policy, based on IWRM principles, has been completed and prepared for further deliberations. Water resources management is not embedded in the Poverty Reduction Strategy Paper, or in the Strategy for the MDGs.

#### Legal framework

The development of a national water law was proposed in 2000. There is also a Water Resources Decree 101 from 1993. Some states, such as Lagos have water laws. The Federal Ministry of Water Resources is dealing with water infrastructure provision while the National Council on Water Resources is dealing with regulation.

#### Catalyzing change: IWRM Action Plan/Strategy

Nigeria does not have an IWRM plan/strategy in place. However, in 2004 the Federal Ministry of Water Resources formally proposed to develop a National IWRM Strategy and is seeking external financial support. Nigeria developed National Water Resources Master Plans in 1996 and 2004 with external aid and initiated a

process of changes to the water governance system at Federal and State levels.

#### Change areas

Nigeria has a federal system of government which complicates national planning for water. There is political will to launch the IWRM planning process and in order to facilitate the process, it may be necessary to start in one or two regions and later extend it to cover the whole country. The Federal Ministry of Water Resources and the National Council on Water Resources both have a mandate for cross-sectoral water resources management and to include stakeholder participation – the Federal Ministry of Water Resources is the agency that is mainly responsible for implementation of the cross-sectoral water resources management. The Country Water Partnership (established 2003) is trying to enhance the cross-cutting approach that the IWRM planning process requires.

## Senegal

#### Establishing a vision

There is a Master Plan for Water Resources (1994-2004) and a National Vision for Water in 2025 (2000). The Poverty Reduction Strategy Paper, the National Strategy for the MDGs and the National Plan for the Environment, all address sound water resources management principles, while the Master Plan for Agriculture excludes any specific reference to such issues.

#### Legal framework

The water code dates back to 1981 and does not explicitly state IWRM as basic framework for water resources management. Apart from considering the principles of the user/polluter pays principles, the water code does not consider key issues related to good water resources management.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM plan is in preparation since January 2004, with support from GWP. The planning process is estimated to be finalized by 2007.

#### Change areas

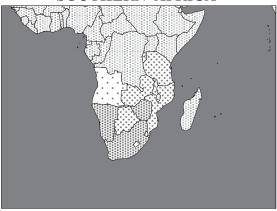
All agencies and NGOs concerned with water issues are involved in the planning process to develop an IWRM plan. This process is coordinated by the Direction of Management and Planning of Water Resources. A Country Water Partnership was created in 2002 and is actively assisting the government in the development of the IWRM plan. A good sign is the existing political will and awareness about water issues, and the development of stakeholder platforms at various levels which will build ownership and help the government to create the basis for better water management. The Direction of Management and Planning of Water Resources is the main responsible unit for the implementation of cross-sectoral water resources management, in addition to having responsibility for stakeholder participation.

## Southern Africa

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a
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#### SOUTHERN AFRICA



### Angola

#### Establishing a vision



National water policies are implicit in the recently passed framework for legislation and in the Water Sector Development Strategy, prepared by the National Directorate of Water. The policies and institutions required to implement the strategy are identified, which also covers the role of the private sector. Angola is in the process of compiling its public development documents. To overcome the effects of the civil war, Angola is embarked on a reconstruction programme supported by the international community.

#### Legal framework

The Water Law 6/02 of June 2002 covers both water resource management and water supply. Many of the specific provisions remain to be specified in secondary legislation (regulations).

#### Catalyzing change: IWRM Action Plan/Strategy

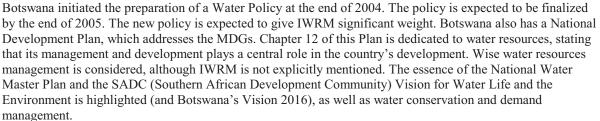
Discussions are underway to facilitate the development of an IWRM Plan. This would include the collaboration between the National Directorate of Water and GWP. With this support, the country could have an IWRM plan in place by 2007/2008.

#### Change areas

Angola is facing post-war reconstruction and nation building, and has just started a process that will enable the country to establish better water resources management. The Water Sector Development Strategy, prepared by the National Directorate of Water is based on the concept of integrated water resource management and incorporates the following elements: meeting basic needs for water, achieving food security, working with neighbouring countries to achieve equitable access to shared water resources, preparing for and managing droughts and floods, using appropriate technologies, applying economic valuation to water, decentralising decision-making in the sector, involving users, and reforming institutions. In addition to water resource management, the Strategy covers the provision of potable water and sanitation to the people of Angola.

#### Botswana

## Establishing a vision



#### Legal framework

There are currently no laws or regulations that address IWRM issues, but Botswana has the following legislation: Water Act (1968), Borehole Act (1956), Waterworks Act (1962), Waterworks Amendment Act (1983), Water Utilities Corporation (WUC) Act (1970), WUC Amendment Act (1978). A Water Law is under preparation based on the review process of Botswana's National Water Master Plan. The same review is also based on the SADC water policy and strategy, which address sound water resources management.

#### Catalyzing change: IWRM Action Plan/Strategy

The IWRM planning process was initiated in 2005 with support from UNDP/GEF. The IWRM Plan is expected to be completed in 2007.

#### Change areas

Although there is no formal IWRM plan in place at this point, significant effort is being made to embed IWRM in programmes and activities. These include the Okavango Delta Management Plan, the review of the Botswana National Water Master Plan, and most significantly, the IWRM planning process which has just commenced. The planning process involves key stakeholder groups such as the Department of Water Affairs, the Country Water Partnership, NGOs and other governmental institutions. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Department of Water Affairs, the Water Utilities Corporation and the Department of Environmental Affairs. The Department of Water Affairs is the unit mainly responsible for implementation of cross-sectoral water resources management.

## Lesotho

#### Establishing a vision



Lesotho has a Water Resource Management Policy from 1999. The Policy explicitly states IWRM, but does not define it further. To address the MDGs, Lesotho developed the Lesotho Vision 2020. Additionally, the country has the following public documents: the Agriculture Sector Strategy Document (2003), the Lesotho Energy Policy Framework (2002), and the Strategic Planning of Ministry of Tourism, Environment and Culture (2004). Lesotho has developed The Kingdom of Lesotho Poverty Reduction Strategy 2004/2005 – 2006/2007, which includes a small reference to water supply and sanitation and water for agriculture but water resources management does not feature.

#### Legal framework

The Water Resources Act dates back to 1978. It includes obligations for the efficient use of water, but does not address any other aspects of IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

Lesotho has not yet embarked on the preparation of an IWRM plan; however, the government is inviting donors and the Lesotho Country Water Partnership to assist them in their efforts to initiate the planning process.

#### Change areas

The Water Sector in Lesotho is currently undergoing institutional changes aimed at improving the management of the country's water resources with support from the World Bank. Four units have a mandate for cross-sectoral water resources management: The Commission of Water, the Lesotho Water Partnership, the Department of Water Affairs, and the Water and Sewerage Authority. The Water Resources Management Policy provides room for private sector involvement within the water supply sector and entails the application of the polluter and user pays principles. In Lesotho the IWRM planning process has only recently started. To facilitate this process, capacity building on IWRM is needed.

#### Malawi

#### Establishing a vision

The water policy of Malawi was adopted in 2005. The policy clearly defines integrated water resources management. To reduce poverty and to achieve the MDGs, Malawi developed a Growth and Development Strategy in 2005. In addition to this, the Agriculture Strategic Plan (2003), the Rural Electrification Master Plan (2004), and the National Environmental Action Plan (1994) all address water issues.

#### Legal framework

Malawi's Water Resources Act (1969) has been complemented by the Water Works Act (1995) and the Irrigation Act (2001).

#### Catalyzing change: IWRM Action Plan/Strategy

In the beginning of 2004, Malawi started the process of developing an IWRM plan with support from GWP. A draft of the plan is expected to be ready in March 2006, and the whole process is scheduled to be completed in mid-2006.

#### Change areas

In Malawi, the Ministry of Irrigation and Water Development have a mandate for cross-sectoral water resources management and responsibility to ensure stakeholder participation. The Ministry is responsible for the following areas: investment in planning, development and construction of water infrastructures, manage water and sanitation information, establish guidelines, undertake training and capacity building within the sectors of water and sanitation, promote adherence to the regional and international obligations and agreements. The water policy includes the role of the private sector as a participant in and investor in water and sanitation, and the role of community participation in water resources management. The policy also provides for the applications of both the polluter-pays and user-pays principles. The Water Resources Act and the Water Works Act include obligations for stakeholder participation, financial contribution towards water management and the separation of responsibilities for management and use. There are some shortcomings, with no mention of river basin management, decentralization, water efficiency or the elaboration of an IWRM strategy.

In Malawi studies have been undertaken to assess the current water situation and stakeholder consultations are taking place to identify and prioritise issues to be dealt with.



#### **Establishing a vision**

A national water policy is in preparation. Public planning documents addressing water resources management are: the Action Plan for Poverty Alleviation (2005), National Development Strategy (effective as from June 2005), the Sugar Sector Strategic Plan (2001), the Non-Sugar Sector Strategic Plan 2003-2007, the Integrated Electricity Plan 2003 – 2012, the White Paper for the National Environment Policy (1991), the National Environmental Strategies, the National Environmental Action Plan II and Environmental Investment Programme (1999), which has a horizon of 2009, the Central Water Authority Corporate Plan 2004-2008, and the National Sewage Master plan (1994).

#### Legal framework

Since 2002 a water act has been in preparation. There are numerous existing laws, standards and guidelines related to water issues from the 19<sup>th</sup> century onwards: the Rivers and Canals Ordinance No. 35 (1863), now known as the Rivers and Canals Act, the Ground Water Act No. 55 (1969), the Ground Water Authority (1971), the Irrigation Authority Act (1979), the Forests and Reserves Act (1983), the Wastewater Management Authority Act (2000), and the Environmental Protection Act (2002) etc.

#### Catalyzing change: IWRM Action Plan/Strategy

Mauritius does not have an IWRM plan, but actions taken in the past together with current initiatives in the field of water management, follow good water resources management principles.

#### Change areas

The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Water Resources Unit (responsible for the formulation of policy in relation to the control and use of water resources), the Central Water Authority (responsible for the treatment and distribution of water to domestic, industrial and commercial consumers), the Wastewater Management Authority (responsible for the wastewater sector), the Irrigation Authority (responsible for the implementation and management of irrigation projects), and the Central Electricity Board (responsible for the control and development of the electricity supplies). These agencies are the main players in the preparation of policies, strategies/plans related to the use and management of water. Although it is not indicated in any water law or code, the Environmental Protection Act (2002) ensures consultation and the exchange of information with the public. Stakeholders are encouraged to participate in decision making on water rights and investments. The polluter pays principle is covered in the Wastewater Management Authority Act (2000). Users are required to pay for connection to the water distribution network and for the supply of water as required by the Central Water Authority. Groundwater users have to apply for a groundwater abstraction permit and have to pay for exploitation. Household connection to the sewerage system, where it exists, is free.

## Mozambique

#### Establishing a vision

The National Water Policy of Mozambique was published in 1995. It is currently being revised within the framework of a national IWRM strategy. Mozambique has a Poverty Reduction Strategy Paper and a MDG Country Report, but it is unknown to what extent they address water resources management.

#### Legal framework

The Water Law of August 1991 is currently subject to revision. It includes obligations for many elements of IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

In early 2005, Mozambique started the process of developing an IWRM plan with help from GWP. The planning process was recently initiated and is lead by the National Water Authority (DNA). The country expects to finalize the IWRM plan in 2007.

#### Change areas

The DNA is working to ensure the involvement of stakeholders in the planning process of the IWRM plan and uses the existing role of the Water Board for support. The Minister for Roads, Water and Public Utilities is providing political support. The planning process started at basin level with wide stakeholder participation and the process is expected to be completed in 2007. Mozambique has undertaken studies in some of the river basins to this end. The following units have a mandate for cross-sectoral water resources management and stakeholder participation: the National Directorate of Waters (responsible for the overall strategic management of water resources), the National Water Council (composed of the Ministry of Public Works and Housing, the Ministry of Environmental Affairs, the Ministry of Agriculture, the Ministry of Mineral Resources, the Ministry of Health and the Ministry of Fisheries), and the Regional Water Authorities. The National Water Policy neither states nor defines IWRM, although it states the role for the private sector in investment and also provides for the application of polluter-pays and user-pays principles. The role of the private sector is described as follows: participation in management of the water supply system, in water sources, in investment, and in the management of the hydraulic infrastructure. The water law includes obligations for decentralization of management of water resources, the participation and empowerment of stakeholders, management at river basin scale and other central issues for good water resources management. During the WSSD Summit in 2002,

Mozambique signed an agreement with Swaziland and South Africa for the sustainable utilization and cooperation for the Incomati and Maputo River Basins. This was a key commitment to ensure improvement in the management of transboundary waters. The agreement provides a legal framework for IWRM for these shared waters.

## Namibia

#### Establishing a vision

Namibia's National Water Policy was published in 2000. The Water Policy proposes a framework and a strategy to steer towards equitable, efficient and sustainable water resources management and water services. The basic principles, on which the policy is based, are due to cognisance of existing policies, the Namibian Constitution and the core principles agreed at international level. The policy states and defines IWRM, and further refers to Agenda 21 and the Dublin principles as fundamental to good water resources management. There is also a policy of Community Based Management for rural water supply. Namibia has the following public planning documents where water resources management is taken into consideration: Poverty Reduction Strategy, 1998, implemented through the National Poverty Reduction Action Plan 2001-2005; National Planning Commission Namibia: 2004 Millennium Development Goals, 2004; Ministry of Agriculture, Water and Rural Development: National Agricultural Policy, October 1995.

#### Legal framework

The Water Resources Management Act was published in December 2004.

#### Catalyzing change: IWRM Action Plan/Strategy

Namibia does not have a specific IWRM Action Plan but is implementing the water policy through various programmes and basin committees.

#### Change areas

In Namibia the whole water sector review process is geared towards integrated water resources management. The implementation of the Water Resources Management Act forms part of the Action Plan relevant to IWRM, for example, the implementation of basin management. The need for the creation of institutions to manage the water and other resources within a basin has been identified in the Act. Functional responsibilities for integrated management will be vested in Basin Management Committees to be established in major or problematic basins in the country. Basin Management Committees provide the opportunity for government and communities to work together to assure that integrated water basin management is achieved. So far, two basin management committees have been established; Kuiseb BMC and Lishana sub-basin BMC (Cuvelai basin). The Department of Water Affairs is the agency with a mandate for cross-sectoral water resources management and responsibility for ensuring stakeholder participation, while the National Planning Commission is responsible for the implementation. The main principles adopted in the National Water Policy are as follows: ownership, equity, promotion of development, economic value, openness and transparency, decentralisation, ecosystems values and sustainability, integrated management and planning, clarity of institutional roles and accountability, capacity building, and shared watercourses.

#### **South Africa**



#### Establishing a vision

The White Paper on a National Water Policy (1997) asserts the government as custodian of water resources which are collectively owned by the people. The second policy entitled; Water Supply and Sanitation Policy White Paper was produced in 1994 and is now considered outdated. This policy is to be replaced with a new White Paper, which is currently in draft form. The third policy is the White Paper on Basic Household Sanitation from 2000. It focuses on education and appropriate sanitation technologies but not so much on financial and institutional policies to facilitate implementation at household level. This white paper will be complemented by the new Water Services White Paper which has been in preparation since 2002 and is a comprehensive new policy on water services (including sanitation). It states preference for public ownership and management of water services infrastructure. These policies have been developed through consultative processes. The National Water Conservation Strategy and Water Demand Management Strategy were published in August 2004. With regard to water supply and sanitation, the Strategic Framework for Water Services (September 2004) sets out clear targets of 2008 and 2010 for the full provision of water and sanitation services respectively.

#### Legal framework

There are two pieces of legislation that govern the water sector: The National Water Act of 1998 and the Water Services Act of 1997. The Water Services Act will be revised in the light of the forthcoming Water Services White Paper.

#### Catalyzing change: IWRM Action Plan/Strategy

South Africa has most of the framework for IWRM in place and the National Water Resources Strategy is considered a national IWRM plan. A first version of the National Water Resources Strategy was launched in September 2004 with the provision for a review every five years. The National Water Resources Strategy provides a list of other planning documents which have a cross cutting impact on the water sector such as: environmental management, disaster management, financial management, access to information and administrative justice.

