

Commitments on Water Security in the 21st Century

**An Analysis of Pledges and Statements made at the
Ministerial Conference and World Water Forum,**

The Hague, March 2000

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Acronyms

ADB	Asian Development Bank
CEO	Chief Executive Officer
EU	European Union
GEF	Global Environment Facility
GO	Governmental Organisation
GWP	Global Water Partnership
IHE	International Institute for Infrastructural, Hydraulic and Environmental Engineering (Netherlands)
IWRM	Integrated Water Resource Management
IVL	Swedish Environmental Research Institute
LAWA	Standing Committee of Federal States on Water (Germany)
NGO	Non Governmental Organisation
OECD	Organisation for Economic Cooperation and Development
SADC	Southern African Development Community
SEI	Stockholm Environment Institute
SIDS	Small Island Developing States
SIWI	Stockholm International Water Institute
UN	United Nations
UNICEF	United Nations Children's Fund
WASHE	Water, Sanitation and Hygiene Education
WRAP	Water Resources Action Programme

1. Introduction

This report provides an overview of the different pledges, commitments and promises made by governments and international organisations at the Ministerial Conference on Water Security in the 21st Century that was held in The Hague in March 2000. The commitments and pledges, and the analysis presented here, reflect the structure and content of the conference and the Second World Water Forum with which it was linked. These are in turn best represented by the Ministerial Declaration on Water Security in the 21st Century and by the World Water Vision that was presented at the Forum. There is no need to outline in detail either of these events (see the Second World Water Forum Final Report for a fuller picture), but it is useful to give an overview of the key issues in the World Water Vision and the Ministerial Declaration.

The core message of the **Vision** is captured in its sub-title: *making water everybody's business*. The heart of this message is that the tremendous challenges facing the world in the future over the sustainable management of water resources can be addressed, but only if there is vigorous and concerted action by all parts of the global community to do so: *“there is a water crisis today. But the crisis is not about having too little water to satisfy our needs. It is a crisis of managing water so badly that billions of people – and the environment – suffer badly”* (World Water Vision, p. xix). Throughout the Vision, the inter-connectedness of all water resources and all of their multiple uses are emphasised. The report sets out the scale of the achievements involved in providing six times as much water for human use than 100 years ago. It also tells us of the price that this has entailed, in terms of investments made, resources degraded and, above all, the consequences for the millions whose needs are not met today despite this six-fold increase in the water we use. The Vision stresses the importance of changing many aspects of the way that we manage water, with three primary objectives identified for 2025:

- Empowering women, men and communities to decide on levels of access to safe water and hygienic living conditions and on the types of water-using economic activities that they desire – and to organise to obtain them.
- Producing more food and creating more sustainable livelihoods per unit of water applied and ensuring access for all to the food required for healthy and productive lives.
- Managing water use to conserve the quantity and quality of freshwater and terrestrial ecosystems that provide services to humans and all living things.

The Ministerial Declaration enshrined this vision and these objectives. The concept of water security lies at its heart. This innovative concept relates the management of water resources to the vulnerabilities and overall livelihoods of poor people and to the integrity of ecosystems. Included in it are both resource issues (scarcity of water, problems of water quality, the effects of storms, floods or droughts, etc) and human issues (conflicts over water allocation, limited knowledge or capital assets for efficient water management, etc). It is an idea that links water resources management issues to wider environmental and development concerns. This includes the need to consider issues of enhancing sustainability and environmental integrity and reducing the vulnerabilities that so many people face. Equity is also a core concept, so that the needs of *all* users and value and potentials of *all* uses of water resources are recognised in decisions over their future.

The seven “challenges” identified in the Ministerial Declaration develop this thinking further and provide a structure in which the key themes for the analysis of intentions for future support to the water sector can be identified. These seven challenges are:

- **Meeting basic needs:** to recognise that access to safe and sufficient water and sanitation are basic human needs and are essential to health and well-being, and to empower people, especially women, through a participatory process of water management.
- **Securing the food supply:** to enhance food security, particularly of the poor and vulnerable, through the more efficient mobilisation and use, and the more equitable allocation of water for food production.
- **Protecting ecosystems:** to ensure the integrity of ecosystems through sustainable water resources management.
- **Sharing water resources:** to promote peaceful co-operation and develop synergies between different uses of water at all levels, whenever possible, within and, in the case of boundary and trans-boundary water resources, between states concerned, through sustainable river basin management or other appropriate approaches.
- **Managing risks:** to provide security from floods, droughts, pollution and other water-related hazards.
- **Valuing water:** to manage water in a way that reflects its economic, social, environmental and cultural values for all its uses, and to move towards pricing water services to reflect the cost of their provision. This approach should take account of the need for equity and the basic needs of the poor and the vulnerable.
- **Governing water wisely:** to ensure good governance, so that the involvement of the public and the interests of all stakeholders are included in the management of water resources.

2. Pledges and Statements from The Hague

These concepts and issues can be considered the intellectual heritage of The Hague and are the basis of the analysis set out in this report. One of the outcomes of the Ministerial Conference was a series of pledges (11 in total, see table 1) and statements (28 in total, see table 1) made by national delegations, international organisations or (for some statements) other interest groups. These are reproduced in full in the Final Report of the Forum and Conference, and are summarised below. It is these pledges and statements that form the basis of the analysis presented in this report.

Table 1: Pledges and Statements made by Countries and Organisations at The Hague, March 2000

Pledges	Statements	
Cambodia	Australia	Macedonia
Germany	Azerbaijan	Maldives
Morocco	Bangladesh	Mali
The Netherlands	Cambodia	Malta
Norway	China	Morocco
Sweden	France	Oman
United Kingdom	Gambia	St Lucia
United Republic Of Tanzania	Germany	Sweden
Global Environment Facility	Italy	Turkey
OECD	Japan	Vietnam
World Bank	Kazakhstan	Zambia
	Gender Ambassadors	Business
	NGOs	Science & Research
	Youth	Public Services International

These pledges and statements were, in a few cases, prepared in advance of the Ministerial Conference. Some were prepared during the Conference itself, whilst others were submitted in the few weeks after the Conference was over. They are inevitably extremely varied in length, character and specificity. In some cases, extremely specific targets were identified in the pledges and statements. These are itemised below. The majority of the statements were, however, less specific than that. A large number are more a statement of intent than a promise to take specific actions within a measurable time frame. Others are even less specific than that, being more an indication of interest than a clear commitment to action.

This varied character of the statements and pledges is reflected in the discussion presented below, and is something that has longer-term implications. “From Vision to Action” was the theme of the whole Forum and Ministerial Conference. Many of the statements made reflect the vision of the different countries and organisations and in themselves represent significant progress, but what is critical for the future of our planet’s water resources is the way in which these ideas are followed through into tangible changes to the management of water resources. One of the key objectives of this report is to synthesise the different intentions expressed at The Hague so that individual commitments and intentions can be placed in a wider context and a framework for making those that are non-specific more specific is available.

This analysis will also provide a basis for tracking what actions are taken to follow through on the pledges and statements over time. This will be undertaken in order to identify and publicise good experiences and models of good practice through to the Third World Water Forum in Kyoto in 2003 and beyond. This is crucial: it is important to show not just that change is possible, but that *change is happening* and that the approach and principles set out in the Vision and Ministerial Declaration do provide a basis for clear and effective action.

