Mexico 2006
4th World Water Forum

World Water Council
4th. World Water Forum

CONAGUA
Comisión Nacional del Agua

Final Report

Local Actions for a Global Challenge

Front Cover: Lithography of Tlaloc

God of rain and fertility in the mythology of the Aztec Empire, whose people were located in the current site of Mexico City, during the 15th and 16th centuries.

His name in Nahuatl, *Tlaloctli*, means 'nectar of the earth', the wine that impregnates it for abundant vegetation to be produced. Tlaloc is the snake of clouds that appears in the sky, from where he hangs to cause a storm.

Final Report of the
4th World Water Forum

D.R. ©2006 National Water Commission of Mexico
Av. Insurgentes Sur 2416
Piso 4, Ala Sur
Col. Copilco El Bajo
Del. Coyoacán
04340 México, D. F.
México

Final Report of the 4th World Water Forum
ISBN 968-817-782-2

Impreso en México
Printed in Mexico

Mexico 2006
4th World Water Forum

World Water Council
4th. World Water Forum

CONAGUA
Comisión Nacional del Agua

Final Report

Local Actions for a Global Challenge

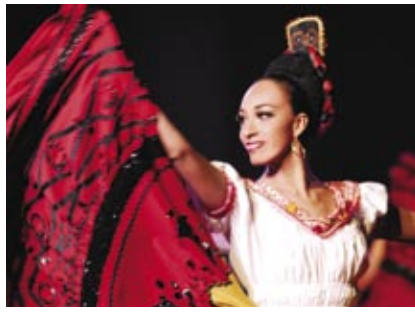
Actio
for a
Glob
Chall


Table of Contents

Messages 7
Overview of the Forum 13
- Program of the Forum 14
- Description of the Main Outcomes of Each Day 14
- Prizes 21
- Commitments, Agreements, Initiatives and Announcements Made During the Forum 22
- The Forum in Figures 24

Topic Sessions 27
Local Actions 105
Ministerial Conference 141
High-Level Debates 157
- Participation of Local Authorities 158
- World Encounter of Water Parliamentarians 159
- Empowerment and Democratization Project 160
- Task Force on Financing Water for All 164

Involvement of Civil Society and Other Groups in the Forum 169
- Non-Governmental Organizations 170
- Children 171
- Youth 173
- Women 174
- Indigenous Peoples 175
- Water Fair 176
- World Water Expo 176
- Water Learning Center 177
- 1st International Water and Film Encounter 177
- Cultural Program 178
- Special Events 180

Preparatory Process of the Forum 183
- Timeline of the 4th World Water Forum 184
- Thematic Preparatory Process 186
- Topic Sessions at the Forum 189
- Regional Preparatory Process 191
- Involvement of the Civil Society and Interest Groups in the Preparatory Process 196
- Virtual Water Forum 196

Communication Program for the 4th World Water Forum 199
Next Steps 215
- Creation of the Mexican Forum Alliance 215
- Continuity of Other Initiatives 215

Additional Information 219
- Declarations 219
- Publications Released on the Occasion of the 4th World Water Forum 234
- Participating Delegations in the Ministerial Conference 236
- Sessions Conveners 242
- Kyoto World Water Grand Prize Finalists 245
- Posters Presented at the Forum 246
- Organizations with Stands in the Water Fair 248
- Organizations in the World Water Expo 249
- Organizations that Organized Special Events during the Forum 252
- Acknowledgements 253

Message from President Vicente Fox

The whole world is today determined to give fair and efficient replies to the millions of human beings that are currently lacking drinking water.

In March 2006, the capital of Mexico was honored to be the meeting point of a powerful worldwide movement in favor of life, health and the progress of all peoples.

For one week, 19,000 people assembled at the 4th World Water Forum exchanged experiences and ideas on the search for equitable and sustainable solutions for the families that, on all continents, are lacking this vital liquid.

During the 4th Forum, girls and boys, young people and women, businessmen and representatives of NGOs, civil servants and scholars from 150 countries shared the results of successful local actions in water supply and sanitation.

Mexico sincerely thanks all the participants for their generosity, their dedication and commitment to the water cause, which is the cause of all humanity.

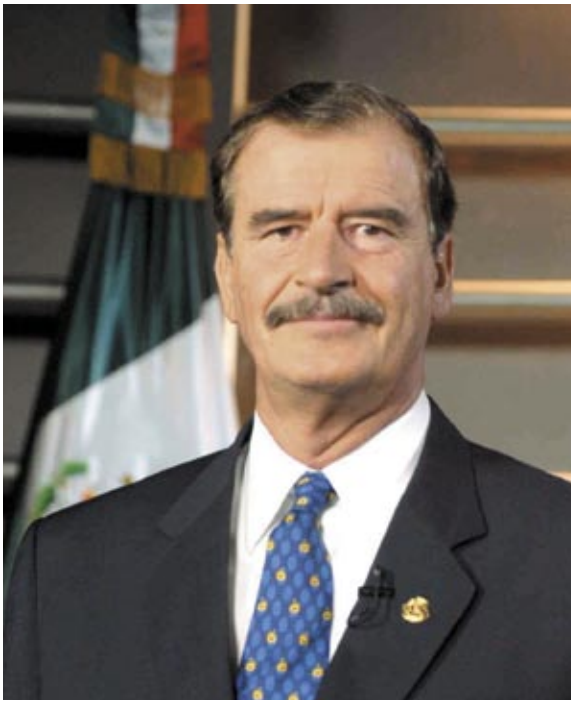
Today, ensuring clean and sufficient water for all inhabitants of the planet is an essential task.

Making use of the lessons learned from the local actions that we shared at the 4th Forum, will without doubt require political commitment at the highest level. It will also require the coordinated impetus and action of societies, scientific communities and national and international institutions.

It is to be applauded that, following this great Forum, UN-Habitat and the North American Development Bank announced loans for 579 and 100 million dollars for water infrastructure projects, on the African continent and in Mexico, respectively.

Similarly, we are delighted with the decision of the Asian Development Bank, which, for the next four years, will invest 10,000 million dollars in water and sanitation projects for the peoples of its continent.

These examples are encouraging lessons for all of us: they confirm that solving local water problems contributes once and for all to the solution of global problems.



Actions like these strengthen the worldwide conviction that only by working together will we be able to widen the paths of justice, wellbeing and sustainable development that the new generations will walk down.

Today, promoting a culture that preserves this vital liquid and ensures that all families have access to it is a shared global responsibility.

Mexico reiterates its determination to continue working alongside the international community that, day by day, is making efforts to fully accomplish the Millennium Development Goals. I am convinced that, by working side-by-side as we have been doing so far, we will achieve it.

Vicente Fox Quesada
President of Mexico

Message from Loïc Fauchon

The time has now come to take stock of the 4th World Water Forum in Mexico. After two years of preparation and joint effort with our Mexican friends, Mexico 2006 was a great water celebration, the opportunity for an open debate, a respectful dialogue to reinforce the idea that there can be no development without water.

This Forum marked progress in several areas. First of all, for the first time, everyone came to sit around the same table: Ministers, Parliamentarians, local officials, NGOs, companies, international and professional institutions. More than 19,000 participants from 150 countries took part. Everyone listened, reflected, spoke and made proposals, during the more than 200 sessions and almost as many parallel events.

Secondly, because fundamental subjects, such as the right to water or its financing, and many more besides, were presented as the result of preparatory work and concrete proposals. From different positions, sometimes diverging, dialogue was set up, synthesis was established.

We have tried, through this document, to reconstruct as completely as possible everything that happened during the Forum, during the various preparatory processes, and during the week in Mexico City, everything that was presented and discussed.

Beyond the reports and declarations, we felt a clear willingness to favor action. Action is movement, it is progress. Beyond the messages, lessons and recommendations, it was thus important to include in this synthesis a certain number of pertinent, innovative, and particularly promising local actions, and there were many of them in Mexico!

Finally, we decided to recall the initiatives and declarations that served as commitments, either local or global, announced in Mexico City. They are the echo that the Water Voice seeks to generate.

This final report is aimed at you, stakeholders of the international water community. For what happened in Mexico, for the messages widely spread there to be imprinted in the minds of decision makers as well as the public-at-large and the media. For the reflection to continue on different subjects. For concrete proposals to be integrated into the action plans of large organizations, of States and local collectivities. Our action only has any sense if it continues to gather as it did in Mexico, a gathering around ideas, values, messages and initiatives.

Thank you once more, actors in this Forum. Thank you in particular to you, our Mexican friends. You who, around the CONAGUA, ANEAS, the Water Advisory Council, the Mexican Ministries of the Environment and of Foreign Affairs, were able to relay this Water Voice, alongside the World Water Council, with a conviction, an enthusiasm, a dynamism and professionalism at each moment. The water planet gathered in Mexico was also able to appreciate your hospitality throughout both the preparation and this great event itself.

I am hereby formulating the wish that Mexico may prolong its commitment alongside the Council, to benefit the great water family from its experience.

Long live the Forum. Long live water.

Loïc Fauchon
President of the World Water Council
Co-Chair of the 4th World Water Forum
International Organizing Committee

Message from Cristobal Jaime Jaquez

In this final report we have summarized for all of you a series of relevant aspects from the 4th World Water Forum, hoping that you can benefit from them.

I am positive that we can feel satisfied with all the work performed since the very beginning of the preparatory process and of the results obtained to date.

I wish to particularly emphasize our gratitude to all individuals, institutions and organizations of the various regions in the world for their invaluable contribution to the success of this Forum.

It has been quite satisfactory for us as Mexicans to become part of the synergy that has been developed within the international context among those interested in the topic of water.

The Forum constituted a stage open to all voices where actions and local experiences were shared to show beyond any doubt how water may become a decisive factor for social welfare, while water also acts as a driving force for economic development and the preservation of the environment.

This outstanding event included various activities of interest such as: speeches from the regions; keynote speeches by special guests, topic sessions, the Ministerial Conference, Children's Forum, Youth Forum, Parlamentarians Forum, dialogue with local authorities, Water Fair, World Water Expo and courses that were offered at the Learning Center.

Without doubt we also enjoyed the artistic and cultural events included in the social program.

Enthusiasm shown by the more than 19,000 participants from 150 countries, together with the exchange of ideas and of cumulative experience in the international context, are reasons to assert with full conviction that the challenges associated with water can be resolved provided authorities, users and the media work together for the sake of the public interest.

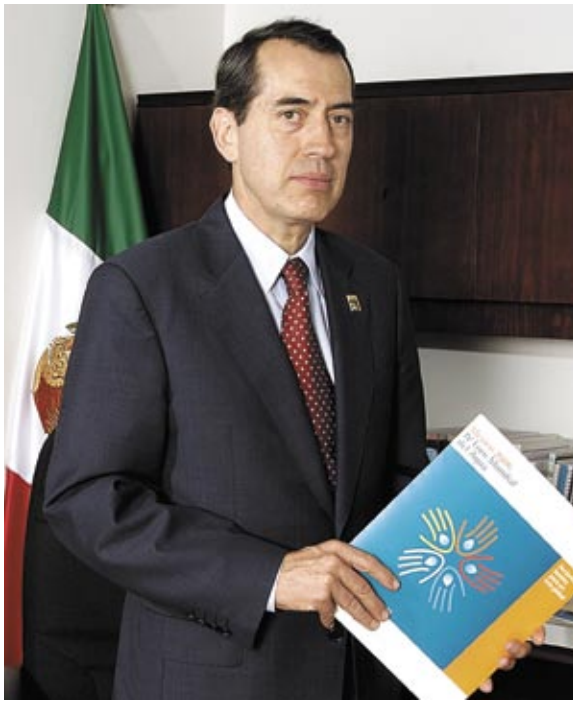
The work performed has been translated into different documents and digital information that have become a valuable source of reference, analysis

and guidance for the future. This is evidenced by the Regional Documents, the Thematic Documents and the Declarations issued.

I am convinced that the spirit shown during the 4th World Water Forum will continue to be an incentive for all of us. It is important to keep in mind that the objective of actions realized every day is to contribute to the creation of an ever improving world for the benefit of our generation and for future generations and this dream shall always remain present in our minds and in our hearts beyond any expectations.

Cristobal Jaime Jaquez
Director General of the National Water Commission of Mexico (CONAGUA)
Co-Chair of the 4th World Water Forum International Organizing Committee

Message from Cesar Herrera and Daniel Zimmer



After the three previous World Water Fora, held respectively in North Africa, Europe and Asia, the 4th World Water Forum in Mexico offered the Americas an opportunity to present its positions and solutions to the challenges faced by the global water community. Mexico City was selected as the host city for a simple reason: it offers a very good example of the intricate challenges of water resources management, of water supply and sanitation services faced by an increasing number of cities in the world.

The overarching theme of the Forum, Local Actions for a Global Challenge, resulted from the conviction that listening to the local actors, to their experiences, successes and difficulties would be helpful to the water community and would also promote new ideas for international debate on water issues. It would also help to focus on action, an obvious need after the two previous meetings of the UN Commission on Sustainable Development, more concerned with policy issues.

The preparatory process of the Forum mobilized a variety of stakeholders from various parts of the world around water issues. In this process, a great deal of effort was devoted by many people all over the world:

• The Thematic Beacons mobilized their knowledge, energy and resources to make explicit the rationale and the issues of the thematic framework that had been constructed after the initial kick-off meeting held in Mexico just two years before the Forum.

• The Regional Committees were established and helped decentralize the preparation of the Forum throughout the five main regions defined for this purpose. These Regional Committees were pivotal to the identification of local actions and the preparation of the regional reports, which will remain an important output of the Forum.

• More than 600 topic sessions were proposed by 320 organizations representing all types of stakeholders, all sectors and all continents. The Forum Secretariat and the World Water Council proposed a grouping exercise that helped us decrease that number to 206. This difficult exercise was finally appreciated by many. Indeed it helped to initiate new partnerships that will hopefully survive long after the Forum!

• More than 1,600 local actions were submitted by various organizations from around the world through the Forum website, and 530 were subsequently shared in the topic sessions at the Forum, to illustrate local challenges and the solutions encountered.

In addition to the above, the political process of the Forum introduced a new approach: the Ministerial Conference was complemented by two international meetings, one of Local Governments and the other of Parliamentarians and a general dialogue between the three groups was also organized. We hope that this first attempt to organize such a dialogue will serve as an example for the future Fora. Indeed there is a clear need to bring new ideas and try new ways to exchange at this crucial political level, in order to come to coherent and holistic solutions that can be adopted at all levels of decision-making.

This renewed political process has undoubtedly contributed to giving a new tone to the Forum. It has confirmed that water is a political issue that needs to be ultimately under the control of public authorities, at the most appropriate local level.

The number of participants at the Forum exceeded our expectations. The impressive level of participation, the good attendance at sessions and most of all, the very constructive spirit of the whole Forum have demonstrated that many believe that such an event is unique in facilitating exchange, developing a common understanding of the important issues, fostering new partnerships and triggering action on the ground.

At this stage, our objective is to provide you with the results of this Forum. This report is a first contribution to this reporting exercise. It represents a compendium of what happened during the Forum, the debates, the various components, the progress made and the concrete conclusions. Another publication is presented alongside this Final Report, namely the Synthesis Report, which focuses more on drawing conclusions from the substance and the progress made in Mexico on the various themes addressed at the Forum.

Further to this, the World Water Council will increasingly monitor the outcomes and the implementation of the various commitments made at the Forum, and Mexico will be following up on its efforts within the international water community.

Finally, the Forum has had a great impact in the host country, Mexico, where water has been placed at the highest level of priorities in the political agenda. The momentum created by the Forum will certainly contribute to solving national water problems, which require the participation of the various stakeholders, which were brought together through the Forum's preparatory process.

Cesar Herrera Toledo
Secretary General
4th World Water Forum

Daniel Zimmer
Executive Director
World Water Council

Overview of the Forum

Governmental delegations from 148 countries, 200 legislators, 160 representatives of local authorities, 185 children, a plethora of non-governmental organizations, UN agencies, experts, academia, water managers and media representatives met in Mexico City from March 16 through March 22 to share their local experiences, in order to make a difference in a world in which billions of people still lack access to safe water and sanitation.

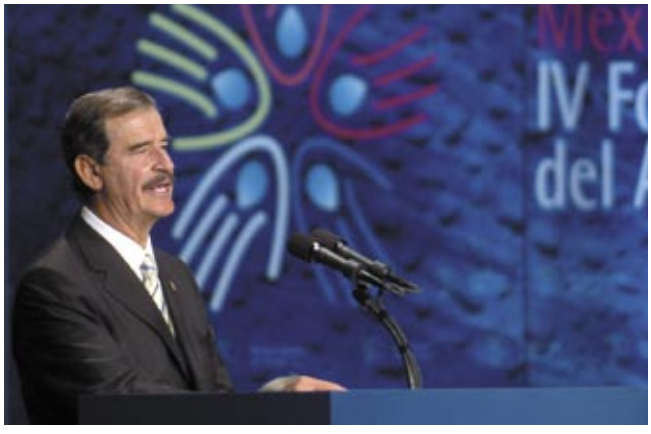
The 4th World Water Forum was a week-long meeting point for anyone with an interest in contributing to solving this growing water crisis. The Forum was organized around five regions, five framework themes and five crosscutting perspectives. Under this template, 206 multi-stakeholder topic-sessions were organized, as two-hour action-oriented debates aiming to come up with recommendations to improve local water management. Each topic-session included the presentation of local actions from various parts of the world, as attempts to come up with tangible solutions to water-related issues at the local level.