#### Change areas

South Africa has developed legislation that translates IWRM into law and makes provision for its practical implementation. The publication of the National Water Resources Strategy is the culmination of a process of public consultation. The following units have a mandate for cross-sectoral water resources management and stakeholder participation: the Department of Water Affairs and Forestry, together with its regional offices in nine provinces. In the future there will be 19 Catchments Management Agencies for the 19 Water Management Areas, which are not yet operational. At the sub-national level, Catchments Management Agencies will develop Catchments Management Strategies which will contain activities aimed at an integrated approach to water resources management at ground level. During the WSSD Summit in 2002, Swaziland signed an agreement with Mozambique and South Africa for the sustainable utilization and cooperation for the Incomati and Maputo River Basins. This was a key commitment to ensure improvement in the management of transboundary waters. The agreement provides a legal framework for IWRM for these shared waters.

#### Swaziland



#### Establishing a vision

Swaziland's Water Policy has been in preparation since 2000 and is expected to be completed by the end of 2007. Swaziland PRSP and MDG Country Reports only mention water supply and water for farming and irrigation, and do not address water resources management. A long list of action plans, master plans and planning documents do refer to some aspects of good water management. These planning documents have been developed over the period 2001-2005. In addition, the National Physical Development Plan, the Environmental Action Plans, and other public documents all address key elements of good water resources management

#### Legal framework

The Water Act 7 was published in 2002 and adopted in mid 2003. Although there are no by-laws or regulations related to water resources management, Swaziland's Water Act provides obligations for many aspects of integrated water resources management.

#### Catalyzing change: IWRM Action Plan/Strategy

In early 2005, Swaziland started developing an IWRM plan with help from GWP. The plan is expected to be completed in 2007.

### Change areas

The planning process of the IWRM plan is lead by the National Water Authority (NWA). The NWA requested the Swaziland Country Water Partnership, a multidisciplinary and multi-stakeholder platform of water stakeholders, to facilitate the process. Consensus was reached that the national water master plan should be used as the entry point. Swaziland has commenced consultations on the process of developing the IWRM Plan. The Minister for Natural Resources and Energy is providing political support. The following units have a mandate for cross-sectoral water resources management and stakeholder participation: the Water Resources Branch, the Rural Water Supply Branch, the Department of Geological Surveys and Mines, the Swaziland Water Services Corporation, the Swaziland Water and Agricultural Development Enterprise, and the Swaziland

Electricity Board. The Water Act 7 covers stakeholder involvement, decentralization and separation of management etc. The government has provided funds for stakeholder consultations to implement the water resources management reforms being brought about through the new Water Act. The reforms are in essence seeking to adopt the IWRM approach. During the WSSD Summit in 2002, Swaziland signed an agreement with Mozambique and South Africa for the sustainable utilization and cooperation for the Incomati and Maputo River Basins. This was a key commitment to ensure improvement in the management of transboundary waters. The agreement provides a legal framework for IWRM for these shared waters.

## United Republic of Tanzania

#### Establishing a vision

Tanzania has a National Water Policy in place since 2002. It states IWRM as an integrated approach that addresses participatory, multi-sectoral, multi-disciplinary river basin management. It recognizes that water is a scarce resource and integrates the linkage between land use and water use.

#### Legal framework

The Water Utilization Act (Control and Regulation) dates back to 1978. The most recent amendment was made in 1997 and includes obligations for the IWRM approach. To reduce poverty and to reach the MDGs, Tanzania has developed a National Strategy for Growth and Reduction of Poverty (2005). In addition to this, Tanzania has the following policy documents: the National Agricultural and Food Security and Irrigation Master plan (2003), the Energy Policy of Tanzania (1992), the Wild Life Policy of Tanzania (1998), and the National Forest Policy of Tanzania (1998).

#### Catalyzing change: IWRM Action Plan/Strategy

Tanzania has a draft of a Water Sector Development Strategy, which has been in preparation since 2004. The strategy is expected to be finalized soon. The document is a national strategy that will embrace the main aspects of IWRM.

#### Change areas

Tanzania is establishing an enabling environment which is fundamental for the IWRM process. To complement the Policy of 2002, the draft of the Water Sector Development Strategy has been developed through a participatory approach engaging all key sectors; public, private and civil society. The draft strategy indicates how the water policy will be implemented. Apart from the existing Water Policy, River Basin Boards have been formed in all of the nine river basins. Efforts are also underway to put the final touch on the water legislation which will assist in the implementation of the new water policy. The Ministry of Water and Livestock Development has a recurrent programme for capacity building on IWRM. The National Water Policy recognizes the important role that water ecosystems play in the national economy. It covers the following: (i) comprehensiveness: a holistic basin approach for integrating multisector and multi-objective planning and management that minimizes the effects of externalities, and ensures sustainability and protection of the resources; (ii) Subsidiarity: decentralizing decision making and devolving to the lowest practicable level, with stakeholders participating in the planning, design, implementation of the management actions and decision making; and (iii) Economic: decision making in the public sector, private sector and in civil society on the use of water should reflect the scarcity, value of water, water pricing, cost sharing, and other incentives for promoting the rational use of water.

## Zambia

#### Establishing a vision

Zambia has a national water policy from 1994. A revision of that policy started in 2005 and there is a draft version available. The revised version of the policy is expected to be completed by 2006. Zambia has further strengthened its PRSP by revising the document to include IWRM and water issues and linking them to poverty reduction. This is also reflected in the National Environmental Action Plan from 1994, and in the Strategic Plan for the Ministry of Energy and Water Development 2003-2007. Zambia further addresses water issues in the Irrigation Policy and Strategy of 2004, and in the National Policy on Wetlands Conservation of 2000.

#### Legal framework

There is a water act from 1949, which has been under revision since 2003. This process has included country-wide stakeholder consultations. A water resources management bill is under preparation and is envisaged to be finalized and approved by the Parliament in June 2006.

#### Catalyzing change: IWRM Action Plan/Strategy

The development of an IWRM plan started in May 2004 and is expected to be completed in June 2006. GWP is facilitating the process. A first draft of the IWRM plan was ready in August 2005. Zambia has translated elements of the draft IWRM plan into programmes and projects for their inclusion in the National Development Plan of Zambia that starts in 2006.

#### Change areas

The national water policy explicitly states IWRM as a process to ensure long-term sustainability of existing water resources. It addresses the role of private sector involvement, it refers to the relevant laws of the country that ensure polluter-pays policies, and recognizes water as an economic good through water tariff legislation. The draft water act does not provide for information sharing with the public, however, it does provide

procedures for the Water Board to conduct public inquiries where registered rights-owners can legally complain. Management at river basin is limited to the Water Management Committee established for rivers with an administrative function only. It does not promote decentralization or user contribution to costs. It limits management responsibilities to the Ministry for Energy and Water Development, and promotes efficiency through introduced tariffs and metering. The Ministry of Energy and Water Development is in charge of the preparations of the IWRM plan, while the Country Water Partnership is facilitating a stakeholder platform. Programmes and projects identified in the planning process will be inserted into the 5th National Development Plan for Zambia (2006-2010). The Department of Planning and Information of the Ministry has been entrusted with the monitoring function.

## Zimbabwe

#### Establishing a vision

There is water policy from 2001 entitled: Towards Integrated Water Resource Management. The document contains the water policy and the water pricing policy. Zimbabwe takes water resources management into consideration in a number of official documents related to poverty reduction, agriculture, energy etc. Zimbabwe has also produced a Zimbabwe Millennium Development Goals: 2004 Progress report.

#### Legal framework

The Water Act published in 1998, and the Zimbabwe National Water Authority (ZINWA) Act published 2001, constitute the water law. Together they address most key elements of IWRM. Furthermore, Zimbabwe has many regulations addressing water resources management, such as: water permits, water levy, sub-catchment council rates, establishment of catchments and sub catchments, wastewater and effluent.

### Catalyzing change: IWRM Action Plan/Strategy

The Water Resources Management Strategy (2001) covers IWRM and states "sustainable, equitable and economically feasible development in Zimbabwe through proper use of water resources whilst taking into account the shared watercourse systems".

#### Change areas

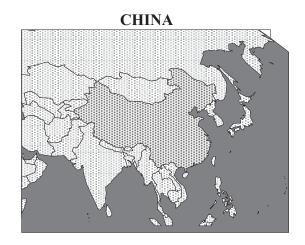
Several Ministries, farmers associations, civil society and the donor community were actively involved in the development of the Water Resources Management Strategy, which was adopted at national level. The Ministry for Water Resources and Infrastructure Development is responsible for monitoring its implementation. It contains capacity building programmes and contains a strategy for financing. Zimbabwe had made considerable progress on IWRM planning before the World Summit. Two water resources management institutions, ZINWA and Catchment Councils were formed in 2001. ZINWA is responsible for the technical side of implementation. Catchment Councils with their sub-units, sub-catchment councils, monitor the usage of water in their different areas of jurisdiction; they issue permits for accessing water as well as discharge. At present all the seven catchments have produced draft outline plans which are the guiding principles on water allocation and development and usage. At a national level, the country has not yet considered how IWRM (through all the policy, strategy and legal water instruments in place) will assist the country in achieving the MDGs as outlined in the national MDG report, though this is being considered at each catchment level. The role of the private sector is also outlined in the strategy and both the polluter-and user-pays principles and pricing are included.

## 4.2 ASIA & OCEANIA

### China

### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main
	elements of an IWRM approach.
800000000000	Countries that are in the process of preparing national
	strategies or plans but require further work to live up to
[2222222222222	the requirements of an IWRM approach.
	Countries that have taken only initial steps in the
	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.



## China

#### Establishing a vision

China has no specific water resources policy but water is included in the National White Paper: Outline of Action for Sustainable Development in the beginning of the 21st Century in China, 2003-07. There is a strong political commitment to balance water resources development and management as reflected in the policies of a "Water Saving Society" and "Water for All", where the rural poor are highlighted in the context of meeting the MDGs. There are white papers on Poverty Reduction Strategy and the National Development Strategy to achieve the MDGs. The Agricultural Master Plan and the Energy Master Plan are covered by government reports. The Environmental Action Plan is part of the 9th and 10th national five year plans.

#### Legal framework

The China Water Law of 2002 is based on the principles of IWRM. Several by-laws exist and river basin laws are in preparation. Today there is an ongoing implementation of the new water law on river basin and provincial levels including the development of regulations.

#### Catalyzing change: IWRM Action Plan/Strategy

The strategy is outlined in the National Water Resources Comprehensive Plan (NWRCP), which has been given legal status through the China Water Law. The following nine Ministries: Development and reform, Water resources, Land and resources, Agriculture, Construction, Environment protection, Forestry and Meteorology together with research institutes, civil society and GWP China, were all involved in the preparation work of the Plan. The work is coordinated at the highest level through the National Commission of Development and Reform and budget allocations are in place for implementation.

#### Change areas

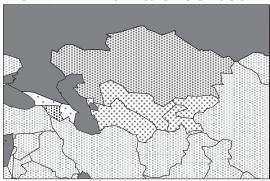
China has put in place the planning framework and implementation on lower levels is in progress. The River Basin Commissions are developing a governance structure with public participation. The National Commissions of Development and reform and the State Council and governments at provincial, autonomous region and municipalities levels have a mandate for cross-sectoral water resources management and stakeholder participation. Although progress has been made in the planning framework. China faces challenges in its management of water resources include balancing rapid economic growth with pollution control and development disparities between urban and rural areas.

# Central Asia & Caucasus

#### Status IWRM & WE plans development process

 1 1
Countries that have plans/strategies in place, or a process well underway, and that incorporate the main elements of an IWRM approach.
**
Countries that are in the process of preparing national strategies or plans but require further work to live up to the requirements of an IWRM approach.
Countries that have taken only initial steps in the process towards preparing national strategies or plans and have not yet fully embraced the requirements of an IWRM approach.
Countries that have not submitted a survey reply, or been included in the survey.

#### **CENTRAL ASIA & CAUCASUS**



# Armenia

#### Establishing a vision

The water policy is covered by the law of the Republic of Armenia on Fundamental Principles of National Water Polices, adopted by the Parliament in 2005. The national planning documents outside the water sector which include water resources management are: the Poverty Reduction Strategy Paper - 2010, and the Strategic Plan for Sustainable Development - 2010.

#### Legal framework

The Armenian water code is from 2002. Details are given in about 70 by-laws and governmental decisions from 2002-2005.

#### Catalyzing change: IWRM Action Plan/Strategy

A plan is being prepared and will be adopted in 2006. Armenia elaborated a Program for IWRM with external assistance. The IWRM terminology is used and there is a definition given in the law, Article 15. The Armenian IWRM plan will commence its implementation in 2007.

#### Change areas

There are two governmental agencies responsible for the IWRM policy implementation: the Agency of Water Resources – planning, infrastructure, efficiency improvements, and water fees collection; and the Ministry of Environment – monitoring, information system, and "extreme situation mitigation". The IWRM principles are applied and take into account key issues such as: public involvement, river basin management, delegation to the lowest appropriate level, polluter and user pays principles, recognition of the role of women, and obligation to elaborate and maintain an IWRM plan.

# Azerbaijan

#### Establishing a vision

Azerbaijan has no national water policy in place, but is expected in 2006. Water resources management issues are embedded in the Poverty Reduction Strategy Plan - 2010, and the Strategic Plan on Sustainable Development - 2010.

#### Legal framework

There is a Water Code from 1999 with two by-laws; one on irrigation and land reclamation, and one on water supply and wastewater. There is a regulation related to water charges in agriculture.

# Catalyzing change: IWRM Action Plan/Strategy

Azerbaijan has no IWRM plan/strategy in place. The realization of a national IWRM plan is foreseen to start after 2007.

#### Change areas

The responsible agency for water resources management is the State Committee on Irrigation and Water Resources. Although Azerbaijan does not have any formal policy or planning documents in place, there is ongoing work towards raising awareness and understanding of IWRM with financial resources set aside by the government. At present there is a single sector approach to the work.

# Georgia

# Establishing a vision

Georgia has taken initial steps towards preparing national policies and plans, but has not yet fully embraced the requirements of an IWRM approach. The formulation of a national water policy is expected to start in 2006. Water resources management issues are covered in public planning documents relating to: Environment, Health, Finance (of urban water supply and sanitation with a feasibility study in 2005), and interstate agreements on environmental cooperation with Armenia, Azerbaijan, and Turkey.

#### Legal framework

There is a law on Water from 1997 with an obligation to elaborate and maintain an IWRM plan. There are no

by-laws.

#### Catalyzing change: IWRM Action Plan/Strategy

There is presently no IWRM plan/strategy in place, although a national IWRM plan is foreseen to be in force after 2008.

#### Change areas

The Ministry of Environment with its Department of Water Resources is responsible for the management of Georgia's water resources.

# Kazakhstan

#### Establishing a vision

The water policy is formulated in three national documents: (i) Development Strategy of Kazakhstan to 2030, signed by the President in 1998, (ii) The Concept of Water Sector Development to 2010, adopted by the Government in 2002, and (iii) The Programme on Drinking Water Supply 2002-2010, adopted by the Government in 2002. Water resources management issues are included in the Strategy on Industrial Innovative Development 2003-2015 and in the Programme on Poverty Reduction 2003-2005.

#### Legal framework

The Kazakhstan Water Code was signed by the President in June 2003. IWRM is explicitly stated and defined in the Water Code. There is one by-law about rural cooperative of water users from 2005.

#### Catalyzing change: IWRM Action Plan/Strategy

The national IWRM plan is in preparation since 2004 with support from the UNDP and GWP. It will be submitted for approval by the Government of Kazakhstan in 2006. The IWRM plan is expected to be implemented in 2007 as a tool to achieve the MDGs.

#### Change areas

The IWRM planning process is led by the Committee of Water Resources that is responsible for policy and normative formation over the country and in river basins, water use coordination between agencies (sectors), and information exchange, and includes the involvement of the Ministry of Finance.

# Kyrgyzstan

#### Establishing a vision

The national water strategy was drafted in 2002 and is waiting for adoption by the Government and the Parliament. The policy includes the following definition of IWRM: "IWRM is the management system based on consideration of all kinds of water resources (surface water, groundwater, and return water) within hydrological units that coordinates interests of different economic sectors and hierarchical levels of water use, involves all stakeholders into decision-making, and promotes efficient use of water, land and other natural resources for the sake of sustainable satisfying water requirements of eco-systems and human society". Other sectoral documents that relate to water resources management are: the Poverty Reduction Strategy Paper, the Medium Term Development Plan, the Programme for Rural Development, and the Environment Protection and Risk Management plan.

#### Legal framework

The Water Code of the Kyrgyz Republic is from 2005. There is a by-law on Water Users Associations from 2003.