3. Specific Targets

Only a limited number of specific, quantified targets were included in the pledges and statements. These are identified where appropriate below in the thematic analysis, but are also worth identifying here as a specific grouping of pledges that are the most amenable to future monitoring. These specific targets are:

- **Mali** has targeted to meet basic water needs of 40% of the rural population and 45% of villages by 2001 by providing 3.5 million people in 6,000 villages and 700 urban and semi-urban localities with modern water connections. The main objective of the national vision is to meet 80% of the drinking water needs of the population, agriculture and industry, in a sustainable manner by 2025.
- **Malta** has stated that, by 2005, the construction of sewage treatment plants will ensure that all waste water is treated.
- **The Netherlands** will double total government funds for water related activities in developing countries from approximately 100 million NLG to 200 million NLG over a period of 4 years.
- **The United Kingdom** is focused on achieving International Development Targets and has set the goal of halving the proportion of people living in poverty, by lifting a billion people above \$1/day by 2015. The government also plans to more than double bilateral contribution to water and sanitation over the next 3 years.
- **Vietnam** has defined the objectives of water resources management to the year 2025 as: 1/ ensuring a sufficient domestic water supply for the population of 100 million people, 2/ Providing irrigation water for 7 mil ha of cultivated land to ensure national food security.
- **Zambia** has targeted to achieving 75% coverage of water service provision in rural areas and 100% for the urban areas by the year 2015.
- The **Global Environment Facility (GEF)** has committed to doubling its financial support to water related activities to half a billion dollars over a five year period.

4. The Seven Challenges: Pledges and Statements from The Hague

This section presents an overview of the different pledges and statements that are included in the Final Report of The Hague. They are related to the seven challenges from the Ministerial Declaration, so that we can easily relate the commitments made to the core issues identified in the declaration. Each of the seven challenges is considered in turn.

4.1 Meeting Basic Needs

There was a wide range of pledges and statements made that relate to the issue of meeting basic needs. In this, the issues of **water supply** and **sanitation** were intimately linked. Their specific content varied, but in most cases there was a clear **poverty focus** to these statements and the relationship between poverty and addressing fundamental water needs can be taken as an overarching theme for this issue. This poverty focus had two linked dimensions to it.

Firstly, several developing countries have identified this issue as a top national priority and specified a range of actions to address it:

- In **Bangladesh** the issue of domestic water is identified as the top priority in the National Water Policy.
- **Mali** has set targets to reduce water shortages to meet basic needs within both rural and urban communities. The overall target is 80% of the drinking water needs met by 2025, representing 3.5 million rural people in 6,000 villages and 700 urban and peri-urban localities.
- **The Philippines** is committed to the establishment of National Programmes that focus on specific water use and supply issues and targets to ensure that clean water is available to the poorer sections of society.
- **Vietnam** has identified the provision of adequate domestic water to all of its people by 2025 as the top priority in national water policy.
- **Cambodia** has pledged to strengthen water policies to meet basic needs and provide for water security for all.
- **The Maldives** is collaborating with UNICEF to develop a roof catchment programme.
- **Morocco** has targeted ensuring supplies of drinking water to urban areas even in periods of drought.
- **Zambia** has introduced an ambitious programme of reform that includes the goals of 75% coverage for water services in rural areas and 100% in urban areas by 2015.

Secondly, a number of developed countries stated their intention to increase their assistance to developing countries that focused on the water needs, and especially domestic water needs, of the very poor. For example:

- **The United Kingdom** pledged to double bilateral assistance to water and sanitation over a three-year period and linked this to International Development Targets of halving the proportion of people living in poverty by 2015.
- **The Netherlands** has pledged to double bilateral assistance to the water sector over a three-year period, with poverty alleviation the main focus of this assistance.
- **Japan** has established the Initiatives for Sustainable Development as a means to increase the development of water supply and sewerage systems in developing countries and is committed to the promotion of access for all people to safe drinking water and sanitation.
- **France** has established a Water Academy that has developed a Social Charter for Water that defines access to water for all as a fundamental right.
- **Norway** has identified access to clean drinking water for the poor as a priority in development co-operation policy.

Integrated water resources management (IWRM) and/or **river basin management** approaches were identified by many as a key to meeting basic needs in a sustainable manner, representing a major shift from traditional supply-based approaches. Similarly, the issue of **participation** in water supply planning was identified as crucial by many. These issues were implicit in many statements, as part of a wider commitment to IWRM, river basin management and participation. Some countries referred to these issues specifically in the context of water supply issues:

- **Australia** emphasised the extent to which climate and population distribution have made innovative solutions based on IWRM and catchment management essential.
- **The Netherlands** emphasised the extent to which water management is integral to spatial planning, urban development and coastal management.
- **Vietnam** placed water supply targets within the context of achieving them through IWRM and participatory approaches.
- **Zambia** has developed a large-scale national programme that centres on community-based organisations and is committed to an integrated approach to water, sanitation and hygiene improvements.

A number of statements refer to specific technical, sectoral or planning approaches that are seen as the basis for innovations to meet basic needs:

- **Water quality** was identified as a core concern by **Australia, Italy, Japan, Macedonia, The Netherlands, Norway, Oman, the Philippines, Zambia, OECD** and the **GEF**.
- The importance of **pricing mechanisms** for water supplies was identified as a priority by **Zambia, the GEF, the OECD** and the **CEO Panel**.
- The importance of **investments in technological innovations**, including technology transfers, was emphasised by **The Maldives** (roof catchments and desalinisation), **Azerbaijan** (water regulating plants), **Oman** (water conservation and groundwater recharge measures), **Zambia** (technologies appropriate to local conditions) the **OECD** (urban water supply and wastewater treatment).
- **The UK, Norway, Zambia, Japan the World Bank, OECD** and the **Asian Development Bank (ADB)** all stressed the importance of collaboration and partnerships within **international organisations**.
- **Health and hygiene education** was specified as an integral part of rural water programmes by **Zambia** and was implicit in the statements of other countries and organisations.

4.2 Securing the Food Supply

Although the importance of water's role in food production is widely recognised, as are many of the present and future tensions that come from the use of water in agriculture, the level of discussion of water in relation to food was surprisingly sparse in The Hague; something that is also reflected in the relatively small number of specific commitments made in relation to this issue. The reasons for this are not obvious, but the lack of a clear consensus on many of the key issues, combined with the politically sensitive nature of these issues, no doubt provide a partial explanation. This lacunae has been recognised in the period since the Forum and initiatives to ensure that water and food has a higher profile are being taken. Within this context, it is important to identify the commitments that were made over this issue.

- A number of countries and organisations recognised water for food as a key issue in **water policies** and **macro-level planning**. This includes **Cambodia, the Gambia, Mali, Macedonia, Vietnam** and the **OECD**.
- The maintenance and extension of **irrigation provision** was also identified as a key issue by a number of countries. **China** specified the need to improve the efficiency of irrigation systems. **Vietnam** identified the extension of irrigation to 7 million ha of lands as a key target.

Other specific issues that were identified in relation to water for food supply were:

- **Mali** recognised the importance of water for crop production and the need for 170,000 m³ of water for livestock.
- **Japan** specified increased agricultural production as a key goal of international collaboration.
- **The Gambia** identified the importance of water in crop diversification programmes.

4.3 Protecting Ecosystems

The issue of protecting ecosystems was prominent in many statements and pledges; reflecting the general feeling that many past water management policies and practices have taken insufficient account of the profound impacts that human modification of hydrological processes has on ecological systems. Many of the statements recognised the need to address these issues at both policy and implementation levels. The form that these commitments took varied widely, but some core themes can be identified.