Activities throughout the week were varied and manifold. Thousands of people walked around the venue of the Forum, through the World Water Expo, a showcase in which 340 companies presented and shared their latest technologies, and the Water Fair, an open and inclusive space in which 108 governments, non-governmental organizations and regions of the world shared their knowledge and experience.

The 148 participating governments adopted by consensus a Ministerial Declaration that was presented at the conclusions of the Forum, highlighting priorities for national governments for the coming years. The Forum also allowed Ministers to discuss freely and openly with Mayors and Parliamentarians.

The following is the program of the week, with a short summary of the relevant issues debated on each of the days of the Forum. Apart from the opening and closing ceremonies, every day was devoted to one of the five framework themes of the Forum. In addition, the days started with a presentation of one of the five regions in which the world was divided for the purpose of the Forum, followed by a couple of keynote speeches related to the theme of the day. The main debate of the day took place during the topic-sessions, related to the theme of the day, which were held in parallel with the other activities, such as the Water Fair, World Water Expo, Water Learning Center, Children's Forum, Youth Forum, etc. Groups of Parliamentarians and Local Authorities organized encounters from March 20-21, and the week was closed by the Ministerial Conference, which was held during the last two days of the Forum.

Opening Ceremony



Vicente Fox Quesada, President of Mexico

Program of the Forum

Thursday 16	Friday 17	Saturday 18	Sunday 19	Monday 20	Tuesday 21	Monday 22
					Ministerial Conference	Ministerial Conference
Opening of the 4th World Water Forum	Regional Presentation AMERICAS	Regional Presentation EUROPE	Regional Presentation AFRICA	Regional Presentation MIDDLE EAST	Regional Presentation ASIA PACIFIC	World Water Day
Hassan II Great World Water Prize	HIH The Crown Prince of Japan	HRH The Prince of Orange	Anna Tibaijuka *Executive Director UN Habitat*	Carlos Slim *Chairman of Grupo Carso*	Mario Molina *Chemistry Nobel Prize Laureate 1995*	Presentation of the World Water Development Report
From the 3rd to the 4th Forum	Luis Alberto *Moreno President of IADB*	Katherine Sierra *Vice President of the World Bank*		Louise Fresco *Assistant Director General of the FAO*	Michel Jarraud *Secretary General of WMO* Hideaki Oda *Secretary General of JWF* Ltg. Carl. A. Strock *Commander and Chief of Engineers, USACE* Melanie Schultz *Vice Minister of Transportation of the Netherlands*	Ministerial Conference Kyoto World Water Grand Prize
Panel "Introduction to the 4th Forum"	Water for Growth and Development	Implementing IWRM	Water Supply and Sanitation for All	Water Management for Food and the Environment	Risk Management	Adoption of the Ministerial Declaration Closing Ceremony
Water Fair						
World Water Expo						

Thursday March 16
Opening Ceremony

Vicente Fox, President of Mexico, opened the Forum, emphasizing that water is both a human right and a public good that all governments must guarantee. He said that the 4th World Water Forum needs to advance the implementation of international water-related commitments by reviewing progress and communicating challenges and opportunities in this regard. He stressed that water conservation is imperative for combating poverty and promoting growth and development both nationally and internationally. President Fox declared the Forum open, and also inaugurated the World Water Expo and Water Fair.

The opening ceremony also included speeches by HRH Prince of Orange Willem-Alexander of the Netherlands, who stressed that global water challenges must be met with actions at the local level; HIH Crown Prince Naruhito of Japan, who recalled the outcomes of the 3rd World Water Forum, held in Japan in 2003, and the various follow-up initiatives that include the strengthening of regional activities in Africa and Asia-Pacific; Cristobal Jaime, Director General of the National Water Comission of Mexico and Loïc Fauchon, President of the World Water Council, who stressed that the right to water is indispensable to human dignity.

Torkil Jønch-Clausen, from Denmark, was presented the King Hassan II Great World Water Prize, for his scientific excellence and support for international cooperation on water issues. Jønch-Clausen announced that the prize

money would be used to fund women from developing countries to study water issues.

In the afternoon, a roundtable "Introduction to the 4th World Water Forum", emphasized the need for capacity building, good governance, and action at the local level. The high-level roundtable was chaired by Margaret Catley-Carlson, Chair of GWP and included Julia Carabias, former Mexican Minister of Environment and Natural Resources, and Coordinator of the Program on Water, Environment and Society of the National Autonomous University and the Colegio de Mexico; Pedro Arrojo, President of the Foundation for a New Water Culture, Gerard Payen, President of Aquafed; the late Ryutaro Hashimoto, former Prime Minister of Japan and Chair of the UN Advisory Board on Water and Sanitation; Jose Angel Gurria, Secretary General of the Organization for Economic Cooperation and Development (OECD), and Eduardo Sojo Garza, Chair of the Mexican President's Public Policy Office.

Gurria emphasized that only 5% of Official Development Assistance is assigned to water while a twofold increase in the level of financing is needed. Hashimoto stressed the importance of preparedness to face water related disasters and called for efforts to create global awareness, commitment and consensus. Payen said that lack of consensus on a right to water is due to a shortage of knowledge of its implications and stressed the need for dialogue.

Children of the world, with President Fox

Friday March 17
Region: Americas
Framework theme: Water for Growth and Development

The regional document for the Americas was presented by several members of the regional committee, which was created for the purpose of coordinating the activities of the preparatory process of the Forum in the Americas. Civil society, academia, financial institutions, international organizations, national institutions and the private sector participated in the preparatory meetings of the region. The regional coordination will be pursued beyond the Forum to continue dialogue among stakeholders and to advocate for the establishment of water as a priority in public policy.

HIH The Crown Prince of Japan

Crown Prince Naruhito of Japan gave a keynote address on Tokyo and water transport. He encouraged participants to draw inspiration from pioneering water management solutions throughout history as well as from local knowledge.

Luis Alberto Moreno, President of the Inter-American Development Bank (IDB) mentioned in his keynote address that the IDB is establishing a fund for infrastructure to benefit rural communities while taking into account social and environmental variables, and underscored the progress made, including the launch of new strategies and management programs.

Participants discussed the concept of a "minimum platform" for water security in the topic session about the dynamics of water and growth. It was mentioned that investments in water infrastructure and institutions are

essential for growth and development. The development of infrastructure to produce energy was also addressed, especially to use renewable energy sources. Indigenous towns and water was another relevat session of the day, in which participants discussed the need to promote regional sustainable development for the benefit of marginalized communities.

Saturday March 18
Region: Europe
Framework theme: Implementation of Integrated Water Resources Management (IWRM)

During the presentation of the regional document for Europe, Michel Rocard, former Prime Minister of France, stated that the short-term mandates of politicians can be a hindrance to the long-term resolution of water issues, and that governments have the responsibility not just of changing laws, but also the behavior of their citizens.

HRH Prince of Orange Willem-Alexander of the Netherlands highlighted in his keynote address the growing awareness that the water crisis is in fact a management crisis. He further highlighted the success of the European Water Framework Directive, a legislative instrument coordinating freshwater resources management in all European Union member States. Noting that achieving IWRM requires patience, he said the process itself is a critical success factor, and expressed his view that it should build on multi-stakeholder involvement and integrated planning while focusing on improving people's quality of life.

Katherine Sierra, Vice President of the World Bank, mentioned in her keynote address that the inevitable trade-offs surrounding water infrastructure development have been poorly understood in the past, but stated that socially and environmentally sound water infrastructure is indeed possible and can benefit society at large. Noting that the absence of investment exacerbates poverty, she called for increased commitment in this respect by developed countries.

HRH Prince of Orange Willem-Alexander of the Netherlands

A sequence of three topic sessions was dedicated to reviewing the progress made by countries in meeting the Johannesburg goal of incorporating IWRM principles into national plans by 2005. It was mentioned that IWRM plans should be part of broader national development plans, and governments and donors should increase support to countries lagging behind in the IWRM planning process. Transboundary water management

Europe session

was another important topic discussed. Participants emphasized the need to establish transboundary basin agencies and develop legal instruments to facilitate IWRM in shared basins. The case of IWRM in federative countries and the limits of the participatory approaches due to provincial-state-federal conflicts were also discussed.

Sunday March 19
Region: Africa
Framework theme: Water and Sanitation for All

During the presentation of the regional document for Africa, Anna Tibaijuka, Executive Director of UN-Habitat, announced the signing of a Memorandum of Understanding with the African Development Bank for the release of approximately 550 million USD for meeting the MDG water target in Africa. Jean-Christophe Deberre, from the French Ministry of Foreign Affairs, discussed the role of external support agencies in water development in Africa.

Tibaijuka, mentioned in her keynote address that cooperation between UN-Habitat and the Asian Development Bank since the 3rd World Water Forum had brought 300 million USD in investments in water and sanitation for the poor in Asia. She mentioned the need for the replication of initiatives such as the Lake Victoria Region Water and Sanitation Initiative, which is yielding quick and high-impact results.

Three topic sessions addressed the issue of the right to water. The World Water Council presented a report on the implementation of the right to water, calling for an expanded dialogue between all stakeholders. Other sessions addressed the need for more decentralization and financial mechanisms that allow an increase in investments in water and sanitation. Several successful cases of public-private participation and decentralization in the water sector were presented during the topic sessions. Barriers and conditions to private investments were also examined. It was mentioned that in most cases private funds are a small percentage of investment and private participation in fact requires public funding. Countries in the Middle East emphasized the option of desalination of seawater to meet future freshwater demands.

Anna Tibaijuka, Executive Director of UN-Habitat

Monday March 20
Region: Middle East and North Africa
Framework theme: Water for Food and the Environment

The regional document for the Middle East and North Africa was the result of a broad consultation undertaken during the preparatory process of the Forum, involving, among others, governments, scientists and civil society. President of the Arab Water Council and Egyptian Minister of Water Resources and Irrigation, Dr. Mahmoud Abu-Zeid noted that the region has the least per capita share of water in the world and absolute scarcity is expected by 2025, adding that the challenge is to maintain the level of investment in water storage and provision, sanitation and irrigation services, to build capacity, and to adopt a holistic approach.

Carlos Slim, Chairman of Grupo Carso, proposed in his keynote address, the creation of an autonomous water agency outside the national budget, in the form of a public-

private partnership, to perform the investments required to solve water problems in the Valley of Mexico. He mentioned that investments are needed to increase aquifer recharge, to address leakage, and to treat wastewater.

Louise Fresco, Assistant Director General of the FAO, underscored in her keynote address the importance of the participation of farmers in agricultural, environmental and water discussions, and said that adequately addressing water problems will require an integrated approach and private and public investment in the agricultural sector.

Payment for environmental services was one of the topics discussed in the topic sessions. It was mentioned that these payments are based on the principles that users must pay for the environmental services they enjoy and suppliers must be compensated for delivering them. The cases of Mexico and El Salvador were discussed. Virtual water was another important topic, which is especially relevant for countries in the Middle East, where water is particularly scarce. Noting that more than one billion people live in dry areas, panelists 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. This day was also devoted to discussing the experiences in water management in megacities, many of which face the challenges of water scarcity and pollution control.

Carlos Slim, Chairman of Grupo Carso

Dr. Mahmoud Abu-Zeid, President of the Arab Water Council, Minister of Water Resources and Irrigation, Egypt

Tuesday March 21
Region: Asia-Pacific
Framework theme: Risk Management

During the presentation of the regional document for the Asia-Pacific region, the late Ryutaro Hashimoto, former Prime Minister of Japan, officially launched the Asia-Pacific Water Forum, established by ministers from the Asia-Pacific region, as a result of the activities undertaken in the region during the preparatory process of the 4th World Water Forum. He informed participants that the initiative had three priorities: increasing investment in water and sanitation, reducing the vulnerability of human populations to water-related natural disasters; and conserving and restoring the land-water interface for improving water productivity. Participants were informed that the Asian Development Bank (ADB) will double its water and sanitation investments by 2010 in order to achieve the MDGs.

In his keynote address, Mario Molina, Chemistry Nobel Prize Laureate from Mexico, insisted on the dramatic impacts of climate change on the water cycle. He predicted that the water cycle will continue to modify and mentioned that it is up to the governments to take action with the cooperation of all stakeholders.

Carl Strock, Commander of the US Army Corps of Engineers, mentioned in his keynote address that all countries, developed or developing, can be affected by natural disasters, as was the case in the US with the recent Hurricane Katrina. He stressed the importance

of preparedness, teamwork and partnership among the different agencies involved in risk management. Michel Jarraud, Secretary-General of the World Meteorological Organization said developing countries in particular must address the challenge of installing early warning systems, and modify their attitude from disaster reaction to disaster prevention and preparedness.

The topic sessions highlighted the impacts of water-related disasters and the need for major public awareness and technological solutions. It was said that the number of people affected by floods is increasing rapidly due to climate change combined with population growth and urbanization. Participants discussed non-structural and integrated flood management solutions. The Hyogo Framework for Action: 2005-2015, which aims to help countries develop strategies for natural disaster risk management, was reviewed. Panelists stressed the critical role of protection systems, including risk management strategies in IWRM plans, citizen participation and better communication to reduce the impact of extrememeteorological phenomena.

Mario Molina (center), Chemistry Nobel Prize Laureate from Mexico

Jose Luis Luege, Mexico's Minister for the Environment and Natural Resources, welcomed the 148 government delegations attending the Ministerial Conference. He reiterated the obligation of governments to offer access to safe and clean water to all citizens. During the Ministerial Dialogue several countries stressed the importance of financing at the local level. Many countries also stressed the importance of decentralization and strengthening of local authorities and institutions. Representatives from the 2nd Children's World Water Forum presented their conclusions to the Ministers. They emphasized the populations' right to sustainable delivery of water services. The local authorities presented the Declaration of Mayors and Local Authorities and Parliamentarians also presented their conclusions to the Ministers, which reiterated the importance of reaching the MDGs on water and sanitation.

Children of the world present their conclusions to the Ministers

Wednesday March 22
Closing Ceremony

Eight ministerial roundtables were held, offering a platform for ministers and high level officials to exchange experiences on various aspects of water management. The roundtables covered the following themes: water efficiency and transfer of water-related technologies; capacity building for effective water management and basic sanitation at the local level; water for the environment; and decentralization processes, governance, institutions and the enhancement of all stakeholders' participation.

The Ministerial Declaration was adopted by acclamation. In the Declaration, Ministers stressed the need to include water and sanitation as priorities in national processes, particularly national sustainable development and poverty reduction strategies. The Declaration has annexes that reflect the work of all regional groups. Bolivia proposed a complementary declaration made jointly with Cuba, Venezuela and Uruguay, stating that access to water with quality, quantity and equity, constitutes a fundamental human right.

Presentation of the World Water Development Report

Koïchiro Matsuura, Director-General of UNESCO, delivered a message on the occasion of World Water Day, held under the theme "Water and Culture". Matsuura also introduced the second edition of the World Water Development Report, which is a joint product of 24 UN agencies, which highlighted their contributions, as well as presenters from Brazil, Spain, Estonia, Kenya and Mexico, who had presented case studies for the report.

The Kyoto World Water Grand Prize was awarded to Gram Vikas, an NGO working in India. Joe Mediath, Executive Director of Gram Vikas, emphasized that water and sanitation constitute an enabling tool to build self-dignity and sense of worth, particularly for women.

The Forum was officially closed by Alejandro Encinas, Mayor of Mexico City, at 2:15 PM, GMT-6 hrs.

Additional Components of the Forum

To coincide with the Forum, a number of other events were organized. The 2nd Children's World Water Forum and the 4th Youth World Water Forum were both held as an attempt to prepare the next generation of water managers. Parliamentarians and local authorities also organized their own Fora in parallel to the week.

Another important innovation at this Forum was the Water Learning Center, known as TheInstitute@WWF4, which allowed Forum participants to enhance their specific knowledge and capabilities in water management-related issues. The Forum was much more than just a technical conference, and the Water Learning Center greatly contributed to the learning ethic adopted by participants.

In addition to the program of sessions, a number of invitation-only side events were held during the week. These events were organized by various groups wishing to take advantage of the unique opportunity afforded by the Forum to gather water specialists, decision makers, the public, or any other group, for a social cocktail, a social event, a closed meeting on a particular topic, or internal debates within key organizations.

Finally, the backdrop to the week of the Forum was a detailed cultural program, with various activities providing a lighter touch to the heavy debates, showing the intrinsic importance and value of water to expressions of art and culture from both Mexico and around the world. One example of this program is the 1st International Water and Film Event, which showed water-related short films and spots to participants during the week, which were competing for cash prizes, the winners being selected and awarded during the Forum.

All of these activities provided participants and organizers alike with a very busy week, but one which left both greatly enlightened by the experience. The long-term effects of the 4th World Water Forum will be felt for years to come, and it will thus stand as a contribution to the achievement of international water-related goals.

Alejandro Encinas, Mayor of Mexico City

Hassan II Great World Water Prize

The King Hassan II Great World Water Prize is an international award jointly established by the Government of Morocco and the World Water Council, in memory of His Majesty King Hassan II of Morocco's distinguished leadership and encouragement of cooperation and sound management of water resources.