#### Catalyzing change: IWRM Action Plan/Strategy

The Kyrgyz Republic has an IWRM planning process underway with the aim to finalize an IWRM National Plan by 2007. The finalisation of the draft for further adoption by the Government and the Parliament is foreseen to take place by the end 2006.

#### Change areas

There is a proposed 'Road Map' for an IWRM National Plan with support from GWP and UNEP. The work is coordinated by the Department of Water Resources with four Ministries involved; Agriculture, Environment, Finance, and Justice. The Department of Water has a mandate for cross sectoral resources management. Their main task is to create policies and norms for the country and river basins, coordinate water use between sectors, and exchange information.

#### Tajikistan

#### Establishing a vision

The national water policy is formulated through the Concept on Rational Use and Protection of Water Resources in Tajikistan, which is a Governmental Regulation (№ 551, Dec. 2001). Additional planning documents relevant to water are: The Concept of the State Demographic Policies of the Republic of Tajikistan for the period of 2003 to 2015; The Program of Cotton-Growing Development in the Republic of Tajikistan for the period of 2000 to 2005; The Program of Grain-Growing Development in the Republic of Tajikistan for the period of 2000 to 2005; The Concept of Fuel and Energy Complex Development in the Republic of Tajikistan; The Poverty Reduction Strategy (2002).

#### Legal framework

There is a Water Code from 2000. The Water law includes several aspects of IWRM but does not fully comply with the concept.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM Plan is in preparation with a proposed completion date in 2006.

#### Change areas

In Tajikistan there is high-level political awareness and commitment to IWRM which should translate into an IWRM plan in 2006 together with actions and a budget for its implementation. The work is led by the Ministry of Water Resources and Land Reclamation, whose main functions are as follows: formulate policies and norms for the nation and river basins, coordinate water use between different sectors, care for irrigation development and construction, exchange information and be in charge of interstate water relations.

# Turkmenistan

#### Establishing a vision

The national water policy is included in the National Programme of Economic and Political Development for 2020. Other sector planning documents which relate to water resources management are: The Poverty Reduction Strategy Paper from 2003 and the Strategic Plan for Sustainable Development from 2001.

#### Legal framework

The Water Code of Turkmenistan is from 2004. There are also by-laws.

# Catalyzing change: IWRM Action Plan/Strategy

The planning process towards an IWRM National Plan is ongoing with the assistance of GWP. A tentative date for completion of the plan is 2007. The work is led by the Ministry of Water Resources and Land Reclamation.

#### Change areas

Water polices and legislation do not fully comply with the concept of IWRM. The management of water resources at river basin level and the role of the private sector are not covered in the legal framework. There is a programme for capacity building on IWRM provided by the Training Centre ICWC. The Ministry of Water Resources and Land Reclamation have a mandate for cross-sectoral water resources management and stakeholder participation.

# Uzbekistan

#### Establishing a vision

The basic water resources management principles are formulated and defined in the Constitution (1992), The Nature Protection Law (1992), and the law about Limited Water Use (1993). Water resources management issues are covered in the National Master Plan on Water and Irrigation Development from 2003. IWRM is defined.

#### Legal framework

The law about Water and Water Use regulates water resources management. There is one by-law, the decree of the President of the Republic of Uzbekistan About Major Directions of Reforms Deepening in Agriculture, July 2003, where the principle of IWRM and transition to a basin method of management are considered.

### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM plan or strategy in place yet. The planning process is led by Ministry of Agriculture and Water Resources in cooperation with the Scientific-Information Centre of Interstate Commission Water Cooperation (ICWC) with support from GWP. The realization of an IWRM plan is foreseen after 2007.

#### Change areas

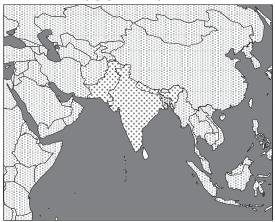
In Uzbekistan IWRM is based on the dominating water use sector of irrigation. The challenge for true IWRM planning has to be met through regional cooperation on shared waters and by support of international development agencies. The legal framework does presently not cover key issues like: polluter/user pays principles, the role of the private sector, or separation of responsibilities for management and use of the water resources. There is a capacity building programme organized by the Training Centre of ICWC.

# **South Asia**

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a
	process well underway, and that incorporate the main
	elements of an IWRM approach.
(00000000000000000000000000000000000000	Countries that are in the process of preparing national
	strategies or plans but require further work to live up to
	the requirements of an IWRM approach.
	Countries that have taken only initial steps in the
	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.
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#### **SOUTH ASIA**



# Bangladesh

#### Establishing a vision

Bangladesh established a National Water Policy in 1999. The policy covers IWRM elements, such as the payment for services and the role of private-sector participation. The application of the polluter pays principle is found in the Bangladesh Environmental Rules under the Environmental Act (2002). Bangladesh covers water resources management in many official documents, such as: The National Strategy for Accelerated Poverty Reduction (Sep. 2005) and the Development Strategy for Water Supply and Sanitation (to achieve the MDG by 2010), as well as other sector documents on agriculture, the environment etc. There are numerous guidelines and policy documents related to water supply and sanitation.

#### Legal framework

There are many laws and regulations related to water. A draft National Water Act has been in preparation since 2003. The draft Water Act, when finalized and approved, should embrace IWRM principles. The new water act will consolidate laws concerning managing, ownership, development, appropriation, utilization, conservation and protection of water resources. The act will establish the Government's obligation to manage and administer the country's water resources. When finalized and adopted, it will take precedence over former legislation and replace the Water Resources Planning Act of 1992. There is also a number of by-laws/regulations relating to water resources management: Guidebook for preparing by-laws of water management cooperative associations (published in 2004 by the Local Government Engineering Department), Guidelines for Participatory Water Management (published by the Ministry of Water Resources in 2001), the Cooperative Societies ordinance (1984), the Cooperative Societies Rules (1987), known as the Water Management Cooperative Association.

#### Catalyzing change: IWRM Action Plan/Strategy

Bangladesh adopted a national water management plan in March 2004. The plan was prepared by the Water Resources Planning Organisation, which is responsible for implementation of the plan together with the involvement of all line Ministries.

#### Change areas

Bangladesh has managed to incorporate IWRM principles into the legal framework and several national planning documents related to cross-sectoral areas relevant to water. There is a strategy for financing and monitoring the plan. There is a recurrent programme for capacity building for organizations and individuals involved in the implementation of the IWRM plan. The following major agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Bangladesh Water Development Board (Water resources development and management, river training, flood control, irrigation, water conservation), the local government engineering department (rural infrastructure development and small scale water resources development), the Water resources planning organisation (macro level water resources planning, formulation of water rules and regulations, central monitoring and coordination), the Department of public health engineering (rural water supply and sanitation), the Dhaka water supply and sewerage authority (urban water supply and sanitation), Chittagong water supply and sewerage authority (urban water supply and sanitation), the Department of forest (forest conservation) etc. The following units are mainly responsible for implementation of cross-sectoral water resources management: the Bangladesh Water Resources Development Board, the local government engineering department, the Bangladesh Agricultural Development Corporation, and the Barind Multipurpose Development Authority.

# India

# Establishing a vision

India has a national water policy that was published in April 2002. Aspects relating to water resources management are incorporated in several official development plans of the Government of India and the States. Examples include planning documents related to poverty reduction, national development goals, agriculture, energy and the environment.

#### Legal framework

According to the Constitution of India, water is a State responsibility. There are many State level laws and codes on both ground and surface water.

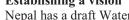
#### Catalyzing change: IWRM Action Plan/Strategy

At national level, there is no specific national IWRM Plan or Strategy in place.

India is a federal state with the main responsibilities for water residing with the state governments. More information is needed from the state level to fully assess multi-sector and basin level planning. Progress has been made in many states and water is included in official planning documents relating to water using sectors at national level. India also has a national water policy that incorporates key IWRM principles. In the national water policy the role of the private sector is covered and states that private sector participation should be encouraged in planning, development and management of water projects for diverse uses, whenever feasible. Private sector participation may also help in introducing innovative ideas, generating financial resources and introducing corporate management to improve service efficiency and accountability to users. The main challenge is the federal structure and getting political will for reform across such as diverse country. There is a need to address serious pollution issues, conflict resolution mechanisms and pricing and cost recovery for sustainability. There is also a need to create and/or reform institutions and equip them with formal regulatory powers to improve inter-sectoral water allocations and management.

#### Nepal

#### Establishing a vision



Nepal has a draft Water Policy, which has been in preparation since December 2004. The final draft is expected to be finalized by December 2006. Nepal has incorporated principles of sound water resources management in key official documents relating to poverty reduction, national development strategies to achieve the MDGs, agriculture, energy etc.

#### Legal framework

Nepal has a Water Resources Act which was published in December 1992. The water Resources Act and other laws cover participation by stakeholders, decentralisation, and financial contributions by users, separation of responsibilities for resource management and water use as well as environmental conservation.

#### Catalyzing change: IWRM Action Plan/Strategy

Nepal adopted a Water Resources Strategy in January 2002 and a national Water Plan in September 2005. The Water Plan is an action plan for the implementation of the National Water Strategy and encompasses the basis of IWRM. The Plans were prepared by the government with external support. A participatory process was followed during the preparation of the Plan. Participating stakeholders included governmental, nongovernmental, private sector agencies at all levels. The Plan addresses problems of the country relating to poverty and water resources, however, the speed of the Plan preparation was not uniform, and there were several halts as the country faced political instability, financial constraints and poor inter-agency cooperation.

The Water and Energy Commission is the integrated monitoring authority of the National Water Plan. The Commission also has a mandate to form river basin organizations for integrated water use and management. Additionally, they are authorized to act as a facilitating agency for IWRM capacity development. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Water and Energy Secretariat, the Department of Hydrology and Meteorology, the Department of Water Induced Disasters Prevention, and the Department of Soil Conservation. Nepal has embedded IWRM principles in the regulatory framework of water resources management. The Water Policy and the ongoing institutional reform need to be completed. Additionally, the Water Resources Strategy (2002), the national Water Plan (2005) and the Water Law (1992) are yet to be harmonized. It is estimated that the country will fully meet the 2005 WSSD target by the end of 2006. The present political instability constrains effective policy and plan implementation.

#### Pakistan

#### Establishing a vision

Pakistan has developed a national Water Policy which incorporates and specifies the IWRM principles. The participation of stakeholder groups was ensured during the formulation of the policy, which is presently awaiting approval by Cabinet. Pakistan has a federal system that requires political consensus of the Provinces. The policy does not specify the role of private-sector participation in water resources management. The polluter pays principle is included in the National Environmental Policy. Water is included in the Medium Term

Development Framework (March 2005) although it is not clear to what extent IWRM principles are covered. **Legal framework** 

There are a number of Acts relating to water at both Federal and Provincial level. The Provinces have irrigation and drainage authority acts (1997) and Sindh province has a water management ordinance (2002). Some of the acts cover some aspects of IWRM such as participation of stakeholders, decentralisation of management, payment by users and separation of powers for management and use of water resources.

#### Catalyzing change: IWRM Action Plan/Strategy

Pakistan has an operational Water Sector Strategy which was published in October 2002. The Strategy was prepared by the Ministry of Water and Power and was later approved at Federal level. The Strategy includes mechanisms for monitoring its implementation and for financing the process, although there is no distinct budget for IWRM.

#### Change areas

The following bodies have a mandate for cross-sectoral water resources management and a responsibility to ensure stakeholder participation: the Ministry of water and power (policy formulation and oversight), and the Water and Power Development Authority (Planning and execution). The legal framework does not cover participation and empowerment of stakeholders, management at river basin scale, or other key issues. As a federal state the process of developing national plans is more complex. It would be productive to deal with the existing knowledge gaps related to the fundamental principles of IWRM to advance further. The main difficulties encountered relate to the translation of policies into programmes; institutional adjustments and capacity building; achieving cross-sectoral coordination for multi-sectoral programmes, and the formulation of an enforceable regulatory framework.

# Sri Lanka

#### Establishing a vision

There is no national water policy in Sri Lanka, but there are two draft policies: The Water Resources Policy and Institutional Arrangement was approved by the cabinet on 28<sup>th</sup> March 2000, but was subsequently challenged by civil society. A revised version of the policy was approved by the cabinet on 21<sup>st</sup> December 2004, however, this too has been challenged and there is no clearly accepted policy as at present. At this point, a consensus approach is being sought but changes of government and policy stalemate slow down progress. The drafts do not explicitly state IWRM although this is implicit in natural resources activities since the Rio conference. The draft policies do not provide for application of the polluter pays principle, but this is currently provided under the Environmental Law and Regulations. Water issues are incorporated in official documents although the extent to which they include IWRM principles is unclear. The documents in question are: the Poverty Reduction Strategy Paper (2001-04), which is now being revised by the new government, the Energy Master Plan, and the Environment Action Plan (2001). A national development strategy to achieve the MDGs was prepared in 2004 with help from UNDP.

#### Legal framework

There are currently 50 Acts that regulate "water". There is a draft of a comprehensive Water Resources Law, which has been in preparation since 2001. Completion depends on finalizing the water policy and is unlikely to be ready before 2007.

#### Catalyzing change: IWRM Action Plan/Strategy

No IWRM Action Plan or Strategy is presently foreseen and would depend on the finalization of the water policy. Awareness raising activities have been undertaken.

### Change areas

Sri Lanka has made initial steps and to advance further, a common approach to the creation of policies is necessary. The IWRM approach has been identified as essential for the country and pilot basins have been identified, water resources management now has to become a priority matter on the national agenda. There are several pending issues related to this process, such as the approval of a comprehensive Water Resources Law and establishing a National Water Resources Authority, as currently there is no such authority in place. Significant support (technical, financial, educational) is needed as well as political and bureaucratic commitment in order to advance in the process. The following government agencies have a mandate for cross-sectoral water resources management and for ensuring stakeholder participation: the Ministry of Agriculture, irrigation and Mahaweli, the Department of irrigation, the Water Resources Board, the National Water Supply and Drainage Board, and the Mahaweli Authority of Sri Lanka.

# Southeast Asia and Oceania

#### Status IWRM & WE plans development process

	1 1
	Countries that have plans/strategies in place, or a
	process well underway, and that incorporate the main
***************************************	elements of an IWRM approach.
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#### **SOUTHEAST ASIA & OCEANIA**



#### Cambodia



### Establishing a vision

Cambodia has a National Water Resources Policy, published in January 2005. The Water Policy explicitly states IWRM as a basic framework for water resources management in the country, although it does not define the concept. The Water Policy provides for the application of the polluter and user pays principles. Cambodia has a limited number of official documents where water resources management issues are taken into consideration: the National Strategy to achieve the MDGs and the National Poverty Reduction Strategy.

#### Legal framework

A water law was formally proposed in 1999 and aims to cover management at river basin scale. There are no bylaws or regulations relating to water resources management.

# Catalyzing change: IWRM Action Plan/Strategy

This is not foreseen for the time being.

#### Change areas

The Cambodia National Mekong Committee has a mandate for cross-sectoral water resources management and ensuring stakeholder participation. Their main tasks are the following: advise the Cambodian representative to the MRC Council on all matters relating to activities within the Mekong River Basin that could affect Cambodian interests; review proposals in the light of the Mekong Agreement, and provide coordination between MRC and concerned Ministries. The agencies mainly responsible for implementation of cross-sectoral water resources management are: the Ministry of Water Resources and Meteorology, the Ministry of Environment, the Ministry of Industry, Mines and Energy, the Ministry of Rural Development, the Phnom Penh Water Supply Authority, and the Ministry of Agriculture, Forest and Fishery. Cambodia has made a step forward with the adoption of the national Water Policy but has not initiated a process for developing an IWRM plan or strategy. There is a need to finalise water legislation to support the new policy.

#### Indonesia



# Establishing a vision

Indonesia is presently updating its Water Policy, which is expected to be finalized early 2006. The outline Policy explicitly states and defines IWRM. Indonesia has prepared some framework documents that address some water issues, such as the National Development Strategy to achieve the MDGs.

#### Legal framework

A new Water Resources Law was adopted in March 2004. There are also by-laws/regulations covering water resources.

# Catalyzing change: IWRM Action Plan/Strategy

A national comprehensive framework for addressing water resources management in Indonesia is presently being developed with support from GWP. Work on the framework started in April 2005 and will be finalized by the end of 2006.