The most common, was the importance of putting water for ecosystems within the wider context of **IWRM**. In many cases this was also placed within a **river basin context** and/or within a context where **land and water** management needed to be addressed together. This represents a notable departure from many traditional approaches, which have tended to see ecosystems preservation in terms of the protection of particular habitats only and not through the understanding of ecological processes within the wider hydrological system. Issues referred to within the context of this general theme were the importance of increasing **water allocations for ecosystems maintenance** and the adoption of measures for **ecological restoration**. The individual statements made in this field are:

- **Bangladesh** identified the need to foster collaboration across the Ganges-Brahmaputra-Meghna river basin.
- **China** committed to increasing the proportion of water for ecological purposes and to the adoption of an IWRM approach that accounts fully for ecological processes.
- **France** has prioritised the protection and restoration of aquatic environments, based on a river basin approach.
- **Japan** has specified the river basin as the basic unit for water resources management, with the full diversity of ecosystem processes within basins fully taken into account in the planning process. Japan has also identified the contamination of groundwater resources as a key issue for future action.
- **Morocco** has defined a goal of developing 30 year water management strategies for all river basins affected by dam construction.
- **OECD** are generating reports that integrate the best practices in environmental finance and frameworks for water investments.

There were a number of references to actions to address **specific forms of environmental stress** and/or **specific measures** to address the threat to ecosystem processes from water resources management. These were:

- **Cambodia** specified a commitment to take measures to eradicate pollution that threatened water resources.
- **Azerbaijan** stressed the importance of actions to prevent river pollution of the rivers of the South Caucasian Region.
- **China** identified a wide range of actions to address water resources degradation, including the intensified treatment of seriously polluted rivers and lakes; compulsory closure of small enterprises with low energy efficiency and severe pollution; implementation of standard discharge at key industrial pollution sources; unified discharge of water at rivers and instituting a waste discharge licensing system.
- **Japan** has committed to the protection and expansion of nature reserves, national parks and wildlife protection areas.
- **The Netherlands, the Maldives, Malta and St. Lucia** are all committed to protecting coastal ecosystems through integrated coastal zone management.
- **The Philippines** identified the need to plan soil and water conservation together and committed to the implementation of clean production technologies to protect aquatic environments.

Some of individual statements and pledges recognised the importance of **international collaboration** to address trans-boundary ecological issues, the need to share resources and capabilities and the importance of the global commons:

- **Bangladesh** stressed the need for international co-operation to restore the environment of the lower Ganges.
- **France** specified the need for sustainable water policies and management based on collaboration across river basins.
- The **ADB** specified collaboration at sub-regional and regional levels as a key to sustainable use and conservation of water resources. This included specific reference to supporting GWP initiatives in the Asian region.
- **GEF** committed to actions to support regional actions to prevent ecological degradation in Sub-Saharan Africa.

Finally, there were specific references made to issues of **knowledge and awareness** concerning the relationship between ecosystems and water resources management:

- **China** committed to establishing a system to monitor aquatic environments.
- **Japan** is taking actions to compile knowledge related to the prevention of pollution of ecosystems and is committed to increasing public awareness of this issue and the importance of wetlands.
- **Malta** identified the need to utilise appropriate resource assessment and management techniques and tools.
- The **ADB** identified actions to assist the sharing of experiences between national partners in the Asia region.
- **OECD** will develop guidelines for national water resources and environmental policies.

4.4 Sharing Water Resources

Issues associated with sharing water resources, especially at the international level, were widely discussed in the Forum and the Ministerial Conference. The implications of existing and future tensions over this issue were widely recognised and the importance of international collaboration at bilateral, regional and global levels was reflected in many statements and pledges. Once again, the emphasis was on **integrated basin approaches**, including the role of formal river basin organisations.

There were a number of references to the importance of international assistance in regions where there were tensions over shared waters and to the role of the UN and other international organisations in these issues. Although in most cases, the emphasis was on trans-boundary rivers, there were references made to groundwater, lakes, water quality, coastal waters and cross-border ecosystems. The specific statements made on these issues were:

- **Azerbaijan** identified bilateral agreements with Iran and Georgia over the allocation of shared waters and called for the establishment of a permanent Co-ordinating Council for the distribution of water resources amongst Southern Caucasian countries. Azerbaijan also identified a need for joint research works and knowledge sharing on international river basins and the importance of agreed protection schedules that are confirmed by international organisations.
- **Bangladesh** specified its commitment to the bilateral agreement with India on the sharing of Ganges River waters but called for wider international assistance to manage the Ganges-Brahmaputra-Meghna river basin.
- **France** cited the success of the International Committee for the Protection of the Rhine as the basis for the management of trans-boundary rivers in Europe (Rhine, Meuse and Scheldt) and identified such agreements as a priority in situations of conflict between countries sharing the same river basin.

- **The Gambia** emphasised the need for collaboration with Senegal over shared aquifers and the importance of wider sub-regional links to manage river basins.
- **Germany** pledged continuing and future support to a wide range of initiatives on trans-boundary and international waters. As well as active involvement in European actions, Germany's commitments include support to SADC to establish River Basin Commissions in Southern Africa, collaboration with the World Bank to develop integrated approaches to international waters under the 1998 Petersberg Roundtable, assistance to the Nile initiative and support to a trilateral team from the Middle East to assess existing and future water availability.
- **Kazakhstan** specified the importance of collaborative structures involving the five central Asian republics for addressing the problems of the Syr Darya, Amu Darya, Shu and Talas Rivers and the Aral Sea.
- **Macedonia** committed to clean the waters and rivers through which national boundaries pass. This includes actions to preserve Dorjan Lake and a trilateral agreement with Greece and Albania to preserve Prespa Lake.
- **Norway** specified their willingness to support initiatives that require technical and political support to improve the management of trans-boundary waters where the initiative came from the riparian states concerned.
- **Turkey** emphasised the importance of consensus-based mechanisms to allocate waters across river basins that cross international borders. The statement emphasised the need to formalise such a consensus in a detailed agreement.
- The **World Bank** committed to expanding its work with partners on collaboration for the management of international waters, building on past initiatives in the Baltic, the Danube, the Aral Sea, the Nile, the Mekong and elsewhere. The pledge emphasised the importance of initiatives that stemmed from the riparian states themselves.

4.5 Managing Risks

Many of the statements from national delegations make clear reference to issues associated with risks from water resources, and especially to **floods** and, to a lesser extent, **droughts**. These were seen as fundamental issues in the overall justification of **IWRM and river basin approaches** for many countries. The issue of risks is also seen as a focal point for **international collaboration**, and one that is perhaps not as contentious as the issue of allocating trans-boundary waters.

The overall scope of the points raised was, however, limited in some areas. In particular, the significance of **climate variability and change** and the impact of extreme climate events (especially major tropical cyclones) were not reflected in the analysis or the statements and pledges made. This is in major part a reflection of the extremely limited attention that was paid to these issues in the Second World Water Forum; something that is, with hindsight, recognised and an active strategy to address them for the Third World Water Forum is being developed.

