



# World Water Forum Bulletin



## A Summary Report of the 4th World Water Forum

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### SUMMARY OF THE 4TH WORLD WATER FORUM: 16-22 MARCH 2006

The 4th World Water Forum convened in Mexico City, Mexico from Thursday, 16 March to Wednesday, 22 March 2006. The Forum is the largest international event on freshwater, and seeks to enable multi-stakeholder participation and dialogue to influence water policy-making at a global level, in pursuit of sustainable development.

The 4th Forum's main theme, "Local actions for a global challenge," was addressed through five framework themes: water for growth and development; implementing integrated water resources management (IWRM); water supply and sanitation for all; water management for food and the environment; and risk management. Over 200 thematic sessions were held, and almost 20,000 participants attended, representing governments, UN agencies, intergovernmental organizations, non-governmental organizations (NGOs), academia, business and industry, indigenous groups, youth and the media.

The Forum concluded with a Ministerial Conference on 21-22 March, with some 140 ministers and high-level officials gathering in both closed and open sessions, which included dialogues and roundtables on various aspects of water management. A Ministerial Declaration was adopted, calling for international action on water and sanitation issues.

### A BRIEF HISTORY OF GLOBAL WATER ISSUES

Freshwater is a finite resource and is imperative for sustainable development, economic growth, political and social stability, health, and poverty eradication. While water issues have long been on the international agenda, the debate on how to meet the growing global demand for freshwater has intensified in recent years. More than one billion people currently have no access to safe drinking water, and an estimated 2.7 billion people, or one third of the world's population, will face major water shortages by 2025.

Convened every three years, the World Water Forum is an initiative of the World Water Council (WWC), an international water policy think-tank established in 1996 in response to global concern over the pressures on the Earth's freshwater resources. The Forum's objectives are to: raise the importance of water on the political agenda; support the deepening of discussions towards solving international water issues in the 21st Century; formulate concrete proposals; and generate political commitment.

**1ST WORLD WATER FORUM:** The 1st World Water Forum, held in Marrakesh, Morocco, in March 1997, mandated the WWC to develop a long-term Vision on Water, Life and the Environment for the 21st Century. The 1st Forum also cautioned against treating water as a marketable good, and prioritized: water and sanitation; shared water management; ecosystem conservation; gender equality; and efficient use of water.

**2ND WORLD WATER FORUM:** The 2nd World Water Forum took place in The Hague, the Netherlands, in March 2000. The Ministerial Declaration identified key challenges for the future as meeting basic water needs, securing food supply, protecting ecosystems, sharing water resources, managing risks, and valuing and governing water wisely. In this Declaration, Ministers also agreed to review progress in meeting these challenges on a regular basis, and to provide support to the UN system to periodically reassess the state of freshwater resources.

**UN MILLENNIUM SUMMIT:** At the UN Millennium Summit in September 2000, world leaders adopted the Millennium Declaration, which inspired eight Millennium Development Goals (MDGs) and 18 targets, including the target to halve the proportion of people without access to safe drinking water by 2015.

**INTERNATIONAL CONFERENCE ON FRESHWATER:** The International Conference on Freshwater convened in Bonn, Germany in December 2001, in preparation for the World Summit on Sustainable Development (WSSD), and addressed: equitable access and sustainable supply of water for the poor; strategies for sustainable and equitable management of water resources; integration of gender perspectives; and mobilization of financial resources for water infrastructure.

### IN THIS ISSUE

A Brief History of Global Water Issues . . . . .	1
4th World Water Forum Report . . . . .	2
Opening of the Forum . . . . .	2
Framework Themes . . . . .	4
Regional Presentations . . . . .	11
Ministerial Conference . . . . .	14
Closing Plenary . . . . .	18
Closing Statements . . . . .	19
Upcoming Meetings . . . . .	19

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**WSSD:** World leaders convening in Johannesburg, South Africa at the WSSD in 2002 took the MDG target on safe drinking water a step further by agreeing to halve the number of people lacking adequate sanitation by 2015. Other water-related targets in the Johannesburg Plan of Implementation include the commitment to develop integrated water resources management (IWRM) and water efficiency plans by 2005. Governments, lending agencies and international organizations also launched several voluntary partnerships and initiatives in the area of water and sanitation.

**3RD WORLD WATER FORUM:** Held in Kyoto, Osaka and Shiga, Japan in March 2003, the 3rd World Water Forum brought together 24,000 participants from over 170 countries, making it the largest water-related meeting ever held. Some 130 Ministers adopted a Declaration underscoring the role of water as a driving force for sustainable development, and launched the Portfolio of Water Actions – an inventory of more than 3,000 local actions. The “Financing Water for All” report of a high-level Panel chaired by Michel Camdessus, former Director General of the International Monetary Fund, was also presented.

**GURRÍA TASK FORCE:** The Task Force on Financing Water for All, led by José Angel Gurría Treviño, former Finance Minister of Mexico and incoming Secretary-General of the Organization for Economic Cooperation and Development (OECD), was established at the 3rd Forum as a follow-up to the report of the Camdessus Panel, and met twice during the intersessional period. The Gurría Task Force, composed of representatives from NGOs, local authorities and financing institutions, was mandated to present a case-based report at the 4th Forum on progress made and challenges ahead, focusing on financing water for agriculture and new models for financing municipalities and local action.

**G8 SUMMIT:** At their annual Summit, held in Evian, France from 1-3 June 2003, leaders of the Group of Eight (G8) countries adopted the Action Plan on Water to help meet the MDG and WSSD goals of halving the number of people without access to clean water and sanitation by 2015. In this Action Plan, G8 leaders committed themselves to: promoting good governance; utilizing all financial resources; building infrastructure by empowering local authorities and communities; strengthening monitoring, assessment and research; and reinforcing engagement of international organizations.

**UN COMMISSION ON SUSTAINABLE DEVELOPMENT:** At its twelfth and thirteenth sessions held in New York from 14-30 April 2004 and 11-22 April 2005, respectively, the UN Commission on Sustainable Development (CSD) focused on policies and options to expedite the implementation of international commitments in the areas of water, sanitation and human settlements. The CSD-13 outcome document’s section on water calls, *inter alia*, for: accelerating progress towards the 2015 water access target through increased resources, and by using a full range of policy instruments such as regulation, market-based tools, cost recovery, targeted subsidies for the poor and economic incentives for small scale producers; improving water demand and resource management, especially in agriculture; and accelerating the provision of technical and financial assistance to countries that need help to meet the 2005 target on IWRM.

**2005-2015 UN INTERNATIONAL DECADE FOR ACTION “WATER FOR LIFE”:** Organized by the UN, the International Decade focuses on the implementation of water-

related programmes and projects and strengthening cooperation on water issues at all levels. Africa is the region for priority action. Other priorities include: sanitation access; disaster prevention; pollution; transboundary water issues; water, sanitation and gender; capacity building; financing; and IWRM.

## 4TH WORLD WATER FORUM REPORT

### OPENING OF THE FORUM

Welcoming participants to the Forum, Cristóbal Jaime Jáquez, Co-Chair of the 4th World Water Forum, emphasized: the strategic importance of water to national security; the need for a long-term vision on water management; and the need to create a new water culture that enables people to face water and development challenges based on cooperation and tolerance.

Loïc Fauchon, President of the World Water Council (WWC) and Co-Chair of the 4th Forum, stressed that lack of access to safe drinking water and poor water quality are unacceptable, and that the right to water is indispensable to human dignity. He outlined major challenges for global water systems, including demographic growth, deforestation, soil degradation and climate change. Urging the international community to step up its efforts in addressing the global water crisis, he called for: greater investments in water infrastructure; technological progress to ensure water security; research and education; water management decentralization; and risk management.

José Luis Luege Tamargo, Mexico’s Secretary of Environment and Natural Resources, noted the need for universal access to safe drinking water, stressing that water is a fundamental human right and a key to development. He said that: although sovereignty must be respected, water access must not be constrained by borders; local experiences, knowledge and technology must be exchanged; and forestry issues must be addressed.

Prince of Orange Willem-Alexander of the Netherlands stressed that global water challenges must be met with actions at the local level. He highlighted the water-related findings of the Millennium Ecosystem Assessment, which describes current rates of environmental degradation and its impacts on development, urged implementation of integrated water resources management (IWRM) plans, and stressed the need for consideration of water issues in energy, agriculture and other policies. He also underscored the need for leadership at all levels.

Crown Prince Naruhito of Japan recalled the outcomes of the 3rd Forum, and noted several follow-up initiatives at the global level, such as the UN Advisory Board on Water and Sanitation and the UN’s 2005-2015 UN International Decade for Action “Water for Life”. He noted modest progress towards improving water supply and sanitation, and urged action to cope with the increasing number of weather-related disasters.

Driss Jettou, Prime Minister of Morocco, drew attention to the King Hassan II Great World Water Prize, created jointly by Morocco and contributing countries to recognize outstanding achievements in the management and development of water



Cristóbal Jaime Jáquez, Co-Chair of the 4th World Water Forum



Vicente Fox Quesada, President of Mexico

resources. He underscored the importance of institutions in creating awareness and contributing to water management. Stressing the need for collective action and sharing experiences, he also welcomed South-South cooperation and emerging solidarity in addressing global water challenges.

Vicente Fox Quesada, President of Mexico, emphasized that water is both a human right and a public good that all governments must guarantee. He said the 4th Forum needs to advance the achievement of international water-related commitments. He noted that water conservation is imperative for combating poverty and promoting growth and development, both nationally and internationally, and advocated a new water culture based on shared responsibility, equity and solidarity. Noting that there is no single approach to solving the global water crisis, he said many solutions lie at the local level. In closing, he highlighted the Forum's role in fostering public awareness and respect for water, and inspiring leadership on water issues worldwide. A folkloric music and dance performance followed.

**KING HASSAN II GREAT WORLD WATER PRIZE CEREMONY:** Mohamed El Yazghi, Morocco's Minister of Environment, introduced the King Hassan II Great World Water Prize, announcing that the international jury had selected Torkil Jøneh-Clausen (Denmark) for his scientific excellence and support for international cooperation and solidarity in the field of water.

Forum Co-Chair Fauchon highlighted Morocco's role in initiating the Great World Water Prize and the country's success in achieving self-sufficiency in water management as a result of its political will and technical expertise.

Prime Minister Jettou then presented the Great World Water Prize to Jøneh-Clausen. In his acceptance remarks, Jøneh-Clausen stressed that his award is a result of cooperation among the Danish Government, the Danish Hydraulic Institute and the Global Water Partnership (GWP), and announced that the prize money would be used to make a contribution to a fund for women from developing countries to study water issues.

**SPECIAL PRESENTATION "FROM THE 3RD TO THE 4TH FORUM":** Ryutaro Hashimoto, Chair of the UN Advisory Board on Water and Sanitation, said that most of the Millennium Development Goals (MDGs) cannot be achieved without solving water problems. He summarized global water-related developments since the 3rd Forum, including: the launch of the UN 2005-2015 International Decade for Action "Water for Life"; the establishment of the UN Advisory Board on Water and Sanitation; discussions at the twelfth and thirteenth sessions of the

UN Commission on Sustainable Development (CSD) focusing on water and sanitation; and the African Ministerial Conference on Water. Hashimoto highlighted shortcomings in meeting the 3rd Forum's commitments, and called for concrete actions to resolve global water problems.