Torkil Jønch-Clausen (Denmark), receiving the Hassan II World Water Prize

The Prize was created in March 2000, with the aim of having a political tool at the disposal of both institutions, to stimulate awareness and reflection. It is awarded to a renowned institution, organization, individual or group of individuals in honor of their outstanding achievements in any aspects of water resources, such as scientific, economic, technical, environmental, social, institutional, cultural or political.

The award is presented every three years in conjunction with the World Water Forum. The Prize winner receives a prize sum of 100,000 US dollars, a trophy and a certificate. The theme for the Prize is "Cooperation and Solidarity in the Fields of Management and Development in Water Resources."

The second edition of the Prize, awarded during the opening ceremony of the 4th World Water Forum, was presented to Torkil Jønch-Clausen (Denmark), for his scientific excellence and support for the recognition of the concept of Integrated Water Resources Management (IWRM). On behalf of the government of the Kingdom of Morocco, Moroccan Prime Minister Driss Jettou presented the Prize to Jønch-Clausen. In his acceptance remarks, he announced that the prize money would be used to fund women from developing countries to study water issues.

Jønch-Clausen is currently Development Director and Deputy CEO of DHI Water & Environment in Denmark, serves as Senior Adviser to GWP, Senior Adviser (IWRM) to UNEP, Secretary-General of the International Water Resources Association, Chair of the Danish Water Forum and Professor (IWRM) at the Technical University of Denmark.

Kyoto Great World Water Grand Prize

The Kyoto World Water Grand Prize was created in March 2003, by Kyoto City, one of the hosts of the 3rd World Water Forum, which wished to contribute to the success of future World Water Fora through the establishment of a World Water Prize. In conjunction with "Soroptimist International of Kyoto" and the World Water Council, the "Kyoto World Water Grand Prize" was consequently created during that Forum. This prize of JP ¥5,000,000 (approximately US$45,000) is to be presented every three years at the World Water Forum, and its first edition was awarded at the 4th World Water Forum.

Joe Madiath, from the NGO, Gram Vikas, receiving the Kyoto Prize

The objectives of the Prize are to honor a distinguished individual or organization whose grassroots-level activities work towards addressing critical water needs of communities and regions. The prize money must be used by the winner or winning organization to continue the award-winning exercise or similar ones. The intended use of the funds is to be announced at the award ceremony.

For this first edition of the Prize, thirty individuals were invited to attend the Forum, during which ten finalists were selected to present their activities to a 12-strong International Panel of Judges, thus sharing their experiences with Forum participants, in view of generating interest in these activities and reproducing them in other contexts. After the deliberations by the International Panel of Judges, the Prize was awarded to Gram Vikas, an NGO from Orissa, India, and was presented at the Closing Ceremony of the 4th World Water Forum.

Gram Vikas is a rural development organization, working since 1979 with poor and marginalized communities in Orissa, towards making sustainable improvements in the quality of life of the rural poor, notably through water and sanitation projects. Founded by a group of student volunteers from Chennai who came to Orissa under the umbrella of the Young Students Movement for Development, Gram Vikas was registered as a society in 1979. The organization currently serves a population of over 140,000 (28,000 households) across 400 villages in 15 districts of Orissa.

Gram Vikas' mission is to promote processes that are sustainable, socially inclusive, and gender equitable, coupled with enabling critical masses of poor and marginalized rural people or communities to achieve a dignified quality of life. Gram Vikas leverages the inherent strength of communities to initiate, manage and sustain context-specific development processes. The process is backed up by organizing technical and managerial support by Gram Vikas.

Accepting the prize, Joe Madiath, Executive Director of Gram Vikas, recognized the efforts of local people in the province of Orissa who contributed to the success of the project. 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, including for the poor. He announced that the Prize money will be used for capacity building of the village committees and Gram Vikas' staff.

Quite apart from the significance of the Prize for Gram Vikas, a world network of local actors was created among the thirty finalists, which will allow them to continue sharing their experiences in favor of a careful and efficient management of water.

Commitments, Agreements, Initiatives and Announcements Made During the Forum

The 4th World Water Forum was a platform for announcing various initiatives to advance in the solution of water problems around the world. The following is a list of some of the main commitments, agreements, initiatives and announcements made during the week of the Forum

- The European Union and the countries of Latin America signed the Joint Declaration on the Implementation of the Strategy for Water Resources and Sanitation, under the leadership of the Spanish Minister of the Environment, Cristina Narbona, and the Mexican Minister of Environment and Natural Resources, Jose Luis Luege. This initiative, promoted by Spain, Portugal and Mexico, intends to reduce the number of people who do not have access to clean water while at the same time fostering an exchange of water management models.

- The Inter-American Development Bank (IADB) announced that it is in the process of approving a donation fund for infrastructure projects in Latin America, and expects most of these to be water-related. A 1.5 million dollar limit is planned for each infrastructure project.

- UN-HABITAT announced loans and subsidies for an amount of 579 million dollars through a Memorandum of Understanding with the African Development Bank (AfDB) for low scale urban water projects. This institution authorized the allocation of 217 million US dollars in subsidies and more than 362 million US dollars in credit for investment in water and sanitation over the next five years. France contributed 215 million euros to the AfDB initiative on access to water and sanitation in rural areas.

- The Asian Development Bank (ADB) informed that it plans to double investment for the Asia-Pacific region to reach the figure of 2 billion US dollars per year in the coming five years. The program "Water for All", which focuses initially on India, Indonesia, Pakistan, China and Vietnam, will be implemented through the departments of private and regional operations of the ADB. The objective of these projects is to provide clean

water to over 200 million Asian people and improve irrigation and sewage systems to benefit another 40 million people.

- The governments of the United States and Japan agreed to help India to improve water and sanitation services. This is as part of the "United States and Japan Clean Water for People Initiative", which will accelerate international efforts to meet the Millennium Development Goals. The amount of aid from the United States Agency for International Development (USAID) and the Japan Bank for International Cooperation (JBIC) came to nearly 5 million US dollars. This will enable the residents of Bangalore, India, to organize and learn how to make critical water decisions. Likewise, USAID provided a partial guarantee for an amount of 23 million US dollars. JBIC has provided an additional loan of 750 million US dollars, in addition to technical assistance.

- The representatives of countries from Asia and the Pacific announced the creation of the Asia-Pacific Water Forum. Kim Huk Su, Executive Secretary for the United Nations Economic and Social Commission for Asia and the Pacific, considered two major priorities for this new regional Forum: tools to support Integrated Water Resource Management and more effective management of water and risk prevention in the region.

- The government of France announced that it would double public aid for the development of the water sector in the world. The French government strengthened support to those governments interested in implementing national water strategies, promoting appropriate governance of the resource, involving local stakeholders and assessing progress and the appropriate use of the funds through follow-up and evaluation mechanisms.

- The World Water Council announced the launch of its initiative "Water for Schools", seeking to provide access to water for one thousand schools in ten countries and to create training schools for high level technicians.

- Water Solidarity Program (pS-Eau), United Cities and Local Governments and the World Water Council launched a global solidarity financing initiative based on solidarity between users in the North and South and decentralized forms of funding. Such mechanisms have already been developed over recent years and can complement bilateral and multilateral aid especially in response to the need to build sustainable local management capacities in order to secure the investments made. The potential financing that could be raised through such initiatives is 100 million euros in France, 650 million euros if extended to the whole of Western Europe (15 countries) and 2 billion euros if extended to all OECD countries.

In addition, various specific commitments and agreements were made whose specific focus was on Mexico, of which the following is a selection:

- The Spanish Association for Water Supply and Sanitation and the National Association of Water and Sanitation Utilities of Mexico (ANEAS) signed an agreement through which both organizations established a commitment to exchange information on different technical and operational experience of its members, and to submit information on Public Policy for Integrated Water Management at all levels of government and to establish links for direct communication.

- The World Meteorological Organization (WMO), announced the establishment of a Project Office in Mexico to support the National Water Commission of Mexico (CONAGUA) in its objective to attain the integrated management and sustainability of water in Mexico. Michael Jarraud, Secretary General of the WMO, and Cristobal Jaime, Director General of CONAGUA, signed the agreement during the 4th World Water Forum.

- Mexico and France signed an Agreement for Technical and Scientific Cooperation for the management of water resources at the basin level so as to establish planning and financing processes for the disposal and treatment of wastewater, as well as supplying water to the metropolitan area of the Valley of Mexico. The agreement was signed by the National Water Commission of Mexico (CONAGUA) and the Seine-Normandy Basin Organization.

- A Memorandum of Understanding was signed between the Project WET International Foundation, the Mexican Institute for Water Technology (IMTA) and UNESCO to work jointly on water education projects in Latin America.

- The Founder, President and Director General of the Autonomous Institute of Ecological Research of Mexico (INAINE), Luis Manuel Guerra, announced the establishment of the Mexican Association of Environmental Communicators, to operate as a timely, serious source of information on water issues. This association will help to make the work of environmental journalists more professional so that the public at large can receive reliable information.

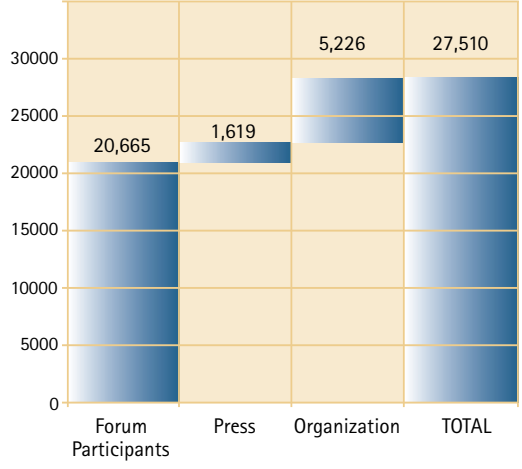
- The North American Development Bank (NADBANK) announced that it is in the process of authorizing 10 loans for a total of 100 million US dollars for water and sanitation projects in the border cities of Sonora, Tamaulipas, Coahuila and Baja California.

- Businessman Carlos Slim proposed the creation of an autonomous agency to raise 50 to 60 billion pesos in investment in the course of the next three years to solve increasing water problems in the Valley of Mexico.

The Forum in Figures

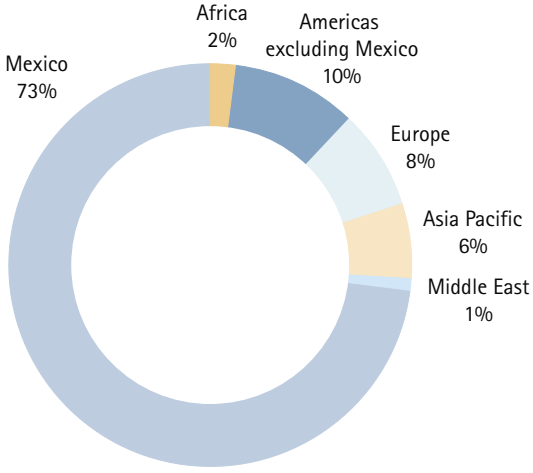
A total of 27,510 people attended in the Forum, from 168 countries, of which 20,665 were participants in the Forum itself.

Distribution of Attendees by Type



185 children took part in the Forum, as well as 1,472 members of governmental delegations. In addition, the Forum attracted 1,619 journalists.

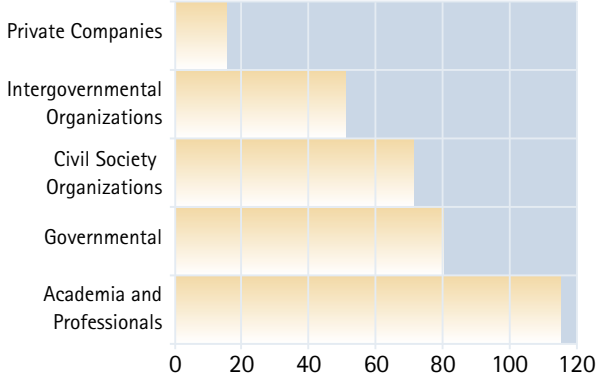
Distribution of Participants by Region



Distribution of Topic Session Conveners

During the week of the Forum, a total of 206 topic-sessions were convened by 323 organizations from different sectors and regions of the world.

Below is shown the distribution of these conveners by stakeholder group.



Of the 206 sessions, 12% focused on a particular region on the world, whereas 88% had a global focus. In addition, 21% were convened by Mexican organizations, whereas organizations from the rest of the world convened 79%.

del Agua

Mexico

Topic Sessions

More than 300 organizations from around the world, including NGOs, international organizations, enterprises, intergovernmental institutions and governmental agencies, convened Topic sessions at the Forum. The sessions included the presentation of local actions which led to the formulation of specific recommendations for water policy.

Selected from the Forum's preparatory process, 206 topic sessions were presented at the Forum. These sessions were action and output oriented, and included 530 of the local actions registered on the Forum website. The sessions were organized according to the five framework themes of the Forum, one for each day, and included the crosscutting and regional perspectives.
The general information about the topic sessions is included in the following pages. In the attached CD you will find a complete summary of each. Please note that some topic sessions were convened on a day which was not related to the theme of that session. All sessions are shown below on the day they were presented at the Forum, rather than in the theme to which they belong.

Cristobal Jaime and Minister Maria Mutagamba

SESSIONS PRESENTED ON MARCH 17, 2006

The focus of the day was "Water for Growth and Development". In the session "Dynamics of Water and Growth: Issues and Political Reflections" (FT1.22) participants discussed the concept of a "minimum platform," or threshold, that countries must acquire to achieve water security and emphasized that the poorest must not be excluded from the full range of infrastructural and institutional options for achieving water security.

In the session "Ensuring Dams Are a Platform for Growth and Sustainable Development" (FT1.25) participants mentioned that while a large effort should be done in terms of addressing the needs of the rural poor through strong support to small scale decentralized solutions, large scale approaches involving dams and reservoirs were required as well because they also provided services for poverty alleviation and constituted an option where there was a need to manage significant quantities of water. It was agreed that in all cases careful planning and participatory decision making processes were needed to achieve solutions that involve minimum acceptable environmental and social impacts.

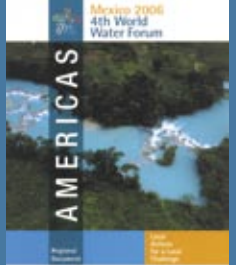
The panelists of session "Business, Water and Sustainable Development" (FT1.36) stressed that investing in water, sanitation and water resources management is good business and that the participation of the private sector can help in growth and development.

Panelists in the session "Linking Poverty Reduction and Water Management – Reaching the MDGs through Investing in Water (FT1.04)" presented several positive experiences that demonstrate the potential of linking poverty reduction processes at national and local levels to water management. Participants agreed that investing in water, whether in large-scale infrastructure or in smaller local developments, is an economically sound decision that generates rapid returns and is beneficial in wider development terms.

Session "Indigenous Towns and Water" (FT1.35) concentrated on the fundamental role of indigenous peoples in the conservation of watersheds. Participants also highlighted new ways of financing water infrastructure for indigenous towns, such as the labor and knowledge that indigenous peoples can add to governmental initiatives.

The following is a complete list of the topic sessions presented during the day.