### Change areas

Even though the IWRM & WE Plan of Indonesia will not be completed by the end of 2005, the process is underway. The planning process of the IWRM plan involves workshops and public consultation meetings with key stakeholders. The intention is to make the IWRM plan available at national level as an umbrella, at provincial level as a coordinating level, and at river basin level as an implementing unit. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Directorate General of Water Resources (Ministry of public works), the State Ministry of the Environment, the Directorate General of Land and Water (Ministry of Agriculture), and the Ministry of Forestry. Once finalized, the new water policy will

cover improving water use efficiency, institutional arrangements for basin management and stakeholder participation. The updated water policy will cover polluter and user pays principles, role of the private sector participation, decentralisation and community management. The new water resources law includes many important elements of IWRM, for example: the exchange of information with the public, participation and empowerment of stakeholders, management at the river basin scale, financial contribution by the users toward the management of water resources and the efficient use of water. Possible obstacles to be dealt with in relation to the implementation of the IWRM Plan are knowledge gaps and low awareness on the substance of IWRM among lawmakers and stakeholders and weak public consultation due to poor coordination and/or organization.

# Lao People's Democratic Republic

#### Establishing a vision

Laos has a draft Policy on Water and Water Resources (2000), although it is unclear when this draft will be approved. The document states IWRM as a basic framework for water resources management in the country. Issues that are relevant to water resources management are mentioned in cross-cutting official documents relating to Poverty Reduction (2004), National Development Strategy to meet the MDGs (2004), Integrated Agricultural Development (2001) and the National Strategy on Environment (2004).

#### Legal framework

A Water and Water Resources law was adopted in 1996 and the preparation of a new law on Water Supply started in 2005. There is a Prime Minister's Decree to implement the Water and Water Resources law dated 2001 that provides for payments linked to licensing with contributions to a water resources protection fund. The law covers various aspects of IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

Laos adopted a national Water Sector Strategy and Action Plan (WSSAP) in 1998. A chapter covering financing of the plan is included as well as mechanisms for monitoring its implementation. The plan was prepared by the Water Resources Coordination Committee in cooperation with line agencies and local authorities. The plan indicates where sub-sector strategies would need to be supplemented to achieve sustainable and efficient use of water resources. It identifies cross-cutting issues that need special attention and the activities and timing required to address these issues. The WSSAP has only partly been implemented and is being reviewed, updated and consolidated for more effective implementation. The completion of the revised plan is scheduled for 2007.

#### Change areas

The legal framework in Laos has been partially updated and IWRM principles have been incorporated in several public documents relating to different sectors. Although considerable progress has been made on the planning framework, implementation of the 1998 Action Plan has been limited. The new draft policy and Action Plan should be completed by 2007. The draft policy encourages foreign direct investment using appropriate measures to ensure the nation's benefits. The policy mentions that polluters should pay for the pollution they cause and for users to pay within their capability. It also covers decentralization, water use efficiency, river basin management and specifies the role of private-sector participation. The Water Resources Coordination Committee has a mandate for cross-sectoral water resources management and stakeholder participation. It is responsible for coordinating line agencies for the drafting of strategies and action plans, programmes and regulations that are necessary for the planning, management, use and protection of water and water resources. The Committee is also responsible for monitoring, control, promotion and reporting on the implementation of activities related to water resources. The main obstacles to overcome are: lack of financial resources, limited capacity and manpower, and lack of awareness to support the IWRM process. There is a need for cross-sectoral support projects related to IWRM at both national and river basin level.

# Malaysia

#### Establishing a vision

In the Constitution, water is listed as a joint Federal and State responsibility. At national level there is no water policy since the water constitution is a state matter and the Malaysian Parliament has no jurisdiction to legislate on water. However in 1998 a National Water Resources Council was formed. This council is chaired by the Prime Minister and a number of Ministers as well as Chief Ministers of States are members. Through this council issues relating to water policy are discussed and implemented. Malaysia has incorporated water resources management issues into some official national planning documents, such as the National Development Strategy to achieve the MDGs, Agriculture and Environment. The Eighth Malaysia Plan (2001-2005) and the third Outline Perspective Plan (2001-10) include management plans for a number of river basins.

#### Legal framework

There is a Water Act dating from 1920 which was updated in 1989 together with state and sector-specific laws. The following Acts are also in place: Irrigation Areas Act (1953), Sarawak Rivers Ordinance (1993), Sabah Water Resources Enactment (1998), Drainage Works Act (1954 - revised 1988), and Selangor Waters Enactment (1999). The Environmental Quality Act also covers water including the polluter pays principle.

#### Catalyzing change: IWRM Action Plan/Strategy

Malaysia had a Natural Resources Master Plan as far back as 1982, and in 2000 the Second Natural Resources Master Plan was updated. There is presently no national IWRM plan or strategy, but the need for integrated water

resources management is incorporated in a number of National Plans and Policies. A study is presently undertaken by the Economic Planning Unit on the IWRM approach and is scheduled for completion by mid 2006.

#### Change areas

Since Malaysia is a federal state, there is no national IWRM plan or Water Policy as of this date. River basin management is recognised and clearly stated in the Third Outline Perspective Plan. Plans have been developed for a number of river basins that include the IWRM approach, and the National Water Resources Council approved the preparation of master plans for all 189 river basins in the country. So far 26 master plans have been completed and used as a reference for stakeholders. The legal framework for water needs to be updated to include key IWRM elements. However, positive initiatives related to water management are the active National Water Resources Council where water policy issues are addressed, and the increased stakeholder participation in the river basin planning processes. The federal system complicates water management with numerous Government agencies having different responsibilities on water related functions. At this point, the following agencies have a mandate for cross-sectoral water resources management: the Department of Irrigation and Drainage, the Department of Environment, the Department of Water Supply (Ministry of Energy, Water and Communication), the Forestry Department, the Maine Department, the Department of Town and Country Planning, the District office etc. The Economic Planning Unit and the Prime Minister Department will be responsible for the implementation of the IWRM plan when created. There is a programme for capacity building organized by CapNet, the Institute for Environment and Development and the National Institute of Public Administration.

# Myanmar

#### Establishing a vision

A Water Policy has been in preparation since October 2005, but there is no date set for its completion. Myanmar has included water resources management principles in key official documents that relate to the national development strategy to achieve the MDGs (2005). Water is also included in Agenda 21 of the National Commission for Environmental Affairs and Agriculture Master Plan of February 2000.

#### Legal framework

There are several Acts and Laws related to water that date back 50 years and most are outdated.

## Catalyzing change: IWRM Action Plan/Strategy

A draft Strategic Plan for IWRM was published in 2004 but is not yet operational. Various water-related government agencies are involved in the preparation of the Plan which will be officially approved at national level. The preparation of the strategy has included stakeholder consultation. The strategy will incorporate mechanisms for monitoring its implementation.

#### Change areas

Once the water policy and strategic plan is finalized, Myanmar should have a framework for better water management. The Myanmar Water Resources Committee, comprising ministers from all water related Ministries has become a national authority for managing all aspects of water. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: Ministry of Agriculture and Irrigation (Irrigation Department and Water Resources Utilization Department), the Ministry of Electric Power (Department of Hydroelectric Power), the Ministry of Forestry (Forest Department and National Commission for Environmental Affairs), the Ministry of Transport (Directorate of Water Resources and Improvement of River Systems), the Ministry of Construction (Public Works) and the Ministry of Health (Department of Health). Key obstacles include inadequate funding, weak coordination and a lack of awareness and capacity. In 2003 the Irrigation Department launched a programme to develop a "Myanmar Water Vision" in order to raise awareness about future opportunities and challenges on water. Focal point agencies related to the water sector have also held seminars and workshops to discuss priority issues, possible strategies and action programme for managing water. These agencies have also formulated a Strategic Planning and Management document, which has become a basic guideline and framework for the preparation of an integrated approach to water resources management.

# Philippines

#### Establishing a vision

The Philippines does not have a specific Water Policy. Water is included as a part of the Medium Term Philippine Development Plan (2004-2010) which was published in 2004. Important initiatives include the formulation of a National Water Vision and the 2004 National Water Forum which assessed the country's water situation in the context of IWRM. The output of these initiatives will form the basis of the IWRM Plan after validation through consultations.

#### Legal framework

The Philippine Water Code was established in 1976 and the Clean Water Act was adopted in 2004.

#### Catalyzing change: IWRM Action Plan/Strategy

There is a national IWRM Plan in preparation, and the government is committed to completing it by mid 2006. A national water resources master plan was published in 1998.

#### Change areas

There are several capacity building programmes for IWRM including the programme for Institutional Strengthening for the Adoption of IWRM using the River Basin Approach. Additionally, there are capacity

building programmes supported by several external donors. Awareness about integrated water resources management is being raised through multi-stakeholder gatherings, conferences and consultations in different parts of the country. The following two units have a mandate for cross-sectoral water resources management and stakeholder participation: the National Economic and Development Authority (over-all policy making body), and the National Water Resources Board (coordinating and regulation agency on water resources management and development). The Clean Water Act includes several IWRM principles, such as information sharing with the public, participation of stakeholders, river basin management, financial contribution by users, and the efficient use of water.

# Thailand

#### Establishing a vision

Thailand has a national water policy which was adopted in October 2001. IWRM is a basic principle in Thailand's natural resources policy and is covered indirectly in the national development strategy to achieve the MDGs and other public planning documents relating to agriculture, energy, and the environment.

#### Legal framework

There are many laws related to water resources but Thailand does not have a comprehensive water resources law. A draft law has been in preparation since 1991 and is intended as a framework law for IWRM. There is also a Groundwater Act from 1977.

#### Catalyzing change: IWRM Action Plan/Strategy

Thailand has an Action Plan for Integrated Water Resources Management, which was published in July 2001. The Plan was prepared by the Ministry of National Resources and Environment and approved at national level. The Plan has mechanisms for monitoring its implementation and budgetary allocations have been made by government to implement the plan.

#### Change areas

Thailand has developed an Action Plan for integrated water resources management with the aim to support the country's development in all sectors by using surface and groundwater (including a trans-border water allocation scheme). The principle of the Action Plan is to assess water demand and supply in area grids and allocate water between grids to assure sufficient water. Detailed allocation of water will be done through River Basin Committees in each of the 25 river basins. For the effective implementation of the Plan it would be useful to strengthen capacity to avoid any knowledge gaps among key local authorities. In general, there is a need for more training to create an adequate human resources base that could engage fully in the IWRM process. Several agencies are responsible for cross-sectoral water resources management: the Department of Water Resources (within the Ministry of Natural Resources and Environment), the Department of Groundwater Resources, and the Royal Irrigation Department. The National River Basin Committee organizes a programme for capacity building for organizations involved in IWRM plan implementation. The national water policy states and defines IWRM, specifies the role of the private-sector and provides for the application of the polluter pays and user pays principles.

# Viet Nam

# Establishing a vision



Vietnam does not have a Water Policy as such, but there is a detailed National Water Resources Strategy which is based on the law on Water Resources, where the essence of the IWRM approach is considered. Water resources management issues are stated in official planning documents related to poverty reduction, national development and environment. The Vietnam Agenda 21 was approved by the Government in 2004, where the Water Resources Management Plan is stated. Vietnam has a draft document of a 'Programme for Action implementing the Law on Water Resources and the National Water Security Vision', although this programme has not been officially adopted.

#### Legal framework

There is a Law on Water Resources which was adopted in May 1998. Considerable work has been done on upgrading this law but this has not yet been finalised. There are several regulations and by-laws related to water resources management.

#### Catalyzing change: IWRM Action Plan/Strategy

There is presently no national IWRM plan/strategy in place. The aim is to prepare a National Strategy on Water Resources during 2006, with both Governmental and non-governmental agencies involved in its preparation. The plan will have to be adopted by the National Council for Water Resources and later approved by the Government to become official. Several water-related ministries/branches have adopted their own Water Efficiency Plans where the IWRM principles are applied.

#### Change areas

The prevailing traditional approach to water resources development and the fragmented organization of the water sector needs to be dealt with by increased capacity building on IWRM. The water resources management function is assigned to the Ministry of Natural Resources and Environment, but river basin planning and management is assigned to the Ministry of Agriculture and Rural Development. The legal framework covers issues like participation and empowerment of stakeholders, management at river basin scale and decentralization of

management of water resources. The revised law on Water Resources includes obligations for the participation and empowerment of stakeholders, management at the river basin scale, decentralization of water resources management, efficient use of water, and separation of responsibilities for management and use of water resources. The responsibility for water resources management has passed from the Ministry of Agriculture and Rural Development to the Ministry of Natural Resources. Establishing a vision Australia has a water policy entitled the National Water Initiative from 2003. Australia takes water resources

# Australia

management into consideration in multiple official documents related to National Development.

There are multiple water laws/codes which vary between the States since Australia has a Federal system. Consequently there are different governance arrangements and the laws/codes are not necessarily "national".

#### Catalyzing change: IWRM Action Plan/Strategy

There are multiple operational planning documents for each river basin with a strong community leadership. All the main user and stakeholder groups were involved in the preparation work of the plans.

Australia sets very high standards in water resources management and governance. The National Water Commission which was established about one year ago is the nation's key agency responsible for the latest major policy development in water resources. The Commission is responsible for cross-sectoral water resources management and ensuring stakeholder participation. Australia is continuously updating its water resources management and governance systems and agrees every four or five years on the next initiatives to work on. The National Water Initiative states IWRM and specifies the role of the private-sector related to multiple roles: from Irrigation Districts to Community lead Catchments Management groups and authorities. The policy provides for the principles of polluter and user pays. The legal framework includes obligations for participation and empowerment of stakeholders, management at river basin scale, decentralization of management of water resources, separation of responsibilities for management and use of water resources and the efficient use of water.

### 4.3 EUROPE

# **Central & Eastern Europe**

### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main elements of an IWRM approach.
	Countries that are in the process of preparing national strategies or plans but require further work to live up to the requirements of an IWRM approach.
	Countries that have taken only initial steps in the process towards preparing national strategies or plans and have not yet fully embraced the requirements of an IWRM approach.
	Countries that have not submitted a survey reply, or been included in the survey.

#### CENTRAL & EASTERN EUROPE



# Bulgaria

#### Establishing a vision

Bulgaria has strategies and Action Plans for the environment, water supply and sanitation sector, and a national strategy for the development and management of the water sector up to 2015. General policy relates to the European Union Water Framework Directive (EU WFD) and other EU water directives. Bulgaria has embedded water resources management issues in official documents relevant to water, such as: agriculture, energy and social sector polices which more or less have the integrated approach, for example, accelerated establishment and improved quality of infrastructure and ecology in agriculture; national strategy for the environment 2005-2014 and Action Plan 2005-2009 with special sections on water; new social policy strategy part of the integrated approach of the Government to implement reforms in the economy and the social life; and national long-term programme for energy effectiveness to 2015.

#### Legal framework

The present water law is from 1999. A new water law is in preparation with active involvement of water and environmental sectors, NGOs and other stakeholders. Art. 3 (4) of the Draft Water Law states that "the river basin is a basic unit for integrated water resources management".

#### Catalyzing change: IWRM Action Plan/Strategy

The IWRM concept is included in all water policy documents although there is no specific IWRM plan.

#### Change areas

Bulgaria is preparing for membership of the EU in 2007 and this dictates its approach to water resources planning. The legal framework covers the participation and empowerment of stakeholders, and River Basin Councils with stakeholder participation meet several times per year. There are four established River Basin Directorates at river basin scale. They are responsible for IWRM involvement in river basin plans by 2009. There are representatives from the private sector in the River Basin Councils and in ministerial working groups for water resources management. Unfortunately, the private sector is not well informed on the WFD and IWRM. To some extent there is a separation of responsibilities for management and use of water resources. The Ministry of Environment and Water (MoEW) is responsible for water resources management; the Ministry of Regional Development and Public Works is responsible for the state-owned water supply and sewerage companies; there are also municipal water supply and sewerage companies; major irrigation systems are managed by the Ministry of Agriculture and Forests, small ones are managed by Associations of water users for irrigation, and big dams are managed by the Ministry of Economy and Energy. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: MEoW, the Danube River Basin Directorate, the Black Sea Basin Directorate, the East Aegean River Basin Directorate, and the West Aegean River Basin Directorate. Key issues are flood protection, wastewater treatment and water quality monitoring. Major obstacles are sectoral rigidity and a lack of transparency. A coordination unit for EU WFD implementation at Ministry of Environment and Water has potential to overcome the obstacles and to catalyze cross-sectoral water management and to get public involvement.

# Czech Rep.

#### Establishing a vision

The Czech water resources policy is formulated within the Water Act.