Forum Co-Chair Fauchon summarized progress achieved between the 3rd Forum and 4th Forum, suggesting that much work is needed, including procedures for decentralization of water management. He then highlighted several achievements since the 3rd Forum, including a 40 percent growth in the WWC's membership, and in the areas of water financing, monitoring and water rights.

Forum Co-Chair Jaime Jáquez outlined the institutional history of global water policy since the 1972 UN Conference on the Human Environment and progress achieved. He said regional reports would form the basis of the Forum's discussions and provide input into the Ministerial Conference and Declaration.

**ROUNDTABLE "INTRODUCTION TO THE 4TH WORLD WATER FORUM":** Opening the roundtable, Eduardo Sojo Garza-Aldape, Mexican President's Public Policy Office, encouraged all stakeholders to be open to different viewpoints and to share and learn from local experiences.

Ryutaro Hashimoto then presented the UN Advisory Board's recently released Compendium of Actions "Your Action, Our Action," noting that it draws from existing consensus documents and focuses on six vital areas: financing; water operators partnerships; sanitation; monitoring; IWRM; and water-related disasters.

On financing, he said governments should install an appropriate mix of equitable tariffs and subsidies. Noting that available financial resources often fail to effectively address water and sanitation issues, he called for: better governance and transparency; programmes to expand knowledge on developing local markets; and water funding focused on capacity building. Hashimoto said water operators partnerships are crucial to achieving hygiene promotion, household sanitary arrangements and sewage treatment, and called for concrete tools for action, advocacy at the global level, and concerted campaigns at the sub-regional level.

On sanitation, he highlighted the Compendium's recommendations to the UN, including to: designate 2008 as the International Year of Sanitation; install a UN Sanitation Prize; promote regional high-level meetings; and organize a global sanitation conference towards the end of the UN International Decade on Water.

On monitoring, he called upon the UN to disseminate reliable data on progress towards water-related targets and urged all UN Members to submit progress reports to CSD-16 in 2008 to be incorporated in a UN database.

Recalling recent water-related disasters, Hashimoto stressed the importance of preparedness and called for efforts to foster global awareness, commitment and consensus. Highlighting cross-cutting perspectives, he said



Ryutaro Hashimoto, Chair of the UN Advisory Board on Water and Sanitation

stakeholder participation remains insufficient in the field, and called for links and synergies with other key sectors, including education, health care and agriculture.

Margaret Catley-Carlson, GWP Chair, chaired the ensuing roundtable discussion on the Compendium's six vital areas.

Gérard Payen, President of Aquafed, International Federation of Private Water Operators, said that capacity building is critical, and stressed the need for partnerships between experienced water operators and public utilities in helping public operators deliver water services.

On financing, José Angel Gurría Treviño, former Finance Minister of Mexico and

incoming Secretary-General of the Organization for Economic Cooperation and Development (OECD), noted that although practices and commitments have been adopted, flows of financing have not occurred. Noting that only five percent of Official Development Assistance (ODA) is assigned to water while a twofold increase in financing levels is needed, he called for "a rallying cry to capture the imagination of world leaders."

On ethics, Pedro Arrojo Agudo, President of the New Culture of Water Foundation, stressed that access to drinking water is not so much a financial problem, but rather a political and democratic one. Drawing attention to the various values assigned to water, he said that part of the problem has been prioritizing profit over access to water as a human right.

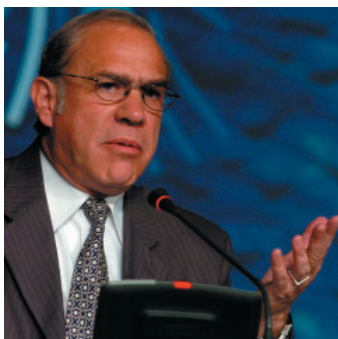
Sojo Garza-Aldape addressed the hidden costs of water service delivery and speculated on the implications of identifying these costs as a subsidy that mainly benefits high-income groups, underscoring the need for transparency in decision-making.

Julia Carabias Lillo, Programme on Water, Environment and Society, National Autonomous University of Mexico (UNAM)/El Colegio de México, said that experience in decentralization is scarce. She stressed the need for real participation to foster legitimate organizations.

Payen said that lack of consensus on a right to water stems from uncertainty surrounding its implications and stressed the need for dialogue. He stated that local governments are in the best position to implement water rights.

On actions that can be taken at the UN level, Manuel Dengo, Chief of Water, Natural Resources and Small Island Developing States (SIDS) Branch, UN Department of Economic and Social Affairs (UNDESA), said the problem is the absence of a mechanism that can accelerate the translation of global policies into actions that reflect local needs. He said local demands must meet top-level policies at a common point of agreement. Arrojo Agudo said grassroots solutions are often the most cost-effective and successful.

In closing, panelists reemphasized the need for capacity building, good governance, and action at the local level. Payen insisted that local governments cannot provide water and sanitation unless national governments provide the necessary frameworks. Sojo Garza-Aldape called for well-defined strategies, while Carabias Lillo encouraged the inclusion of binding commitments in the Ministerial Declaration.



José Angel Gurría Treviño, former Finance Minister of Mexico and incoming Secretary-General of the Organization for Economic Cooperation and Development (OECD)

## FRAMEWORK THEMES

The Forum's framework themes were addressed from Friday to Tuesday. Due to a large number of overlapping sessions, IISD coverage was limited to a selection from some 200 sessions organized under the following five themes: water for growth and development; implementing IWRM; water supply and sanitation for all; water for food and the environment; and risk management.

### WATER FOR GROWTH AND DEVELOPMENT:

Participants addressed the theme of "Water for growth and development" on Friday. Detailed *World Water Forum Bulletin* coverage of these discussions can be found online at: <http://www.iisd.ca/ymb/worldwater4/html/ymbvol82num10e.html>

**Keynote address:** Crown Prince Naruhito of Japan gave a keynote address on the history of water transport in Edo (now Tokyo), outlining the development of engineering solutions and their use in modern water infrastructure. He highlighted several water management and infrastructure projects, including an eastward diversion of the Tone River from Tokyo Bay into the Pacific Ocean, land reclamation through drainage, as well as the special relationship between people and water that has contributed to the creation of present-day Tokyo. He encouraged participants to draw inspiration from pioneering water management solutions throughout history as well as from local knowledge.

**Introduction to the framework theme:** Luis Alberto Moreno, President, Inter-American Development Bank (IDB), introduced the theme, stating that to achieve the MDGs, investments, especially in sanitation, are an urgent priority. He said changes in economic and political systems pose administrative and financial challenges, and advocated: universal access to water, combined with the promotion of efficient use; mechanisms to solve water-related conflicts; efficient financial structures to ensure reasonable prices for local communities; and subsidies to ensure maintenance of water infrastructure to limit water waste. He also recommended: well-regulated private sector involvement at the micro- and macro-levels; incentives to promote efficient financial administration; and attracting new financial resources while strengthening existing ones.



Luis Alberto Moreno, President, Inter-American Development Bank (IDB)

**European initiatives on water and poverty:** Several European initiatives were outlined, including the European Union's Africa, Caribbean and Pacific (ACP-EU) Water Facility, which seeks to improve governance, water services and sanitation in order to provide 10 million people with sustainable access to drinking water by 2010. The ACP-EU Water Facility projects in Benin and Haiti and their expected capacity-building impacts were described and the funding gap between national- and community-level water projects were also addressed.

**Dynamics of water and growth:** issues and political reflections: Participants discussed the concept of a "minimum platform," or threshold, that countries must acquire to achieve water security and emphasized that the poorest people must not be excluded from the full range of infrastructural and institutional options for achieving water security. They urged: the use of

environmentally sustainable, socially desirable and politically viable policy-making on water; strengthening of democratic institutions; respect for human rights; participation of local authorities; and consideration of not only local, but also global impacts of water infrastructure development. One participant called for greater awareness throughout the international community of the water crisis in Africa and another suggested that the water debate needs to be framed in terms of rights and risks, emphasizing that all water management entails costs and benefits and that good governance, multi-stakeholder scrutiny and options assessment are required in decision-making processes.

**Indigenous towns and water:** Participants discussed the need to: promote regional sustainable development for the benefit of marginalized communities; blend traditional skills with modern techniques; and promote the use of project assessment. They also encouraged actors to improve the coverage and quality of drinking water and sanitation services and to use a rights-based, as well as an integrated, approach to water management. One participant described the struggle of indigenous peoples in Bolivia against water privatization. Participants urged the use of efficient mechanisms to halt the depletion of major sources of water and stressed the need for local communities to play a primary role in water planning.

**Ensuring dams are a platform for growth and sustainable development:** Participants discussed benefits and controversies surrounding dams, the need for balanced actions, alternatives to dams, and licensing issues. They underscored that developing countries can least afford to make the mistakes of developed countries with respect to large infrastructure development and stressed the importance of a comprehensive, basin-wide, multi-stakeholder approach to dam planning. They also discussed: dams as a tool for providing water for growth and development and for achieving the MDGs; the use of dams for irrigation; and challenges in establishing efficient and transparent bottom-up approaches and involving all stakeholders.

**Findings of the Gurría Task Force:** GWP Chair Catley-Carlson introduced, and participants reviewed, the contents of the Report on Financing Water for All, prepared by the Task Force led by Angel Gurría, OECD. They noted its findings on: access to finance for local governments; the need for financing for water-related agricultural activities; and local implementation actions. They emphasized that: financing issues should be framed by demand rather than supply considerations; water financing issues should be prioritized on political agendas;

the role of local authorities should be strengthened; and unsustainable water practices in the agricultural sector should be phased out. Local government perspectives, issues regarding financing local authorities, and international donor experiences in water sector financing were also discussed. Participants also shared experiences on: synergies among the water, energy and sanitation sectors; “debt for water swaps”; small-scale, locally-funded sustainable projects; and partnerships with the public,



GWP Chair Catley-Carlson

private, and financial sectors. Task Force Chair Gurría announced that the work of the Task Force would continue after the 4th Forum.

**Water and energy:** Panelists underscored the need to develop energy systems that draw on a combination of renewable energy sources and highlighted the important role of hydroelectricity as a reliable source of power. They highlighted: different methods to reduce water consumption in electricity generation; the importance of synergies between hydro- and thermal power generation; alternative electricity generation technologies; and the importance of planning and participation in energy generation and delivery. The value of using appropriate technologies was also discussed.

**Business, water and sustainable development:** Panelists discussed various initiatives on sustainable water supply and services, including a private sector water purification pilot project, wastewater treatment and reuse activities, and efforts to support funding systems to improve the coverage of water services. They stressed that investing in water, sanitation and water resources management is good business and that each country needs to develop a “minimum platform” for water infrastructure and water security. Participants also noted that the needs of youth need to be taken into account and that a long-term vision for addressing water issues is needed.

**IMPLEMENTING IWRM:** On Saturday, participants addressed the theme of “implementing IWRM,” convening in plenary to hear a keynote address and an introduction to the theme. They also attended some 40 IWRM thematic sessions held throughout the day. Detailed *World Water Forum Bulletin* coverage of these discussions can be found online at: <http://www.iisd.ca/ywb/worldwater4/html/ywbvol82num11e.html>

**Keynote address:** Prince of Orange Willem-Alexander of the Netherlands highlighted growing awareness that the water crisis is a management crisis. He urged countries to continue to take action to develop IWRM and water efficiency plans, and said the need is not for new policies but for concrete action. Noting that his country has over 800 years of experience in water management, he stressed the need to share experiences and knowledge.