In consequence, the issue of risks was identified as important by many, but the interpretation of what this meant was perhaps rather narrow. The number of specific commitments made on this issue was also limited. There were three inter-related themes identified in these commitments: **monitoring and forecasting, infrastructure protection measures** and **international co-operation**. The specific commitments made were:

- **Bangladesh** identified the need to further improve the country's flood warning and coping system, but noted the importance of international collaboration if this was to happen.
- **Cambodia** committed to improve their floods and drought forecasting system through better co-operation between national institutions.
- **China** declared their intention to develop a water resources development plan for North China that included disaster protection as a core element and identified infrastructure to protect urban areas as a key goal.
- **Italy** is co-ordinating initiatives by Euro-Mediterranean countries relating to floods and drought as part of the preparation for the meeting in Bonn on water resources.
- **Japan** has identified floods as a focal point for both national policy and planning initiatives (based around integrated basin management) and for international assistance.
- **Macedonia** has identified protection measures for floods and erosion damage as key national policy priorities.
- **Vietnam** has prioritised investments to protect from floods and to mitigate natural calamities as a priority for national policy and planning.
- Although not a formal commitment, the report of the Regional Session on **Africa** from the Ministerial Conference identified an African consensus on the need for more effective collaboration, including monitoring and early warning systems, for risks in Africa and called for international assistance to develop these systems.

4.6 Valuing Water

Issues associated with the valuation of water resources and services were amongst the most contentious discussed in The Hague. Indeed, the call for **full cost pricing** of all water services that was central to the World Water Vision Commission Report and was a key issue in the Vision itself was widely questioned by many delegates at the Ministerial Conference and the wording in the Ministerial Declaration was deliberately different. It is consequently not surprising that specific pledges and statements on this issue were few and far between, and that those that were made were often vague in formulation.

There was a more general recognition that there is a real need for financial innovations if the huge **investment needs** of the future are to be met, with the involvement of the **private sector** seen by many as critical. There were also many

statements on the importance of adequate **valuation of environmental resources**, but all of these were typically general statements and not specific commitments. The few real commitments that were made on this issue are:

France has committed to the introduction of an environmental tax system to reinforce polluter pays principles, the development of water charges that vary according to different usage categories and to the development of innovative public-private financing mechanisms.

Japan stated a commitment to the full cost recovery principle and is seeking to identify water pricing strategies that are adapted to local conditions.

The Maldives have identified effective pricing strategies and private sector involvement as integral to their IWRM strategy.

The Philippines committed to the development of appropriate water resources accounting systems that take account of all uses and values of water resources.

Zambia has identified full cost recovery for water supply and sanitation services as a policy principle.

The **OECD** committed to helping partners to develop pricing strategies, including the assessment of the implications of a move towards full cost pricing.

4.7 Governing Water Wisely

Almost all of the pledges and statements referred to issues associated with the governance of water in one form or another. These references were often linked to specific issues associated with the other challenges and in many ways governing water wisely emerged as an issue that runs through the whole approach that has emerged from the Forum and Ministerial Conference processes. As with some of the other challenges, many of the references made to governance issues in the pledges and statements were either part of the analysis (as opposed to commitments) or were too vague to be taken as statements of intent to take specific actions to address governance issues.

This tendency perhaps reflects that there has been a significant change in terms of awareness of the importance and implications of this issue, but that this awareness has not been translated into specific actions. This in turn reflects the complexity and political sensitivity of such actions and uncertainty over what should be done as it entails moving significantly beyond water management issues into processes of political, social and institutional change.

Despite these caveats, this challenge can be seen as an **over-arching issue** that needs to be considered in almost all aspects of changes to water resources management. In this regard, there were many references to this in relation to **water policies and laws** and in relation to **IWRM and river basin approaches**. The specific statements made in these two core areas were:

- **Bangladesh** has adopted hydrological units as the basis for institutional reorganisations defined in the National Water Management Plan.

- **Cambodia** has embarked on a process of institutional strengthening and integration in order to implement national policies on water resources.
- **China** is committed to policy development and the creation of institutional capacities for IWRM, with in particular the development of capacities to manage medium-sized and small catchments a priority.
- **France** has developed a policy based on principles of transparency, democracy and solidarity at all levels from the local to the international and is moving to strengthen the co-ordination of actions on a river basin basis.
- **Italy** stated their commitment to the development of a “Culture of Water” as the basis for addressing issues associated with water resources management and the development of conditions for widespread participation.
- **Japan** has embarked on a process of institutional and administrative change to enhance capacities for river basin planning.
- **Macedonia** has committed to the incorporation of the Ministerial Declaration into their national water policy.
- **Mali** has committed to the development of an enhanced policy and regulatory framework and the strengthening of capacities in the water sector.
- **Morocco** is in the process of establishing a national policy, a new national law, planning guidelines and institutional capacities for river basin-based management.
- **The Netherlands** has a long-established system of institutions for water management at all levels of society and is committed to further develop this to ensure a better gender representation.
- **Oman** is committed to sectoral reform based on IWRM and the integration of water issues into the wider planning process.
- **The Philippines** has established a Presidential Task force to promote policy reforms and advocacy for IWRM.
- **St. Lucia** has committed to a sector reform process based on IWRM principles.
- **Tanzania** has committed to strive for an IWRM approach to implement the Hague Declaration and previous international commitments from Rio, Marakesh and Dublin.
- **Vietnam** aims to reform investment policies and strengthen institutional capacities to implement IWRM by improvements to policies, laws, institutional frameworks and management systems.
- **Zambia** is committed to a programme of legal, policy and institutional reforms to restructure the water sector based on participatory and IWRM principles.

A number of countries and organisations cited this issue as an important focal point for **international collaboration and assistance**, with in particular assistance to developing countries to develop **institutional capabilities** in order to improve water resources governance a matter of concern.

- **Australia** stated that the issue of institutional strengthening to improve governance is vital for all developing countries and committed to build on past work to further improve the effectiveness of aid resources in this area.
- **Cambodia** called for international assistance to improve the monitoring and management of water resources.
- **France** is committed, within the EU framework, to the assistance of Central and Eastern European Countries to improve water governance. France will also continue to support initiative in the Mediterranean, the Rhine Basin and elsewhere to improve capacities for IWRM.
- **Germany** has identified water sector reforms and improvements to capacities (institutional, legal, economic and other) for IWRM and for participatory planning and management in specific initiatives such as the establishment of River Basin Commissions in the SADC area, the Nile River Initiative, along the Limpopo and elsewhere as a focal point for overseas collaboration.
- **Macedonia** has identified their needs for bilateral and multilateral assistance to create capacities for sustainable water development.
- **Mali** launched an appeal to international development partners to assist with the realisation of the National Vision for Water by 2025.
- **The Netherlands** has committed to doubling international assistance to water, with the enhancement of governance and institutional capacities a focal point of these efforts. The Netherlands will also improve and share research and training capacities through international initiatives such as the Partners for Water and the development of IHE as an International Institute for Water Education.
- **Norway** will continue to support a number of regional river basin initiatives and will strengthen involvement in international and regional bodies in order to strengthen water-related policies and water security programmes.
- **St. Lucia** has emphasised the need for international support for an international forum to develop IWRM for Small Island Developing States.

Changes to governance structures, in general towards greater **subsidiarity** and wider **civil society participation**, were particular foci of attention in a number of cases, reflecting a general sentiment that this issue should not be separated from wider societal and political trends.

- **Bangladesh** has made increased decentralisation and increased public participation the centre of the National Water Policy and will follow this through by steps currently being defined in the National Water Management Plan.