	March 17,2006			
	Morning		Afternoon	
Room	08:30 to 10:30	11:15 to 13:15	14:30 to 16:30	16:45 to 18:45
Valparaiso 2 and 3		FT3.58 Participation of the State Governors of Mexico I -CONAGUA, ANEAS	FT3.59 Participation of the State Governors of Mexico II -CONAGUA, ANEAS	FT4.43 Participation of the State Governors of Mexico III -CONAGUA
Valparaiso 1		FT1.40 The Mass Media: Key Elements for a Conscience and Social Participation in the Resolution of Water Problems -Hombre Naturaleza	FT1.26 Access to Finance for Local Governments -WWC/ GWP	FT1.25 Ensuring Dams are a Platform for Growth and Sustainable Development -UNEP/ ICOLD/ WWF/ USACE/ IRN
Iturbide 1	FT4.44 Integrated Management of the Water Sector under Conditions of Uncertainty and Scarcity – Part I -WC Israel/ ZIWR	FT1.35 Indigenous Towns and Water -CDI/ UNPFII	FT1.33 Successful Indigenous Approaches to Integrated Water Resource Management and Achieving the Millennium Development Goals -EDF/ IFIP	FT1.15 Is Water Alive? Indigenous Understandings of Water -IWI / IEN
Iturbide 2	FT1.14 Call for Proposal Mechanism : A Way to Directly Support Local Stakeholders in Implementing Local Actions for Local Development -EC/ ADA/ ps-EAU/ WWP	FT1.22 The Dynamics of Water and Growth: Issues and Political Reflections -WB	FT1.07 How to Overcome Corruption in Water Resources and Service Management. Actions for Development -SIWI/ AIDIS/ IICG/ SWH	FT1.36 Business, Water and Sustainable Development -WBCSD/ UNEP/ CESPEDES
Iturbide 3		FT1.23 Local Initiatives (Community Involvement, Stakeholders) -COLMEX/ UNAM/ CICEANA	FT2.47 Crosscutting Issues in Water Policy -IWRN/ CONAGUA/ MMA-Brazil/ WRA Jamaica	FT1.09 Financing Water Infrastructure in the Americas -COA
Casa del Diezmo 1		FT1.34 Water Infrastructures for Sustainable and Equitable Development -IWRA/ ICID/ IHAS/ ICOLD/ IAHR	FT1.28 Water & Energy -CFE/ IHAS/ NVE	FT1.20 Megacities: Paradigms for Urban Water Management -COLMEX/ UNESCO
Casa del Diezmo 2		FT1.24 Groundwater Protection in Africa -UNEP/ UNESCO/ UWC/ DWAF South Africa/ SSO/ CEDARE	FT1.10 Water for Growth and Development in Africa -UNECA/ AfDB/ NEPAD/ SDC	FT1.13 Financing Mechanisms for Local Water Initiatives -AWF/ IsDB/ WSP
Casa del Diezmo 3		FT1.38 Sustainable and Secure Delivery of Water: Unique Solutions Proposed by the Consulting Industry -FIDIC/ CNEC/ AJCE	FT3.57 Water Supply Services -CONAGUA	FT3.56 Society and Water -CONAGUA/ AMNCA
Casa del Diezmo 4		FT1.19 Young People in the Water Crisis and the Challenges to Face -IMJ/ OIJ/ OQAJ	FT1.29 Empowerment of Young People for Water Management and the Strengthening of the Appropriate Use of Water -IMJ/ Geojuve/ UIA	FT1.06 Water and Transport -MLIT Japan / MRC / PIANC / MOCT / USACE
Casa Montejo 1		FT3.18 Capacity Development and Empowerment of Civil Society -IRC/ STREAMS/ CINARA/ EMPOWERS	FT1.01 Water and Free Trade Agreements -IDRC/ UN ECLAC/ COA/ Agua Sustentable	FT1.30 Assessment of Policy Interventions in the Water Sector -WB/ SEMARNAT
Casa Montejo 2		FT1.27 New Concepts and Tools for Education and Capacity Building to Achieve the MDGs -UNESCO -IHE	FT1.39 Shared Groundwater Resources for Sustainable Development -UNESCO/ OAS/ GEF/ IGES	FT1.32 Community Water Management in Latin America -FAN/ COA/ FANCA/ CLAEH
Casa Montejo 3		FT1.05 Achieving Water Security: Innovative Solutions for System Resilience -IRI	FT1.08 The Global Potential for Major Water System Reoptimization to Restore Downstream Ecosystems and Human Livelihoods -NHI	FT1.04 Linking Poverty Reduction and Water Management - Reaching the MDGs through Investing in Water -PEP/ UNDP/ SIWI
Casa Montejo 4		FT1.02 Wastewater Management to Fight Poverty -AESN / SIAAP - France	FT1.18 Innovative Strategies for Financing Projects by Local Authorities. How to Implement Transparent, Responsible and Ethical Models -AMGVF/ UCLG / Edo. Mexico	FT1.16 Land and Water Resources Development in Semi-Arid and Arid Regions -DSI



Mexican State Governors' Session

Participation of the State Governors of Mexico part I, II and III (FT3.58, FT3.59 and FT4.43)

Convened by: National Water Commission (CONAGUA, Mexico), National Association of Water and Sanitation Utilities (ANEAS Mexico)

Participating Governors:

- Luis Armando Reynosa Femat, Governor of Aguascalientes
- Eugenio Elorduy Walter, Governor of Baja California
- Ismael Hernandez Deras, Governor of Durango
- Alejandro Encinas, Head of the Government of Distrito Federal
- Ney Gonzalez Sanchez, Governor of Nayarit
- Fidel Herrera Beltran, Governor of Veracruz
- Felix Gonzalez Canto, Governor of Quintana Roo
- Juan Carlos Romero, Governor of Guanajuato
- Manuel Andrade, Governor of Tabasco
- Marcelo de los Santos, Governor of San Luis Potosi
- Amalia García, Governor of Zacatecas

Objective: To approach water issues from a regional point of view, as well as to present the advances and experiences of each state in water management, especially in terms of water policy oriented at an efficient use of water resources.

The Mass Media: Key Elements for a Conscience and Social Participation in the Resolution of Water Problems (FT1.40)

Convened by: Hombre Naturaleza (Mexico)

Objective: To acknowledge and define the way in which the mass media promote participation for an adequate use and preservation of water resources, in order to promote a collective conscience of responsibility of this valuable resource, linking it with the planning, development and growth of cities.

Ben Braga, Vice President of the WWC

Access to Finance for Local Governments (FT1.26)

Convened by: World Water Council (WWC), Global Water Partnership (GWP)

Objective: The main purpose of the session was to present the findings of the Task Force on "Financing Water for All" established by the WWC, the GWP and the Secretariat of the 4th World Water Forum, as a follow up to the Camdessus Panel, in order to maintain financing issues in the water and sanitation sector at the top of the political agenda.

Local Actions presented:

- *Local Governments Perspectives*, UCLG-Africa / Municipal Development Partnership

- *Financing Local Authorities* – New Water Financing Programme, Asian Development Bank
- *Delivering Financial Engineering and Concessionality to Local Partners* – New approaches from AFD, Agence Française de Developpement
- *Mixed Services* - Enhanced Creditworthiness - Casablanca Morocco, Administration of rural engineering of Morocco
- *Removing Financing Obstacles by Improving Project Structuring*, Inter-American Development Bank
- *Municipal Grants*, DPLG, South Africa
- *Financing Irrigation Project*, Spain and Mexico

Jean Pierre Elang Mbassi, UCLG-Africa

Ensuring Dams Are a Platform for Growth and Sustainable Development (FT1.25)

Convened by: UNEP Dams and Development Project (DDP), International Commission on Large Dams (ICOLD), International Rivers Network (IRN), United States Army Corps of Engineers Institute of Water Resources (USACE) and the World Wildlife Fund (WWF).

Objective: To further clarify the role of dams and their alternatives in water and energy resources development and management, in the context of the MDGs; further stress and agree on the need for appropriate consideration of environmental, social, economical and technical aspects in order to ensure that outcomes contribute to sustainable development; highlight the need to institutionalize sound decision-making processes in the planning and management of dams aiming at public acceptance and local ownership with emphasis on the role of stakeholder participation in dealing with the alternatives, associated trade-offs and risks to produce sustainable projects; and, in the context of the Forum thematic document for Theme 1, "Water for Growth and Development", to discuss the attributes and proper mix of development and institutional/management platforms in the case of dams.

Local Actions presented:

- *Mekong Habitat Classification Project*, Thailand, WWF (LA0378)
- *Optimizing the Role of Dams for Providing Water for Growth and Development*, United States, ICOLD (LA0635)
- *Town Planning and Water Supply in Sofara, Mali*, France, City of Mulhouse (France) and city of Sofara (Mali) (LA0753)
- *The Tennessee Valley Authority,* USA, USACE Institute for Water Resources (LA 1771)
- *The Columbia River Basin (1919 to Present)*, USA, USACE Institute for Water Resources (LA1772)
- *Southeastern Anatolia Project (GAP) in Turkey: An Example for the Socio-economic Development at a Regional Scale and As Water Resources Management*, Turkey, DSI (LA1773)

Indigenous Towns and Water Session

Integrated Management of the Water Sector under Conditions of Uncertainty and Scarcity – Part I (FT4.44)

Convened by: Water Commission (Israel), Zuckerberg Institute for Water Research

Objective: To present the three major aspects of the new approach for stabilization of the water sector in water-stressed environments, such as Israel, for effective

management on a sustainable basis. During the session, examples of efficient exploitation of existing water resources were presented, through operation of water systems on the national level, exploitation and reuse of marginal water resources and development of new water resources.

Local Actions presented:

- *Establishment of National Water Authority* – Directions Towards Implementation, Israel Water Commission (LA1790)
- *Flexible Economic Instruments for Integrated Water Management – The Example of Progressive Production Fees*, Israel Water Commission (LA1791)
- *Remediation and Sustainable Development of the Coastal Aquifer of Israel - Reflection of Past Activities on Future Management,* Israel Water Commission (LA1792)
- *From Wastewater to Sustainable Agriculture The Dan Reclamation Project*, Israel, Mekorot National Water Company (LA1818)

Xochitl Galvez, Director General of CDI, Mexico

Indigenous Towns and Water (FT1.35)

Convened by: National Commission for the Development of the Indigenous People (CDI, Mexico), United Nations Permanent Forum for Indigenous Affairs

Objective: To promote successful cases on water management in indigenous communities. Analyze the contribution of indigenous cultures to the society in water resources related topics. Acknowledge the ancient indigenous water management techniques.

Local Actions presented:

- *Water Forever Program and Quali Cooperative Group*, Mexico, Alternativas y Procesos de Participación Social A.C. (LA0894)

Successful Indigenous Approaches to Integrated Water Resource Management and Achieving the Millennium Development Goals (FT1.33)

Convened by: EcoLogic Development Fund, International Funders for Indigenous Peoples

Objective: To bring together indigenous leaders from Mesoamerica to discuss their successful experiences in Integrated Water Resources Management at the community level and evaluate how integrated approaches to water management present opportunities for improved sustainable livelihoods and economic growth.

Local Actions presented:

- *Traditional Forest and Natural Resource Stewardship of the Maya Quiche in Totonicapan*, Guatemala, Ulew Che' Ja' (LA0496)
- *Models for Village-ed Watershed Management and Payment for Ecosystem Services in Latin America*, EcoLogic Development Fund, United States of America (LA0501)
- *Giganawendaamin Nibi (we must all take care of water),* United States of America, Indigenous Peoples Task Force (LA0549)

Is Water Alive? Indigenous Understandings of Water (FT1.15)

Convened by: Indigenous Water Initiative and Indigenous Environmental Network, Sustainable Water, International Water History Association

Objective: The purpose of the session was to explore indigenous understandings in three contexts (Andes, Ojibway, Navajo) and with the help of the panelists and input from the audience, to try to clarify some of the ways that water is alive.

Local Actions presented:

- *The Andean Social Vision of Water, The Concept of a "Social Water Basin" Was Introduced as Comprising the People Living within a Basin*

- *Ojibway Three-Fires Tradition and "Water-Walking"*
- *Navajo Concepts of Water, The Controversy Surrounding the Black Mesa Coal Mine (owned by Peabody Coal) Has Inspired a Re-Examination of the Importance of Water to the Navajo People*

Call for Proposal Mechanism: A Way to Directly Support Local Stakeholders in Implementing Local Actions for Local Development (FT1.14)

Convened by: Austrian Development Agency, European Commission, Women for Water Partnership, Water Solidarity Program

Objective: To focus on decentralized financial mechanisms, such as calls for proposals that are directly accessible to civil society organizations and local authorities. Such mechanisms have been supported by the European Commission for many years and were presented along with more recent mechanisms such as the ACP-EU Water Facility. Through the Local Actions presented, the beneficiaries of these mechanisms on the ground showed the utility, impacts, and lessons of these different calls for proposals, and their suggestions to improve and promote them. The lessons learn could be useful for other donors.

Local Actions presented:

- *Water Finances Water: Local Mobilization for a Sustainable Access to Water: The Mboss Experience, Senegal,* Eau Vive Senegal (LA0682)
- *Local Development Support Programme in Kornaka, Niger: Reinforcing Local Capacities in a Transparent, Responsible and Ethical Manner,* France, City of Paris, City of Kaolack (Senegal), City of Kornaka (Niger) (LA0859)
- *The African Water Facility-An Instrument for Financing Local Actions,* African Development Bank (LA0705)

Achim Steiner, Director General IUCN

The Dynamics of Water and Growth: Issues and Political Reflections (FT1.22)

Convened by: World Bank

Objective: This session presented the main findings of the Water for Growth and Development Thematic Document. Following a presentation of the document, a panel of high-level decision makers commented on the dynamics of water resources development and management in their country's past, present and future development.

How to Overcome Corruption in Water Resources and Service Management? Action for Development (FT1.07)

Convened by: Stockholm International Water Institute (SIWI), Swedish Water House (SWH), Inter-American Association on Sanitary and Environmental Engineering (AIDIS), International Initiatives on Corruption and Governance (IICG)

Call for Proposal Mechanism Session

David Gray, World Bank Senior Water Advisor

Objective: (1) To increase awareness of the magnitude and dynamics of corruption in water resources management and in the struggle for a universal access to basic water resources and services; (2) To identify, support and discuss effective anti-corruption mechanisms at various levels (from the local to the global) and within relevant levels of transaction (such as public-private, public-public and public-consumer); (3) To stimulate preventive actions that reduce chances of corruption and promote transparency and honesty; (4) To be a forum for the announcement of "The Water Integrity Network (WIN): An Initiative to Form a Network to Combat Corruption in the Water Sector".

Mohamed El Yazghi, Minister of the Enviroment, Morocco

Local Actions presented:

- *Campaigning for People's Governance in Water Resources and Services,* Philippines, International Initiative on Corruption and Governance (LA0457)
- *Private Sector Integrity Initiative in Water and Sanitation Transport Systems in Colombia,* Colombia, ACODAL (LA1719)
- *Support in Social Control of Public Management: Agreement of Interinstitutional Cooperation between EMAAP-Q and AEISA,* Ecuador, Ecuatorian Association of Sanitary and Enviromental Engineering (LA1817)
- *Presentation of an Initiative to Form a Network to Combat Corruption in the Water Sector*
- *A Strategic Framework for Anti-Corruption Activity in the WSS Sector in Africa*

Business, Water and Sustainable Development (FT1.36)

Convened by: World Business Council for Sustainable Development, UNEP - Finance Initiative, Commission for Private Sector Studies for Sustainable Development (Mexico)

Objective: To demonstrate how water can (and should) be on the business and financial agendas. By focusing on three local actions, this session highlighted some key aspects of the future of "water sustainability" that are likely to affect current business and financial models. Moreover, the session touched upon the challenges and opportunities of strategic importance to business activities.

Local Actions presented:

- *Integrated Sanitation and Industrial and Agriculture Reuse,* Mexico, Regional Water Commission of San Luis Potosí (LA1112)
- *Innovative Water Treatment for Remote Communities in Morocco,* Netherlands, Shell Global Solutions International BV (LA1180)
- *Water and Sanitation Institutional Strengthening Program,* Mexico, BANOBRAS (LA1832)

Business, Water and Sustainable Development Session

Local Initiatives (Community, Involvement, Stakeholders) (FT1.23)

Convened by: El Colegio de México (COLMEX), National Autonomous University of Mexico (UNAM), North American Environmental Information and Communication Center

Objective: To identify actions realized by the communities in water management, its preservation and use, as well as their impact on a local, regional and global level, to highlight the conditions which allow the organization of civil society groups that promote initiatives which demonstrate the capacities of such groups in water management and the benefits of a shared management of the resource, to recommend ways to collaborate in the improvement of isolated conditions in rural and urban spaces and to identify key elements in the design of strategies of water management.

Local Actions presented:

- *Andhra Pradesh Farmer Managed Groundwater Systems Project*, India, Bharathi Integrated Rural Development Society (LA0145)
- *The Community Participation Methodology Aclara el Agua, Alternative of Social Action for Water Care*, Mexico, North American Environmental Information and Communication Center (LA0161)
- *Social Management of Water in Popular Neighborhoods*, Mexico, UNAM Campus Morelia (LA1198)

Crosscutting Issues in Water Policy (FT2.47)

Convened by: Inter-American Water Resources Network, National Water Commission of Mexico (CONAGUA), Ministry of the Environment (Brazil), Water Resources Authority (Jamaica)

Objective: To analyze the importance of planning and strategy setting in integrated water resources management towards a crosscutting perspective of the agriculture, energy, sanitation, transportation, environment, communication and tourism sectors to develop a common strategy for water resources management in Latin America and the Caribbean.

Local Actions presented:

- *The Strategic Planning System Implemented by the National Water Commission*, Mexico, CONAGUA (LA1611)
- *The Mexican Committee for a Sustainable Use of Water: A Success Case*, Mexico (LA1630)
- *Brazil's National Hydrological Resources Plan*, Brazil, Ministry of the Environment (LA1704)

Maureen Ballestero, GWP Central America, and Luis E. Garcia

Financing Water Infrastructure in the Americas (FT1.09)

Convened by: Americas Operative Committee

Objective: This session discussed the existing financing methods and new possibilities to allow the countries of the Americas to face the challenges of providing safe water, food and energy to their citizens in order for them to achieve the MDGs. The approach adopted was to discuss infrastructure as a means of achieving better quality of life and not as an end in itself. However, the session was not limited to local actions in the Americas.

Local Actions presented:

- *Financial Instruments to Facilitate Investment in the African Water Sector*, African Development Bank (LA0764)
- *Public-Private Partnership for Sanitation Sector Financing*, Brazil, CAIXA Economica Federal (LA1163)
- *Financing a Large Scale Sanitation Plan to Achieve Major Goals*, France, SIAAP (LA0733)
- *Agricultural Development Based on Water*, Mexico, Colegio Integral de Consultores y Asesores A.C. (LA0227)

Water Infrastructure for Sustainable and Equitable development (FT1.34)

Convened by: International Water Resources Association (IWRA), International Commission on Irrigation and Drainage (ICID), International Hydropower Association (IHA), International Commission on Large Dams (ICOLD), International Association for Hydraulic Research (IAHR)

Objective: To clearly identify the role of water infrastructures in sustainable and equitable development. Addressing the key issues of meeting the MDGs for poverty, hunger, human health and a safe environment by securing services for irrigation, drainage, access to clean drinking water and sanitation, clean and renewable hydro-electricity, protection from flood and drought and fostering efficient water transportation

Water and Energy (FT1.28)

Convened by: Federal Commission for Electricity (CFE) Mexico, International Hydropower Association (IHA), Norwegian Water Resources and Energy Directorate

Objective: Speakers discussed the interrelationships between water and energy, and emphasized the importance of the sustainability criteria in the design and operation of water and energy systems. Methods of promoting and ensuring sustainable development were identified, including the use of sustainability guidelines and certification procedures.