The Prince of Orange further highlighted the success of the European Water Framework Directive, a legislative instrument coordinating freshwater resources management in all EU member States. He said that achieving IWRM requires patience, and should build on multi-stakeholder involvement and integrated planning, while focusing on improving people’s quality of life. He advocated focusing on positive factors, including the many achievements of the GWP, encouraged the collation of best practices, and challenged participants to learn from the Forum’s outcomes and to use them to inspire actions on the ground.

**Introduction to the framework theme:** Katherine Sierra, World Bank, stressed that development that either undermines the environment or is socially unacceptable cannot be called



Prince of Orange Willem-Alexander of the Netherlands

development. Noting that water-related disasters receive significantly more attention than the world's chronic water problems, she stressed poor countries' vulnerabilities and called for increased investment in water control and development, combined with institutional development and community involvement.

Calling for global standards for social and ecological sustainability, she noted the importance of innovation and increased financial flows. Noting that all investments must be supported by robust regulatory systems and involve all stakeholders, she identified good governance as essential.

Sierra emphasized the need to involve local communities, share benefits and take into account local and indigenous knowledge. She also called for increased commitment by developed countries.

During the ensuing discussion, participants addressed: the definition of "water security"; the role of legislation; the importance of disaster prevention; the cost of not implementing IWRM; the need to involve civil society; the role of education and active participation of local communities; and the need to include social parameters in cost-benefit analyses, while ensuring a fair distribution of costs and benefits among stakeholders.



Katherine Sierra, World Bank

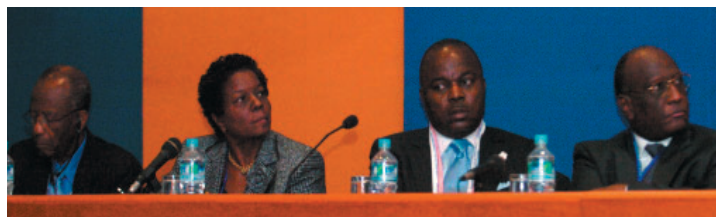
#### **Implementation of IWRM in national plans 2005:**

Presentations were made by 25 speakers, including on regional surveys of IWRM implementation carried out by the UN Environment Programme (UNEP), UN Economic and Social Commission for Western Asia, UN Economic and Social Commission for Asia and the Pacific (UNESCAP), Arab Water Council, Economic Community of West African States, and the Water Development Office of Martinique. There was a general call for: new approaches to water management, including decentralization and increased public participation; development of IWRM plans as part of broader national development plans; and increased donor support to countries lagging behind in the IWRM planning process.

Presentations also stressed the need for: poverty alleviation as the ultimate goal of IWRM; capacity building; participation of all stakeholders; strengthening the legal basis for basin management, including enforcement measures; and alternative private sector sources of funding.

The closing panel discussion addressed: IWRM as a process with important environmental, social and economic aspects; financial barriers for developing countries; the importance of central government endorsement of IWRM; and plans and strategies for cross-sectoral planning to ensure integration.

**Lessons learned on facilitating IWRM planning:** Several speakers noted that IWRM is a useful tool to mainstream water concerns into national development strategies, and that it contributes to achieving the MDGs. They also noted that IWRM should: aim at awareness raising, capacity building and sustained cross-sectoral and multi-level participation; induce a paradigm shift within government structures; address key legislative



Panel on Transboundary water management and regional integration in Africa

provisions; incorporate feasible actions and timeframes; mainstream a gender perspective; and address conflict prevention and resolution.

Participants discussed the need for: strong political will; local water partnerships to promote top-down and bottom-up information exchange; regional awareness workshops; acceptance of IWRM among water managers as well as global decision-makers; and exchange of technological knowledge and lessons learned.

**Transboundary water management and regional integration in Africa:** Presentations identified challenges regarding transboundary water management in Africa, including: economic and development challenges; the lack of basic legal frameworks that integrate customary laws and local mechanisms; ensuring transparency and accountability in governance; and involvement of stakeholders at all levels, particularly women.

Speakers highlighted achievements of the Nile Basin Initiative, the Niger Basin Authority, and the African Network of Basin Organizations (ANBO). After a brief discussion, participants approved several recommendations, including: increasing support for the IWRM process; establishing new, and strengthening existing, transboundary basin agencies; organizing a monitoring system for transboundary basins' water resources at the continental level; and considering the elaboration of an international African charter of waters.

**Integrated management and governance:** Several speakers said that the water crisis is largely a governance crisis typified by poorly organized institutions, weak legal frameworks, limited human and financial resources, corruption and lack of transparency, and limited involvement of major stakeholders in decision-making processes. They advocated: reconciling diverse stakeholder interests; establishing responsibilities and clear indicators for monitoring, evaluation and reporting; adapting to local circumstances, including through using local expertise with minimal new infrastructure; defining the roles and responsibilities of local governments; improving capacity building and empowerment of youth; developing legal frameworks for effective interaction between national and local policies; and establishing clear mechanisms for financing, coordination and infrastructure renewal.

**Challenges of legal sector reforms:** Presentations advocated: adopting the "polluter pays" principle and the ecosystem approach; using flexible norms and incorporating local proposals into legislation; strengthening political will, building trust, and addressing reluctance to adjust legal frameworks and difficulties in reaching agreement across all sectors; and developing legislation that responds to public needs and incorporates wide environmental and social considerations.



Participants also addressed: the involvement of all stakeholders, including local authorities and institutions; the transfer of financial resources from national to local levels; the effects of global environmental problems such as climate change; and effective public participation in the elaboration of laws.

**The role of water and IWRM in the achievement of the MDGs:** Participants discussed the outcomes of the 2005 World Summit calling on all countries to prepare MDG-based national development strategies and urging the implementation of IWRM plans and strategies in these national plans. On progress in achieving the MDG water supply and sanitation targets in Africa, one speaker advocated a Pan-African, country-owned, regionally supported water supply and sanitation MDG “roadmap” to provide a common framework and enable the tracking of progress towards the MDGs.

Participants stressed the importance of: strengthening coherence between planning and budget processes; supporting national policy dialogues; mobilizing resources; developing frameworks for monitoring; making an economic case for IWRM by using quantifiable data, involving finance and economic planning ministries, and allowing the media to play a role; and understanding other sectors’ requirements.

Participants further discussed: how the informal sector can be brought into IWRM plans; the need for dialogue addressing IWRM in conjunction with other MDG issues; and the role of civil society in IWRM implementation.

**Transboundary basin management:** Participants advocated: the wide adoption of a new water culture; joint planning and a common vision; public participation in water management; database development and monitoring; local expert training and delegation of responsibility; international cooperation; protecting water and ecological resources through, *inter alia*, wetland restoration and pollution reduction; international coordination in parallel with national implementation; respect for the human right to water; and the ecosystem approach.

One participant discussed transboundary water management in Africa, recalling several recommendations, including: supporting transboundary basin agencies; establishing observation and monitoring systems; improving education and awareness; and increasing user participation. Regional agreements on transboundary water management, which aim at developing legal instruments, common visions and objectives, and contributing to sustaining peace, were also highlighted.

**IWRM in federative countries:** Presentations focused on the need to: consider diplomacy and dialogue as major IWRM challenges for federations; apply the “polluter pays” principle; ensure adequate technical and financial means; and recognize the tourism and recreational potential of watershed management.

Participants also discussed: potential lawsuits and provincial-state-federal conflicts, limits of the participatory approach given water deficits, and incorporating the precautionary approach in IWRM.

**WATER SUPPLY AND SANITATION FOR ALL:** This framework theme was addressed on Sunday and coincided with the launch of the UN Human Settlements Programme (UN-HABITAT) report “Achieving Global Goals in Small Urban Centers: Water and Sanitation in the World’s Cities,” which addresses water and sanitation needs in rapidly growing small urban settlements, where a quarter of the world’s population lives and where local communities can barely afford clean piped water

and adequate sanitation. Detailed *World Water Forum Bulletin* coverage of these discussions can be found online at: <http://www.iisd.ca/ywb/worldwater4/html/ywbvol82num12e.html>

**Keynote address:** In her keynote address, Anna Tibaijuka, UN-HABITAT Executive Director, described a vision of the world where everyone can access safe water and basic sanitation. She expressed support for the 4th Forum’s focus on local actions, saying that water and sanitation conflicts have to be resolved at the local level. She cited urbanization as a core public issue in gross neglect, and noted that the MDG targets are not being met. She also said that the water supply and sanitation crisis has to be viewed as a crisis of governance, and urged sound policies and country-level poverty reduction strategies to reflect the MDG targets on water, sanitation and human settlements. Tibaijuka lamented that Africa is not on track to meet the MDGs and, noting that donor funding for water and sanitation is declining, she called for implementation of policies to assist developing countries. She addressed the need for “quick impact” initiatives, such as the Lake Victoria Region Water and Sanitation Initiative, and highlighted the challenge of developing monitoring mechanisms that reflect the voices of poor communities.



Anna Tibaijuka, UN-HABITAT Executive Director

**Water rights:** Three thematic sessions addressed the issue of water rights.

Using rural and urban case studies from Mexico, the session on the human right to water explored, *inter alia*: extra-curricular educational and awareness-raising activities that help children in rural communities explore the right to life; an urban neighborhood project that seeks to facilitate the right to housing and water and entails the conservation of water through rooftop rainwater collection; and commonalities between urban and rural experiences in trying to ensure the human right to water.

The session on civil society perspectives on securing the right to water presented several cases of indigenous and local groups’ struggles against privatization of water services and popular campaigns for an integrated sustainable water plan. Among other things, participants: stressed the importance of the International Covenant on Economic and Social Rights as a mechanism requiring governments to implement the right to sufficient and clean water; noted convergence in discourses between civil society and some major institutions at the 4th Forum, including on recognizing the right to water for all and shortcomings of public-private partnerships; and highlighted that water has a profound spiritual significance and is essential for justice and peace.

The session entitled “Right to water: What does it mean and how to implement it?” addressed challenges surrounding the right to water and sustainable natural resources management. The presentations highlighted a number of international and national legal instruments that recognize the right to clean water. Participants addressed the need to identify the rights and responsibilities of public authorities and users, and identified challenges, including non-payment by those who can afford to



Panelists during the Forum framework theme of "Public policies for water and sanitation services"

pay, and lack of capacity at local level. WWC President Fauchon presented the WWC report "The right to water: what does it mean and how to implement it?" noting that it identifies necessary conditions for guaranteeing the right to water and calling for an expanded dialogue.

**Public policies for water and sanitation services:** Several successful cases of public participation and decentralization in the water sector were presented during this session. New financing schemes and private sector involvement were also described. Common themes emerging from the presentations included the importance of clear and transparent rules, defining the roles of different actors, developing regulations for operator services, and improving local governance.