- **France** has emphasised the importance of local democratic processes and public-private partnerships.
- **Japan** is committed to the establishment of Water Users Associations as an integral part of the water resources planning process.
- **The Maldives** has committed to an IWRM approach based on traditional management systems and private sector involvement.
- **Mali** has committed to decentralisation and participation as key principles in the development of national policies and a National Action Plan for IWRM.
- **Norway** has identified participation and the enhancement of the role of women in decision-making as focal points for water management.
- **Oman** has identified participation, education and awareness as integral to programmes to address water issues.
- **Vietnam** has committed to improving participation as the basis of strategies, policies and mechanisms for IWRM.
- **Zambia** has instituted a series of reforms to create village water and sanitation committees and to devolve authority to local and district authorities. The greater participation of the private sector is also a key objective.

4.8 The Seven Challenges: Conclusions

Although the way that the key issues were presented in the seven challenges in the Ministerial Declaration in many ways represented a new terminology, it is clear from the above that most of the pledges and commitments made at The Hague can be understood within their structure. More than this, using this framework for the analysis of the commitments and statements from The Hague provides a basis for the comparison of the reaction of different countries and organisations to the agenda established during the Forum and Ministerial Conference. There is additional value, however, to analysing the commitments in more conventional terms, through looking at them through a series of themes that are widely used within water debates. This is done in the next section.

5. Pledges and Statements Analysed by Theme

This section builds on the analysis presented above to consider the pledges and statements in relation to some of the main water resources issues that have emerged as dominant themes during the analysis. These are discussed in this section in terms of the general issues raised and the implications of these issues. Individual commitments are not listed, as all are presented in a different form in the discussion of the seven challenges, above, and in relation to individual country summaries, below. Although a number of other issues could be identified, the six main themes to emerge were:

- Integrated Water Resources Management & River Basins.
- Water Policies and Laws.
- Institutional Capacities & Development.
- Participation, Empowerment & Gender.
- International Collaboration and Assistance.
- Education, Awareness & Training.

5.1 Integrated Water Resources Management & River Basins

This theme ran through most of the pledges and statements, with in many cases IWRM and river basin (or catchment or watershed) management used interchangeably. Although these are in a strict sense not synonymous, they can be taken as such in the approaches presented in many of the different statements. The development of these approaches was in general presented as a pre-condition for efficient, effective and sustainable water resources management. These approaches were consequently seen as essential in situations where there are severe resource pressures, scarcities and conflicts.

There were some refinements to the basic concepts, to reflect different national situations and priorities. In some cases, there was specific reference to an **ecosystems-based** approach to river basin management, with the preservation of ecosystems services seen as the basic rationale for IWRM. Some countries, and in particular small islands, extended the river basin concept to include **coastal waters** and resources such as coral reefs and mangroves.

The specific issue of river basin management for large river systems that **cross national boundaries** was identified as a specific concern and several nations called for concerted international actions to address this issue.

Issues that are often contentious to deal with, such as **conflict** resolution processes, water **allocation** decisions, dealing with natural **hazards** and the preservation of threatened **ecosystems**, were seen to be best addressed within an IWRM and/or river basin context that takes account of all resources, all users and all pressures.

In most cases, there was a strong emphasis on **policy and legal frameworks**: reflecting that most countries recognise this approach in principle but do not yet have the structures to put it into practice. As such, the development of IWRM and/or river basin management can in itself be seen as one of the main challenges in the immediate future.

Having said this, in a number of cases there was some emphasis placed on the need to develop **technical and knowledge capabilities** for river basin management or IWRM. This in particular related to the development of monitoring and/or planning capabilities that were more inclusive than the traditional emphasis on hydrology in water resources management. Social, economic and environmental information was seen as being as or more important. There were also a number of calls for the development of effective **tools or examples of good practice** for IWRM and river basin management; something that was again seen as an arena of international support to these processes.

5.2 Water Policies and Laws

A surprisingly large number of countries advanced different forms of commitment to the introduction of new or revised **water policies and laws** that were seen as the basis for addressing the challenges identified in The Hague. A total of 13 countries made specific statements on the introduction of new policies and laws in the near future or recent past. Many other countries have taken similar steps that are not itemised in the statements from The Hague. There is consequently a widespread international acceptance that addressing the water challenges in the 21st Century is more than a matter of specific, traditional measures. It entails fundamental **reform** to many aspects of the framework within which these resources are managed.

Policies and laws for IWRM and/or river basin management were, as we have seen, often the focal point of these commitments; again reflecting both the prominence and the relative newness of this approach. That there was widespread recognition that putting these principles into practice requires new laws and policies is in itself significant. In some cases, the approach went further than just IWRM to recognise the need to integrate water policies with those of other sectors such as land.

There were also statements on a number of more specific issues:

- Drinking **water supply and sanitation**, with this frequently identified as the top national priority. Issues of needs and rights and the importance of gender were both linked to water supply questions.
- **Ecosystems protection**, including the difficult issue of ensuring an adequate allocation of water for the maintenance of ecosystems functions. The inclusion of ecosystems as an issue in water policies was a new feature of many national water policies.
- **Pollution and water quality**, with this linked to industrialisation and urbanisation for many countries. The need for more effective enforcement measures and for investments in treatment facilities were cited by a number of countries.
- Mitigating **natural disasters** such as floods and droughts was a high priority for a number of countries (both developed and developing). There was in most cases a recognition of the need to move beyond disaster relief measures to more effective prevention and preparedness through integrated river basin planning.

- **Operation and maintenance** of existing and new facilities was seen as a policy priority in some cases, with this linked at times to the more contentious issue of **pricing and cost recovery** for water allocations and investments. Although the principle of water as an economic good has been accepted for some time and was a feature of discussions at The Hague, there is a widespread recognition that putting this principle into practice is extremely difficult.
- Improving the **efficiency** of water use through new technologies and better management was identified as an issue, often in relation to specific sectors such as agriculture.

5.3 Institutional Capacities & Development

The need to strengthen institutional capacities for water resources management of different forms was a feature of most national statements and was at times the main objective behind national policies and programmes. Supporting such processes was also a prominent feature of many offers for development assistance from donor countries and agencies. The process of institutional change was, not surprisingly, typically linked to the adoption of IWRM approaches. Within this general context, there were two main trends in the specific statements made: actions to improve the capabilities and effectiveness of **existing institutional structures** and actions to develop **new structures** to reflect changed approaches and priorities.

The **enhancement of existing institutional structures** had two main themes:

- Improving **operational capabilities** through the generation and use of new knowledge and planning systems, integrating new skills (especially social sciences) and introducing modern, more effective management systems.
- **Integrating different agencies** that are traditionally fragmented and poor at linking their different areas of responsibility (irrigation, drinking water, environmental protection, pollution monitoring, etc).

There was often a strong emphasis on **decentralisation and participation** as prerequisites for **institutional change**, with the development of systems for these often absent and again a key issue for the near future. These processes were often linked to wider trends in social, political and institutional change in, in particular, transitional and developing countries. This was reflected both in the statements of these countries and in the emphasis placed on support to these processes by many bilateral donors and international agencies. This in turn reflects the importance of **governance** issues in the development of water management, which is seen primarily as concerned with social and institutional, rather than technical, processes.

5.4 Participation, Empowerment & Gender

The issue of improving **participation** in water resources management, with this often linked to the **empowerment** of disenfranchised groups and also linked to **gender** issues (with the focus of participation and empowerment recognised as being women), is widely recognised as a major challenge in improving water resources management. This was reflected in some of the pledges and statements, but the

number of commitments on this issue was perhaps surprisingly small. Those that were made were often vague in both intent and actions.

The most common theme was the need to involve **rural communities** in water resources management in developing countries. This was typically related to one of two specific themes: drinking water provision or irrigation. The wider issue of integrating local people into IWRM or river basin management was not addressed in most cases.