#### Legal framework

The Water Act was amended in 2004. There are more than 20 by-laws (Gov. Decisions and Decrees). Other relevant laws are: Act on the Protection of Public Health, the Act on the Public Water Supply and Sewerage Systems, and, partially, in the Act on Nature Protection.

# Catalyzing change: IWRM Action Plan/Strategy

Two types of plans are under preparation. Firstly there is the Plan of Main River Basins to be adopted in 2006. Secondly there are the Plans of the River Basin Districts, according objectives of EUWFD. There are eight such plans under preparation and they will be submitted in 2008 for open discussion, following the EUWFD time table. The planning involves the Ministries of the Environment and Agriculture, five river boards, state enterprises and 13 Regional Authorities of State Administration. There is a "co-ordination group" of stakeholders including main players of NGOs.

#### Change areas

In the Czech Republic the IWRM process follows the EUWFD, i.e. the final plans (for 8 watersheds in the Czech Republic) will be approved after appropriate public discussion by 2009. The plans in the Czech Republic will be even more complex than expected by EUWFD as plans for flood protection and infrastructure of water supply and sewerage systems are included. Other sectoral documents including principles of IWRM are: The Czech Republic Strategy for Sustainable Development (incl. the MDGs), Strategy for the Agriculture Policy, an energy master plan, The Environmental Policy of the Czech Republic. The leading roles for cross-sectoral work are shared between the Ministries of the Environment and Agriculture.

# Estonia

#### Establishing a vision

The Estonian water policy consists of the Water Act (renewed in 2000, 2002, and 2004) and The Estonian Environmental Strategy up to 2010. IWRM is not explicitly used as term in the documents but river basin management is defined and used to include IWRM principles. Estonia has developed public documents of all major sectors relevant to water resources management: the National Action Plan for Social Inclusion (poverty) and the National Development Plan (2004-2006) which covers the MDGs. Policy documents are also in place for agriculture, energy and environment.

#### Legal framework

The Water Act, OJ I, 1994, OJ I, 2001 and the Public Water Supply and Sewerage Act, OJ I, 1999.

#### Catalyzing change: IWRM Action Plan/Strategy

This is part of the Estonian, National Environmental Action Plan and Estonian Environmental Strategy up to 2010. River basin management plans comply with EU Water Framework Directive. There are several sub-basin plans already approved. Implementation and monitoring is under the Ministry of Environment.

#### Change areas

Estonia is focused on meeting requirements for the EUWFD and polices and plans comply with the EUWFD. Estonia sees this as only part of adopting the IWRM approach. The roles and responsibilities of the private sector are covered stating that there are general obligations for every water user to protect and sustain the status of waters and not to degrade the available resources. According to the law, there is a possibility for the private sector to take on the responsibility to manage water supply and sewage services. The following agencies have a mandate for cross-sectoral water resources management: the Ministry of the Environment (Water Department and Regional Environmental Departments), the Ministry of Agriculture, and the Ministry of Economic Affairs and Communications. Problems remain on integrating sectors and to secure financing for implementation of the plans.

#### Hungary

#### Establishing a vision

Hungary's National Water Policy dates from 1998. It is based on two Acts: one on Water Management and the other on Environmental Protection. Key cross-sector principles for water resources management are in place in the National Development Strategy to Achieve the MDGs, the Agricultural Master Plan modified in 2005, the National Environmental Action Plan 2003-2008, municipal responsibilities on water supply and sanitation, and groundwater protection. Energy policy is under discussion.

#### Legal framework

The water legislation is formulated in two documents, namely the Water Management Decree (1998) and the National Water Authority Directive (1981)

# Catalyzing change: IWRM Action Plan/Strategy

There is an operational strategy from 2000, elaborated by the Hungarian Academy of Sciences in cooperation with the Ministry of Environment.

#### Change areas

Hungary considers that implementation of the EUWFD is one of the major elements of IWRM. There is full

political commitment and resources set aside for this task. Water resources stakeholders are linked to the environmental sector as well as with water authorities. The National Water Law and the National Environmental Protection Law specify the role of private-sector participation. Although the water legislation includes empowerment of stakeholders, up to date stakeholders were not involved in the preparation of recent (2005) river basin management plans. The Self-Government Law determines the responsibilities of the Municipalities in water supply and sewerage and makes it possible for the private sector to participate in this sector. The participation and empowerment of stakeholders, management at river basin scale and the decentralization of management of water resources are also taken into account. There is a recurrent programme for capacity building on water resources management organized by the Ministry of Environment and Water, plus several other initiatives with external funding. The Ministry of Environment and Water together with the Environmental and Water Authorities (12) have a mandate for cross-sectoral water resources management and stakeholder participation.

# Latvia

#### Establishing a vision

Latvian water polices form part of the National Environmental Policy Plan including IWRM principles. There are 20 national framework documents that address water issues: the PRSP, Agriculture, Energy and Environment, and Laws on Fishery and Ports.

#### Legal framework

A Law on Water Management was adopted in 2002. There is also a large number of Cabinet Regulations such as: "Regulations on typology of surface water bodies, classification, quality elements and procedures for identification of anthropogenic loads", "Regulations on groundwater quality elements and procedures for gathering information about groundwater resources", "Requirements regarding monitoring of surface water, groundwater and protected areas and regarding development of programmes for the monitoring", "Procedures for cleansing and deepening of surface water bodies" etc.

#### Catalyzing change: IWRM Action Plan/Strategy

IWRM principles are included in the Action Plan of the National Environmental Policy Plan.

#### Change areas

Latvia has transposed the EU Water Framework Directive into national legislation. The four main river basins of Latvia are preparing River Basin Management Plans with all water related institutions involved. The basic approach is claimed to be in accordance with the scope of IWRM plans although the EUWFD time table is followed. The linking of the WFD with the Agricultural Policy of Latvia is a sign of IWRM approach while public awareness and participation are claimed to be weak elements of IWRM application. The following authorities have a mandate for cross-sectoral water resources management: the Environmental Protection Department of the Ministry of Environment, the River Basin management sector of Latvia State Agency of Environment, Geology and Meteorology, the Regional Environmental Boards of the State Environmental Service, and the Municipalities. The Ministry of Environment is responsible for developing water resources management policies and the Latvia State Agency of Environment, Geology and Meteorology is responsible for the elaboration of river basin plans for every river basin district. A capacity building programme for the implementation of the plan will start in 2008 and be directed to staff of the State Environmental Service.

## Lithuania



## Establishing a vision

The Lithuanian water policy is part of the National Sustainable Development Strategy (decided by the Government in Sept. 2003), which includes the concept of IWRM. Some elements of the IWRM approach are indirectly mentioned in the Rural and Agricultural Development Strategy, the National Sustainable Development Strategy, the Health Protection Strategy, the Strategy of Education for Sustainable Development, and the Strategy for Industrial development of Lithuania.

#### Legal framework

The Water Law was adopted in April 2003. This law specifies the IWRM structure, where objectives will be met through river basin management plans. There are a large number of resolutions and Ministerial orders that are relevant to IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

In terms of IWRM plans, Lithuania follows the EUWFD and is preparing river basin management plans to be approved by 2009. In terms of IWRM there are Coordination Boards on the river basin level with representatives from national and regional levels including both governmental and non-governmental organisations. The boards constitute IWRM stakeholder platforms.

#### Change areas

The Lithuanian approach to IWRM is led by the environmental sector in cooperation with sectors of agriculture, health, education, and industry. The regulatory mechanism lies in possibilities for stakeholders and the public to become involved through the EUWFD process. The Environmental Protection Agency of Lithuania is the agency with a mandate for cross-sectoral water resources management and stakeholder participation. Their main functions include the establishment of water status goals and the elaboration of

integrated basin management plans and programs of measures encompassing different sectors influencing water quality. The Agency also organizes the information and involvement of stakeholders during the process of establishing water status goals and management plans and programs. The National Sustainable Development Strategy states that the society (public) and scientific institutions are to be encouraged to participate in the development of the system of water management according to basin boundaries as well as in the development and implementation of basin management programs, and for this purpose an incentive system is to be created; and: in order to help reach the abovementioned goal the system of competence raising and information distribution about basin management among the stakeholders is to be created.

# Poland

#### Establishing a vision

The water policy is included in the National Ecological Policy. This is a Parliamentary Act from 2002 which is subject to update every fourth year. The National Development Plan (NDP) is currently being prepared for the years 2007-2013. It constitutes the basis for IWRM taking into account sectoral and regional strategies. The draft NDP and its financing will be discussed with the European Council in 2006. The key sectors involved are agriculture, energy, and environment (including water resources management).

#### Legal framework

The Water Law of Poland was approved in 2001 with a last update by the parliament transposing the EU Water Framework Directive in June 2005.

#### Catalyzing change: IWRM Action Plan/Strategy

The National Water Management Strategy is from September 2005. It was developed by the Ministry of Environment, cleared by all ministries and adopted by the Council of Ministers.

#### Change areas

The Polish water resources governance system includes an array of rules and regulations and funding mechanisms. Poland's IWRM approach is linked to the EUWFD. The planning is river basin oriented with 10 River Basin Management Plans in preparation. The planning process to develop the National Water Management Strategy was characterized by broad participation. The Ministry of Environment (including all subordinated agencies, such as the Institute of Meteorology and Water management, the State Institute of Geology, etc.), and the Regional Water Management Boards are responsible for water resources management at the national and regional (river basin) levels respectively. Other cooperating agencies include all Ministries (health, economy, agriculture, finance etc.), and self-governing agencies at the municipal, county and provincial levels. There are several capacity building programs at national, regional (river basin) and local level organized by the institutions responsible for water management at these levels. Some of them are of international character and organized with the assistance of the European Commission.

# Romania

### Establishing a vision

Romania has a water policy that is IWRM oriented. There is full cross-sectoral documentation relevant to water resources management: the Poverty Reduction Strategy Paper, the National Strategy on MDGs, agriculture, energy, environment, coastal zone management, public participation, territorial planning, etc.

#### Legal framework

The Romanian Water Law 310 from 2004 includes the EUWFD (EC/2000/60). The law defines Integrated Water Management activities (Article 15). The Environmental Protection Law is a by-law that covers aspects of water resources management.

### Catalyzing change: IWRM Action Plan/Strategy

A new water strategy is in preparation since 2003 and is expected to be finalized in 2006. The present strategy is from 1995. It is based on "river basin framework schemes". These schemes were developed in 1970 and are updated every 5<sup>th</sup> year. The new water strategy will be fully in compliance with EU legislation requirements and with IWRM principles.

#### Change areas

Since 2002 Romania has followed the French system of public and stakeholder involvement in decision making processes through River Basin Committees. The legal framework includes obligations for each of the following: exchange of information with the public about infrastructure projects, participation and empowerment of stakeholders, management at river basin scale, decentralization of management of water resources, separation of responsibilities for management and use of water resources, the efficient use of water and the elaboration of an IWRM plan/strategy. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Environment and Water Management (coordinator), the National Water Administration "Apele Romane" through the 11 Basin Units – Water Directorates, and the National Environment Protection Agency (links with air, soil and waste management). The present polices are linked to the EU WFD (in preparation for EU membership in 2007) and to the International Commission on the Protection of the Danube River (ICPDR) and adopt an IWRM approach, in particular for the environment and social development. Key players are the Ministry of Environment and Water Management (coordination), the 11 basin water directorates (implementation) and the Romanian EPA (linking air, soil, and waste management).

Regarding public participation, the WFD asks for full information, communication and involvement in the decision making processes of all water stakeholders, whether they are managers, planners, large users or ordinary users. The water law states that water management shall be based on the principle of human solidarity and common interest, through the close collaboration and cooperation of the public administration, water users, representatives of the local communities and public, in order to obtain the maximum social benefit.

#### Slovakia



#### Establishing a vision

The present State Water Management Policy expires by 2005. A new Water Management Policy up to 2015 has been elaborated and at the moment is awaiting approval by the cabinet. The Slovak policy adopts an IWRM approach including its definition. Several Cross-cutting documents include principles relevant to water resources management: the PRSP and the MDGs Strategy, Agricultural and Energy master plans, the Energy Action Plan and the national pollution reduction programme.

#### Legal framework

The legal framework includes the 2004 Water Act, the 2002 Act on Public Sewerage and Public Water Supply, and the 2004 Act on Flood Protection.

#### Catalyzing change: IWRM Action Plan/Strategy

The EU WFD Implementation Strategy constitutes the IWRM plan and was approved by the government in 2004. Both the policy and strategy were open for public comments through the Danube Environmental Forum that comprises several non-governmental organisations.

#### Change areas

The key players in water resources management are Slovak governmental agencies together with regional and district environmental offices. Since the EU WFD came into force, the main effort is implementation of this directive. The cross-sectoral coordinating role is played by the Slovak Water Management Enterprise which has financial resources for implementing the plans. In Slovakia, the river basin management plans are developed in line with the EU WFD. There are limitations in the IWRM implementation, but these could be dealt with through increased involvement of local governments at regional and municipal levels. The EU WFD implementation is presently the responsibility of the national government (Ministry of the Environment of the Slovak Republic) and its organizations/institutions without any inter-sectoral body. Increased co-operation among ministries and the active participation from NGOs would improve the process.

# Slovenia



The water policy is described in the Environmental Protection Act from 2004. There is no explicit IWRM terminology used. Sustainable development is considered as a basic principle as well as the principles of polluter pays and user pays. Water resources management issues can be found in the following public documents: the Development Strategy of Slovenia to achieve the MDGs, the Slovene Agro-Environmental Programme, The National Energy Programme, and the National Environment Protection Programme.

#### Legal framework

The Water Act dates from 2002. It includes public involvement and empowerment of stakeholders. Water Management Plans and Program of measures are required.

#### Catalyzing change: IWRM Action Plan/Strategy

The National Environment Protection Programme (NEPP) from 1999 is not fully in compliance with the IWRM approach.

### Change areas

In Slovenia, the EU WFD has been transposed into national legislation. The lead role is given to the environmental sector; however, there is a need to integrate the social, economic and political components as well. Additionally it is important to coordinate agricultural and water polices. Another fruitful initiative would be to raise the public awareness and involve NGOs or the public in general. Lessons are learnt from pilot projects on river basin planning. The cross-sectoral coordination role is given to the Ministry of Environment and Spatial Planning. Other ministries involved are Agriculture and Economy (responsible for energy).

### 4.4 LATIN AMERICA

# **Central America**

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main
	elements of an IWRM approach.
[00000000000000000000000000000000000000	Countries that are in the process of preparing national
	strategies or plans but require further work to live up to
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	Countries that have taken only initial steps in the
	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.

#### **CENTRAL AMERICA**



# Belize

#### Establishing a vision

Belize has been preparing a water policy since August 2004 and is expected to complete it by January 2006. The draft adopts IWRM as the guiding principle for water resources management. Belize has embedded water resources management principles into the Agricultural Master Plan and the National Health Sector Strategy.

#### Legal framework

The Water Industry Act is currently in force.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM Action Plan is under preparation since December 2004. The Plan is expected to be finalized by April 2006.

#### Change areas

The draft IWRM Action Plan is being prepared by five government ministries with the participation of numerous NGOs and will be approved at national level. It does not have a funding strategy but includes mechanisms for monitoring its implementation. This would be the task of the Water Commission and Public Utilities Commission. In order to facilitate the implementation process, the IWRM Plan needs to be linked to the national development plan and a financing strategy should be prepared. Belize has taken steps in using a participatory approach through numerous meetings of the multi-sectoral Water Commission followed by public consultations. The draft plan does not provide for a capacity building programme for organizations and/or individuals involved in the implementation of the IWRM Plan. The Public Utilities Commission regulates and defines water rates. The water policy will cover the user pays principle, whilst the polluter pays principle is covered in the Environmental Protection Act. The Water Industry Act includes the participation and empowerment of stakeholders. It also provides for decentralization of management through village Water Boards and considers management at river basin scale. The separation of responsibilities for management and use of water resources is treated, but it does not include obligations related to sharing information with the public, the efficient use of water.

# Costa Rica

#### **Establishing a vision**

A national water policy has not been officially adopted in Costa Rica. This is partially covered in the Government Development Plan.

#### Legal framework

Costa Rica's Water Act dates back to 1942 and does not embrace the IWRM approach. A new water bill is currently being scrutinized by the Legislative Assembly.

# Catalyzing change: IWRM Action Plan/Strategy

In 2005 the government approved an IWRM national strategy. The development of an IWRM Action Plan will start early 2006 and is expected to be completed by the end of 2006.