**Delivering on the MDGs in three years: a model-setting regional initiative:** This session introduced the Lake Victoria Region Water and Sanitation Initiative, a partnership formed in 2004 among the governments of Kenya, Tanzania and Uganda and UN-HABITAT to deliver water and sanitation services to secondary urban centers around Lake Victoria. The initiative was designed to show that the MDGs can be met with modest investments and often through improvements to existing infrastructure. Participants also presented a number of experiences in sustaining new investments in water and sanitation for small towns through capacity building, cross-subsidies and the application of affordable consumption tariffs. Noting the importance of engaging communities in water and sanitation, several panelists emphasized the inclusion of women and children and the importance of such initiatives to rural development and slowing urbanization.

**The public-private controversy in water and sanitation: lessons in light of the MDGs' requirements:** The session examined privatization attempts in Bolivia and in Brazil as well as findings from a research programme on barriers and conditions for private investment in water supply and sanitation. These findings show that: in most cases private funds are a small percentage of investment; privatization requires public funding; and the private sector is not more efficient than the public sector. Panelists drew attention to chronic weaknesses in the regulatory ability of states *vis-à-vis* the private sector, leading to difficulties in follow-up and to non-compliance with legislation; problems regarding lack of transparency in decision-making and operations; unfair bidding practices; and inequitable, profit-oriented policies. They underscored that water scarcity is an institutional and political problem and stressed that the limits of market mechanisms must be recognized.

**Safe drinking water for all:** This session addressed water safety plans, noting their benefits, such as access to safe drinking water at low cost, as well as constraints for implementing them, including a lack of trained personnel and water management agencies' reservations in making new assessments. A number of

presentations drew attention to how the engineering community can help develop sound water management. One panelist proposed a solution for cleaning up Mexican lagoons through the installation of water treatment plants upstream that would be powered by tidal energy.

**Public state policy impact on drinking water service delivery supply and sanitation for urban use:** This session elaborated on public water policies in different Mexican states, noting that given the different local characteristics of water problems in each Mexican state, solutions cannot follow a single pattern. Panelists agreed on the importance of decentralization, highlighted the problem of compliance, and noted several disconnects between policy and practice. They also urged public policy to focus on and invest in water systems' efficiency rather than building new infrastructure, which is less profitable and often triggers environmental and social problems.

**Service delivery and local empowerment: turnaround of public utilities:** This session presented cases of efficient public water utilities from Uganda, Honduras, Zambia and Mexico. Common themes emerging from the presentations included the importance of: flexibility to ensure innovation and financial sustainability; public participation in and awareness raising on decentralization; transparent regulation of system providers; and investing in strengthening institutions. Participants also highlighted the difference between regulating water resources and water supply and sanitation.

**Desalination of seawater in the Middle East:** This session explored desalination of seawater as a solution for meeting future freshwater demands. In addition to explaining the technical processes of desalination, outlining the history of desalination, describing efforts to expand desalination activities, and commenting on the potential for future growth, one participant presented a research project on sea and brackish water desalination through renewable energy in Mexico. Participants discussed the environmental impacts of desalination and seawater pollution, noting that development of this technology must be cost-effective and environmentally friendly.

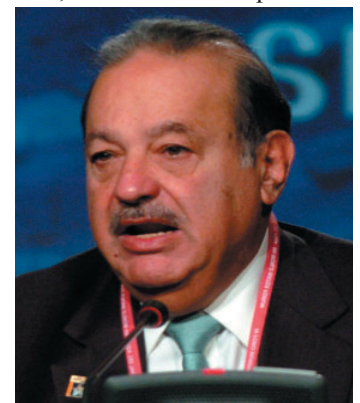
**WATER FOR FOOD AND THE ENVIRONMENT:** On Monday, participants addressed the theme of "Water for Food and the Environment," convening in plenary to hear a keynote presentation and an introduction to the framework theme. They also attended thematic sessions held throughout the day. Detailed *World Water Forum Bulletin* coverage of these discussions can be found online at:

<http://www.iisd.ca/ymb/worldwater4/html/ymbvol82num13e.html>

**Keynote address:** Carlos Slim Helú, Chairman of Grupo

Carso, provided a historical overview of water distribution, the climatic changes affecting it, and humankind's relationship with water. He stressed that in today's service-based economy, there is an urgent need for investments in the water sector and for cultural change.

Addressing the water situation in Mexico, Slim Helú noted that the water problem is fundamentally an investment problem and proposed the creation of an autonomous water



Carlos Slim Helú, Chairman of Grupo Carso



agency outside the national budget in the form of a public-private partnership. He said this public service would operate under the scheme of cost subsidies, highlighting the importance of subsidizing lower-level consumption and noting that businesses would pay the actual rate. Slim Helú said there would not only be a strong business case for this, it would also be an environmentally and socially viable option.

In the ensuing discussion, participants addressed: rooftop rainwater collection; flood management; leakages in water infrastructure; and the political viability, technical expertise, and participatory mechanism of the proposed autonomous agency. Emphasizing that payments for water alone will not solve the water crisis in Mexico, several participants stressed the importance of technology and raising awareness about water conservation. Slim Helú acknowledged the importance of awareness but insisted that the basic problem is water supply and treatment rather than consumption.

**Introduction to the framework theme:** Louise Fresco, UN Food and Agricultural Organization (FAO), argued that there can be no solution to water issues without tackling agriculture and poverty. She noted that agriculture is the most important user of water and that 70 percent of the world's poor live in rural areas, thus depending on agriculture. Arguing that agriculture can keep pace with the world's demographic growth and that agricultural productivity is dependent upon water productivity, she predicted that the 70 percent increase in global food production required to meet the demands of the world's growing population can be done with only a 14 percent increase in water use. She underscored the importance of farmers' participation in agricultural, environmental and water discussions, and said that adequately addressing water problems will require an integrated approach and private and public investments in the agricultural sector.

**Financing water for agriculture:** Jim Winpenny, GWP consultant, introduced a progress report prepared by the Working Group on Financing Water for Agriculture, which is comprised of representatives from the GWP, WWC, FAO, World Bank and others. He said future needs include modernizing and rehabilitating existing irrigation systems and upgrading rain-fed and groundwater systems. Encouraging non-traditional funding sources, he said the report calls for: functional government funding; selective ODA; harmonized engagement of international financing institutions; and increased cost recovery.



Jim Winpenny, GWP consultant

Other speakers identified the importance of:

- addressing macro-economic factors such as population growth, urbanization, changing lifestyles, and trade globalization;
- investing in participatory governance frameworks;
- open, competitive and transparent procedures;
- risk sharing by private and public funds;
- low-cost and adequate technologies, including recovered indigenous technologies;
- capacity building, including for farmers;

- quantifying and valuating ecosystem services; and
- sharing innovation costs.

In the ensuing discussion, participants addressed: using wastewater for irrigation and financial schemes to facilitate this; the need to address indigenous peoples' interests; linking land and water resources management to prevent deforestation and land degradation; and reducing farmers' risks in the face of globalization.

#### **Water challenges and perspectives in megacities:**

Participants described experiences in water management in several megacities, including Los Angeles, Beijing, Mexico City and Calcutta. They identified as challenges: decreasing supplies of surface and groundwater; the need to upgrade water works; pollution; and a lack of synergies among water, land-use and environment planning. They stressed the need for: urgent investments, including in the promotion of rainwater harvesting, infrastructure development and maintenance, and ecosystem rehabilitation; coordination among municipalities; and public awareness of water conservation. One speaker called for the establishment of a task force on sanitation under the World Water Forum umbrella.

#### **Improving agricultural water productivity in dry areas:**

Noting that more than one billion people live in dry areas, more than half of whom depend on agriculture for their livelihoods, panelists in this session underscored the need to consider productivity not in terms of yield per area of land but in terms of yield per volume of water input.

Presentations focused on the importance of: science and technology within an appropriate policy framework; considering both the biophysical and socioeconomic components of water productivity; the role of improved management practices; and a broader approach to water productivity in agriculture.

#### **Governance as a key factor for IWRM in megacities:**

Aiming to identify characteristics of good governance for IWRM in megacities, presentations addressed: strong networks; involving politicians; good public information; close contacts between stakeholders; recognizing water's role in development and poverty alleviation; and creating clear and transparent water management legislation. One speaker noted that both public and private utilities must have legal authority, control over tariffs, and enforcement mechanisms.

Several speakers described efforts to improve water-use efficiency and reduce consumption in megacities, including through rate structures, irrigation with treated water, water-saving devices, environmental education; information and knowledge exchange and dialogue; monitoring; and stakeholder cooperation.

In the ensuing discussion, participants inquired about: water-saving techniques; stakeholder participation in governance; inclusion of sanitation costs in water tariffs; and payments for ecosystem services.



Panelists of the "Governance as a key factor for IWRM in megacities" session



Panelists of the "Water education for children and youth" session

**Water education for children and youth:** Presentations focused on various programmes and projects taking place throughout the world as part of Project WET (Water Education for Teachers), an environmental education programme focusing on water, and which aims to establish a network of teachers educating teachers.

Speakers described several project examples, including in Mexico and the US, noting that they: reach not only children, but also parents and communities; aim to reach a wide range of stakeholders; and should be combined with local action. Addressing challenges, speakers highlighted that: school curricula often need updating to reflect new water agendas; changing people's attitudes towards water management begins with early education; education is a tool for building cooperation that can help reduce conflict over transboundary waters; and replicating these experiences in other countries requires specific adaptation.

**Virtual water in the Arab region:** One panelist defined virtual water as the water used to produce crop commodities, and explained that virtual water is traded when countries import crop commodities. Underlining that food security does not mean self-sufficiency, but rather the ability of a government to ensure physical and economic access to food for its citizens, it was noted that including consideration of virtual water in crop commodities could help water-scarce countries to achieve food security.

Speakers presented different success stories, stressing the need to: ensure efficient transport between water-abundant and water-scarce countries; include rainwater consumed directly by crops (i.e. "green water") in virtual water calculations; address subsidies, price distortions and international market competition; invest in technological solutions; and take into account global socioeconomic processes.

**Struggle for a new water culture in Latin America and Europe:** Defining a new water culture as one that calls for "eco-friendly" and sustainable management of water, and unites citizens' actions against the renewed trend towards water mega-projects, speakers described the historically strong public opposition to the construction of large dams and privatization of water resources in Europe, which is inspiring a worldwide scientific and social debate. One speaker called upon the EU to adopt a coherent approach with respect to subsidizing large infrastructural projects, noting that these projects often fail to comply with EU policies. Others stressed the importance of political will and judging infrastructural projects on a case-by-case basis.

**Payment for environmental services:** One panelist explained the concept of payment for environmental services, saying it is based on two principles: users must pay for the environmental services they enjoy, and suppliers must be compensated for delivering them. He noted this implies a "win-win" situation insofar as it is based on common interests, and identified efficiency and sustainability as its main benefits.

Speakers highlighted national case studies and stressed the need to: internalize and take into account environmental costs in economic, agricultural and other policies; raise awareness among governments and other stakeholders on the economic and social value of conserving natural resources; strengthen institutions and enhance synergies; build capacity; and promote monitoring and transparency.

During the ensuing discussion, participants addressed, *inter alia*: determining land tenure; participation of indigenous people and the poor; programme continuity between government administrations; reaching equilibrium between supply and demand for environmental services; payments for indirect environmental services; and determination of payment levels.

**Capacity development strategies and social learning:** Several speakers noted that investments in developing countries should be combined with capacity building and emphasized that the ongoing paradigm shift in the water sector requires flexibility and adaptability. They also identified lessons learned, stressing the importance of: promoting dialogue between institutions and communities, awareness raising and technical support; focusing not only on technical know-how, but also on social and economic aspects; stakeholder involvement; project continuity and sustainability; communicating project benefits to receive support from communities; scaling-up knowledge and incorporating it into decision-making processes; and replicating successful projects to achieve results on a large scale.