Questions of participation were often linked to **knowledge**, with the improvement of local knowledge and the transfer of technologies seen as the objective of participation. Little reference was made to the existing knowledge systems of local people and the importance of integrating this knowledge into wider decision-making.

5.5 International Collaboration and Assistance

The importance of international collaboration, including assistance from donor countries and international organisations, was widely recognised in the pledges and statements. This was to an extent inevitable given the international nature of the Ministerial Conference, but overall this issue is clearly a high priority for governments and international organisations around the world.

The focal point of this issue was often **trans-boundary waters**: river basins that are in more than one country but also in some cases cross-border groundwater, lakes and coastal waters as well. In such cases, countries in these river basins were concerned to balance sovereign national rights with the need for international co-operation. Countries such as Norway and Germany also saw this as a major issue in their international assistance. This issue was often linked to questions of peace and security in troubled regions of the world. International agencies (UN and others) were seen to have a pivotal role in this issue.

The mitigation of and recovery from **natural hazards**, including floods, droughts, cyclonic storms and others, was also seen as a generic issue for more effective international collaboration. This was seen as important at bilateral and global levels, but a lot of emphasis was placed on the development of better regional platforms for collaboration and conflict resolution.

Commitments to international collaboration were not solely confined to this issue, however. A number of other specific issues were also raised:

- The need for international **knowledge sharing**, including collaboration on monitoring and analysis, technology transfers and sharing experiences on effective ways to address water management and security issues.
- This was at times linked to **institutional collaboration**, both bilateral arrangements between specific institutions and the creation of more effective fora for international interactions on water management issues. In some cases, this collaboration was specifically linked to improving institutional **capacities**.

- **Poverty reduction**, linked to **basic needs** provision, was seen as the basic rationale for international collaboration by both developing countries and donors, who linked this to their wider development policies.

5.6 Education, Awareness & Training

The need to create a wider awareness and a stronger political consensus on water resources management issues was a common theme to many statements. There was also a wide recognition of the need to ensure a strong corps of professionals with IWRM skills were available to meet the many planning and implementation challenges identified in the statements. Again, this was mostly in the form of general statements on improving **education and training** or on **awareness-raising** activities. There were more specific statements:

- Improving **institutional capacities**, based on advanced research and teaching institutions and including curricula development, was stated as a goal by both developed and developing countries.
- Use of the **mass media** was identified as the basis for improving general public awareness.
- Links were made to **participatory development** activities, with one goal of participation being to improve awareness through active involvement in management.
- Specific issues, such as **water or ecosystems conservation**, that rely on individual actions were often the focal point of these programmes.

6. Summaries of the Individual Country Statements

Australia has had to develop innovative solutions to water resource development and integrated water resource and catchment management has been essential to resolve water supply and quality issues.

The Government believes that institutional strengthening and assistance with governance issues is vital for all developing countries. Through its aid programme, Australia has given works equipment to the same public works agency every five years and will increase its own focus on improving the quality of Australian aid activities in the area of asset maintenance.

The government proposes to develop the theme of sustaining development assets in its development co-operation programme as well as in bilateral consultations with partner governments. It will also support increased analysis of the maintenance issue by international development institutions such as the World Bank, the Asian Development Bank, the Development Assistance Committee of the OECD and the regional organisations in the Asia Pacific Region.

Azerbaijan needs to construct water regulating plants and flow distribution to satisfy water demand in the region. As a result of the problems within the control of water distribution, the Committee on Melioration and Water Economy is implementing State policy in the field of water relations and conducts reforms, repairs, renewal and reconstruction works in the system. Some 30 legal documents on water relations have been worked out by the Committee and ratified by the Government.

The Republic also wishes to develop and implement urgent measures for the prevention of water resource pollution of the rivers in the South Caucasian region and will continue to develop bilateral agreements with neighbouring countries. The Republic wishes to bar the construction of water reservoirs or other implementations which effect the regime of a river in the case of trans-frontier rivers without the consent of countries down stream.

Azerbaijan seeks to develop inter-state agreements to implement the Helsinki Convention of 1992, on the protection and usage of border water flows and international lakes. The Republic wishes to establish a permanent Co-ordinating Council for the purpose of distribution of water resources among Southern Caucasian countries.

The Republic additionally wishes to hold scientific/practical conferences every year for the implementation of joint research works and protection of inter-state water resources and wishes to form international river basins and confirm protection schedules under International Organisations.

Bangladesh needs support from the international community to harness the Ganges waters and to restore the environment of the Ganges. The Government is committed to making best use of the waters of the Ganges secured under the thirty year Treaty with the Government of India, but it also needs full political commitments from the

governments of the Ganges-Brahmaputra-Meghna region and the international community for IWRM in the region.

Bangladesh is in the midst of formulating a 25 year National Water Management Plan to translate the National Water Policy into action, ensuring IWRM throughout the country. Within the National Water Policy, the importance of people's participation is attached at every level of water management, as is poverty alleviation, the needs of women and children, public and private sector collaboration and GO-NGO collaboration.

Cambodia has pledged to strengthen the water policy and security for sustainable development, to meet basic needs, secure the food supply and manage risk.

The government is upgrading the General Department of Hydrology, Irrigation, Meteorology, Agriculture/ Fisheries and creating new Ministry of Water Resources and Meteorology, in part to improve flood and drought warning and to standardise water resources inventories.

Cambodia requires assistance from national/international organisations/governments for the creation and improvement of hydraulic systems for monitoring water resources and addressing water pollution.

China will formulate water development plans along the guidelines of Sustainable Development incorporating an integrated approach including a water resources development and utilisation plan for North China to protect mankind from water destruction and vice-versa.

In areas with a shortage of water, development plans should be formulated within the capacity of water resources. The Government believes that the scale and the speed of construction in the water sector should be adapted to national economic development to provide both support and security.

An integrated approach will be adopted to such issues as flood/drought disasters, water shortage and water environmental degradation. The government has also launched a new programme to formulate and revise the flood management plans, increasing financial input in the construction of flood control projects and starting a construction campaign focused on the dyke systems of major lakes and rivers.

Within the Yangtze river basin, the government plans to construct a flood control system with river dykes as its basis and Three Gorge Project as its backbone, combining engineering measures and river training projects.

In many regions of China, emphasis is being placed on the flood defence in urban areas and the management of middle/small-sized watersheds.

China is actively promoting water saving practices and urban water management. Incorporated within these are policies and investment support to encourage the development of water-saving irrigation; research and development of water-saving irrigation equipment; the establishment of service networks for extending water-saving technology; the strengthening of scientific work on water-saving technology,

the improvement of sustainability of water-saving irrigation for the future and the creation of public awareness of water conservation.

The government places emphasis on; the intensified treatment of seriously polluted rivers and lakes; the compulsory closure of small enterprises with low energy efficiency and severe pollution; the implementation of standard discharge at key industrial pollution sources; the unified discharge of water at rivers; increasing the proportion of water for ecological purposes and instituting a waste discharge licensing system.

China has regarded strengthening integrated water resources management as an important measure to realise the optimal allocation of water resources. One such strategy, 'Great Developments in the West' aims to improve ecology, rehabilitate and construct irrigation districts, solve human drinking water problems, strengthen IWRM and implement inter-region/inter-basin water transfer projects.

France applies water policy principles aiming to achieve greater transparency, democracy and solidarity. These policies emphasise: the preservation of basins to ensure the successful functioning of aquatic ecosystems; partnerships between public and private sectors; conservation as well as the mobilisation of new resources and the development of co-operation agreements and conflict mitigation between countries sharing the same river basin.