#### Change areas

Costa Rica has responded to the 2005 WSSD target which it will meet in the near future. The national IWRM strategy was prepared by a group of key actors representing the Ministry of Environment and Energy, the Aqueducts and Sewage System Institute, the National Service of Ground Water and Irrigation, Universities, NGOs and other relevant stakeholders. Costa Rica has built considerable experience around the definition and

further implementation of economic instruments, such as payment for environmental services amongst others. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Water Resources Department and the Water Quality Department (Ministry of Environment and Energy), the Ministry of Health, the Aqueducts and Sewage Institute, the Costa Rican Institute of Electricity and the National Services of Ground Water, Irrigation and Drainage.

## El Salvador

# El Salvadol

#### Establishing a vision

The National Policy on Water Resources was approved in 2002 and is based on the IWRM approach. Principles for integrated water resources management are embedded in the existing Environmental National Plan and in the Governmental Plan (2004-2009). There is also a Hydro Plan in place (including a sub-sector drinking water and sanitation plan).

#### Legal framework

There is a Water Act from the 1980s and the government is currently preparing a new water act. The country's legal framework also comprises by-laws at municipal and basin level.

#### Catalyzing change: IWRM Action Plan/Strategy

In October 2005, the Ministry of Environment and Natural Resources officially proposed the development of an IWRM Action Plan with help from GWP.

#### Change areas

El Salvador is making progress, although limited participation of key stakeholders is one of the main shortcomings in the development of the legal framework and plan. However, recent signs indicate a gradual openness to dialogue and improved coordination. The National Policy on Water Resources does not specify the role of private sector participation, but it covers the application of the polluter/user pays principles. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Environment and Natural Resources, the General Direction of Forest, Basins and Irrigation of the Ministry of Agriculture, the National Administration of Aqueducts and Sewage System, the Executive Hydro Electrical Commission of the Lempa River.

# Guatemala



#### Establishing a vision

The national water policy is about to be approved and is expected to set the basis for an IWRM Action Plan. Guatemala has a PRSP and water issues are considered to be of high importance and linked to the peace process. The Global Policy effort initiated in November 2005 includes Terms of Reference for the National Water Action Plan.

#### Legal framework

Seven water bills have been submitted since 1958 but none have been adopted. As a result water regulations are spread throughout different sectors and only the Environmental Law (basin management) and the Forest Act (groundwater recharge) partially consider the IWRM approach.

#### Catalyzing change: IWRM Action Plan/Strategy

There have been recent efforts to highlight the importance of IWRM in the economic and social development of the country, and the government has initiated a process of formulating a national IWRM strategy.

#### Change areas

Guatemala has initiated a process to increase awareness and commitment from the government to promote broader consultation around the development of sound water resources management. However, the difficulty of preparing a law and the lack of human and financial resources is a brake on progress. The draft national water policy embraces the IWRM concept and includes elements of risk management, institutional reform, water-related conflict resolution mechanisms, awareness raising, education and economic aspects of water. It also refers to the role of stakeholders as follows: to organize the actions of the public entities, to orient, facilitate and foment the activities of the private sector and civil society. Additionally, they should participate in the process of the formulation of the National Strategy of Water. Finally, they should be partners in the process of efficient use and conservation of the quantity and quality of water.

# Honduras



#### Establishing a vision

Honduras has recently started the preparation of a national water policy (November 2005), which is expected to be finalised by December 2006. Water resources management issues are considered in the following framework documents: the National Strategy of Poverty, the 2004 and 2005 Reports to achieve the MDGs, the National Energy Policies, and the Governmental Plan 2006-2010.

#### Legal framework

In February 2005 a water bill was proposed to replace the old Water Act, which has been in force since 1927. The new Act was prepared by the Honduran Water Platform and is to be approved by the Congress. The only by-laws that include IWRM elements are the Environmental Law and the Forest Law.

#### Catalyzing change: IWRM Action Plan/Strategy

The Honduran Water Platform, made up of 54 institutional members, is currently drafting an IWRM Action

Plan and will propose to the new government that it coordinates the planning process.

#### Change areas

Honduras has raised awareness of the need to develop a national water policy and a new water act. The national 2006-2019 Action Plan will place water issues high on the political agenda. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Ministry of Natural Resources and Environment, the Ministry of Agriculture, National Agencies for water and sanitation, the Honduran Fund of Social Investment, and the National Enterprise of Electric Energy. Financial and expert support would help to accelerate the process.

# Nicaragua

#### Establishing a vision

The national water policy was approved by the government in November 2001. Water resources management has also been taken into consideration in several framework documents relating to development, energy and the environment.

#### Legal framework

A national water bill was submitted to the National Assembly (Jan 2004). It was approved in general terms, but still needs a second approval.

#### Catalyzing change: IWRM Action Plan/Strategy

The IRWM Action Plan (National Plan of Water Resources) was approved in 1998 but has not yet been implemented.

#### Change areas

The water bill requires further public consultation prior to approval by the government. The bill clearly includes IWRM elements such as sharing information with the public, participation and empowerment of stakeholders and takes into consideration the use of economic instruments and mechanisms (i.e. polluter/user pays principles and consumption levy). The bill also provides for decentralisation and river basin management. The national water policy specifies the role of stakeholders as follows: the development and the water management will be done through a participatory approach, including the users, planners and decision makers at all levels, through a process that locates decision making as close as possible to the ones affected directly. The IWRM national plan will need to be revised, updated and submitted to public consultation to make it applicable and operational. Capacity building within institutions involved in water regulation and management is also a key factor that requires attention.

# Panama

#### Establishing a vision

The Water Policy (April 2005) includes and defines integrated water resources management. Panama has also included water resources management elements in the National Plan of Irrigation, the National Plan of Energy, and the National Strategy of Environment etc. The Government of Panama is taking very seriously the achievement of the MDGs for which it has established a high level office attached to the Presidency.

#### Legal framework

The government is actively engaged in the revision of the current Water Act (1966) using the existing water policy as a reference. There is also a Basin Law from 2002.

#### Catalyzing change: IWRM Action Plan/Strategy

Although Panama still has not engaged in the development of an IWRM Action Plan, steps have been taken to prepare for this task.

### Change areas

Panama has a new policy in place which can form the basis of an IWRM plan. There is an awareness of bottom-up planning, taking into consideration people's needs, and the environment. There is strong awareness about the need for building capacities at the local level in order to ensure the ownership and empowerment that will finally lead to long-term sustainability. The Water Policy was submitted to broad consultation, including the private sector, which is also represented in the Basin Committees. The policy does not provide for the polluter pays principle. The Basin Law has recently been regulated and includes an action plan that caters for broad cross-sectoral and civil society participation as part of the Basin Committees. The government has already made some institutional reforms to make it operational. The following agencies have a mandate for cross-sectoral water resources management: the Ministry of Economy and Finance, the Ministry of Health, the Ministry of Farming Development and the National Institute of Aqueducts and Sewage System.

# **South America**

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a
	process well underway, and that incorporate the main
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	strategies or plans but require further work to live up to
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	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.
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#### **SOUTH AMERICA**



# Argentina

#### Establishing a vision

The National Water Policy is set and carried out by the Water Resources Sub Secretariat in coordination with the other competent areas of the National government (Secretariat of Environment and Sustainable Development and others). Water is considered a public good for which management of services can be entrusted to the private sector. Each of the 24 Provinces also count on their own federal level policy. There is a "Federal Agreement on Water Policy Principles for the Nation" (August 2003), approved by the Subsecretaria de Recursos Hidricos for 22 of the 24 provinces. This sets the guiding principles for water-related policies and is based on the IWRM approach.

#### Legal framework

The National Law 25688 on water environmental management (Dec 2002) provides for the participation and empowerment of stakeholders. It considers water management at river basin scale and decentralisation. This law also includes aspects related to the efficient use of water, the financial contribution of users towards water management and the separation of responsibilities for management and use of water resources.

#### Catalyzing change: IWRM Action Plan/Strategy

The elaboration of an IWRM Action Plan Strategy is proposed by Law 25688 at a national level. Some provinces also have their own IWRM plans for their territories, and some for the most extensive basins.

#### Change areas

Although some provinces have their own water laws and regulations and progress has been made towards developing provincial IWRM Plans the national level law is still to be regulated. The National Water Policy is set and carried out by the Water Resources Sub Secretariat in coordination with the other competent areas of the National government (Secretariat of Environment and Sustainable Development). The Subsecretaria de Recursos Hidricos is responsible for water issues at national level and the Direccion Nacional de Política Coordinacion y Desarrollo Hidrico deals with cross-sectoral aspects of water management. The water policy provides for the polluter and user pays principles and specifies the role of the private sector.

#### **Bolivia**

# Establishing a vision

A water policy has been in preparation since April 2003. IWRM is stated as the basic framework for water resources management although it does not consider key issues relevant to good water resources management. Aspects of integrated water resources management are considered in the National Strategy for Rural and Agricultural Development (2005) and in the Irrigation Law (2004)

#### Legal framework

The Water Law in force was issued 100 years ago (1906). In 2001 the preparation process for developing a new law was initiated.

#### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM strategy or plan in preparation but the draft water bill provides for the elaboration of an IWRM plan.

#### Change areas

The country has recently suffered from social conflict that led to a political crisis and further institutional instability. The establishment of the Inter-institutional Water Council (CONIAG) under the chairmanship of the Sustainable Development Ministry has been a major step forward towards IWRM at national level. CONIAG has opened a space for dialogue between the government and other water stakeholders to formulate

the legal framework and adapt the institutional and technical framework towards the organisation and further regulation of water resources management. The draft water policy does not cover the polluter/user pays principles, nor does it specify the role of private sector participation. The draft water bill includes obligations for decentralisation, the exchange of information with the public as well as the participation and empowerment of stakeholders. It states different responsibilities for management and use of water, and includes the financial contribution by users to water management.

# Brazil



#### Establishing a vision

Brazil has a water policy which dates back to 1997. The policy recognises IWRM as a guiding principle for water management in the country. The National Long Term Plan 2004-2007 includes agricultural, energy and environmental aspects and include principles for water resources management.

In 1997 a law was enacted to develop and implement the National Water Resources Management System, which can be considered as the foundation for an IWRM National Plan. Progress has been made towards the creation of federal water laws which have been enacted in 26 out of 27 Brazilian states.

#### Catalyzing change: IWRM Action Plan/Strategy

The National Water Resources Plan, one of the National Water Policy instruments, was finished in December 2005.

#### Change areas

In Brazil there is considerable political will to solve cross sectoral developments (i.e. water supply and sanitation and energy) and this is backed up by the legal framework currently in place. The National Water Resources Plan has been developed with participants from Civil Society, Federal Government agencies, Local Governments, water users, scientific and academic institution, and other stakeholders. It includes financing and monitoring mechanisms as well as a programme for capacity building. This Plan takes into account cultural, ethnical, technical and economics issues and covers the Millennium Development Goals. The legal framework provides for the exchange of information with the public, participation and empowerment of stakeholders, river basin management and decentralisation. It allows for financial contribution by water users towards management as well as elements of efficient use of water. Managerial and users responsibilities for water are also elaborated. Other legal instruments adopt IWRM principles and include a gender perspective. The National Water Agency (ANA) was created in 2000 to coordinate across sectoral institutions. Despite significant efforts and results, in a country the size of Brazil, considerable support is needed to raise awareness and build people's capacity on IWRM and enforcement of the current legal framework to ensure long-term sustainability of water use.

#### Chile



### Establishing a vision

There is a water policy in place since 1999. It does not explicitly refer to the IWRM approach. The National Irrigation Policy was approved in November 2005.

#### Legal framework

The Water Code in force was approved in 1981.

#### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM plan in preparation but an initial consultation process has started. Meetings and seminars have been held to discuss an integrated approach to water resources management.

#### Change areas

Even though there is presently no national IWRM strategy or plan, Chile counts on several sectoral and local level instruments which have a positive effect on the efficient use of water resources. The water policy specifies the role of the private sector and organisations of water users are required to allocate water according to individual rights. The water policy also provides for the application of polluter/user pays principles. The Water Code considers the exchange of information with the public about infrastructure works as well as the participation and empowerment of stakeholders. It states different responsibilities for management and use of water, and includes the financial contribution by users to water management. The Code does not take into account decentralisation aspects or the future elaboration of an IWRM Action Plan.

#### Colombia



#### Establishing a vision

Colombia does not have a water policy. The National Development Plan 2002-2006 and National reports on achievement of the MDGs do consider water resources management.

#### Legal framework

The process to develop a water bill started in April 2004 and was submitted to the Parliament in May 2005 by the Ministry of Environment, Housing and Territorial Development. The legal framework related to water resources in Colombia is scattered throughout several by-laws and the Renewable Natural Resources Code. Water efficiency aspects are covered by Law 373.

Catalyzing change: IWRM Action Plan/Strategy

Colombia is not developing an IWRM National Plan, but counts on guidelines and targets that address the MDGs within the National Development Plan. Progress has been made towards setting the basis for water resources planning at river basin level.

#### Change areas

There is political will to more actively engage in IWRM through the development of a sound legal framework but there are no plans to develop a specific IWRM strategy/plan. IWRM initiatives are supported by the National Environmental System and funded by the government through the Regional Development Corporations and municipalities. The legal framework will provide for participation and empowerment of stakeholders, management at river basin level, decentralisation at the lowest appropriate level and the distinction of responsibilities between water management and use. There are capacity building initiatives for organizations and/or individuals involved in IWRM planning at national level. The draft water bill needs to be submitted to broader consultation and facilitate informed decisions through enlarging access to information. The participation of different sectors and stakeholders at different levels is fundamental given the importance of this resource to ensure future sustainable development and peace.

# Paraguay

#### Establishing a vision



Paraguay does not have a national water policy. There is a national environmental policy, which includes the national biodiversity strategy as well as other documents related to the intergovernmental coordination committee of La Plata river basin countries.

#### Legal framework

Two water bills (Water Code and Water institutional framework) have been submitted to the Parliament and they are expected to be approved during 2006. The water-related laws and regulations in place at national and municipal level, mainly refer to environmental aspects.

#### Catalyzing change: IWRM Action Plan/Strategy

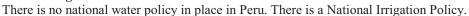
A process for the development of an IWRM Plan started in 2004, however, government commitment to the process is uncertain.

#### Change areas

NGOs are actively engaged in raising awareness about IWRM through training programmes mainly addressed to local governments. Civil society organizations are promoting the Water Forum, which aims to become the Country Water Partnership.

#### Peru

#### Establishing a vision



#### Legal framework

The existing Water Law dates back to 1969 and lacks an integrated approach towards water resources management. The development of a new water bill started in 1993 and was submitted to Congress in May 2005. There are also laws on Hydroelectric Concessions and the Environment.

#### Catalyzing change: IWRM Action Plan/Strategy

In 2004 the National Strategy for Continental Water Resources Management was prepared by the government. This planning process did not include stakeholder participation. The Strategy has not been implemented and lacks a financial strategy to do so. On the other hand, it includes monitoring mechanisms, which would correspond to a National Water Agency, if established.

# Change areas

In Peru, public awareness about IWRM has increased and there is a willingness to follow IWRM principles. Difficulties to overcome include the need for advice on legal issues and training on general aspects related to IWRM to ensure sound implementation of any Action Plan in the future. The new water bill embraces IWRM as a guiding principle; it specifies the role of private sector participation and provides for the application of the polluter/user pays principles.

# Uruguay

# Establishing a vision

Uruguay has no official water policy.

#### Legal framework

The Water Code was approved in 1978. The Water Code and relevant regulations, strongly focus on irrigation.

#### Catalyzing change: IWRM Action Plan/Strategy

The preparation work of an IWRM plan started in 2004 under the leadership of the Ministry of Transport and Public Works, as stated in the Water Code. It does not include financing aspects or elements to guide the monitoring of the implementation of the plan. There are some examples of sub-national IWRM plans at basin level (Laguna Merin - La Plata and Uruguay River).

#### Change areas

In Uruguay, the planning process to develop an IWRM plan has been initiated. Public awareness on the need

for an IWRM approach has been substantially increased in the past years and some of the sub-national IWRM planning initiatives have responded to Uruguay's needs. The Water Code provides for public exchange of information on infrastructure projects, participation and empowerment of stakeholders, river basin scale management, and decentralisation of management at the lowest appropriate level. There is no explicit distinction between responsibilities over management and use of water. The efficient use of water and the financial contribution by users towards water management are not considered in this document. In 2004, the Uruguayan Constitution was modified after national referendum to prevent the privatisation of water services in the future.

# Venezuela

#### Establishing a vision

Venezuela does not have a national water policy. There are national level development plans for hydroelectric and oil generated energy where water resources management is considered.