Local Actions presented:

- *Renewable Energy and Water,* International Hydropower Association (LA0083)
- *Optimization of Water Consumption of Thermal Power Plants,* Mexico, CFE (LA0495)
- *Use of Treated Wastewater Coming from the City of San Luis Potosi for Reuse in the Cooling Systems of the Generating Units of the Thermal Power Plant Villa de Reyes, S.L.P., As a Replacement for Groundwater,* Mexico, CFE (LA0742)
- *Diversification of Power Sources through the Construction of Hydroelectric Power Plants,* Mexico, Ministry of Energy (LA1536)

Megacities: Paradigms for Urban Water Management (FT1.20)

Convened by: El Colegio de México (COLMEX), United Nations Educational, Scientific and Cultural Organization (UNESCO)

Objective: (1) To examine the interrelationship between urban settlements and the river basins which they affect, seeking synergies between local and/or regional stakeholders to improve the conditions of river basins, (2) to address the regional impacts and results of local initiatives and the reasons for their success or failure, (3) to illustrate and explore novel approaches and advances for improved integrated and sustainable urban water management, particularly in cities in developing countries, (4) to derive feedback on where efforts should be concentrated in order to continue the development of appropriate and applicable approaches and the corresponding capacity-building elements, (5) to draw on the lessons of the cases and Local Actions presented to offer them to future local efforts dealing with urban water management and regional development.

Local Actions presented:

- *Application of the Ecohydrology and Phytotechnology Approach for Systemic Urban Water Management,*

Water and Energy Session

Poland, International Center for Ecohydrology-Lodz (LA0327)

- *Integrated Urban Groundwater Management in the Suburb of Belgrade-Serbia,* Serbia and Montenegro, University of Aberdeen, United Kingdom (LA0451)
- *City Metropolitan Area and El Cuchillo Dam,* Mexico, *Monterrey* Technology Institute for Higehr Studies (LA1379)
- *Improving Access to Water and Sanitation Services in the Bangalore Metropolitan Area,* India, USAID India (LA1271)

Groundwater Protection in Africa (FT1.24)

Convened by: United Nations Environmental Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), University of the Western Cape, Center for Environment and Development for the Arab Region and Europe (CEDARE), Department of Water Affairs and Forestry (South Africa), Sahara and Sahel Observatory

Objective: To bring scientists, local authorities, non-governmental organizations, private business and international organizations to pool together their efforts to improve the management of groundwater resources in Africa and work towards a groundwater protection strategy suitable to Africa's physical and socio-economic environment.

Local Actions presented:

- *Groundwater Resources Management and Protection in Africa,* Kenya, Division of Early Warning and Assessment (DEWA) UNEP (LA1815)

Water for Growth and Development in Africa (FT1.10)

Convened by: United Nations Economic Commission for Africa (UNECA), African Development Bank (ADB), New Partnership for Africa's Development (NEPAD) Secretariat, Swiss Agency for Development and Cooperation (SDC)

Objective: 1) To present actions in the African Water Sector aimed at ensuring growth and development in water and energy, water and industry, risk management and valuing water; 2) to present the African Water Development Report (AWDR) as a tool for monitoring progress in the implementation of the African Water Vision 2025 and the MDGs related to water.

Local Actions presented:

- *Multipurpose Water Resources Development,* Ethiopia, Ministry of Water Resources (LA1694)
- *Water and Economic Development in the Southern African Development Community,* South Africa, Southern African Development Community (LA1695)
- *Kessem-Tendaho Dam and Irrigation Development Project,* Awash River Basin Ethiopia, Ethiopia, Ethiopia Ministry of Water Resources
- *Outcomes of the African Ministerial Conference on Hydropower*

Financing Mechanisms for Local Water Initiatives (FT1.13)

Convened by: The African Water Facility, the Water and Sanitation Program (WSP Africa), Islamic Development Bank

Objective: This session aimed to present cases that respond to issues of increased volume of financing as well as creating the right conditions for water sector investments in Africa.

Local Actions presented:

- *The African Water Facility - An Instrument for Financing Local Actions*, African Development Bank (AfDB) (LA0705)
- *Mobilizing Resources for Sanitation,* Burkina Faso, Water and Sanitation Program (WSP Africa LA1700)
- *Microfinance for Community-managed Water Projects,* Kenya, Water and Sanitation Program (WSP Africa) (LA1701)
- *Financing Instruments to Facilitate Investment for Water Sector Infrastructure*

Sustainable and Secure Delivery of Water: Unique Solutions Proposed by the Consulting Industry (FT1.38)

Convened by: Association of Japanese Consulting Engineers, Mexican Chamber of Consulting Firms, International Federation of Consulting Engineers (FIDIC)

Objective: To illustrate how high-tech solutions and project goals can be aligned with local needs and constraints by utilizing innovative technology and creative thinking.

Local Actions presented:

- *Groundwater Extraction and Subsoil Settlements in Mexico City,* Mexico, Mexican Chamber of Consulting Firms (LA1786)
- *Project Sustainability Management,* Canada, International Federation of Consulting Engineers (LA1816)

Water Supply Services (FT3.57)

Convened by: National Water Commission of Mexico (CONAGUA)

Objective: To inform on the reality of freshwater supply services in Mexico, Portugal and Spain, in the continuous search for efficiency in the service and highlighting the need for active participation of the community in the design of public policy.

Local Actions presented:

- *Reduction of Unaccounted Water Losses – Mexicali Water Operator, Baja California,* Mexico, State Commission of Public Services of Mexicali (CESPM) (LA0109)
- *Master Plan of Drinking Water and Sanitation in the Municipalities of Tijuana and Playas de Rosarito,* Mexico, State Commission of Public Services of Tijuana (LA0197)

Society and Water (FT 3.56)

Convened by: National Water Commission (CONAGUA Mexico) , Mexican Alliance for a New Water Culture (AMNCA)

Objective: To present alternatives related to water supply, environmental care and fare fees for water supply services.

Young People in the Water Crisis and the Challenges to Face (FT1.19)

Convened by: Mexican Youth Institute, Iberoamerican Youth Organization, Quebec-Americas Organization for Youth.

Objective: To promote the participation and empowerment of young people in the creation of social or technological alternatives which contemplate strategies for adequate water management as a main factor for development.

Local Actions presented:

- *Strategy for the Linkage of Urban Marginalized Area to the Water Duct and Sewerage Services,* Colombia, Public Companies of Medellín (LA0411)
- *Guides and Scouts of Costa Rica: Developing a New Culture in the Use of the Water,* Costa Rica, Ministry of Foreign Affairs (LA1386)
- *Protection of the Lake Sturgeon Spawning Area,* Canada, Corporation for the Improvement of Assumpttion River (LA1215)

Empowerment of Young People for Water Management and the Strengthening of the Appropriate Use of Water (FT1.29)

Convened by: Iberoamerican University, Mexico, Red Geo Juvenil, Mexican Youth Institute

Objective: To promote the involvement of young people in social processes which improve water management and to analyze and promote the issue of water management and water use and availability, to accomplish the MDGs.

Local Actions presented:

- Universal Access to Water: Chilean Subsidies System, Chile, General Directorate of Water (Chile) (LA0039)
- Youth Involvement in the Youth Environmental Program in Mexico: A Space for the Creation of Water Multipliers, Mexico (LA849)
- Drop by Drop, Water is Running Out, Argentina, Scouts of Argentina (LA1428)

Water and Transport (FT1.06)

Convened by: Ministry of Land, Infrastructure and Transport, Japan (MLIT), Mekong River Commission (MRC), International Navigation Association (PIANC), Ministry of Construction and Transportation Republic of Korea (MOCT), Unites States Army Corps of Engineers (USACE)

Objective: To promote environment-friendly networks of logistics by fully utilizing Integrated Water Transport (IWT) with improved interfaces with other modes of transport, by supporting new relationships between providers and maintainers of water resources and the users of these facilities, to expedite development assistance and capacity building to promote IWT in developing countries, to strengthen information networks between the promoters of IWT worldwide through updating of the IWT Network, international meetings and documentation, to strengthen emergency management utilizing IWT in light of intensifying natural disasters and emergencies, and to revive urban functions through activation of the historically important urban waterfront.

Local Actions presented:

- *Inland Waterway Transport in Japan,* Japan, MLIT (LA0132)
- *Kyungin Canal Project,* Republic of Korea, Korea Water Resources Corporation (LA1720)
- *Inland Navigation in the United States,* USA, USACE (LA1721)
- *Regional Economic Integration through Improved Mekong Navigation,* Laos, Mekong River Commission (MRC) (LA1722)

Capacity Development and Empowerment of Civil Society (FT3.18)

Convened by: Cinara Institute (Universidad del Valle, Colombia), Euromed Participatory Water Resources Scenario, International Water and Sanitation Centre, Streams of Knowledge

Objective: To raise awareness and identify critical points for empowerment as a crucial part of capacity development. Inclusion of marginalized groups, equity, community participation and representation were addressed as key issues.

Local Actions presented:

- *Stakeholder Dialogue for Better Water Resource Management,* Jordan, CARE International (LA0201)
- *Aquacol,* Colombia, Cinara Institute (LA0205)

Water and Free Trade Agreements (FT1.01)

Convened by: International Development Research Centre (IDRC), United Nations Economic Commission for Latin America and the Caribbean (ECLAC), United Nations Technical Assistance, Americas Operative Committee, Sustainable Water

Objective: The objective of the session was to discuss the links and impacts between integrated water resources management and Free Trade Agreements, Bilateral Investment Agreements, and the international dispute systems established under such agreements.

Local Actions presented:

- *Free Trade and Water Agreements Bolivia,* International Development Research Centre (IDRC) (LA0842)
- *Free Trade Agreement Dispositions Related to Water,* Costa Rica, Global Water Partnership Central America (LA1709)
- *North America Free Trade Agreement (NAFTA) and Water*

Assessment of Policy Interventions in the Water Sector (FT1.30)

Convened by: Ministry for the Environment and Natural Resources (SEMARNAT Mexico), World Bank (WB)

Objective: To present and get feedback on an analytical framework that informs a policy dialogue among various stakeholders, and allows an assessment of different policy options to resolve various challenges in the water sector in Mexico. The specific situation in Mexico was the focus of the session, with local actions concentrating on policy impact on indigenous people, and on policy impact on groundwater sustainability.

Local Actions presented:

- Assessment of Groundwater in Tlaxcala, Mexico, El Colegio de Tlaxcala (LA0520)

New Concepts and Tools for Education and Capacity Building to Achieve the MDGs (FT1.27)

Convened by: UNESCO-IHE Institute for Water Education

Objective: The session addressed issues related to the role of knowledge in capacity building in the fields of water, environment and infrastructure. New concepts and tools for more effective learning were presented, as developed and implemented by UNESCO-IHE and a number of its partner organizations, mainly from developing countries.

Local Actions presented:

- *Capacity Building and Networking for the Water Sector in the Nile River Basin,* Egypt, The Hydraulics Research Institute (LA0178)
- *Integrated River Basin Management Online Learning Experiences in China Financing Irrigation Project*, UNESCO-IHE (LA0382)
- *Millennium Development Goals (MDG) Capacity Strengthening Project for Africa,* UNESCO-IHE (LA0440)
- *Millennium Development Goals (MDG) Capacity Strengthening Project for Asia,*UNESCO-IHE (LA0443)

Shared Groundwater Resources for Sustainable Development (FT1.39)

Convened by: United Nations Educational, Scientific and Cultural Organization (UNESCO), Organization of the American States (OAS), Institute for Global Environmental Strategies (IGES), Global Environmental Facility (GEF)

Objective: To disseminate information on: 1) the significance of groundwater for national economic development and public health, from local use to supply for industry and municipalities, 2) the significance of groundwater for environmental sustainability, as a reservoir for drought alleviation, 3) the crucial need to ensure good resource management for sustainability, at the local level of individual users and the regional / global levels, including transboundary partners.

Local Actions presented:

- *Stakeholder Meeting on Sustainable Groundwater Management in Bangkok,* Thailand, Asian Institute for Technology (LA0133)
- *Managing Transboundary Aquifers as a Tool for Environment Stress-Reduction and Poverty Alleviation: Two Examples from the Americas, Argentina,* OAS (LA0386)
- *Risk Management in the Lullemeden Aquifer,* Italy, UNESCO/IHP (LA1122)

Community Water Management in Latin America (FT1.32)

Convened by: Freshwater Action Network (FAN), Operative Committee of the Americas, Freshwater Action Network Central America, Latin-American Center for Water Studies

Objective: This session demonstrated through local experiences and expert participation that communities have full capacity to manage their drinking water supply, also to develop successful initiatives towards integrated water resources management, involving the most vulnerable sectors.

Local Actions presented:

- *Water and Food Security as Possibility Conditions for Women's Development. Water Forever Program,* Mexico, Alternativas y Procesos de Participación Social A.C. (LA0915)
- *Citizen Planning in the Integral Management of Microbasins,* Mexico, Amigos de los Volcanes, A.C. (LA1138)
- *Assessment of Local Management in the Handling of Water Resources: Rural Water Pipeline Boards of Central America, Panama Case,* GEMAS (LA1394)
- Experience from the Potable Water Services Federation of Chile

Achieving Water Security: Innovative Solutions for System Resilience (FT1.05)

Convened by: International Research Institute for Climate and Society

Objective: This topic session presented demonstrations of resilience systems in water and economic development that improve the reliability and quality of water supplies, reduce the vulnerability of economies and people to climate shocks and mitigate the impact of climate variability and strong seasonality on development.

Local Actions presented:

- *Contribution to Flood Monitoring and Adaptation Strategies in Zimbabwe*, Zimbabwe National Water Authority (LA0585)
- *Floods Forecasting System for Integrated Natural Resources Management in the Niger Inner Delta in Mali*, Niger, AGRHYMET Regional Center (LA1496)
- *Aridity Zones Mapping in Latin America and the Caribbean*, Chile, UNESCO–IHP (LA1820)

The Global Potential for Major Water System Reoptimization to Restore Downstream Ecosystems and Human Livelihoods (FT1.08)

Convened by: Natural Heritage Institute (NHI)
Objective: To launch a global dialogue on the potential of reoptimizing major hydraulic infrastructure systems, of which dams are a part, worldwide. The infrastructure under consideration includes systems built for hydropower generation, flood control, irrigation, water supply or multi-purpose uses.

Local Actions presented:

- *The Yellow River Experiments with River Floods and Sedimentation*, China, the Yellow River Conservancy Commission (LA1748)
- *Reoptimizing the Operation of Manantali Dam in the Senegal River Basin OMVS POGR*, Senegal, Institute of Research for Development (IRD) (FT 1747)
- *The Global Initiative on the Reoptimization of Major Dams*, NHI

Linking Poverty Reduction and Water Management – Reaching the MDGs through Investing in Water (FT1.04)

Convened by: United Nations Development Programme (UNDP), Stockholm International Water Institute (SIWI) on behalf of the Poverty-Environment Partnership (PEP)

Objective: To illustrate through the presentation of "local actions" how investing in water management can contribute to poverty reduction and all of the MDGs in different ways, not just those that refer explicitly to water and sanitation.

Local Actions presented:

- *IWRM to Reach the MDGs in Kazakhstan*, UNDP (LA0198)
- *Reducing Health Risks for the Poor through Improved Groundwater Monitoring in the Riviera Maya*, Mexico, National Autonomous University of Mexico (UNAM) (LA1206)
- *Ecological Sanitation Solution for Poverty Reduction, Examples from Mexico*, Mexico, Sarar Transformación SC

Fighting Poverty through Waste Water Management (FT1.02)

Convened by: Seine Normandy Water Agency (AESN), National Water Commission (CONAGUA Mexico) and Inter-Departamental Union for Sanitation of the Urban Area of Paris (SIAAP–France)

Objective: To establish that urban wastewater treatment delivers benefits for sustainable development and poverty reduction.

Local Actions presented:

- *Economic Impact of Quality of Coastal Resources* Management, France AESN (LA0713)
- *Financing a Large Scale Sanitation Plan to Achieve Major Goals*, France, SIAAP (LA0808)
- *Sanitation Systems and Environmental Protection Activities in Istanbul Metropolitan Area*, Turkey, Istanbul Water and Wastewater Administration (LA1697)
- *Wastewater Management of the Metropolitan Region of Mexico City and its Contribution to the Development of the Valley of Mexico and Tula Basins*, Mexico, CONAGUA (LA1703)
- *The City of Fez*, Morocco

Innovative Strategies for Financing Projects by Local Authorities. How to Implement Transparent, Responsible and Ethical Models (FT1.18)

Convened by: Association of Mayors of Large Cities in France (AMGVF), United Cities and Local Governments (UCLG), Government of the State of Mexico, Unites Cities France

Objective: To highlight innovative financing model and share best practices on the basis of the examples presented by French and Italian local authorities and their partners. The issue at stake was how to enhance the articulation of local and global financing for water and sanitation cooperation.