**RISK MANAGEMENT:** On Tuesday, participants heard a keynote address by Mario Molina, 1995 Chemistry Nobel Prize Laureate, on the theme of "Risk Management" and met in thematic sessions on this issue. Detailed *World Water Forum Bulletin* coverage of these discussions can be found online at: <http://www.iisd.ca/ywb/worldwater4/html/ywbvol82num14e.html>

**Keynote address:** Mario Molina, 1995 Chemistry Nobel Prize Laureate, addressed the inter-relationship between global warming and the water cycle. He described the greenhouse effect, highlighting that atmospheric levels of carbon dioxide have risen dramatically over the past century due to the use of fossil fuels and that 2005 was the warmest year in the past 100 years. Molina underscored the dramatic impacts of climate change on the water cycle, noting feedback mechanisms that will stimulate temperature increase, including through a decreased reflection of solar energy due to the melting of glaciers, and increased cloud cover that will exacerbate the greenhouse effect. He predicted that the water cycle will intensify, causing extreme weather events such as hurricanes and increasing the frequency and severity of droughts and floods. Highlighting the significant probability that if no action is taken, the average global temperature will rise by eight degrees Celsius by 2100, he said this as an "intolerable risk."



Mario Molina, 1995 Chemistry Nobel Prize Laureate

**Introduction to the framework theme:** Michel Jarraud, Secretary-General of the UN World Meteorological Organization (WMO), noted that most natural disasters are meteorologically

induced, and emphasized the importance of risk management that focuses on preparedness rather than response.

Carl Strock, Commander of the US Army Corps of Engineers, highlighted recent disasters including the 2004 Indian Ocean Tsunami and the 2005 Hurricane Katrina, emphasized that all countries can be affected, and said that lessons learned can be applied globally.



Carl Strock, Commander of the US Army Corps of Engineers

#### Global climate change

**and urban flood mitigation:** Participants discussed various phenomena, such as El Niño and tropical deforestation, which affect climate scenarios. They stressed the importance of: partnerships at the community level; community-based and participatory initiatives that integrate climate change concerns; community participation in disaster prevention measures to ensure public awareness; mobilizing vulnerable local communities; and short-, medium- and long-term hydrological participatory planning. Panelists also discussed challenges of maintaining long-term continuity within water policies; pollution and overexploitation of groundwater; and the need to strengthen environmental policy and analyze environmental problems at the local level.

**Hurricane Katrina and other major water-related disasters:** The impacts of 2005 Hurricane Katrina and the 2004 Indian Ocean Tsunami were described by various participants. They encouraged: international cooperation; the use of early warning systems and public awareness; and increased planning, education and information dissemination. They also stressed the critical role of protection systems, IWRM, citizen participation and better communication, and highlighted activities including armoring of levees and coastal wetland restoration.

**Sustainability of water and sanitation services in the context of disaster risk reduction:** Participants reviewed the “Hyogo Framework for Action: 2005-2015,” which was adopted at the 2005 World Conference on Disaster Reduction to help countries develop strategies for natural disaster risk management. They emphasized the need to: shift from emergency relief approaches to developmental approaches in disaster-prone regions; rehabilitate infrastructure and develop increased groundwater pumping capacity as risk reduction strategies; involve local communities in preparedness and relief actions; ensure a minimum level of water and sanitation services during emergencies; improve cross-sectoral coordination; and promote education and training.

**Groundwater and risk management:** Participants stated that groundwater tends to be undervalued and its dynamics poorly understood, and that groundwater can be a cost-effective and reliable source of water that can help meet the needs of the poor, especially women. They noted that groundwater serves many functions that are now at risk due to human pressures, climate change and disasters, and highlighted that reinforcement of embankments, construction of dams and artificial ponds and increasing land absorption capacity are strategies that have been

used to reduce the impact of extreme events. The effects of the 2004 Indian Ocean Tsunami on coastal groundwater and solutions to deal with similar situations were also discussed.

**Flood management:** Participants stated that flood management is a long-term challenge and emphasized the need for integrated flood management techniques, stressing the importance of: strong legal frameworks; emergency plans for preventing floods and flood regulation; flood risk mapping; inundation control facilities; preparations for smooth evacuations; and capacity building for effective relief, recovery and reconstruction.

#### Role of dams and reservoirs in integrated flood

**management:** Participants encouraged the use of a coordinated, integrated approach to mitigate the impact of floods through structural and non-structural measures, and underscored the need for forecasting and warning, legal regulation, land-use planning, ecosystem conservation and poverty alleviation. Some participants noted that there is a risk that dams that are not designed to accommodate larger floods could break, and that dams inhibit the beneficial aspects of floods, such as sedimentation. They suggested: managing floods as part of IWRM; favoring non-structural measures; restoring river flows, floodplains and wetlands; controlling urban development; improving dam design and operation; and developing early warning systems. Other participants noted: that dams have proved to be an effective measure to protect the population; positive experiences with infrastructure, such as dams and floodplain reservoirs; the need to use the opportunities created by flooding; and shift from flood control to flood management strategies.

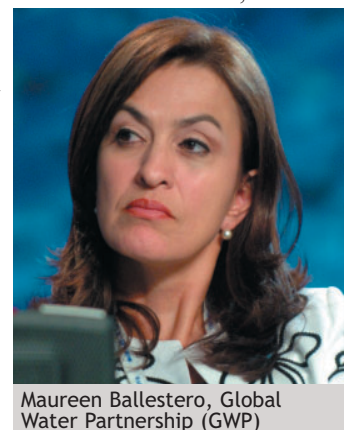
**Reducing human loss of life caused by water-related disasters, including tsunamis and landslides:** Participants described the impacts of the 2004 Indian Ocean Tsunami, the 2005 Hurricane Katrina, and the 2006 landslide in the Philippines. They emphasized the need for: comprehensive multi-hazard vulnerability risk assessments; public awareness and knowledge sharing; advanced climate studies; dissemination of tsunami disaster and disaster prevention information to civil society; community-based early warning and evacuation systems; and practical strategies for risk management.

## REGIONAL PRESENTATIONS

Five regional presentations took place from Friday to Tuesday, highlighting regional and national developments in water management and governance, and progress made towards the achievement of the MDG targets.

**AMERICAS:** Benedito Braga, WWC Vice-President, opened the America’s regional presentation. Abel Mamani, Bolivia’s Minister of Water, noted that advance negotiations on the draft Ministerial Declaration of the 4th Forum did not reach consensus and urged including in the Declaration a provision relating to the human right to water.

Maureen Ballestero, GWP, presented the regional document for the Americas. She said water is vital for the region’s



Maureen Ballestero, Global Water Partnership (GWP)

economic and social development, which must go hand-in-hand with proper management and sustainability, and emphasized the need to achieve a balance between “hard” and “soft” components of infrastructure. She highlighted advances in several countries’ implementation of the WSSD commitment to developing IWRM and water efficiency plans by 2005, in particular through approaches such as payments for ecosystem services. She noted that sanitation services vary across the region and that treating wastewater remains a major challenge for some Latin American countries. She said that while preventive measures have improved, capacity building for risk management remains a priority.

Jorge Mora Portugués, Central American Network for Water Action, highlighted the establishment of an Advisory Board of the Americas and called for continued participation of all sectors, increased economic investments, and continued dialogue and efforts to establish water as a priority in public policy.

Abel Mejía, World Bank, noted the lack of resources to integrate legislative structures and water infrastructure in the region, but expressed confidence that management will improve substantially by 2015. He called for decentralization and sustained efforts to maintain water supply for cities.

Antonio Vives, IDB, emphasized that water is not a common marketable good. He also called for collaboration in exploring options for finding resources, including in areas that may be self-financing.

Scott Vaughan, Organization of American States, highlighted progress in identifying what constitutes good governance, and drew attention to addressing climate change and climate variability, stressing the need to include risk assessment in development plans.

**EUROPE:** Michel Rocard, former Prime Minister of France, stated that the political will to tackle water issues is hampered by the fact that the timeframe for resolving these problems extends well beyond politicians’ mandates. He also noted that governments not only have to change laws but also the behavior of their citizens.

Forum Co-Chair Fauchon noted that 41 million Europeans do not have access to safe water and that more cooperation and technology exchange is required within Europe.

André Santini, President of France’s Seine-Normandy Basin Organization, highlighted a French scheme in which a portion of the water budget is devoted to water development in Africa.

Benoît Lugen, Belgium’s Minister of Environment, stressed the need for better communication with water users and the need to create financial mechanisms and regulatory frameworks.

Cristina Gutiérrez Cortines, Member of the European Parliament, noted that Europe lacks a drought policy and urged the development of long-term policies to enable more water sharing.

Marina Makarova, Environment Ministry of Georgia, stressed the need for international cooperation to address research and financing limitations.



Jorge Mora Portugués, Central American Network for Water Action

During a general discussion, participants emphasized that: fair water use requires equitable, participatory and integrated management; water basins should be managed within their natural boundaries through international cooperation; water can become a catalyst for peace and security; and access to water and sanitation for all can only be achieved through solidarity and increased commitment by all stakeholders.

Panelists noted that Europe should promote community-based disaster risk reduction in developing countries, rather than paying for post-disaster emergency relief efforts, and discussed: the need for public funds for wastewater treatment; the potential benefits of decentralized water treatment systems; and the need for integrated and adaptive solutions to address water scarcity, urbanization, rural development and risk mitigation.

**AFRICA:** Maria Mutagamba, Uganda’s Minister of State for Water and President of the African Ministerial Conference on Water (AMCOW), noted that while Africa appreciates aid, trade has more potential to reduce poverty.

Forum Co-Chair Fauchon acknowledged the positive work conducted by African organizations including AMCOW and the African Water Facility, highlighted the importance of technology, and called for the creation of an emergency task force to ensure appropriate aid delivery.

Kordjé Bedouma, Director of the African Water Facility, presented the Africa regional report, noting that 300 million Africans currently lack access to basic water and sanitation. He said the report’s key message is that Africa must build water infrastructure, including large dams, to achieve the MDGs and sustainable development. He also prioritized action on water governance and transboundary water management, and urged the international community to enhance its support to the continent.

Josué Dioné, UN Economic Commission for Africa, said the processes that countries underwent in contributing to the regional report should be mainstreamed into national policy-making procedures.

Haoua Outman Djame, Minister of Water and Fisheries of Chad, highlighted the African Ministerial Declaration to the 4th Forum, which calls, *inter alia*, for improving infrastructure, environmental protection, transboundary water management, IWRM, and early warning systems for natural disasters.

Anna Tibaijuka, UN-HABITAT Executive Director, stressed the need to address urban water issues and announced the signing of a Memorandum of Understanding with the African Development Bank for the release of approximately US\$ 550 million for meeting the MDG water target in Africa.

Jamal Saghir, World Bank, discussed water infrastructure development in Africa, stressing the extent of infrastructure challenges ahead and the links between water and poverty.