The Water Academy, which combines public authorities and private organisations, has developed a Social Charter of Water, which stresses that access to water is a crucial right.

The efficiency of the States' actions and its public institutions will be further enhanced by targeting the next intervention program of the water agencies (2002-2006), prioritising the aims to regain water quality and aquatic environments.

France is looking to the creation of an innovative financing mechanism whereby public investment assistance could support private financing. To reinforce the polluter-pays principle, an environment tax system will be created. The principle of water use charges will be applied according to different usage categories, consequentially charges will be established on construction and adjustment works which modify the water treatment.

Public services for water and sanitation will be redefined, whereby the regulations will be reinforced with the creation of a High Committee Public Service of Water and Sanitation.

The Gambia believes that harnessing and effective management of national water resources has a key role to play in ensuring diversified crop production and reduced income disparities between rural and urban populations and between sexes.

The Republic believe that it would be prudent for all countries to recognise that ground and surface water resources know no boundaries and emphasises the importance of the collective role in water resource management.

The Gambia needs to confer with Senegal on the long term usage of the Deep Sandstone Aquifer which underlies both regions to avoid the adverse effects of the deterioration in the quality of the water.

Gambia also believes that the sub regional efforts mounted between countries to harness trans-boundary waters are necessary and should be enhanced through existing links and is therefore in full agreement with the West Africa Water Vision and the plan of action for its realisation.

Germany, jointly with the World Bank, started a new initiative in 1998 ‘Petersberg Roundtable’ aiming to develop an integrated approach to the issues of trans-boundary water management. This includes promoting IWRM and strengthening institutional and legal frameworks and the use of economic instruments.

It also places a great deal of emphasis on water sector reform, which incorporates the regional dimension of national water policies. Germany welcomes the river basin approach in the new European Water Framework Directive.

The Federal Republic is hosting a high-level conference in Germany 2000, addressing the issues of the Nile, and assisting the Nile Basin Initiative and has supported a tri-lateral team from the Middle East with regard to water availability to develop future scenarios.

The Republic is to host an international conference on fresh water issues in January 2002 as a preparatory step to facilitate discussions on sustainable development, fresh water issues and to review implementation of Agenda 21 in 2002.

It is providing 3.5MDM for the assistance of Limpopo countries to develop an international river commission, and is considering the possibility of a twinning programme between a European river commission and the Limpopo.

The Republic also supports the ongoing initiative of the South African Development Community to establish River Basin Commissions on shared water courses.

On a national basis the Republic has pledged to work closely with the federal states in the framework of LAWA to establish innovative ways for the implementation of the river basin management approach.

Italy is co-ordinating the initiatives by Euro-Mediterranean countries to face problems related to droughts and desertification for the next conference in Bonn.

Italy believes that the development of the Culture of Water is a priority aspect in order to solve issues and also proposes focus on the issue of peace in the Middle East.

Japan is promoting comprehensive water resources management based on a sound hydrological system, placing more emphasis on the watershed and active stakeholder engagement.

The government is committed to promoting access for all people to safe drinking water and sanitation, focusing on those living in poverty especially women and those belonging to disadvantaged groups.

Japan will continue with efforts to support developing countries to address such issues as water supply/sewerage systems, agricultural production and pollution, through technical and financial assistance and the Japan Initiatives for Sustainable Development.

The government will adopt effective measures against floods and droughts through comprehensive flood management. Japan will pursue full cost recovery by examining measures such as water pricing.

Japan is working to improve water supply systems, the current administration systems to manage water supply, water resource development and has government subsidies for small water utilities. The government is also contributing to extend support in establishing and promoting the Water User's Association.

Japan will promote wastewater disposal and improve sewage systems. It is conserving and managing ecosystems by designating them as nature reserves, national parks and wildlife protection areas. Ecosystems will be protected by the installation of fish ways and the conservation of flora and fauna and by a compilation of basic knowledge to prevent pollutants and increasing public awareness on the importance of wetlands.

Kazakhstan is party to an interstate agreement of 5 Central Asian Republics on joint management, use and protection of water resources from trans-boundary sources. From this the Interstate Water Use Co-ordinating Committee was established.

The implementation of the project to regulate the river bed of the Syr Darya and Northern Aral will be launched this year and activities to rehabilitate water supply systems in the Aral/Kazaklinsk regions will be continued.

The framework to the Aral Sea rehabilitation strategy needs revising, efforts are needed to reduce salinisation, to recover wetlands, and to increase the inflow of river water into the deltas.

An agreement on the 'Joint exploitation of water utilisation units on Shu and Talas rivers' was signed, and productive consultations have been initiated with Chinese delegations on the Irtysh and Illi rivers.

In 1998 a framework agreement on the use of water energy was signed between the governments of Kazakhstan, the Kyrgyz Republic and Uzbekistan. Kazakhstan also calls to the states of Asia to accede to the 1992 Convention on Use and Protection of Trans-boundary Water courses and lakes.

Macedonia will incorporate the Ministerial Declaration in national water policy and publish the visions and actions concerning water resources for the next 20 years.

The priorities of the National Water Policy are pure drinking water, the food industry, rural development, agriculture, water economy, mineral and thermal water,

management, a biological minimum standard for nature, and protection from flood and erosion damage.

Major new initiatives are the reconstruction of the water systems of six big cities and action to clean the waters of rivers and lakes through which the state borders pass.

Recently the Prime Ministers of Greece, Macedonia and Albania agreed activities to preserve Prespa lake. The co-operation between the 'border river and lake water' between these 3 states is also under development.

Macedonia is also taking operative measures to direct water from the coast towards Dorjan lake so as to protect the lake's water resources.

The Maldives has taken action to harvest rainwater through roof catchments and to develop desalination to ensure the provision of safe drinking water.

The Republic is adapting an effective IWRM using traditional and emerging resources, including actions to preserve coastal waters and to promote conservation and improved water resources management.

Mali has targeted to reduce water shortages to meet basic water needs in rural communities (3.5 million people and 6,000 villages) and 700 urban and semi-urban environment, around 700 localities.

To achieve the objective of food self-sufficiency in 2001, 182.000 hectares of land need to be prepared and 18.000 hectares rehabilitated. 170.000 m³ are needed to meet the needs of livestock.

The main objective of the national vision is to meet 80% of the water needs of the population, agriculture and industry, in a sustainable manner by 2025. To maintain this goal several factors need to be promoted; the promotion of professionalism within water management; the integrated and ecologically rational management of water resources; knowledge of the potentials and characteristics of water resources; a coherent and efficient legislative and regulatory framework; the efficient and operational command of the water sector by decentralised authorities; and the promotion of the concept of water as being an "economic and social good".

The integration of local, regional and national levels for the AEP, Irrigation, Energy and Industries will be developed through a National Action Plan of Integrated Water Resource Management.

The Government of the Republic of Mali would also like to launch an appeal to its partners in development to assist with the realisation the National Vision of Water by the year 2025.

Malta emphasises the integration of seawater and fresh water management in islands/coastal zones and is utilising appropriate resource assessment techniques as a development and management tool.

By 2005 the construction of sewage treatment plants will ensure that all waste water is treated.

Malta is offering advice and knowledge to small island developing states (SIDS) and others and would appreciate international support and co-operation to develop renewable energy for its desalinisation plants.

Morocco's water policy and laws are targeted at drinking water for cities and irrigation during periods of drought, and at institutional development for IWRM through the creation of river basin agencies.