Local Actions presented:

- *Project for Improving Water Governance in the Volta Basin (PAGEV), Burkina Faso,* the World Conservation Union (IUCN) (LA0945)
- *Town Planning and Water Supply in Sofara, Mali,* France, City of Mulhouse (France) and city of Sofara (Mali) (LA0753)
- *International Support for the Implementation of Water and Sanitation Projects by the Communities in Kaolack (Senegal): A Health Project,* France, City of Paris (France), City of Kaolack (Senegal), City of Kornaka (Niger) (LA0841)
- *Decentralized Cooperation Program with 2 Municipalities in Lebanon: Elaboration of a Wastewater Management Plan and Construction of a Sewer System and Treatment Facility for a 80-house Settlement,* France, Lille Metropole Communauté Urbaine (France), Chouf Es Souayjani (Lebanon) Bkassine (Lebanon) (LA1572)

Land and Water Resources Development in Semi-Arid and Arid Regions (FT1.16)

Convened by: General Directorate of State Hydraulic Works (DSI, Turkey)

Objective: To share the knowledge of countries in arid and semi-arid regions on the development of techniques and technologies used in the water sector, and to promote international co-operation, also to deal with some engineering aspects of water and soil development, considering the water projects in those areas.

Local Actions presented:

- *Introducing the Culture of Water in the Semi-Desert Rural Area of Mexico,* Monterrey Technology Institute for Higher Studies (LA0222)
- *Regional Solar Energy Programme to Improve Access to Water in the Rural Sahel,* Burkina Faso, Permanent Inter-State Committee for Drought Control in the Sahel (LA0383)
- *Southeastern Anatolia Project (GAP) in Turkey: An Example for the Socio-Economic Development at the Regional Scale and as a Water Resources Management,* Turkey, General Directorate of State Hydraulic Works (LA1773)
- *Sustainable Human Development in GAP Region,* Turkey, Regional Development Agency for Outheastern Anatolia Region (LA1794)

	March18, 2006			
	Morning		Afternoon	
Room	08:30 to 10:30	11:15 to 13:15	14:30 to 16:30	16:45 to 18:45
Valparaiso 2 and 3		FT2.53 Strengthening Crosscutting Schemes toward the Integrated Management of Rivers and Coasts -SEMARNAT/ GEF/ UACAM/ IPN	FT2.05 Water Management in Transboundary Basins -CONAGUA/ AWRA/ AMH	FT2.38 Ecosystem and Ecohydrology Approaches to Integrated Water Resources Management -UNEP/ UNESCO-IHP/ OAS/ ILEC
Valparaiso 1		FT2.07 IWRM National Plans (Part I) -WWAP/ GWP/ UNDP/ UNEP	FT2.19 IWRM in National Plans (Part II) -WWAP/ GWP/ UNDP/ UNEP	FT2.20 IWRM in National Plans (Part III) -WWAP/ GWP/ UNDP/ UNEP
Iturbide 1	FT2.50 Local Governance for Multiple Water Uses: Experiences in Community Participation in Rural Areas of Central and South America -SDC	FT2.28 Lessons Learned on Facilitating IWRM Planning -GWP	FT2.27 The Role of Water and Integrated Water Resources Management in the Achievement of the Millennium Development Goals -GWP/ SIWI	FT2.01 Financing and IWRM -GWP/ FMCN/ GWP/ WB
Iturbide 2	FT2.49 The Mass Media as a Detonator of a Water Culture -FMA/ INAINE	FT2.08 Transboundary Waters in the Americas: Lessons in IWRM -OAS/ IJC	FT2.15 The Challenges of Legal Water Sector Reform -WB/ COA	FT2.45 IWRM Issues in Federative Countries -ANA
Iturbide 3		FT2.14 Implementation of the Water Framework Directive: Status, Challenges & Prospects -INBO/ Univ. Osnabrueck/ Wageningen	FT2.36 Participation of the Public and Solidarity in Basin Management -INBO/ ELIIW/ Académie de l'Eau	FT2.29 Synthesis Session on Transboundary Basin Management : Regional Consensus as a Driving Force for Progress and Development -MONTREAL/ INBO/ SYKE
Casa del Diezmo 1		FT2.51 Institutional Development for IWRM -GEF	FT2.26 Groundwater for Life and Livelihoods - A Framework for Action -IAH/ WB/ GWI	FT2.22 Rivers and Wetlands: A Negotiated Approach -ECOA/ BothEnds/ AEDES
Casa del Diezmo 2		FT2.44 Adopting Integrated Flood Management within Integrated Water Resources Management (IRWM) -MLIT Japan/ MTPWWM Netherlands/ MEDD, France/ Académie de l'Eau/ APFM	FT2.46 Wastewater Management for Integrated Water Resources Management -Japan Water Reclamation Committee	FT2.32 Promoting World Lake Vision and Integrated Basin Management for the Future of Global Water -Shiga, Japan/ ILEC/ GNF/ CPLBYRBAR / WB / GEF / UNEP / MLIT Japan
Casa del Diezmo 3		FT2.04 Shared Vision Models -IMTA/ DHI	FT2.24 Information in Support of Integrated Water Resources Management -WMO/ EMWIS/ ABM	FT2.16 Water Governance and River Basin Organizations -GWP/ IUCN/ EDF
Casa del Diezmo 4		FT2.18 Transboundary Water Management and Regional Integration in Africa -ANBO/ NEPAD/ NBI/ UNECA	FT2.30 Coordination of Local Actions for the Sustainable Future of the La Plata River Basin -GCI/ ITAIPU/ CIC	FT2.34 Bottom-Up Meets Top-Down: Learning Lessons from Latin America and Africa -WfWfW/ GWA
Casa Montejo 1		FT2.33 Advancing Local Actions in Basins, Sub-Basins and Aquifers (BSA) through Comprehensive IWRM Learning and Global Networks -UNESCO-IHP/ INE/ EC	FT2.31 Management Link for Freshwaters and Coasts - Progress in Local Actions -UNEP/ NOAA/ GFO/ SEMARNAT	FT2.17 Public Private Partnership towards IWRM in the MENA Region -MWRI Egypt/ AWC
Casa Montejo 2		FT2.03 Strengthening Institutions and Stakeholders Capacity for IWRM Implementation at the Local Level -CAP-NET/ LA-WETnet/ REDICA	FT2.41 IWRM in the North -NoWNET/ USACE	FT2.39 Rainwater, Watershed Management and Food Sovereignty -IRHA/ CIDECALL / UNEP
Casa Montejo 3		FT2.35 Implementing the 2002 Johannesburg Commitments - African Civil Society in IWRM -MVULA/ FAN/ RWC	FT2.13 IWRM as a Basis for Social and Economic Development in Central Asia -SIC-ICWC/ GWP	FT2.43 Opportunities and Impediments to IWRM: Reality -vs- Virtual Reality -USACE/ IWMI
Casa Montejo 4		FT2.02 Integrated Management and Governance: A Framework for Making Empowerment a Reality -ICLEI / WWAP / Unie van Waterschapen	FT2.25 Groundwater Management in the Middle East and North Africa Region -WB/ AWC	FT2.48 Water Governance: from Analysis to Action -UNAM

SESSIONS PRESENTED ON MARCH 18, 2006

Jose Luis Luege, HRH Prince of Orange, Katherine Sierra and Cristobal Jaime in a Topic Session

The focus of the day was "Implementing Integrated Water Resources Management (IWRM)". A mega session, made up of three consecutive sessions, with the title "IWRM National Plans (FT2.07, FT2.19 and FT2.20)" was devoted to examining to what extent and how countries are progressing toward the MDG target of incorporating integrated water resources and water efficiency planning in all national and regional development strategies by 2005. Panelists mentioned that the slow progress made after the success in the initial stages indicates that the realization of the IWRM target may in fact take many years. The level of progress required, a shift in mindset as well as operational approach, demands widespread institutional as well as social change, at all levels.

The synthesis session "Transboundary Basin Management: Regional Consensus as a Driving Force for Progress and Development (FT2.29)" stressed the benefits for transboundary integrated water resources management for the implementation of the European Directive in the member countries of the European Union. The directive promotes the harmonization of practices and the improvement of management tools in shared river basins. It was highlighted that European countries have agreed to manage water using river basins as the basic management unit.

In the session "The Challenges of Legal Water Sector Reform (FT2.15)" the cases of the modernization of water legislations in Chile, Peru and Costa Rica were presented. Panelists stressed the need to adopt the "polluter pays" principle in the legal framework, as well as the ecosystem approach for water management.

Panelists in the session "Groundwater for Life and Livelihoods – A Framework for Action (FT2.26)" mentioned that there is a failure to understand the scale of significance of groundwater in supporting human and environmental water needs. There was broad recognition that there is a deepening crisis in ensuring the application of best practice at all scales and that the task is an urgent one because of depleting resources and deteriorating quality of groundwater.

Strengthening Crosscutting Schemes toward the Integrated Management of Rivers and Coasts (FT2.53)

Convened by: Ministry of the Environment and Natural Resources (SEMARNAT Mexico), Global Environment Facility (GEF), Autonomous University of Campeche, National Polytechnical Institute (IPN Mexico)

Objective: To exchange experiences and lessons learned on inter-institutional coordination actions to promote integrated management of basins and coasts.

Local Actions presented:

- *Ecological Ordenance for Crosscutting Actions in the IWRM,* Mexico, SEMARNAT (LA1805)
- *State Actions for Water Integrate Management in Campeche, Mexico,* Mexico, Centro Epomex-Uac (LA1806)
- *Moving Forward in a Crosscutting Strategy for an Integrated Management of Basins and Coasts in the Yucatan Peninsula,* Mexico, SEMARNAT (LA1807)
- *Partnerships in Environmental Management for the Seas of East Asia,* Philippines, PEMSEA (LA1808)

Water Management in Transboundary Basins (FT2.05)

Convened by: National Water Commission (CONAGUA Mexico), American Water Resources Association (AWRA), Mexican Association of Hydraulics

Objective: To review and discuss the development of institutional mechanisms, which are in place today, by the two bilateral commissions established between Mexico and the United States of America, as well as those instituted between the latter and Canada; review the successful outcomes accomplished by countries located at the Danube River Basin in Europe in order to manage their transboundary water.

Local Actions presented:

- *Preventing and Resolving Disputes - Getting Ahead of the Issues (the IJC model),* Canada, International Joint Commission (LA0710)
- *UNDP/GEF Danube Regional Project,* Austria, UNDP (LA0191)
- *Institutional Mechanisms for Addressing Transboundary Water Resources Issues, the United States of America and Canada,* Canada, International Joint Commission

Ecosystem and Ecohydrology Approaches to Integrated Water Resources Management (FT2.38)

Convened by: United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization – International Hydrogeological Programme (UNESCO-IHP), Organization of American States (OAS), International Lake Environment Committee Foundation (ILEC)

Objective: 1) To introduce and develop the "ecosystem approach" and the "ecohydrology approach" by introducing local actions that have demonstrated success, and extracting the lessons learned, 2) to develop, through a panel discussion, policy-relevant recommendations for future local actions that can incorporate the principles of the ecosystem and ecohydrology approaches to IWRM.

Local Actions presented:

- *Application of Ecohydrology and Phytotechnology for Integrated Water Resources Management and Sustainable Development,* Poland, Department of Applied Ecology, University of Lodz (LA0493)
- *Community - Government Partnerships and Popular Participation as a Reflowering Instrument of Ciliate Vegetation and Environmental Preservation,* Brazil, National Water Agency (LA0972)
- *Lake Naivasha/Malewa Basin Ecohydrology Demonstration Site,* United Kingdom, University of Leicester (LA1187)

Gordon Young, WWAP Coordinator

IWRM in National Plans I, II and III (FT2.07, FT2.19 and FT2.20)

Convened by: United Nations World Water Assessment Program, Global Water Partnership (GWP), United Nations Development Program (UNDP), United Nations Environment Program (UNEP)

Objective: To examine to what extent and in what ways countries have adopted and implemented the principles of IWRM and are thus progressing toward this MDG target. It also served to provide an overview of on-going monitoring activities regarding IWRM planning and implementation, from the global scale to the regional and country levels.

Local Actions presented:

- *National Political Processes that Make Possible Positive Changes Locally*, Bolivia, ALT (LA0796)
- *The Use of the Federal Law of Access to Governmental Public Information to Foster Civil Society Participation in Water-related Issues: Chiapas Case*, Mexico, Mexican Citizens Presence (LA1445)
- *Burkina Faso Experience on Local Water Committee*, Burkina Faso, Directorate General for the Inventory of Water Resources (LA0644)
- *Water Management Policy Implementation Issues*, Ethiopia, Ministry of Water Resources (LA0826)
- *Advancing the IWRM Agenda in the Sg. Langat River Basin, Malaysia, through the Use of GWP IWRM Toolbox*, Malaysia, Malaysian Water Partnership (LA1502)

Madiodio Niasse, Chairman GWP West Africa

Local Governance for Multiple Water Uses: Experiences in Community Participation in Rural Areas of Central and South America (FT2.50)

Convened by: Swiss Agency for Development and Cooperation (SDC)

Objective: To discuss the challenges regarding the aim of sustainable water use with decentralized management mechanisms in rural areas and integrated water resources management at municipal and inter-municipal levels, through local water governance in situations of diverging interests of social groups.

Local Actions presented:

- *Management Mechanisms and Experiences of a Local Water User Association (JAPOE-Honduras) Running a Medium Sized Rural Town Water System in Line with the IWRM Concept*, Honduras, Drinking Water Management Committee and Human Waste Disposal of the City of Jesus de Otoro.
- *Integrated Basin Management in the Local Development: A Process of Learning and Construction, Tunari Hill's experiences*, Bolivia, IWRM Program PROMIC (LA1044)
- *Impact of Decentralized Models for the Management of the Water and Sanitation in Cusco – Peru on Local, Sub National and National Policies*, Peru, SANBASUR Project (LA1492)

Mike Muller, Wifts University School, South Africa

Lessons Learned on Facilitating IWRM Planning (FT2.28)

Convened by: Global Water Partnership (GWP)

Objective: The session presented lessons learned from the planning program currently underway and welcomed related local actions to present their experiences in IWRM.

Local Actions presented:

- *Burkina's National IWRM Planning Process: Impacts and Lessons*, Burkina Faso, Directorate General for the Inventory of Water Resources (LA0445)
- *Capitalization of Experiences - Land, Water and People*, India, Intercooperation (LA1298)

The Role of Water and Integrated Water Resources Management in the Achievement of the Millennium Development Goals (FT2.27)

Convened by: Global Water Partnership (GWP), Stockholm International Water Institute (SIWI)

Objective: (1) To highlight the vital role of water resources management and development in the achievement of the MDGs on poverty, hunger, gender, education, health and environmental sustainability and how this translates into local policies and actions; (2) to discuss how IWRM approaches can help in maximizing synergies and reconciling trade-offs in the achievement of the MDGs at the national and local levels; (3) to review how, in this context, to accelerate implementation of the 2005 World Summit's resolution to assist developing country efforts to prepare and implement IWRM and water efficiency plans as part of their national development strategies to achieve the MDGs; and (4) to identify strategies that the water community can use to advocate, communicate and persuade decision-makers to change planning and development processes.

Local Actions presented:

- *Water Management Policy Implementation Issues,* Ethiopia, Ministry of Water Resources (LA0826)
- *Ethiopia's Poverty Reduction,* Uganda, GWP Eastern Africa (LA1762)
- *Roadmaps to Achieve the MDG Targets on Water and* Sanitation, World Bank

Mi Hua, Global Environment and Technology Foundation

Members of the Regional Comittee of Europe

Financing and IWRM (FT2.01)

Convened by: Global Water Partnership (GWP), Mexican Fund for Nature Conservation, World Bank (WB), Global Water Partnership-South East Asia
Objective: To increase the knowledge and understanding of financing issues in relation to Integrated Water Resources Management.

Local Actions presented:

- *A Project for the Saltillo Hydrologic Basin,* Mexico, Protection of Mexican Fauna (LA0057)
- *Ecosystem Approach and Payments for Ecosystem Services,* Switzerland, Swiss Agency for the Environment, Forests and Landscape (LA0459)
- *Water Watch Penang: Creation of a Water Saving Society,* Malaysia, Water Watch Penang (LA1120)
- *Economic Instruments in Water Management,* Costa Rica, Water Department. Ministry of the Environmental and Energy (LA1650)

The Mass Media as a Detonator of a Water Culture (FT2.49)

Convened by: Miguel Aleman Foundation (Mexico), Autonomous Institute for Ecological Research (Mexico)

Objective: To stress the importance of the mass media as promoters of society's behavior and actions through the messages sent through them, due to the fact that these messages allow an enhanced social knowledge by raising the awareness of those who are exposed to them.

Local Actions presented:

- *Solid Rain, Mexico*, Miguel Alemán Foundation(LA0393)
- *Water Harvest in Arid Areas*, Mexico, INCASA (LA0712)

Transboundary Waters in the Americas: Lessons in IWRM (FT2.08)

Convened by: Organization of American States (OAS), International Joint Commission (IJC)

Objective: To strengthen capacities of local actors in managing shared international water basins. To examine on-the-ground experience in managing international waters and identify the success of tools, legal structures and common standards, lessons in institutions and governance, as well as the pivotal role of civil society in supporting Integrated Water Resources Management at the transboundary level. The session also examined the cost-effectiveness of transboundary water management in the context of developing countries and the overarching objective of poverty alleviation and achieving the MDGs.