Noting that France has committed to doubling its efforts in water and sanitation, Jean-Christophe Deberre, French Ministry of Foreign Affairs, discussed the role of external support agencies



Maria Mutagamba, Uganda’s Minister of State for Water and President of the African Ministerial Conference on Water (AMCOW)

in water development in Africa. He stressed the need for effective follow-up efforts, collective action, intelligence gathering and mobilization.

Michel Jarraud, WMO Secretary-General, described the extreme impacts of droughts and floods in Africa and their links to climate change. He also stressed the need to recognize, forecast and plan for these impacts and to monitor and gather accurate information to effectively assess, manage and mitigate risk.

African children delivered a message to the 4th Forum, urging participants to work with them as future leaders of Africa in delivering water to the continent.

**MIDDLE EAST:** Mokhtar Bzioui, WWC, noted that the region's water potential is the lowest in the world and is declining. He said challenges include improving financing, governance and water-use efficiency.

Mahmoud Abu-Zied, AWC President and Egypt's Minister of Water Resources and Irrigation, described the region's broad consultative process in preparation for the 4th Forum, highlighting the involvement of scientists and civil society.

El Mahdi Ben Zekry, Morocco's Deputy Secretary of State for Water, said the region is characterized by precarious water resources, low average rainfall and excessive evaporation, and is distinguished by a history of great ancient civilizations that developed around the exploitation of water resources.

Noting that the region has the world's lowest per capita share of water, which is further declining, with absolute scarcity expected by 2025, Abu-Zied presented the region's major challenges and underscored the need for improving governance, financing, and supply management balanced with sustainable development.

Adel El-Beltagy, Director General of ICARDA, stressed the importance of improved reliability and accountability in service delivery. He called for a sustained level of investments and further research on novel methods of irrigation and water harvesting.

Adel Bushnak, Bushnak Water Group, discussed non-conventional water resources, including brackish groundwater used for irrigation, and highlighted examples of successful public-private partnerships in the region.

Inger Andersen, World Bank, called for improved institutional frameworks and accountability mechanisms to enable optimal use. She advocated South-South learning and environmental stewardship.

Hideaki Oda, Japan Water Forum, recalled information-sharing experiences between his country and the Arab region in the context of the 3rd Forum, including on an innovative cost-sharing mechanism between upstream and downstream regions in the Nile basin.

Amadou Boubacar Cisse, Islamic Development Bank, said the water sector remains largely underfunded, drew attention to the institutional inertia that characterizes water governance, and called for reform.



Michel Jarraud, WMO Secretary-General

**ASIA-PACIFIC:** Ryutaro Hashimoto, former Prime Minister of Japan and President of the 3rd Forum, said the region's diversity has been an asset, rather than an obstacle, to finding solutions to water problems. He officially launched the Asia-Pacific Water Forum, established by ministers from the Asia-Pacific region.

Kim Hak-Su, Executive Secretary of UNESCAP, identified IWRM and risk management as UNESCAP's two areas of priority action, and stressed that Asia is the world's most disaster-prone area.

Geert van der Linden, Asian Development Bank (ADB), noted that many countries have developed national water management strategies and indicated that the ADB will double its water and sanitation investments by 2010.

Datuk Keizrul Bin Abdullah, GWP, presented on the Asia-Pacific Water Forum initiative, and identified its three priorities: increasing investment in water and sanitation; reducing the vulnerability of human populations to water-related disasters; and conserving and improving water productivity through conservation and restoration activities.

Hafiz Uddin Ahmed, Minister of Water Resources of Bangladesh, said the Asia-Pacific Water Forum should strive to provide 100 percent safe water access and sanitation coverage in the region and reduce the vulnerability of people to water-related disasters.

Abdukokhir Nazirov, Tajikistan's Minister of Land Reclamation and Water Resources, highlighted the potential of the 2005-2015 UN Decade "Water for Life" and reiterated Central Asia's commitment to strengthening water cooperation in the region for the achievement of the MDGs.

Kay Kalim Kumaras, Ministry of Environment and Conservation of Papua New Guinea, highlighted regional initiatives such as the Pacific Islands Action Plan for Sustainable Water Management and the Joint Programme of Action on Water and Climate.

## OTHER SESSIONS

**PARTICIPATION OF MEXICAN MAYORS:** On Friday, several Mexican State representatives took part in a day-long session on experiences in water management in Aguascalientes, Baja California, Durango, Mexico City, Nayarit, Veracruz, Quintana Roo, Guanajuato, Tabasco, and San Luis Potosí. Forum Co-Chair Jaime Jáquez moderated the panel discussion.

Participants stressed the importance of coordination among all levels of government and of local participation. They also highlighted the need for bilateral communication and cooperation



Panel of Mexican Mayors

regarding the management of transboundary watersheds, the use of a long-term vision and an integrated approach, decentralization and working with able and willing municipalities, inter-State collaboration, and education programmes. They emphasized that water is a common good that needs to be managed in close collaboration across different levels of government and that rainfall catchment and treatment of residual water can allow sustainable water use.

The discussion also touched upon: access to drinking water and payment for water services by people living in unplanned settlements; whether the pricing of water services should be the responsibility of water operators or governments; and States' policies on renewable energy and efficient water use in new buildings.

Participating Governors and Mayors further called for: a cultural change towards a sustainable use of resources; international funding to States and municipalities for infrastructure development; and supplementary actions, such as sustainable forestry and watershed management.

**EMPOWERMENT AND DEMOCRATIZATION MULTI-STAKEHOLDER PANEL:** This panel, held on Tuesday, was part of the Empowerment and Democratization Project, the aim of which was to present to the Forum examples of local actions that resulted in concrete and substantial local change. The Project encompassed: an overview of nine case studies of local empowerment and democratization; two preparatory workshops held during the Forum on Saturday and Tuesday, where local actions were presented and key messages and questions were prepared; and a multi-stakeholder panel session to summarize the results. The outcomes of the panel were then presented to the ministerial roundtable on decentralization and integrated as a distinct element in the Forum's final report.

During the panel session, nine case studies on local empowerment and democratization were presented, and panelists elaborated on lessons learned from these case studies, such as the importance of building on existing processes, generating multiple technical and political capacities, and building co-responsibility. Common themes emerging from the discussion included: the observation that empowerment and democratization are demand-driven processes; the need to understand local and social dynamics; the need for dialogue and networking; the importance of an enabling and enduring environment; and the importance of linking social and institutional change. Panelists further noted that as empowerment and democratization processes mature, they start to scale up and have impacts on policy, but stressed that allowing adequate time is essential. They also noted that although empowerment and democratization are two sides of the same coin, they are not always linked.

**INTERGENERATIONAL DIALOGUE:** On Tuesday, adult and children panelists engaged in an animated debate on water, sanitation and education issues.



Intergenerational dialogue panel

Participants lamented that 400 million children worldwide lack access to safe drinking water, and that while children represent half of the world's population, some six million will not make it to their fifth birthday at the current rate of water-related deaths.

Children representatives from Japan, Kenya, Laos, Mexico, and the US presented their local actions on water, sanitation and hygiene in schools.

Throughout the dialogue, children raised the following questions: why many children in developing countries must sacrifice education in order to fetch water; what actions are going to be taken to address the dire water and sanitation statistics; how children's proposals will be incorporated into the 4th Forum follow-up process; and what type of support will be given to children's projects worldwide. A young representative from Africa called upon governments to support the Children and Youth Alliance for Water and Sanitation launched at the 3rd Forum.

The adult panelists, representing governments of Malawi, Ethiopia, Japan, and Mexico, as well as UNEP, UN Children's Fund (UNICEF) and the World Bank, pledged their support to children's actions, and urged young participants to "raise their voice" and "claim their rights to clean water, sanitation and education."

## MINISTERIAL CONFERENCE

The two-day Ministerial Conference, which convened in parallel with the Forum, opened on Tuesday, with ministers and high-level officials from some 140 countries gathering in both closed and open sessions, including dialogues and roundtables.

### OPENING OF THE MINISTERIAL CONFERENCE:

On Tuesday, José Luis Luege Tamargo, Mexico's Secretary of Environment and Natural Resources, underscored the obligation to offer access to safe and clean water to all citizens, stressed the importance of focusing particularly on the local level, and emphasized the need for greater capacity and certainty for access to financing and investment.

Highlighting that the 4th Forum had been characterized by open debate and respectful dialogue, and drawing attention to governance issues, Loïc Fauchon, WWC President, urged participants to affirm the right to water. Fauchon also announced the launch of WWC's "Water for Schools" initiative, which seeks to provide access to water for one thousand schools in ten countries, and the creation of schools for training higher-level technicians.

In his keynote address, Ryutaro Hashimoto, Chair of the UN Advisory Board on Water and Sanitation and former Prime Minister of Japan, spoke on financing for local water projects, focusing on actions proposed in the UN Advisory Board on Water and Sanitation's Compendium of Actions. He said the Compendium sets out actions that key actors should take to remove obstacles and bottlenecks in achieving the internationally agreed water and sanitation targets, with a focus on: financing; water operators partnerships; sanitation; monitoring and reporting;



José Luis Luege Tamargo, Mexico's Secretary of Environment and Natural Resources

IWRM; and water and disasters. Hashimoto stressed that national governments have a major responsibility to enable operators to deliver on their responsibilities, and emphasized that the international community must provide incentives and support in a more consistent and coherent fashion. Noting that financial resources are available, Hashimoto stressed the need for stronger capacity at the national and local levels to attract funding and said governments and utilities need to devise and apply more equitable tariff systems.

**MINISTERIAL DIALOGUE:** Ministers convened for a dialogue on Tuesday afternoon. Many countries supported the actions proposed by Hashimoto and listed in the Compendium.

On financing, several countries called for greater support from international financial institutions for water and sanitation projects. Many also stressed the importance of focusing and supporting financing at the local level. Drawing attention to the Gurría Task Force report, they emphasized different forms of cooperation and financing options beyond traditional ODA and public funding, highlighting micro- and co-financing.

On governance, many countries stressed the importance of decentralization and strengthening local authorities and institutions, with several highlighting the need for effective stakeholder participation. Some, however, cautioned against over-decentralization and privatization, and underlined the importance of appropriate regulatory regimes and strong and enforced national legislation ensuring transparency and accountability in water management, particularly regarding pollution, flood prevention and overall water management. Countries were urged to submit progress reports on IWRM and water efficiency plans to CSD-16 in 2008.

**MINISTERIAL ROUNDTABLES:** Six ministerial roundtables, held on Wednesday, offered a platform for participating ministers and high-level officials to exchange experiences on various aspects of water management. The Chairs of the thematic ministerial roundtables then presented the reports of their respective groups to the ministerial plenary.

**Water efficiency and transfer of water-related technologies:** Ministers and high-level representatives noted that national water plans and IWRM schemes should include the concept of water efficiency and increase the application of technology, including rainwater harvesting. They discussed the need for accurate data and financing for data collection and information processing. They also addressed the need for capacity building for successful technology transfer and implementation of local solutions using traditional experiences and cultural practices. Some ministers stressed that successful local experiences should be scaled up and knowledge shared. Others emphasized the need to acknowledge the roles of local authorities in IWRM, share data with neighboring States, and the importance of energy-efficient desalination processes in certain regions.