#### Legal framework

The water bill was submitted to the National Assembly in 2001 and is still to be approved. Limited political will for an integrated approach has postponed further discussions. The water-related legal framework includes the Act on water supply and sanitation (2001) and the Act on forest, soils and water.

#### Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM strategy in place in Venezuela. Even though a planning process to develop an IWRM plan was initiated in 1999, little progress has been made.

#### Change areas

There is a lack of political will for water resources management with stalled processes for both water law and strategy development However, there is progress at sub-national level for IWRM, particularly around public investment, river basin management and community participation. However, the lack of an effective integration of such efforts under a national level document duly discussed amongst all relevant stakeholders is a constraint. The water bill provides for public exchange of information, participation and empowerment of stakeholders, river basin management, decentralisation and the distinction between responsibilities for management and use of water, efficient use of water and the financial contribution by users towards water management.

### 4.5 SMALL ISLAND STATES

# The Pacific

### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main elements of an IWRM approach.
900000000000000000000000000000000000000	Countries that are in the process of preparing national
000000000000000000000000000000000000000	strategies or plans but require further work to live up to
[	the requirements of an IWRM approach.
	Countries that have taken only initial steps in the
	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
[888257588850758885075]	Countries that have not submitted a survey reply, or
	been included in the survey.
000000000000000000000000000000000000000	•

#### THE PACIFIC



#### Fiji

#### Establishing a vision

There is presently no water policy in Fiji, but a draft water policy was formally proposed in November 2005. Reference to IWRM principles is made in the draft but does not appear to be comprehensive at this stage.

#### Legal framework

There is a Rivers and Streams Act from 1982 and another policy statement was proposed in 2005. The policy statement regulates the empowerment of stakeholders, efficient use of water and responsibilities for management and water usage.

#### Catalyzing change: IWRM Action Plan/Strategy

An IWRM plan is in preparation with expected completion in 2006.

#### Change areas

The following two agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Department of Mineral Resources and the Department of Environment.

#### Kiribati



#### Establishing a vision

A water policy is planned to be developed in 2006. Kiribati refers to the IWRM principles in the 10 Year Water Mater Plan (1992). The plan was developed to serve as a guide for the water engineering unit.

### Legal framework

A related legislative review was undertaken in 2003.

#### Catalyzing change: IWRM Action Plan/Strategy

A National Strategy and an Action Plan were developed in 2003, and recommends a review of the Land Planning Ordinance Act (1973) and the State Lands Act (2001) etc.

#### Change areas

Kiribati has taken some initiatives towards IWRM planning. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Water Engineering unit of the Ministry of Public Works and Utilities, the Water and Sewerage of Public Utilities Board, and the Environmental Unit.

#### Samoa



#### Establishing a vision

Samoa has a National Water Resources Policy (2001) and a draft National Water Services Policy (2004) that clearly state IWRM as a framework for water management. Reference is also made to IWRM in the Strategy for the Development of Samoa (2005-2007).

#### Legal framework

Laws such as the Samoa Water Authority Act (2003) and the Water Protection and Management Regulation (1992) provides for several IWRM elements.

# Catalyzing change: IWRM Action Plan/Strategy

Samoa has advanced the preparation of plans based on IWRM principles. These plans form an integral part of a broad Water Sector Plan and Framework for Action, rather than being individually distinct. The process has been ongoing since 2004 and implementation is expected to begin in 2006.

#### Change areas

Samoa has made progress in the process of preparing an IWRM plan through its Water for Life process. The document is currently under revision with the aim to incorporate the outcomes of stakeholder consultation and strengthen the cross-sectoral integration in the process. This process has included a review of the government's sector planning guidelines, collation of key documents, review of earlier studies, assessments, consultations and the initial drafting of the plan itself. The legal framework includes obligations for participation and empowerment of stakeholders, financial contribution by the users toward the management of water resources, the separation of responsibilities for management and use of water resources and the efficient use of water. It does not consider decentralization of management. Although there is a water policy in place, its implementation is obstructed by a lack of financial and human resources. A water sector roadmap is available for guidance to future investment needs, and serves as a tool to coordinate domestic and external financing. The Pacific Regional Action Plan for Sustainable Water Management has assisted Samoa in identifying necessary activities needed on a regional level. The following agencies have a mandate for crosssectoral water resources management and stakeholder participation: the Ministry of Finance, the Ministry of Health, the Ministry of Natural Resources, the Environment and Meteorology, the Ministry of Women, Community and Social Development, and the Samoa Water Authority. There is lack of financial and human resources, rather than lack of political will to progress further.

# Solomon Islands

#### Establishing a vision

A national water policy was formally proposed in August 2004. Reference to IWRM is made in the National Development Strategy to achieve the MDGs.

#### Legal framework

There is a River Waters Act from 1969.

# Catalyzing change: IWRM Action Plan/Strategy

There is no IWRM Action Plan or Strategy in place.

#### Change areas

In the Solomon Islands there is a need to create a national water policy and accompanying legislation in harmony with an IWRM approach. A positive sign is that attempts have been made to address the water resources sector by applying sectoral policies and action plans, but implementation has failed due to limited financial support and weak stakeholder participation. The following agencies have a mandate for cross-sectoral water resources management and stakeholder participation: the Department of Mines and Energy, the Department of Environmental Health, and the Solomon Islands Water Authority.

# Tuvalu

#### Establishing a vision

There is a draft national water policy which has not been formally adopted. This is due to delays within the legal advisory body of the government.

#### Legal framework

There is a draft Water Resources and Sanitation Management Bill (1995-1998) and a draft Water and Sanitation Plan (1993-2003).

#### Catalyzing change: IWRM Action Plan/Strategy

A plan has been in preparation since September 2005 and the expected date of finalization is set for July 2006. Representatives from the local and central governments are participating in the preparation work together with NGOs and representatives from the Community.

#### Change areas

Tuvalu has taken some initial steps although the draft water policy does not refer to IWRM as the basic framework for water resources management and basic IWRM elements appear to be lacking at this point.

# The Caribbean

#### Status IWRM & WE plans development process

	Countries that have plans/strategies in place, or a process well underway, and that incorporate the main
	elements of an IWRM approach.
(00000000000000000000000000000000000000	Countries that are in the process of preparing national
	strategies or plans but require further work to live up to
000000000000000000000000000000000000000	the requirements of an IWRM approach.
	Countries that have taken only initial steps in the
[ • [ • ] • ] • [ • ] •	process towards preparing national strategies or
	plans and have not yet fully embraced the requirements
	of an IWRM approach.
	Countries that have not submitted a survey reply, or
	been included in the survey.

#### THE CARIBBEAN



#### **Barbados**



#### Establishing a vision

The Policy Framework for Water Resources Development and Management in Barbados was published in August 1997. This framework was revised in 2002 but is presently awaiting final approval from the Cabinet. Sound water resources management principles are embedded in the National Sustainable Development Policy Framework Report from 2000.

#### Legal framework

Relevant laws include the Underground Water Control Act (Ch. 283) from 1953, the Groundwater Protection Policy from 1963, and the Barbados Water Authority Act (Ch. 274A) from 1980 although these documents do not specifically refer to elements of IWRM. There are no national by-laws or regulations relating to IWRM.

#### Catalyzing change: IWRM Action Plan/Strategy

Barbados initiated the preparation of an IWRM plan in November 2005. The expected date of its finalization is April 2006.

#### Change areas

The Barbados Water Authority (BWA) has taken up the mantle to move the IWRM planning process forward by building on the existing policy framework. The process entails extensive collaboration and consultation with major stakeholders. The first meeting will be held in February 2006 and it is hoped that the plan can be completed by April and later passed on to the Cabinet for approval. More work is needed on updating legislation. In the revised Policy Framework for Water Resources Development and Management, IWRM is stated as the basic framework for water management. The role of private-sector participation is specified to a limited extent (data collection, research and access to information). The framework considers the application of the user/polluter pays principles. The Barbados Water Authority is the main agency responsible for implementation of cross-sectoral water resources management. But the Ministry of Housing, Lands and Environment, and the Ministry of Agriculture also have roles in water resources management and stakeholder participation at policy level and irrigation water provision and management, respectively.

# Jamaica



# Establishing a vision

The Jamaica Water Sector Policy was published in January 1999. The policy states that "the management of water resources will be guided by the following core principles: integrated and informed management of the country's water resources; ensuring sustainable water use and ecosystem protection". Water resources management principles are taken into consideration in the following official documents: Jamaica's Policy toward the Eradication of Poverty (1995), the MDGs report, the National Irrigation Development (Master) Plan (1998), the Jamaica Energy Sector Policy (reference to hydropower and other renewable energy sources) from 1995, the National Forest Management and Conservation Plan (2000), the Watershed Policy 2002, and the National Land Policy (2002).

#### Legal framework

The Water Resources Act (with relevant regulations) was adopted in April 1996.

### Catalyzing change: IWRM Action Plan/Strategy

In April 2003, Jamaica adopted the Integrated Water Resources Management framework.

#### Change areas

The planning process of the Integrated Water Resources Management framework was led by the Water

Resources Authority (WRA) which is the responsible authority for monitoring the implementation. It was characterized by multi-stakeholder input. IWRM principles are included in all WRA programmes. The Integrated Watershed Management Council, a sub-committee of Cabinet, brings together public agencies, private sector companies and landowners and NGOs to a common table to solve water resources and watershed problems. The water sector policy refers to some of the strategies/techniques that will be used to accomplish this. Private sector participation is a part of Government strategy to secure economic benefits for Jamaica. The policy provides for the application of the polluter/user pays principles and these are included in the Water Resources Act. The Water Resources Authority is the main responsible body for cross-sectoral water resources management and stakeholder participation. Their main function is to manage, conserve, protect and allocate the water resources of Jamaica. Although no specific plan exists, the general principles of IWRM are embedded in other public documents and WRA actions. The obstacles are the use of 'development orders', which are not subject to impact assessments or IWRM principles. However recent cases of flooding and other disaster impacts are forcing a review of the use of development orders and the law is now being changed.

#### Trinidad and Tobago

#### Establishing a vision

There is a Water Resources Management Policy from 2005, where IWRM is defined as a process which monitors the coordination development and management of water (and related resources) in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

#### Legal framework

There is a Water and Sewerage Act from 1965 (Revised 1980), a Water and Wastewater Conservation Act (1980), Environmental Management Act (2000) and Public Health Act (1950).

#### Catalyzing change: IWRM Action Plan/Strategy

Trinidad and Tobago has an IWRM Inter-Agency Coordination and Collaboration Framework (2001), which was prepared by the Water Resources Agency and later adopted by the Cabinet. The Framework includes mechanisms for monitoring its implementation and a strategy for financing. The Water Resources Management Unit is the authority with a mandate to monitor implementation.

#### Change areas

The Water Resources Agency, together with the Water Resources Management Unit, has a mandate for cross-sectoral water resources management and stakeholder participation. The water resources management policy covers the principles of polluter/user pays but does not specify the role of the private sector. The following obligations are included in the legal framework: exchange of information with the public, participation and empowerment of stakeholders, management at river basin level, efficient use of water, and the elaboration of an IWRM Plan. Issues like the separation of responsibilities for management and use of water resources, and financial contribution by the users toward the management of water resources, are covered in the policy. There is a recurrent programme for capacity building on IWRM, organized by the College of Science, Technology and Applied Art of Trinidad and Tobago, in addition to a proposed course of study at the Water Institute of Trinidad and Tobago. The key obstacles to implementing an IWRM approach are human and financial resources.

#### ANNEX 1

# Central concepts: the IWRM approach

# IWRM approach9

IWRM is defined as a process that promotes the coordinated 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.

This approach promotes more coordinated development and management of:

- land and water,
- surface water and groundwater,
- the river basin and its adjacent coastal and marine environment, and
- upstream and downstream interests.

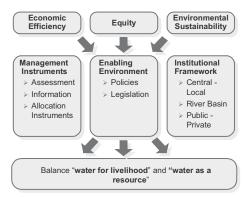
IWRM is also about reforming human systems to enable people to obtain sustainable and equitable benefits from those resources. For policy-making and planning, taking an IWRM approach requires that:

- water development and management takes into account the various uses of water and the range of people's water needs;
- stakeholders are given a voice in water planning and management, with particular attention to securing the involvement of women and the poor;
- policies and priorities consider water resources implications, including the two-way relationship between macroeconomic policies and water development, management, and use;
- water-related decisions made at local and basin levels are along the lines of, or at least do not conflict with, the achievement of broader national objectives; and
- water planning and strategies are incorporated into broader social, economic, and environmental goals.

#### The "3 pillars"

An IWRM approach focuses on three basic pillars and explicitly aims at avoiding a fragmented approach of water resources management by considering the following aspects:

- 1) an *enabling environment* of suitable policies, strategies and legislation for sustainable water resources development and management
- 2) putting in place the *institutional framework* through which to put into practice the policies, strategies and legislation
- 3) and setting up the *management instruments* required by these institutions to do their job.

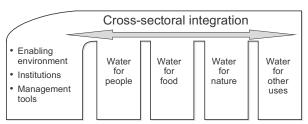


The "three pillars" of Integrated Water Resources Management

<sup>&</sup>lt;sup>9</sup> Policy Brief (TEC): Unlocking the door to social development and economic growth: how a more integrated approach to water can help.

# Integration<sup>10</sup>

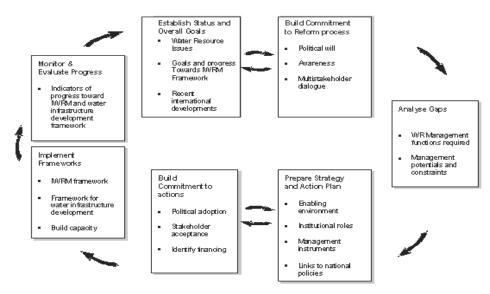
A fundamental aspect of IWRM is the integration of different sectoral views and interests in the development and implementation of the IWRM framework. Integration should take place both horizontally – i.e. across sectors, and vertically – i.e. across different tiers of authority. Integration within the natural system concerns for instance the integration of land and water management, surface and groundwater, upstream and downstream water related interests, recognising the full hydrologic cycle. Integration within the human system relates especially to cross-sectoral integration of policies and strategies and participation of all relevant stakeholders in the decision-making processes. To secure the co-ordination of water management efforts across water related sectors, and throughout entire water basins, formal mechanisms and ways of co-operation and information exchange need to be established. This should be done at the highest political level and established in all relevant levels of water management. It is additionally essential that IWRM harmonize with and shows consistency with government policies and national or sectoral development plans. Thus, it is important to be aware of the links of IWRM with plans and processes at the national and sectoral level and take these into account during the planning process.



IWRM and its relation to sub sectors<sup>11</sup>

# IWRM - a "process"

IWRM is a long and systematic "process" where water is considered as a finite and vulnerable resource for which policy should be expressed in a cross-sectoral process, which guarantee that participation of representatives of sectors and stakeholder groups is provided for in the policy processes. Water as a resource along with its management and development is unique to the social, cultural, economic, geographical and historical reality/context of each country. This is why the IWRM approach has to be contextualized to be effective. The required process leading towards Integrated Water Resources Management is illustrated below in the Integrated Water Resources Management process cycle.



The Integrated Water Resources Management Cycle

<sup>&</sup>lt;sup>10</sup> Source figure: "IWRM & WE Plans by 2005" – Why, What and How?

<sup>&</sup>lt;sup>11</sup> Source figure: GWP (TAC) Background Papers No. 4, IWRM

# **IWRM & WE Strategies/Plans**<sup>12</sup>

The IWRM and WE plans provide the context and prerequisite for safe water supplies for domestic and other areas and basic sanitation for the population in order to guarantee sustainability. The IWRM and WE plans should aspire to institutionalize long term changes that will improve decision-making on a permanent basis. They should address specific objectives and goals for the national interest of the people and the environment in a holistic way - looking at water as a resource and means that all uses of water resources are considered together. Some countries have already initiated or been through the kind of development required by WSSD and have engaged in IWRM planning processes during several years, resulting in new national policies, strategies and laws for their water resources development and management. A number of national institutions in the water sector in different regions have taken holistic and integrated planning and management of water on board, making them IWRM friendly. In other countries, the legislative framework and policy directives remain highly sectoral and fragmented and many mandates and responsibilities are badly defined and/or duplicated.

# Creating an IWRM strategy or plan<sup>13</sup>

Involvement from various sectors:

While a traditional water plan is usually designed and implemented exclusively by a water agency, an IWRM strategy/plan requires input and buy-in from all sectors that impact and are impacted by water development and management – for example, health, energy, tourism, industry, agriculture, and environment.