Local Actions presented:

- *The Great Lakes of North America - An Ecosystem Perspective*, Canada, International Joint Commission (LA0293)
- *Integrated Management of the Transboundary Apa-Pantanal Sur River Basin*, Brazil, Consórcio Intermunicipal para o Desenvolvimento Integrado das Bacias dos Rios Miranda e Apa (LA0839)
- *Ribeirao Preto Pilot Project*, United States, World Bank (LA1435)

Joao Bosco, Ministry of the Environment, Brazil

The Challenges of Legal Water Sector Reform (FT2.15)

Convened by: The World Bank (WB), Operative Committee of the Americas (COA)

Objective: The modernization of water legislation has been popularized in the Americas for some time, yet in the last fifteen years, with some exceptions, new legislation has rarely been ratified by national policy makers despite the national and international interests. The session examined the structure, capacity and efficiency of such institutions and legal reform processes, and the degree of political and legal efficiency.

Local Actions presented:

- *The Challenges of Legal Water Sector Reform in Columbia*, Chile, The World Bank (LA1382)
- *The Challenges of Legal Water Sector Reform in Peru*, Peru, The World Bank (LA1419)
- *Upgrading the Costa Rican Water Policy: An Unfinished Challenge*, Costa Rica, GWP-Centroamérica (LA1717)

Jose Manuel Zeledon, Ministry of the Environment and Energy, Costa Rica

IWRM Issues in Federative Countries (FT2.45)

Convened by: National Water Agency (ANA-Brazil)

Objective: To objectively analyze the applicability of modern water management paradigms such as IWRM, which are conceptually attractive but not commonly implemented, in terms of improving water management practices and processes: conceptual attractiveness alone is no solution to ensure efficient and equitable water management in the future. Furthermore, contrary to what many may believe,

the articulation, debate and implementation of paradigms may be the quickest way to ensure efficient management of water resources. The session discussed, through practical examples, the extent to which IWRM has succeeded in moving water management forward.

Local Actions presented:

- *Agreement of Ruling Principles of Water Policy for Argentina,* Argentina, World Water Assessment Programme (LA0807)
- *São Francisco River Basin Committee Installation Process,* Brazil, National Water Agency (LA1304)
- *Implementing Integrated Water Management Via a Water Management Plan- Montmorency River Watershed,* Canada, Montmorency River Basing Council (LA1439)

Implementation of the Water Framework Directive: Status, Challenges & Prospects (FT2.14)

Convened by: International Network of Basin Organizations (INBO), University of Osnabruek, Wageningen UR

Objective: To take stock of successful experiences and also difficulties encountered in implementation of the Water Framework Directive in Europe and to find ways to disseminate these experiences and, to create awareness about them among the Ministers and multilateral financial institutions attending the Forum and the Ministerial Conference.

Local Actions presented:

- *Transboundary River Basin Management of the Körös/ Crisuri River, a Tisza sub-Basin,* Hungary, Ministry of the Environment and Water (LA0746)
- *Implementation of the European Water Framework Directive,* Poland, Ministry of the Environment (LA0748)
- *Actions of Water Resources Protection, Ecosystem Regeneration and Improvement of the Public and Educational Use of Coastal Wetlands of the Jucar Hydrographic Confederation:* The Case of l'Albufera de Valencia, Spain, Confederación Hidrográfica del Júcar (LA1276)
- *Transboundary IWRM in the Lille Metropolitan Area on the French Belgian Border in the Escaut River Basin, France,* International Commission for Escaut (LA1619)

Helen Fotopoulos, City of Montreal, Canada

Participation of the Public and Solidarity in Basin Management (FT2.36)

Convened by: International Network of Basin Organizations (INBO), Environmental Law Institute and IW: LEARN, Water Academy of France

Objective: To take stock of successful experiences in the role, composition and concrete actions of basin committees, consultation procedures of the general public, the role of NGOs and grassroots stakeholders in education of the people and awareness building and solidarity in resource sharing and creation of adequate financial means.

Local Actions presented:

- *Social Participation Strategy in the Integrated Basin Program in Arriaga's Municipality,* Mexico, Lagartero River Basing Council (LA0294)
- *Public Participation in the Implementation of European Water Management Issues,* France, Seine-Normandy Water Agency (LA0737)
- *"Rhine-Net" for Enhancing Good Practices in Public Involvement,* France, Solidarity Water Europe (LA0745)
- *Decentralized Water Resources Management in a Transboundary River Basin,* Senegal, World Bank (LA1569)

Synthesis Session on Transboundary Basin Management: Regional Consensus as a Driving Force for Progress and Development (FT2.29)

Convened by: City of Montreal, International Network of Basin Organizations (INBO), Environment Institute of Finland

Objective: To synthesize successful experiences implemented in various regions in terms of transboundary basin management and to show how sound transboundary cooperation and regional consensus are key factors towards progress, development and poverty alleviation.

Local Actions presented:

- *Strengthening River Basin Organisations in the SADC Region*, Germany, Southern African Development Community (SADC) (LA0139)
- *Transboundary Water Management of the Irtysh River Basin*, Russia, The Irtysh River Steering Committee (LA0693)
- *The Mekong Programme*, Laos, Mekong River Commission (MRC) (LA1142)
- *Great Lakes and St. Lawrence Cities Initiative*, United States, City of Chicago (LA1203)

Institutional Development for IWRM (FT2.51)

Convened by: Global Environment Facility (GEF)

Objective: To engage presenters in discussing with experts and participants concerning GEF experiences and new directions in planning and implementing IWRM; the local actions illustrated successful approaches in advancing IWRM at different levels and scales.

Local Actions presented:

- *Case of Watershed Degradation on the Jos Plateau*, Nigeria, EarthSearch (LA0177)
- *UNDP/GEF Danube Regional Project*, Austria, UNDP/GEF Danube Regional Project (LA0191)
- *São Francisco River Basin Committee Installation Process*, Brazil, National Water Agency (LA1304)

Groundwater for Life and Livelihoods - A Framework for Action (FT2.26)

Convened by: International Association of Hydrogeologists, the World Bank (WB), Groundwater Institute

Objective: The objective of the session was to highlight and discuss the need for the mobilization of policy support for groundwater in order to facilitate and sustain much needed local actions on resource management and protection.

Local Actions presented:

- *UNESCO-IUGS-IGCP Project no. 523: Titled Grownet: Networking of Best Practices in Ground Water Management in Low Income Countries*, India, Ground Water Institute (LA0022)
- *"Toward the Stabilization of the Villa de Arista Aquifer" Milagro at 150 m*, Mexico, Technical Groundwater Committee of the Valley of Arista, A.C. (LA0410)

Rivers and Wetlands: A Negotiated Approach (FT2.22)

Convened by: Ecoa and Pantanal Network, Both Ends, Specialized Association for Sustainable Development

Objective: This session demonstrated how bottom-up, ecosystem-based approaches address local poverty and environment issues and simultaneously contribute to sustainable and equitable water management policy frameworks.

Local Actions presented:

- *Promotion and Protection of the Environment and the Development of Senegal River Basin*, Senegal, CODESEN – Senegal (LA0029)
- *Paraguay - Paraná Wetland System*, Brazil, Pantanal Network (LA0122)
- *Integrated Water Resources in the Ocaña Basin*, Peru, Specialized Association for Sustainable Development (LA0862)

Adopting Integrated Flood Management within Integrated Water Resources Management (IWRM) (FT2.44)

Convened by: River Bureau, Ministry of Land, Infrastructure and Transport (MLIT Japan), Ministry of Transport, Public Works and Water Management, the Netherlands, Ministry of Ecology and Sustainable Development, France, French Water Academy, World Meteorological Organization / Global Water Partnership Associated Programme on Flood Management (WMO/GWP)

Objective: To build flood-resilient communities, it is essential to take an integrated approach – linking land and water uses, flood risks, socio-economic development and the protection of natural ecosystems through appropriate institutional frameworks and public participation. In this session, various practical experiences were analyzed and shared, in order to facilitate countries in adopting an Integrated Flood Management approach.

Local Actions presented:

- *Plan Loire Grandeur Nature,* France, Ministry of Ecology and Sustainable Development of France (LA0803)
- *Community Approaches to Flood Management,* Bangladesh, Bangladesh Unnayan Parishad (LA1258)
- *Tsurumi River Basin Water Master Plan,* Japan, River Bureau, Ministry of Land, Infrastructure and Transport (LA1470)
- *Overdiepse Polder,* Netherlands, Province of North-Brabant (LA1739)

Wastewater Management for Integrated Water Resources Management (FT2.46)

Convened by: Japan Water Reclamation Committee for the World Water Forum

Objective: To discuss and recommend proposals on the planning and implementation of wastewater management in urban areas, appropriate for the individual characteristics of the region, taking into account aspects such as public-private partnerships, macro-economic policies, basin-wide management, and technological innovation.

Local Actions presented:

- *Countermeasure for Water Shortage in China,* Japan, Maezawa Industries Inc. (LA0812)
- *Restoration of Sumida River and Combine Sewer System,* Japan, Ministry of Land, Infrastructure and Transport (LA821)
- *Water Reclamation: Wastewater to Drinking Water,* Japan, University of Nebraska (AL 0940)

Promoting World Lake Vision and Integrated Basin Management for the Future of Global Water (FT2.32)

Convened by: Shiga Prefectural Government, Japan, International Lake Environment Committee Foundation (ILEC), Global Nature Fund, Conference of Promotion for Lake Biwa - Yodo River Basin Area Renaissance

Objective: The session was divided into 4 sub-sessions, and the main theme of each was: 1) to present the progress of the World Lake Vision (WLV), 2) to highlight local actions for the sustainable management of lakes in Europe, Asia and Latin America, 3) to report on "the Development of Lake Biwa - Yodo River Basin Area Renaissance Project", with an emphasis on the regeneration of the water environment in the Lake Biwa-Yodo River Basin Area, 4) to provide an overview of the GEF Medium-Size Project, and draw key lessons on the governance of lake basin management.

Local Actions presented:

- *Solar Ship Network,* Global Nature Fund (LA0160)
- *Lake Biwa - Yodo River Basin Area Renaissance Project,* Japan, Secretariat for the Conference of Promotion for Lake Biwa - Yodo River Basin Area Renaissance (LA1290)

- *International Symposium on Wetland Restoration 2006,* Shiga Prefectural Government Japan (LA1494)

Shared Vision Models (FT2.04)

Convened by: Mexican Institute of Water Technology (IMTA), DHI Water and Environment (Denmark)

Objective: To show that models are no longer academic exercises. There is now a convergence of models and decision makers. Models are now open not only to experts, but also to the general public. The level of detail is now such that they have allowed conflicts to be avoided and optimal or suboptimal decisions to be taken.

Local Actions presented:

- *Binational Water Management Information System for the Rio Bravo/Grande Basin,* United States, the University of Texas at Austin (LA0099)
- *Mathematical Modeling for Consensus Building in the Lerma-Chapala Basin,* Mexico, IMTA (LA0423)
- *Nitrate Management in the Ringkoebing Fjord River Basin,* Denmark, DHI Water & Environment (LA1691)
- *Karnafuli River Basin Management,* Bangladesh, Institute of Water Modeling (LA1692)

The Application of IWRM in the Fiji Islands (FT2.24)

Convened by: United Nations World Meteorological Organization (WMO), Euro – Mediterranean Information System, Australian Bureau of Meteorology

Objective: To show IWRM in the Fiji Islands, considering the size and lack of natural storage, and that they are susceptible to the frequent occurrence of floods and droughts, also to consider the importance of the exchange of information, coordination and monitoring of the programs established to manage water resources.

Local Actions presented:

- *Pacific Islands Climate Prediction Project,* Australia, Australian Bureau of Meteorology (LA0642)
- *Update of the Irrigation Unit Inventory in the Basin of Ayuquila - Armeria,* Mexico, Ministry of Rural Development of Jalisco(LA1604)

Water Governance and River Basin Organizations (FT2.16)

Convened by: Global Water Partnership (GWP), the World Conservation Union (IUCN), EcoLogic Development Fund

Objective: To discuss governance issues at the local level, emphasizing three specific points: institutional aspects of arrangements, public participation models (basin organizations and public participation) and empowerment of the key stakeholders in water management.

Local Actions presented:

- *Latin American Water Forum,* Mexico, IUCN (LA0221)
- *Management of the Regulating Law, Authority and Basin Council for the Lake of Yojoa,* Honduras, Programa MARENA - Ministry Agriculture (LA1460)
- *Combining Efforts and Willingness for the Integrated Management Integral of the Ayuquila-Armería River,* Mexico, Ayuquila-Armería River Basin Commission (LA1537)
- *A Successful Approach to Water for Growth and Development:* The Paraiba do Sul River Basin, Brazil, National Water Agency (LA1742)

Ger Bergkamp, IUCN

Transboundary Water Management and Regional Integration in Africa (FT2.18)

Convened by: African Network for Basin Organizations (ANBO), New Partnership for Africa's Development (NEPAD), Nile Basin Initiative, United Nations Economic Commission for Africa (UNECA)

Transboundary Water Management and Regional Integration in Africa Session

Objective: To Share concrete ongoing experiences on management of transboundary water basins in Africa through cases ranging from the eldest and most advanced experience of OMVS to newer but very dynamic processes of the Nile Basin Initiative, Niger Basin Authority or KOBWA. The five sub-regions are presented, to illustrate that cooperation on transboundary waters is nowadays widely spread in Africa, that it works and that the region has something to share with the world.

Local Actions presented:

- *Nile Dialogue*, Egypt, Nile Basin Society (LA0351)
- *One Basin, Nine Countries, A Shared Vision*, Niger Basin Authority (LA0640)
- *Institutional Roles in the Management of the Komati River Basin*, Swaziland, Komati Basin Water Authority (KOBWA) (LA1322)
- *OMVS: Water for a Sustainable and Solidarity Based Joint Development*, Senegal River Development Organization – OMVS (LA1582)

Coordination of Local Actions for the Sustainable Future of the La Plata River Basin (FT2.30)

Convened by: Green Cross International (GCI), Itaipu Binational Hydropower Central, Intergovernmental Committee Coordination of the La Plata Basin Countries

Objective: To present the contribution of local actions to the sustainable management of the La Plata river basin, based on the outcomes of the International Dialogues between all stakeholders that took place in Itaipu in November 2005 and on the national action plans of the five riparian countries: Bolivia, Brazil, Paraguay, Uruguay and Argentina.

Local Actions presented:

- *Managing Transboundary Aquifers as a Tool for Environment Stress-Reduction and Poverty Alleviation: Two Examples from the Americas*, Organization of American States (LA0386)
- *Sustainable Development by Sharing in Pantanal Basin. Extensive Use of Prata Interativa, an Information Technology suite*, Brazil, Green Cross Brazil (LA1607)
- *Cultivating Good Water*, Brazil, Itaipu Binational (LA1624)

Bottom-Up Meets Top-Down: Learning Lessons from Latin America and Africa (FT2.34)

Convened by: Women for Water Partnership (WfWfW), part of the Women's Coalition

Objective: To create an environment for gender sensitive IWRM, with the possibility of replication in other places through the convergence of bottom-up (local actions) with top-down (policy level). For the different major groups in society (government, private sector, women, youth, indigenous people, etc) to play their different complementary roles and to work out together an enabling environment for dialogue and exchange is crucial.

Local Actions presented:

- *Indigenous Women and Andean Wetlands Protection and Tourist Exploitation*, Chile, Gender and Water Alliance Latin America (LA0020)

- *Women and Water Campaign*, Tanzania Gender Networking Programme (LA1366)
- *Gender and Water Resources Management and Sanitation,* Case Studies of Zambia and Lesotho
- *Providing Water and Sanitation in Uganda through Women*
- *Water Literacy for Empowerment of Rural Women, Sri Lanka*

Advancing Local Actions in Basins, Sub-Basins and Aquifers (BSA) through Comprehensive IWRM Learning and Global Networks (FT2.33)

Convened by: UNESCO International Hydrological Programme, National Ecology Institute (INE Mexico), European Commission

Objective: To present and discuss the concept of IWRM within the context of water policy making, research, planning and management, and the gaps noted by practitioners and analysts with particular emphasis on sustainability dimensions, and social and political processes, including the process of resource allocation.

Local Actions presented:

- *Challenges to Implementing Transboundary Water Planning: A Political Ecology Perspective on Recent Policy Changes, Management Regimes, and Institutional Practices in U.S. and Mexico,* United States, Udfall Center for Studies in Public Policy (LA0146)
- *Integrated Management of Basins in Mexico: Successful Case Analysis,* Mexico, INE (LA0174)
- *Development of an Environmental Management System in the Hydrographic Basin of Chaguana,* Ecuador, Higher Politechnical School of the Coast (LA0253)
- *Catchment 2 Coast,* South Africa, CSIR (LA0312)

Management Link for Freshwaters and Coasts - Progress in Local Actions (FT2.31)

Convened by: United Nations Environment Programme (UNEP), U.S. National Oceanic and Atmospheric Administration (NOAA), Ministry of the Environment and Natural Resources, Mexico (SEMARNAT), Global Forum on Ocean, Coasts, and Islands (GFO)

Objective: 1) To present the concept of freshwater-to-oceans linkages; 2) to describe various approaches to promote this concept; 3) to report on the previous dialogue on freshwater-to-oceans interlinkages and preparations for the Second GPA Intergovernmental Review; 4) to present the approach of the NOAA/GPA agreement to develop GPA-National Programs of Action in the wider Caribbean; and 5) to share case study experiences, best management practices, and lessons learned in the implementation of the GPA and in the partnership on linking IWRM and Integrated Coastal and Ocean Management (ICM).