**Capacity building for effective water management and basic sanitation at the local level:** After a brief presentation that emphasized that success in meeting the MDGs is strongly linked to the availability of local and national capacities, ministers and high-level officials focused on two issues: who is responsible for capacity development and social learning efforts, and how this capacity development and social learning applies to water and risk management; and the importance of taking into account gender perspectives for capacity-building policies and



Panel on "Capacity building for effective water management and basic sanitation at the local level"

actions. Responding to the first issue, many countries agreed that providing solutions to water and sanitation supply problems is the responsibility of all levels of government and civil society.

Regarding the second issue, many noted that although the role of women in water management decision-making is widely recognized, it has not been given due attention, and that gender mainstreaming is particularly relevant for capacity-development programmes in the water sector. Most countries also underscored that: investing in capacity pays off in the long term; and that capacity-development actions need to be scaled up and result in locally owned implementation.

**Water for the environment:** In this roundtable discussion, participants were presented with two issues: what is the added value of including considerations of ecosystem sustainability in IWRM, national development, and integrated coastal zone management plans; and how scientific, legislative and policy approaches can foster involvement of local communities and traditional knowledge in water resources management.

On integrating ecosystem sustainability in management plans, participants discussed integrating climate change, energy and "environmental flows" into IWRM and ecosystem restoration. Several government participants noted that sustainable ecosystem management is a prerequisite for the sustainable management of water resources, with one delegate calling for payment for environmental services at the national level. Private sector participants urged improvements in technology and innovation, water efficiency use, stakeholder participation, and a discussion on tariffs. On better integrating local communities and traditional knowledge, participants discussed: enhancing local ownership to ensure that benefits of projects go directly to the poor; the importance of indigenous participation in property rights discussions; enforcing decentralization and community involvement by legal means; and capacity building of traditional knowledge holders. Participants also addressed the need to integrate ecosystem management and restoration in poverty alleviation, and the role of women in changing the water culture and reducing water pollution, waste and over-consumption.

**Decentralization process, governance, institutions, and the enhancement of all stakeholders' participation:** Participants described national experiences with decentralization, highlighting the need to empower citizens through education and awareness campaigns that focus on legal, institutional and policy arrangements. Many confirmed the need to harmonize local interests with national, regional and international interests, which calls for effective and institutionalized cooperation and coordination among the different levels of governance, including

indigenous communities. One participant suggested requiring governments to report on the decentralization process, including on intersectoral planning mechanisms.

Noting the need to tailor decentralization to the needs of individual countries, especially developing countries, one participant said policies should be legally framed to prevent frequent policy changes. Another argued that decentralization without the proper policy frameworks and political will results in implementation gaps and exclusion, with another adding that the struggle against exclusion differs from the struggle against poverty.

Discussion further focused on the need to define the tasks and responsibilities of the different levels of government and of different stakeholders, including the private sector. A private sector representative called for incentives for businesses to establish the necessary infrastructure, combined with a proper regulatory framework set up by governments, noting that the private sector needs to align its own business goals with social and environmental goals. Participants also discussed the need for: gender equality as an integral part of decentralization; national water quality standards; environmental service payment mechanisms; downsizing to limit bureaucracy; and cooperation and solidarity between nations.

Several participants noted the importance of stakeholder engagement, stressing the need for accurate information accessible to all stakeholders, and provision of sufficient time for stakeholder engagement. They also discussed: political barriers to stakeholder participation and the need to assign clear responsibilities; the important role of public-private partnerships; the need for skilled personnel; the effectiveness of local-level action; the engagement of local women in water management; the links between decentralization and good governance; and the importance of effective regulatory frameworks. Noting that the right to water provides an effective framework for public participation, some participants said countries should enshrine water as a right in national legislation. One NGO stated that private sector water management may weaken governance, and underscored that water should be viewed as a public asset and a fundamental human right and not a commodity. A private sector representative stressed the benefits of private sector initiatives related to water.

Participants also discussed the need to: address political power and information gaps by involving all relevant stakeholders; include capacity building, infrastructure, financial support and the construction of local public institutions in decentralization processes; recognize that the right to water provides a legislative framework for participation and decentralization; recognize the role of business; and consider the creation of public-private funds for water and sanitation.

**Financing local water and sanitation initiatives:** Considering the fact that in recent years financing for water has not increased significantly, if at all, and recalling the warning from the Camdessus Panel that the MDGs will not be met unless annual investments in water services in developing countries are doubled relative to 2003 levels, participants were asked to consider concrete actions to change this situation, and were encouraged to focus on three key issues: ways to mobilize financing for water and sanitation at the community level; ways in which governments can help develop an enabling environment; and how partnerships can best achieve action.

On ways to mobilize financing for water and sanitation at the community level, participants agreed on the need to tap financial resources from a variety of sources, and discussed, *inter alia*: cross-subsidies; targeted, transparent and tapered tariffs; micro-enterprise and micro-credit mechanisms with the involvement of women; and matching schemes and partnerships among governments, private investors and donors. They also highlighted that tariffs should internalize costs, including environmental costs.

On ways in which governments can help develop an enabling environment, several participants emphasized the need to decentralize both financial and human resources. One delegate expressed a preference for “deconcentration,” whereby local governments and leaders are involved but not all regulation is decentralized. Another country representative emphasized the need to remove political influence on water utilities. To this end, several country participants described positive experiences in developing independent water boards with representation from various sectors. Other participants highlighted the need for transparency, accountability, good governance and effective regulation in attracting funding as well as the need for technology transfer.

On how partnerships can best achieve action, participants agreed that there is no single model. One government representative highlighted the need for multi-stakeholder engagement. An intergovernmental organization stated that public-private partnerships are not a panacea, citing obstacles such as high initial costs, political and exchange risks, and long payback periods.

**Development and strengthening of national water monitoring mechanisms and targeting:** Participants at this roundtable were briefed on problems related to monitoring, and presented with issues to be addressed, including: how to ensure linkages and coordination of the monitoring activities; how monitoring results could be best used to trigger action and progress; and the role of global monitoring of water issues and whether comparing needs among countries helps to prioritize action.

Countries and organizations then shared their experiences with monitoring. Noting that the situation varies from country to country, several participants suggested that every country establish its own master plan and that any global targets be voluntary. A number of participants drew attention to monitoring and forecasting for climate change scenarios and for disaster preparedness programmes, and called for including information on the environment. They also stressed the need for legal and institutional arrangements and efficient organization frameworks, and underscored the importance of transparency. Several countries



Panel on “Development and strengthening of national water monitoring mechanisms and targeting”





President of France Jacques Chirac addressed the ministerial conference through a video message

proposed that the UN create a manual or software for setting up water monitoring systems. There were also calls to take both a top-down and a bottom-up approach to monitoring, involving accountable stakeholders at the local level and clearly assigning responsibilities. An NGO representative noted that success should be measured in terms of people served and not in terms of money spent.

#### CLOSING OF THE MINISTERIAL CONFERENCE:

**Keynote addresses:** Jacques Chirac, President of France, gave a closing video address, noting that the challenge of achieving the MDGs is first of all financial, and called for solidarity mechanisms. He said the prerequisites for sustainable development are good governance and local participation.

Manuel Dengo, UNDESA, described UNDESA's work on the CSD Water Action and Networking Database (WAND), a portfolio of water actions and best practices. He noted the database's links with initiatives such as the World Health Organization (WHO)/UNICEF Joint Monitoring Programme on Water Supply and Sanitation, and said it offers a platform for dialogue.

Tetsuma Esaki, Japanese Vice-Minister of Land, Infrastructure and Transport, highlighted the Ministerial Declaration and portfolio of water actions that emerged from the 3rd Forum, noting that the draft Ministerial Declaration for the 4th Forum aims to take its commitments further.

Paula Dobriansky, US Undersecretary of State for Democracy and Global Affairs, said WAND provides information sharing of best practices and is expected to: connect people; identify new partners to implement new projects and programmes; and provide a framework for communication. She underscored that WAND demonstrates a new way in which the UN can implement action, and highlighted the importance of mechanisms that provide real-time data on the effectiveness of actions.

Noting the CSD-13 decision to develop web-based tools to disseminate information, Kenzo Hiroki, UNDESA, said WAND can link the Forum and UN processes by facilitating the sharing of best practices, enabling stakeholders to self-diagnose programmes and providing a tool for information exchange.

**Adoption of the Ministerial Declaration:** Fernando Tudela Abad, Sub-Secretary of Planning and Environmental Policy of the Mexican Ministry of Environment and Natural Resources, provided an overview of the draft Ministerial Declaration, noting that it was developed during an open consultative process. He said the final draft is based on broad consensus, noting that Mexico would have preferred that the Declaration was more ambitious and proactive. He noted that the appendices reflect the work of all regional groups.

Bolivia proposed a "complementary declaration" made jointly by his country, Cuba, Venezuela and Uruguay, stating, among other things, that "access to water with quality, quantity and

equity, constitutes a fundamental human right" and that "States, with the participation of the communities, shall guarantee this right to their citizens". He explained that the document further: stresses that efforts will be made at the CSD and other UN and international forums to recognize and make this right effective; expresses concern at the possible negative effects that international instruments, particularly free trade and investment agreements, may have on water resources; and reaffirms the sovereign right of every country to regulate its water and all its uses and services.

Tudela Abad stated that this document would be added to the outcomes of the Forum, but not as an annex to the Forum's Ministerial Declaration.

Ministers adopted the Declaration by acclamation.

**Comments on the Ministerial Declaration:** After the Declaration's adoption, several Ministers made comments.

Brazil commented that it did not support the reference to "international" in the Declaration recognizing the Forum's contribution to promoting the exchange of best practices and lessons learned on "international" water and sanitation issues.

Stressing that these were not included in the Declaration, Austria, on behalf of the EU and Switzerland, emphasized the importance of: the right to water and sanitation; the need to maintain the sustainability of ecosystems; and the importance of sustainable hydropower.

Venezuela supported the Bolivian proposal for a complementary declaration that expresses water as a fundamental element of life, and invited each State to become a "promoting force" to recognize this right.

Israel addressed incorporating alternative technologies for sustainable management of marginal water resources.

Uruguay highlighted aspects of its constitutional amendment stating water as the essential resource for life and access to water and sanitation as fundamental human rights. He underscored that the constitutional amendment states that sanitation and water supply for human consumption are provided only by State agencies.

Nigeria emphasized the need to address the issue of corruption.

**Ministerial Declaration:** In this Declaration, Ministers reaffirmed the critical importance of water for sustainable development and underlined the need to include water and sanitation as priorities in national processes, particularly national sustainable development and poverty reduction strategies.

They also reaffirmed commitments to achieve the internationally agreed goals on IWRM and access to safe drinking water and basic sanitation, and the decisions of CSD-13 on: policy options and practical measures to expedite implementation in water, sanitation and human settlements; increasing resources for developing countries to achieve the internationally agreed goals; and improving governance, enabling environments and regulatory frameworks, which adopt a pro-poor approach with active involvement of all stakeholders. Ministers also acknowledged the input of the Forum for the follow-up segment on water and sanitation of CSD-16 to be held in 2008.

The Declaration recognizes the importance of domestic and international capacity-building policies and cooperation to mitigate water-related disasters, the role of parliamentarians and local authorities in increasing sustainable access to water and sanitation services and support for IWRM. The Ministers also welcomed the launch of the WAND as a means of

implementing the CSD decision to develop “web-based tools for the dissemination of information on implementation and best practices.”