Broad focus:

Whereas traditional water plans tend to be concerned exclusively with water supply and demand issues, an IWRM strategy looks at water in relation to other ingredients needed to achieve larger development goals.

Dynamic rather than static:

Unlike a traditional water plan, an IWRM strategy/plan aims at laying down a framework for a continuing and adaptive process of strategic and coordinated action.

Stakeholder participation:

Because it calls for change – and therefore buy-in-at multiple levels, IWRM strategy/plan

development calls for far broader and more extensive participation from stakeholders than a traditional planning process.

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<sup>&</sup>lt;sup>12</sup> Source figure: "...Integrated Water Resources Management (IWRM) and Water Efficiency Plans by 2005" – Why, What and How? By Torkil Jønch-Clausen (2004).

<sup>&</sup>lt;sup>13</sup> "Catalyzing Change: a Handbook for developing integrated water resources management and water efficiency strategies, GWP, 2004.

#### ANNEX 2

# WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT PLAN OF IMPLEMENTATION

#### (Paragraphs 25 & 26)

- 25. Develop integrated water resources management and water efficiency plans by 2005, with support to developing countries, through actions at all levels to:
- (a) Develop and implement national/regional strategies, plans and programmes with regard to integrated river basin, watershed and groundwater management, and introduce measures to improve the efficiency of water infrastructure to reduce losses and increase recycling of water;
- (b) Employ the full range of policy instruments, including regulation, monitoring, voluntary measures, market and information-based tools, land-use management and cost recovery of water services, without cost recovery objectives becoming a barrier to access to safe water by poor people, and adopt an integrated water basin approach;
- (c) Improve the efficient use of water resources and promote their allocation among competing uses in a way that gives priority to the satisfaction of basic human needs and balances the requirement of preserving or restoring ecosystems and their functions, in particular in fragile environments, with human domestic, industrial and agriculture needs, including safeguarding drinking water quality;
  - (d) Develop programmes for mitigating the effects of extreme water-related events;
- (e) Support the diffusion of technology and capacity-building for non-conventional water resources and conservation technologies, to developing countries and regions facing water scarcity conditions or subject to drought and desertification, through technical and financial support and capacity-building;
- (f) Support, where appropriate, efforts and programmes for energy-efficient, sustainable and cost-effective desalination of seawater, water recycling and water harvesting from coastal fogs in developing countries, through such measures as technological, technical and financial assistance and other modalities;
- (g) Facilitate the establishment of public-private partnerships and other forms of partnership that give priority to the needs of the poor, within stable and transparent national regulatory frameworks provided by Governments, while respecting local conditions, involving all concerned stakeholders, and monitoring the performance and improving accountability of public institutions and private companies.
- 26. Support developing countries and countries with economies in transition in their efforts to monitor and assess the quantity and quality of water resources, including through the establishment and/or further development of national monitoring networks and water resources databases and the development of relevant national indicators.

# Survey of National IWRM Policies, Strategies and Plans Methodology and Questionnaire

#### **Background**

As a consequence of the call of WSSD in Johannesburg in 2002 for all countries to produce integrated water resources management and water efficiency plans by 2005, GWP conducted an "informal stakeholder baseline survey" on the status of water sector reform at the end of 2003. It was intended to be an operational assessment of countries' readiness to meet the 2005 WSSD action target. The survey was funded by Norway, which held the Chair of the Commission on Sustainable Development (CSD12) in 2004. The survey "version 1" was launched at CSD12.

As a follow-up to the first survey, and taking into account the 2005 World Summit's resolution to assist developing country efforts to prepare IWRM and water efficiency plans as part of their national development strategies to achieve the MDGs, it has now been agreed that GWP will conduct, through its network, an internal survey on the extent to which countries have progressed towards meeting the IWRM Plan action target, with a specific focus on IWRM policies, strategies and plans<sup>14</sup> prepared to date.

# **Scope of survey**

The first survey was an assessment of the progress of the IWRM process in various countries. The proposed survey adds value because it will build on a questionnaire<sup>15</sup> with questions designed to extract brief information and facts about IWRM policies, strategies and plans in each country surveyed. The main purpose of the survey is to collect basic facts on this issue – not to ask respondents to make an assessment, except in a special section for assessment information that is clearly labelled as such. A glossary of terms used is included as Annex A.

While the questionnaire to be used in this survey is carefully constructed to capture the form of IWRM policies and plans, it is not designed to address the substance of what is actually happening on the ground. This survey is therefore a fore-runner and first step of a more comprehensive effort on IWRM monitoring that GWP is considering doing in cooperation with the World Water Assessment Programme (and potentially other organisations working on IWRM monitoring) in the period 2006-2009. This more comprehensive effort will focus on finding out what is actually happening in countries, especially at the local level.

An important consideration is to have the results <u>as fast as reasonably possible</u>, to publish them in March 2006.

<sup>&</sup>lt;sup>14</sup> Although the WSSD in 2002 referred to "IWRM and water efficiency plans" in the plural, it is interpreted by GWP to mean one process and one outcome, including water efficiency as part of IWRM.

<sup>&</sup>lt;sup>15</sup> The questionnaire used here is adapted from a questionnaire previously developed by DHI and applied by UNEP, GWP and the EU Water Initiative for surveys in West Africa and the EECCA region.

#### Methodology

The proposed survey builds on the active participation and assistance of RWPs<sup>16</sup> and CWPs, where they exist. The intention is to have the RWPs or CWPs (or a knowledgeable and objective observer designated by the concerned RWPs/CWPs) fill in the questionnaire and retrieve and submit the requested documents – in close liaison with relevant government authorities wherever possible. The survey will therefore limit its coverage to those countries in which GWP has a reasonable presence through either a RWP or a CWP.

It is anticipated that the results of the survey will create a basis for selecting a smaller number of countries that could subsequently be studied in more detail with respect to policies, strategies and planning documents. In order to facilitate further studies and help develop an IWRM library that could serve as a source of experience exchange and learning for water managers, countries and partners engaging in the current survey are requested to submit such documents along with the filled-in questionnaire.

#### **Process and timing**

Subject to agreement and coordination with other related ongoing or planned initiatives, the following process is envisaged:

- •End-October: GWP Secretariat distribute the questionnaire to the RWPs/CWPs
- End-October to end-November: RWPs/CWPs fill in questionnaire and retrieve relevant documents, and submit questionnaire and documents to Secretariat by end November;
- •<u>December-February</u>: Questionnaire results are analyzed and final report is prepared
- •March 2006: GWP presents the survey report at WWF-4

<sup>&</sup>lt;sup>16</sup> The term RWP also includes an RTAC where the RWP is still being formed.

### Questionnaire

To respondents: Wherever relevant, please insert your possible comments or attach them in a separate document or sheet of paper, referring to the number of the question. Please do not forget to obtain copies of each document that is referred to.

### For clarifications please contact Sofia Vanner at the GWP Secretariat.

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Email: Sofia.Vanner@gwpforum.org

**Information on respondent(s):** 

1. Contact perso	on (in case clarification is necessary):
Name:	
Position:	
Organisation:	
Address:	
Country:	
Telephone:	
Email:	
2. Co-responder	nt (if relevant)
Name:	
Position:	
Organisation:	
Address:	
Country:	
Telephone:	
Email:	
3. Co-responder	nt (if relevant)
Name:	
Position:	
Organisation:	
Address:	
Country:	
Telephone:	
Email:	

# Part A: OPINION-BASED ASSESSMENT INFORMATION (See also Part D)

1.	The 2005 national IWRM & WE plans target was a challenging milestone for many countries considering the short period involved (September 2002 – December 2005). Considering the situation in your country in September 2002 and the subsequent efforts made plus the results achieved in establishing a strategy and/or plan, do you believe that your country has in essence met the target?							
		ully artially carcely						
	Part	B: BASIC FACT	S					
2.	Doe	s the country have	e a water <sub>l</sub>	policy:				
	2a)	Existing	Date publi	of shing:	Title(s) of rele	evant document(s):		
	2b)	In preparation		date of aration:	Expected date	of finalization:		
	2c)	Formally prop	posed	body	oosed by what v (e.g. cabinet, stry, etc.):	Date of proposal:		
	2d)	Not foreseen t		e being				
	2e)	Other (please	explain):					
3.	Doe	s the country have	e one or m	ore specif	fic water laws, or a	water code?		
	3a)	Existing	Date publi	of shing:	Title(s) of rele	evant document(s):		
			Date adopt					
	3b)	In preparation		date of aration:	Expected date	of finalization:		
	3c)	Formally prop	osed $\square$	Date	e of proposal:			
	3d)	Not foreseen	for the time	e being $\square$				
	3e)	Other (please	explain):					

4.	<b>Does the country</b>	have an	<b>IWRM</b>	Action	Plan	and/or strategy?
т.	Does the country	marc am	1 11 141	rection	1 1411	and/or strategy.

4a)	Operational	Date of publishing Date of adoption	ing:	Title(s) of releva	ant document(s):
4b)	Existing but not operational	Date of publishing adoption Date of implementations.	ing or n:	Title(s) of releva	ant document(s):
4c)	In preparation □	Start date of preparation:		Expected date of	finalization:
4d)	Formally propos	_		ed by what body abinet, ministry,	Date of proposal:
4e)	Not foreseen for	r the time b	eing 🗆		
4f)	Other (please ex	Other (please explain):			

5. Is IWRM itself, or the principles that form the basis for IWRM, mentioned in official documents (policies, plans or strategies) of other water using sectors, or Cross-cutting sectors (other than potential water policy, water law, and IWRM plan/strategy), such as...

Type of document:		If "yes," please provide title and date:
Poverty Reduction Strategy Paper	Yes □ No □	
National Development Strategy to achieve the MDGs	Yes □ No □	
Agricultural Master Plan	Yes □ No □	
Energy Master Plan	Yes □ No □	
National Environmental Action Plan	Yes □ No □	
Other (please specify)		
Other (please specify)		
Other (please specify)		

# Part C: SUPPLEMENTARY FACTS

# 6. If a water policy for the country exists (ref. Q2):

	6a)	Does the water policy explicitly state IWRM (or the principles that form the basis for IWRM) as a basic framework for water resources management in the country? YES $\square$ NO $\square$							
	6b)	Does it define IWRM? YES □ NO □							
		If yes, please write the definition of IWRM as stated in the water policy (use separate sheet of paper if necessary):							
	6c)	Does it specify the role of private-sector participation in water resources management? YES  NO							
		If yes, please describe the role (use separate sheet of paper if necessary):							
	6d)	Does it provide for application of the "polluter pays" principle (those causing water pollution should pay the cost of monitoring and treating waste or recipient water to eliminate the pollution)? YES   NO   NO   Output  Does it provide for application of the "polluter pays" principle (those causing water pollution should pay the cost of monitoring and treating waste or recipient water to eliminate the pollution)?							
	6e)	Does it provide for application of the "user pays" principle (water users should pay the cost associated with supplying water and administering water resources)? YES   NO							
7.	If a	water law or code exists, does it include obligations for each of the following?							
	7a)	Exchange of information with the public about infrastructure projects? YES $\square$ NO $\square$							
	7b)	Participation and empowerment of stakeholders? YES □ NO □							
	7c)	Management at the river basin scale? YES □ NO □							
	7d)	Decentralization of management of water resources to the lowest appropriate level? YES $\square$ NO $\square$							
	7e)	Financial contribution by the users toward the management of water resources? YES $\square$ NO $\square$							
	7f)	Separation of responsibilities for management and use of water resources?  YES  NO							
	7g)	Efficient use of water? YES □ NO □							
	7h)	Elaboration and/or maintenance of an IWRM Plan/Strategy? YES \( \square\) NO \( \square\)							
3.	Regu	ulations on IWRM:							
	8a)	Are there any national by-laws and/or regulations about or relating to IWRM? YES $\ \square$ NO $\ \square$							
	-	If yes, please provide titles of such by-laws and/or regulations:							

	At which level of the State	e (federal/national/provi	ncial etc.) has it been approved?		
9b)	Which government and no	on-government agencies	were involved in preparing the plan?		
9c)	Is there a strategy for final plan)? YES \( \square\) NO \( \square\)	ncing the IWRM Action	Plan (as part of the plan or as a separate		
9d)	Does the plan have mecha YES $\square$ NO $\square$	nisms for monitoring its	simplementation?		
	If yes, who is responsible	for monitoring the imple	ementation of the plan?		
9e) Is there a programme for capacity building for organizations and/or individuals invol IWRM plan implementation? YES □ NO □ (if no, skip to Q10)					
	If yes, please provide nam	e and organizing institu	tion of programme(s):		
9f)	Is the capacity building pr	ogramme a recurrent pro	ogramme? YES   NO		
IW	RM players:				
Which government agencies/departments/units have a mandate for cross-sec resources management and stakeholder participation? Please list their names and contact details:					
	Name of agency/department	Function	Contact details		
10b)	Which is the agency/depa water resources managen		ponsible for implementation of cross-sectora		

12. If such plans have been prepared, please provide your assessment of the extent to which the plans are implemented in practice, as well as obstacles to effective implementation of which you are aware:	
Comment: (Please provide about half a page of text as a response)	
13. If such plans have been prepared, please provide your assessment of the process of plan preparation, especially in terms of participation, speed and quality:	
Comment: (Please provide about half a page of text as a response)	

# Annex A Glossary for the IWRM Survey Questionnaire

There are many definitions for some terms and those given below aim to help in completing the questionnaire and should not be considered definitive.

Policy	A policy sets out the goals and the vision.
	Water policy development gives an opportunity for setting national objectives for managing water resources and water services delivery within a framework of overall development goals. A water policy that reflects the IWRM approach would seek to balance economic growth, social equity and environmental sustainability.
Strategy	A strategy sets out what should be done to realize the policy goals and is based on future possibilities and is dynamic rather than static.  The process of creating an IWRM strategy is an opportunity to take a coherent, as opposed to an ad hoc, approach to improving the development, management and use water resources to further sustainable development goals.  Strategies should aim at institutionalizing changes that will promote more strategic and coordinated decision-making.
Plan	A plan sets out how to achieve the strategy with concrete objectives, activities and related means. A plan focuses on problem-solving.
Partnerships	A means to enable organizations with differing skills, resources and priorities to leverage increased impact through working together than would be possible by working alone.
Participation	Is the involvement of people in decision making processes relating to policies and actions undertaken by formal bodies.  Real participation takes place when stakeholders are part of the decision-making process. This can occur directly when local communities come together to make water supply, management and use choices.
Stakeholder	A person or group of people who have a direct interest in an activity because its existence will materially affect their lives.
Cross-cutting sectors	In this context a Cross-cutting sector refers to issues that affect several economic sectors, such as finance, social policy, environment etc.
Water code	A systematically arranged and comprehensive collection of written laws.  Some codes are administrative and have the force of law even though they were created and adopted by regulatory agencies and are not actually statutes or laws.
Water law	The required water laws cover <i>inter alia</i> ownership of water, permits to use (or pollute) it, the transferability of those permits, and customary entitlements.  Water laws underpin institutional mandates and regulatory norms for e.g. conservation, protection, priorities, and conflict management.  Specific water laws have been enacted in a considerable number of countries, but some still lack a water resources law <i>per se</i> .
Regulations	Rules and administrative codes issued by governmental agencies at all levels, municipal, county, state and federal. Although they are not laws, regulations have the force of law, since they are adopted under authority granted by statutes, and often include penalties for violations.
By-laws	The written rules for conduct of a corporation, association, partnership or any organization. By-laws are in effect a contract among members and must be formally adopted and/or amended.

#### **ANNEX 4**

### **Sources of information**

- 1. Report of the World Summit on Sustainable Development, The Johannesburg Plan of Implementation, 2002, United Nations.
- 2. "Health, dignity and development, what will it take?", Millennium Development Goals, United Nations Task Force, Earthscan, 2005.
- 3. "Catalyzing Change: A Handbook for developing integrated water resources management (IWRM) and water efficiency strategies", TEC, Global Water Partnership, 2004.
- 4. "...Integrated Water Resources Management (IWRM) and Water Efficiency Plans by 2005 Why, What and How?", Torkil Jønch-Clausen, TEC Background Paper No. 10, Global Water Partnership, 2004.
- 5. "Informal Baseline Stakeholder Survey", Global Water Partnership, 2004.
- 6. "Policy Brief: Unlocking the door to social development and economic growth: how more integrated approach to water can help", TEC, Global Water Partnership, 2004.
- 7. "Integrated Water Resources Management", TEC Background Paper No. 4, Global Water Partnership 2000.