Dam construction is based on planning guidelines for all hydraulic basins, setting out the water resource development strategies for the next thirty years.

Morocco hosted the first World Water Forum three years ago, demonstrating the priority it gives to the water sector and its commitment to the development of international co-operation in this domain and is prepared and willing to share its experience in water development and co-operate regionally, particularly in the South.

The Netherlands will use water as a leading principle in spatial planning and urban development, sustain coastal zone management and continue to guarantee high quality water supply and sanitation.

It will also develop the principles of IWRM, at the river basin level, accounting for a fair gender representation.

International co-operation will focus on the support to achieve IWRM and will take the initiative to establish an informal Ministerial gathering on gender.

The Netherlands will make resources available to develop the IHE Delft, the International Institute for Infrastructural, Hydraulic and Environmental Engineering into an International Institute for Water Education.

The government will support and finance initiatives for co-operation to exchange knowledge and experience in the fields of water research, training and water management.

The government will provide double government funds for water related activities in developing countries from approximately 100 M NLG to 200 M NLG over a period of 4 years. This co-operation will focus on support for the development of coherent strategies and policies for building institutional capacities to achieve integrated water resource management.

Norway's main priority in development co-operation is to ensure that the poor have access to clean water and is increasing focusing its co-operative efforts on Integrated Water Resource Management based on ecosystems as key features and a participatory approach with women's involvement in the decision making process.

The Government provides technical and political support to regional efforts in Middle East, the Nile, SA and the Mekong, emphasising that water must be seen as the key to peaceful and sustainable development.

Norway will continue to promote co-operation within existing mechanisms, particularly the UN, the international financial institutions, regional bodies in order to strengthen water-related policies and programmes to enhance water security.

The Government urges nations to ratify and sign the UN Convention on the Law of Non-Navigational Uses of Trans-boundary Water Courses.

Oman's main objectives are; balancing water issues and renewable resources, the conservation of water from depletion and pollution, the provision of safe, potable drinking water for all as a priority and the allocation of water to high value activities where possible.

Ground water abstraction is controlled by well permitting, augmentation by artificial recharge of flood waters is well established, and small retention or storage dams for water supply are utilised. The government has plans for expanding the use of treated wastewater to meet future demands of irrigation water and thereby reduce ground water abstraction.

The preservation and economic strengthening of rural agricultural communities is also a primary goal in water sector reform. The water sector is an integral part of the planning process, with development of 5 year plans to establish the set goals. Considerable investment and allocation of funding to support a range of strategies to achieve the goals will be required within the next 20 years.

To redress these water issues requires a carefully planned programme of education, awareness, participation and consensus within society and amongst users.

The Philippines are committed to put into action National Programmes, focusing on specific water use, supply concerns and targets to ensure clean water is equitable and easily available to the poorer segments of society.

The government will identify indicative water security targets, formulate water resources accounting systems to determine the proper value of water, adopt the best practices on water use and conservation, including the promotion of best indigenous technologies.

The Integrated Watershed Approach and the departments responsible for water use and conservation are being redefined to conform to the IWRM approach.

The Philippines are committed to mobilise all sectors of society by using the media as a communication tool to ensure the implementation of the Declaration. The government has established the Presidential Task Force on Water Resources Development and Management, which will take an active role in the Rio +10 conference in 2002 and encourage the UN system in developing indicators to monitor targets.

St Lucia is committed to IWRM and to make substantial investments to build up human and institutional capacity to develop comprehensive national water policies, to develop and utilise planning tools and to protect and conserve watersheds.

St Lucia also restates their commitment to the principles outlined in the Ministerial Declaration. St Lucia calls to the World Water Council to host a national forum to examine IWRM in terms of Small Island Developing States (SIDS).

Sweden will strengthen collaboration with the Global Water Partnership (GWP), the Stockholm Environment Institute,(SEI), the Stockholm International Water Institute (SIWI) and the Swedish Environmental Research Institute (IVL).This progress of Sweden's initiatives will be presented at the 10th Stockholm water conference in 2000.

During 2000, GWP will become an internationally recognised organisation, with support from IVL/SEI/SIWI and the City of Stockholm.

Sweden will increase its contribution to networking international water development capacity permeated by IWRM and water security.

Sweden also offers a yearly gathering (World Water Week) to share knowledge and expertise in the broad area of IWRM. The development of curricula and an international course on policy-relevant IWRM, a world reference centre and documentation on water security.

Tanzania continues to endeavour to implement the Hague declaration and to implement previous commitments from Rio, Marakesh, and Dublin. The Government is also endeavouring to implement the issues discussed at the forum based on an integrated water resources approach.

Turkey believes that the whole hydrological basin should be taken into account and proportions determined optimally by parties within a consensus, in an equitable and reasonable manner.

In this agreement the parties should first assess the water resources and needs of their respective countries through rational analytical methods and then they if possible reach a consensus and delineate the framework and details of the agreement.

The United Kingdom is focused on achieving its International Development Targets and has set the goal of halving the proportion of people living in poverty, by lifting a billion people above \$1/day by 2015.

The government also plans to more than double bilateral contribution to water and sanitation over the next 3 years and also continues to work with international partners to monitor the progress of Forum.

Vietnam: the objectives of water resources management in Vietnam to the year 2025 are; 1/ ensuring a sufficient domestic water supply for the population of 100 million people, 2/ Providing irrigation water for 7 mil ha of cultivated land to ensure national food security, 3/ Ensuring water for industry and other economy's sector development in order to maintain high growth rate, 4/ Conserving sustainable aquatic ecosystems and protecting and mitigating the adverse effects caused by water.

Vietnam will develop the implementation of IWRM having reasonable strategies, policies and mechanisms based on the participation of stakeholders.

Vietnam needs to ensure equal, reasonable water allocation, the co-operation of sharing international water resources and the development of river basin planning to ensure equity between water uses and the conservation of ecological systems.

It aims to reform investment policies and strengthen institutional capacity to implement IWRM by the separation of the state management on water resource issues, by the development of institutional frameworks and capacity building.

The Government aims to develop scientific technologies to facilitate efficient and effective water uses and to form technical support systems for IWRM, to improve institutional water delivery service organisations and to promote participation within the economic sector and water user associations.

Zambia has been implementing a policy aimed at improving accessibility to water and sanitation through efficient service and delivery. One of the measures that Zambia is implementing is water sector reform.

This reform is guided by the seven water supply and sector principles; 1/separation of water resources functions from water supply and sanitation, 2/separation of regulatory and executive functions within the water supply and sanitation sector, 3/devolution of authority to the local authorities and private enterprises in the provision of water and sanitation, 4/full cost recovery for water supply and sanitation services, 5/human resource development, 6/technology appropriate to local conditions and 7/increased Government budget to the sector.

The Water and Sanitation Act of 1997 provides for public/private partnerships in the provision of commercial utilities and to date six water supply /sewerage companies have been established with international support.

The government is implementing a rural water supply strategy using a concept known as WASHE, (Water, Sanitation and Hygiene education). This deals with strengthening institutional capacity at district and local levels, based around the integration of all stakeholders into the process.

The Government is also undertaking a water resources action programme (WRAP), with legal, institutional and other components, to ensure water resources are utilised in a sustainable manner, based on IWRM. This includes actions at the regional level to address shared water resources.

Zambia is pledging to achieve 75% coverage of water service provision in rural areas and 100% for the urban areas by the year 2015. The Government is appealing to the international community for either financial or technical assistance.