## CLOSING PLENARY

Forum Co-Chair Jaime Jáquez opened the closing plenary session, noting that the theme of the 2006 World Water Day, celebrated on 22 March, is “Water and Culture.” Stressing that water is central for cultural expressions and the survival of humanity, he stated that a new water culture begins with each individual and requires understanding of its environmental, social, economic and political dimensions.

Walter Erdelen, UNESCO Assistant Director-General for Science, emphasized that water problems cannot be solved by technical expertise alone, and underscored the need to manage water in a holistic and multidisciplinary manner. He noted the role of the UN Educational, Scientific and Cultural Organization (UNESCO) in facilitating agreements on emerging ethical issues, citing its 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions as an example.

Children representatives presented their statement, calling, *inter alia*, for: fulfilling human rights and provisions on access to water and sanitation; supporting children’s activities; ensuring participation of children in decision-making; law enforcement; investments to ensure children’s access to water; and education in support of a water culture.

Speaking for the legislators, Fernando Ulises Adame de León, Mexican Congressman, reported on the outcomes of international legislators’ meetings during the Forum, emphasizing that legislative proposals on water should be precise and adequately funded, and promote ethnic and gender equality.

Enrique Peña Nieto, Governor of the State of Mexico, spoke on behalf of local authorities, expressing their commitment to the MDGs and to IWRM. He stressed the need to mobilize funds and ensure transparency, and called for support to local governments from the national and international levels.

**2006 WORLD WATER DAY CELEBRATION:** Koïchiro Matsuura, UNESCO Director-General, delivered a message to the 4th Forum on the occasion of the 2006 World Water Day, held under the theme “Water and Culture.” Noting that the cultural dimension of water still requires a better understanding, he highlighted UNESCO’s activities on water issues and its role in addressing the interface between culture, education and science. He further emphasized the need for an ethically sound system of water governance and respect for traditional and local knowledge.

**WORLD WATER DEVELOPMENT REPORT:** Matsuura introduced the second edition of the World Water Development Report entitled “Water: A Shared Responsibility,” stressing its focus on governance as a key to addressing the global water crisis and tackling poverty. He said the Report is a product of collaboration among 24 agencies involved in water resources management. He then presented its key findings, which included that:

- access to clean water needs to be recognized as a fundamental right;
- lack of access to water and sanitation is a cause of poverty and disease, and hampers economic opportunities and political stability;
- there is a need to focus on governance and the MDGs;
- climate change will exacerbate water challenges;

- while IWRM is the best approach to address problems holistically, only a few countries have met the 2005 IWRM target set at the WSSD;
- healthy ecosystems are essential for the hydrological cycle;
- water is critical for socioeconomic development; and
- water governance, including institutional capacity, legal frameworks and resource distribution, need to be improved.

Gordon Young, Director of the World Water Assessment Programme, identified the report’s cross-cutting themes, namely: poverty alleviation and preservation of the natural environment. He noted that the report further addresses: drinking water supply and sanitation, food security, education and social security, economic development, security from extreme events, and environment sustainability. He said the sensitive issues of corruption, rights and privatization were also examined, and reemphasized that water is a shared responsibility.

Representatives of collaborating UN agencies, including UN University, UNESCAP, UNEP, WHO, FAO, UN International Strategy for Disaster Reduction, and UN Development Programme, welcomed the Report and highlighted their contributions. Presentations were also heard by the report’s case study countries, including Brazil, Spain, Estonia, Kenya and Mexico.

### KYOTO WORLD WATER GRAND PRIZE

**PRESENTATION:** The Kyoto World Water Grand Prize was awarded to Gram Vikas, an NGO working in India’s State of Orissa. The award aims to honor a distinguished individual or organization whose work or activities aim to solve the critical water necessities of communities and regions, and carries a prize of ¥5,000,000 to be spent on furthering the project.

Accepting the prize, Joe Madiath, Executive Director of Gram Vikas, recognized the efforts of local people who contributed to the success of Gram Vikas’ work. He explained that people in 290 sites now have access to toilets, showers, and 24-hour water delivery, highlighting 100 percent coverage in these sites. He emphasized that water and sanitation constitute an enabling tool to build self-dignity and sense of worth, particularly for women, and stressed the need to prioritize sanitation and recognize that local actions do make a difference.

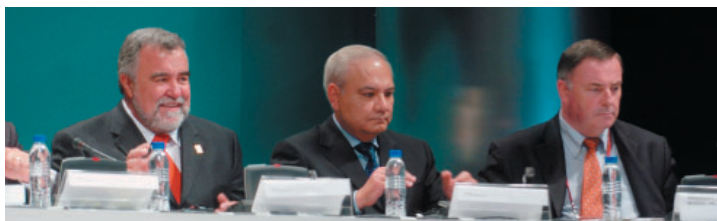
**DATE AND VENUE OF 5TH FORUM:** Forum Co-Chair Fauchon announced that the 5th World Water Forum will be held in Istanbul, Turkey, in March 2009.

Forum Co-Chair Fauchon thanked the Government and people of Mexico for organizing the Forum, noting it was attended by almost 20,000 participants from 141 countries, with heightened participation of women and youth. He highlighted key ideas



Kyoto Prize

emerging from the Forum, including: the right to water and sanitation; local participation and action; a new water culture of consuming less and managing better; centrality of water for development; the political, economic and



From left to right: Alejandro Encinas Rodríguez, Mayor of Mexico City, Cristóbal Jaime Jáquez, and Loïc Fauchon, Co-Chairs of the 4th World Water Forum

financial aspects of water management; and the need for decentralization and other governance processes to be implemented effectively.

## CLOSING STATEMENTS

Forum Co-Chair Jaime Jáquez highlighted the Forum's outcomes, noting that 1600 local actions were presented and over 200 sessions were held during the Forum.

Alejandro Encinas Rodríguez, Mayor of Mexico City, expressed hope that the Forum's outcomes would make water a priority on national agendas and noted the important role of public participation and local authorities in Mexico's water governance. He stressed that water should be seen as a common public good rather than as a commodity.

Encinas Rodríguez officially closed the Forum at 2:15 pm.

## UPCOMING MEETINGS

**FIFTH WORLDWIDE WORKSHOP FOR YOUNG ENVIRONMENTAL SCIENTISTS – "URBAN WATERS: RESOURCE OR RISK?":** This workshop will be held from 9-12 May 2006 in Vitry sur Seine, France. For more information, contact: Organizing Committee, Gilles Varrault; tel: +33-1-4517-1631; fax: +33-1-4517-1627; e-mail: varrault@univ-paris12.fr; Internet: <http://www.enpc.fr/cereve/www-yes>

**ENVIROWATER 2006 CONFERENCE:** The Ninth Inter-regional Conference on Environment-Water ("Envirowater 2006") will take place from 17-19 May 2006, in Delft, the Netherlands. For more information, contact: Organizing Committee; tel: +31-317-483-849; fax: +31-317-482-166; Hubert van Lier, e-mail: [envirowater2006@wur.nl](mailto:envirowater2006@wur.nl); Internet: <http://www.isomul.com/envirowater2006>

**THIRD INTERNATIONAL SYMPOSIUM ON TRANSBOUNDARY WATERS MANAGEMENT:** This symposium will be held from 30 May - 2 June 2006 in Ciudad Real, Spain. For more information, contact: Javier González Pérez, University of Castilla-La Mancha; tel: +34-926-295-300 (ext.6372); fax: +34-926-295-391; e-mail: [twm@uclm.es](mailto:twm@uclm.es); Internet: <http://www.uclm.es/congresos/twm/Index.htm>

**REGIONAL CONFERENCE ON WATER FINANCING:** This event is scheduled from 30-31 May 2006 in Manila, Philippines. For more information, contact: PWP Secretariat; tel: +632-927-7149; fax: +632-927-7190; e-mail: [philwaterpartner@gmail.com](mailto:philwaterpartner@gmail.com); Internet: <http://www.gwpsea.org/web/events.htm>

**22ND ICOLD CONGRESS:** Organized by the International Commission on Large Dams (ICOLD), this meeting will take place from 18-23 June 2006 in Barcelona, Spain. For more

information, contact: ICOLD Secretariat; tel: +34-93-4016-478; fax: +34-93-4017-357; e-mail: [secretariat@icold-barcelona2006.org](mailto:secretariat@icold-barcelona2006.org); Internet: <http://www.icold-barcelona2006.org>

**INTERNATIONAL CONFERENCE ON RIVERS AND CIVILIZATION:** This conference will take place from 25-28 June 2006 in La Crosse, US. For more information, contact: Jan Olson, University of Wisconsin, La Crosse; tel: +1-608-785-8000; e-mail: [olson.jani@uwlax.edu](mailto:olson.jani@uwlax.edu); Internet: <http://www.rivers2006.org>

**2006 WORLD WATER WEEK IN STOCKHOLM:** The annual World Water Week, which will take place from 20-26 August in Stockholm, Sweden, seeks to provide a meeting place for capacity-building, partnerships and follow-up to the implementation of international processes and programmes in water and development. This year's theme is "Beyond the River – Sharing Benefits and Responsibilities." For more information, contact: Stockholm International Water Institute; tel: +46-8-522-13960; fax: +46-8-522-13961; e-mail: [sympos@siwi.org](mailto:sympos@siwi.org); Internet: <http://www.worldwaterweek.org>

**EIGHTH INTERNATIONAL CONFERENCE ON MODELLING, MONITORING AND MANAGEMENT OF WATER POLLUTION:** This conference will be held from 4-6 September 2006 in Bologna, Italy. For more information, contact: Zoey Bluff, Conference Secretariat; tel: +44-238-029-3223; fax: +44-238-029-2853; e-mail: [zbluff@wessex.ac.uk](mailto:zbluff@wessex.ac.uk); Internet: <http://www.wessex.ac.uk/conferences/2006/water06>

**IWA WORLD WATER CONGRESS:** Organized by the International Water Association (IWA), the congress will take place from 10-14 September 2006 in Beijing, China. For more information, contact: Tony Williams, IWA; tel: +44-20-7654-5500; fax: +44-20-7654-5555; e-mail: [2006beijing@iwahq.org.uk](mailto:2006beijing@iwahq.org.uk); Internet: <http://www.iwa2006beijing.com>

**EUROPEAN LARGE LAKES SYMPOSIUM 2006:** This event will take place from 11-15 September 2006 in Tartu-Pühajärve, Estonia. For more information contact: Tuula Toivanen, University of Joensuu; tel: +358-13-251-3503; fax: +358-13-251-3449; e-mail: [tuula.toivanen@joensuu.fi](mailto:tuula.toivanen@joensuu.fi); Internet: <http://www.largelakes.ebc.ee>

**TENTH CONFERENCE OF THE PARTIES TO THE RAMSAR CONVENTION:** Ramsar COP-10 will be held in Changwon, Republic of Korea in 2008. For more information, contact: Ramsar Secretariat; tel +41 22 999 0170; fax: +41 22 999 0169; e-mail: [ramsar@ramsar.org](mailto:ramsar@ramsar.org); Internet: <http://www.ramsar.org>

**5TH WORLD WATER FORUM:** The next World Water Forum will take place in Istanbul, Turkey in March 2009. For more information, contact: Stéphanie Porro, World Water Council; tel: +33 491994100; fax: +33 491994101; e-mail: [wwc@worldwatercouncil.org](mailto:wwc@worldwatercouncil.org); Internet: <http://www.worldwatercouncil.org>