Local Actions presented:

- *Chilika Development Authority,* India, Chilika Development Authority (LA0469)
- *Developing the Bases for a GPA-National Program of Action for the Yucatan Peninsula,* Mexico, CINVESTAV - Mérida (LA1774)
- *Developing a National Program of Action under the UNEP-GPA Framework for Trinidad and Tobago,* Institute of Marine Affairs (LA1775)
- *CATHALAC, Panama*

Public Private Partnership towards IWRM in the MENA Region (FT2.17)

Convened by: Arab Water Council (AWC), Ministry of Water Resources and Irrigation (Egypt)

Objective: (1) Introduction of public-private partnership (PPP) initiatives in the Middle-East and North Africa (MENA) region to the international community with experiences from Egypt, Jordan, Morocco and Yemen; (2) obtaining participants' reactions and feedback to the introduced local actions, that may be contemplated to fine-tune these actions; (3) building up links between professionals and experts in PPP; and (4) motivation of development partners and donors to play a role in the ongoing local actions or those actions to be mobilized.

Local Actions presented:

- *PPP for Integrated Water Resources Management :* Egypt Experience, MWRI
- *Experience of Public Private Partnerships for Water Supply and Sanitation in The MENA Region,* Suez Environment

- *Egyptian-Dutch Partnership for Integrated Water Resources Management*, Egyptian-Dutch Advisory Panel Project on Water Management

Strengthening Institutions and Stakeholders Capacity for IWRM Implementation at Local Level (FT2.03)

Convened by: Cap-Net, Latin American Water Education & Training Network (LA-WETnet), Central America Network of Engineering Institutions (REDICA)

Objective: The session showed how networks operate as effective instruments to facilitate capacity building at the local level, strengthening institutions and stakeholders which are ultimately responsible and decisive to enable better water resources management.

Local Actions presented:

- *Arab Integrated Water Resources Management*, Lebanon, College of Graduate Studies; Arabian Gulf University; Manama – Kingdom of Bahrain (LA0053)
- *Mechanisms for Scaling Up CB for IWRM – The REDICA Experience*, Costa Rica, Central America Engineering Institutions (LA0444)
- *Nile IWRM Net: Experiences from the Nile IWRM Net*
- *Pangani Basin Water Office*

Integrated Water Resources Management in the North (FT2.41)

Convened by: Northern Water Network (NoWNET), U.S. Army Corps of Engineers (USACE) and Rijkswaterstaat

Objective: To provide examples of how we practice IWRM in the North and what kind of lessons can be learned for the countries of the South. With many industrialized countries having recently undergone water reform and institutional development, there is a wealth of information available about different approaches to IWRM and, more importantly, how these various approaches have succeeded or failed.

Local Actions presented:

- *The Current National Water Resources Plan in the Republic of Korea*, Korea Water Forum (LA1778)
- *Water Reform & Institutional Development in Australia*
- *Comparison and Contrast of U.S. and Dutch Water Management*
- *EU Water Framework Directive and IWRM*

Rainwater, Watershed Management and Food Sovereignty (FT2.39)

Convened by: International Rainwater Harvesting Alliance (IRHA), International Center for the Demonstration and Education on Rainwater Use, Mexico (CIDECALLI), United Nations Environment Programme (UNEP)

Objective: To find an appropriate place for Rainwater Harvesting in national policies and hence programs, which will facilitate the development of financial mechanisms and necessary conditions for dissemination.

Local Actions presented:

- *International Centre for Demonstration, Training On*, Mexico, CIDECALLI (LA1809)
- *Harvesting the Heavens*, Fiji, UNEP (LA1833)
- *Shallow Wells*, Kenya, Practical Action (LA1834)
- *Managing Water in Rain Fed Systems in Burkina Faso*

Implementing the 2002 Johannesburg Commitments - African Civil Society in IWRM (FT2.35)

Convened by: Mvula Trust on behalf of African Civil Society Network on Water (ANEW), Freshwater Action Network (FAN) and Rwanda Wildlife Clubs

Objective: To provide a platform for African Civil Society Organizations to share their experiences and lessons from public partnerships for effective participation in implementing IWRM and to strengthen: (1) The linkages and partnerships between African CSOs towards national and regional strategies; (2) Lesson learning and sharing regarding partnerships with government towards scaling up the facilitation role of African CSOs in IWRM - in order to replicate good practice; (3) The implications of local actions and case studies for influencing national and regional IWRM policies, legislation and practices.

Local Actions presented:

- *Participatory Community Based Water Sources Conservation*, Tanzania, Water and Sanitation Network in Tanzania (LA0121)

- *The National Community Water Conservation Program "NCWCP"*, Egypt, Arab Office for Youth and Environment (LA0483)
- *Community-Based Water Leaks Project*, South Africa, Environmental Monitoring Group (LA0750)
- *Integrated Water Shade Management through Progressive Terracing Techniques*, Rwanda Wildlife Clubs – RWC (LA0792)

IWRM as a Basis for Social and Economic Development in Central Asia (FT2.13)

Convened by: Interstate Coordination Water Committee (ICWC) of Central Asia, Global Water Partnership (GWP)

Objective: In relation to the implementation of IWRM (unique institutional arrangements, legal regulations, management tools, etc.), the objective was to obtain new ideas on how to meet political and environmental challenges existing in the region within the framework of strategic planning for future social and economic development.

Local Actions presented:

- *Testing of the Practical Ways to Implement IWRM Concept in Central Asia within Pilot Projects*, Uzbekistan, Scientific-Information Center (LA0061)
- *Multi Stakeholder Dialogue on Ways for Future Water Resources Development in Central Asia*, Uzbekistan, Scientific-Information Center (LA0062)

Sybe Schaap, Dutch Association of Water Boards.

Opportunities and Impediments to IWRM: Reality -vs.- Virtual Reality (FT2.43)

Convened by: United States Army Corps of Engineers (USACE), International Water Management Institute (IWMI)

Objective: To provide a more technically/theoretically-oriented vision on the philosophy of IWRM as it is applied to date around the world, with a strong dose of real-world examples of successes and failures, and what are the key attributes of success. A total of four technical papers examining the conceptual aspects of IWRM and evaluated examples of real world applications were presented.

Local Actions presented:

- *Assessment of the Status of the Integrated Water Resources Management Plans in the Arab Region*, Egypt, Centre for Environment and Development for the Arab Region and Europe (LA0379)
- *The Book Integrated Water Resources Management - Experience and Lessons from Central Asia*, Uzbekistan, Interstate Commission for Water Coordination in Central Asia (LA0817)
- *Promoting IWRM in the Western Amazon of Peru and Ecuador*, Global Water for Sustainability Program (LA1474)

Integrated Management and Governance: A Framework for Making Empowerment a Reality (FT2.02)

Convened by: Local Governments for Sustainability, International Council for Local Environment Initiatives (ICLEI), United Nations World Water Assessment Program (UN-WWAP),Dutch Association of Water Boards

Objective: All successful and sustainable management of freshwater requires a sound institutional framework, as a precondition. This framework consists of legislation (for authorizing the tasks of the institutions), representation (of stakeholders), funding (both by taxation and external funding) and capacity development

Local Actions presented:

- *Sustainable Water-Integrated Management and Governance*, Philippines, ICLEI (LA0081)

- *Decentralization of Water Resources Management in Uganda*, Water Resources Management Department (LA0783)
- *Agreement of Ruling Principles of Water Policy for Argentina*, World Water Assessment Programme (WWAP) (LA0807)
- *LoGo Water - Towards Effective Involvement of Local Government in Integrated Water Resources Management in Southern Africa River Basins*, Germany, Local Governments for Sustainability, European Secretariat (LA1037)
- *2002-2006 Regional Water Plan*, Mexico, CONAGUA (LA1602)

Bowdin King, ICLEI

Groundwater Management in the Middle East and North Africa Region (FT2.25)

Convened by: The Arab Water Council (AWC), World Bank (WB)

Objective: To introduce three groundwater management models and to discuss their sustainability and reproduction in the region. The three local actions possess unique successful elements from community-based water management and private sector involvement to affordable technology application.

Local Actions presented:

- *Public Private Partnership Scheme in Irrigation:* The Case of the Morocco Guerdane Project, Ministry of Agriculture of GOM and Omnium Nord-African (LA0667)
- *Yemen Land and Water Conservation Project*, Directorate of Water Resources Affairs, Muscat, Sultanate of Oman (LA0674)
- *Assessment of Groundwater Development Potential for Arid and Hyper Arid Regions Characterized by the Presence of WADY Systems*, Egypt, Cairo University (LA1166)

Water Governance: from Analysis to Action (FT2.48)

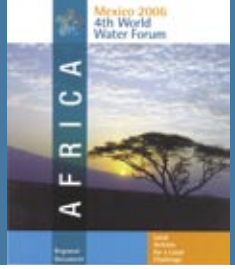
Convened by: National Autonomous University of Mexico (UNAM)

Objective: To discuss water governance related issues in the framework of IWRM from an economic, political, environmental and legal perspective to improve transparency, accountability and corruption control and implement market mechanisms without compromising governance.

Local Actions presented:

- *Legislation, Administration and Water Management in Mexico*, Civil Engineers Association of Mexico (LA1799)
- *Water Governance during Drought Periods*, Spain, Ebro Hydrographical Confederation (LA1800)
- *Sharing Water: Australian Experience with the Unbundling and Use of Shares to Define Entitlements to Use Water Groundwater*, Australia, CSIRO (LA1801)
- *Governance in Water Reform; Lessons from South Africa*, Policy and Regulation Department of Water Affairs and Forestry, South Africa (LA1803)

Fernando Gonzalez Villareal, UNAM



	March 19,2006			
	Morning		Afternoon	
Room	08:30 to 10:30	11:15 to 13:15	14:30 to 16:30	16:45 to 18:45
Valparaiso 2 and 3		FT3.48 Public Policies for Water and Sanitation Services -CONAGUA	FT3.37 Water and Sanitation in Human Settlements in Latin America and the Caribbean -SEDESOL/ UN-HABITAT	FT3.47 Human Right to Water -CDHDF/ CEMDA/ Casa y Ciudad
Valparaiso 1		FT3.21 Delivering Millennium Development Goals in Three Years: A Model-Setting Regional Initiative -UN-HABITAT	FT3.35 Securing the Right to Water; from the Local to the Global, Civil Society Perspectives -BPP/ EJCW/ FRW	FT3.36 The Right to Water: What Does It Mean and How to Implement It -GCI/ Académie de l'Eau
Iturbide 1	FT3.52 Appropriate Operation and Maintenance of Water Supply and Sanitation Facilities -NIPH Japan/ JICA/ IWA / OMN	FT3.01 Decentralization: The Role of Communities in Water Resources Management -COA/ CCA/ FANCA	FT3.02 Clean Water for People - US-Japan Initiative toward Achieving the MDGs in Water and Sanitation -MOFA Japan/ USAID/ JBIC/ USSD	FT3.06 Desalination of Seawater & Saline Groundwater -MOWE Saudi Arabia
Iturbide 2	FT3.28 Strategies and Technologies for Arsenic and Fluoride Mitigation from Drinking Water -USGS/ UASLP/ UNICEF	FT3.20 Monitoring and Targeting Drinking Water Supply and Sanitation -WHO/ UNICEF/ WSP/ ISW/ DWAF South Africa	FT3.50 The Way Forward for MDG Country-Level Monitoring -WSP/ WHO/ UNICEF/ UNDP/ ISW	FT3.12 Safe, Accessible, Private and Nearby: Making Services Work for Women - The Key to Meeting the MDG Water and Sanitation Target -UNDP/ Columbia Univ./ UN-HABITAT/ UNICEF/ UNDESA
Salón Iturbide 3		FT3.19 Service Delivery and Local Empowerment -IMTA	FT3.25 Sector Wide Programme Approaches (SWAP) to Meet MDGs -DWAF South Africa / EC	FT3.05 Water Supply and Sanitation for All -AfDB
Casa del Diezmo 1		FT3.08 Scaling up Water, Sanitation and Hygiene Education for Schools -CCHRI / UNICEF	FT3.10 Voicing People's Interests - Civil Society Innovating Change in Water & Sanitation Policy -FAN	FT3.09 Asian Civil Society Innovating Change -NGO Forum on ADB/ FAN
Casa del Diezmo 2		FT3.14 Accelerating Progress Toward Millennium Development Target 10: What Will It Take? -UNDP/Columbia Univ./ UN-HABITAT/ UNICEF	FT3.15 Making a Difference in Slums and Low Income Settlements: Towards Achieving MDG's in Water and Sanitation -UN-HABITAT	FT333 Transfer of Organizational and Technical Know-How between Northern and Southern Countries -VEOLIA/ GEM/ BPD
Casa del Diezmo 3		FT3.41 Governance of Local Water and Sanitation Services -AMGVF/ CGLU / MESD, France	FT3.17 Governance for Local Water and Sanitation Services - Needs of Cities in Developing Countries and Responses from International Initiatives -MEDD / ONEP/ FNCCR	FT3.03 Solidarity and Decentralized Forms of North/South and South/ South Funding -ps-EAU/ UCLG/ WWC
Casa del Diezmo 4		FT3.40 Innovative Financing Mechanisms for Drinking Water and Sanitation: Local Government Alternatives -IADB/ WB/ WSP	FT3.23 Harnessing Local Providers to Deliver Water for All -BPD/ AFD/ STREAMS/ PWC	FT3.16 Service Delivery and Local Empowerment: Turnaround of Public Utilities -WB/ ANEAS/ BMZ-GTZ/ USAID
Casa Montejo 1		FT3.29 Sanitation, Hygiene, Education: Household Water Management -WHO/ CAWST/ PAHO	FT3.22 Hygiene Promotion: Improving the State of the Art -UNICEF/ USAID/ IWA	FT3.24 Emerging Sanitation Paradigms -Economics and Capacity Building in ECOSAN -IWA/ UNESCO/ GTZ
Casa Montejo 2		FT3.07 Access to Safe Water and Ecological Sanitation for Rural Areas, Good Practices in Latin America and Eastern Europe from a Gender Perspective -WECF/ MAMA-86/ EFF	FT3.13 Ecological Sanitation: Closed-Loop Sanitation Approaches to Attain Healthy and Sustainable Cities and the MDGs -SEI/ UMB/ ST	FT3.53 Governance of Water and Sanitation for the Peri-Urban Poor: Bridging the Gap Between Policies and Practices -DPU UCL
Casa Montejo 3		FT3.43 The Public-Private Controversy in Water and Sanitation: Lessons in the Light of the MDGs' Requirements -Univ. Newcastle	FT3.04 Knowledge Generation & Innovative Technologies for the Sustainable Management of Water Resources in Europe and Worldwide -EC/ NWP	FT3.44 Improving Local Services through Water Operator Partnership (WOPs) -UNDESA/ ASSEMAE/ SEI
Casa Montejo 4		FT3.27 Safe Drinking Water For All -USEPA/ FECIC	FT3.38 Public State Policy Impact on Drinking Water Service Delivery Supply and Sanitation for Urban Use in Mexico -ANEAS/ ASE	FT3.46 Successful Public Sector Experiences in Water and Sanitation -ASSEMAE/ PSIRU/ Univ. Newcastle

Public Water and Sanitation Services Panel

SESSIONS PRESENTED ON MARCH 19, 2006

The focus of the day was "Water and Sanitation for All". Three topic sessions addressed the issue of the right to water. The session "Securing the Right to Water: form the Local to the Global, Civil Society Perspectives (FT3.35)" presented the cases of indigenous and local groups' struggles against privatization of water services and peoples campaigns for integrated sustainable water plans. Participants stressed the importance of the International Covenant on Economic, Social and Cultural Rights as a mechanism to implement the right to sufficient and clean water. Panelists in session "The Right to Water: What Does It Mean and How to Implement It (FT3.36)" highlighted a number of international and national legal instruments that recognize the right to clean water and address the need to identify the rights and responsibilities of public authorities and users, and identified challenges. In the session "Human Right to Water (FT3.47)" urban and rural examples were shown on how to translate the human right into action.

In the session "Public Policies for Water and Sanitation (FT3.48)" several successful cases of community participation and decentralization in the water sector were presented. Panelists stressed the importance of clear and transparent rules, defining the roles of different actors, developing regulations for operator services, and improving local governance.

The session "Public-Private Controversy in Water and Sanitation: Lessons in the Light of the MDGs' Requirements (FT3.43)" examined privatization attempts in Bolivia and Brazil. It also showed the findings of research that show that in most cases private funds for water supply and sanitation are small and that privatization requires public funding. This session also argued that the private sector is not more efficient than the public sector.

In the session "Desalination of Seawater and Saline Groundwater (FT3.06)" participants discussed the benefits and disadvantages of desalination as a solution for meeting future freshwater demands, especially in the Middle East, where water scarcity is an issue. They highlighted that the development of this technology must be cost-effective and environmentally friendly.

Blanca Alicia Mendoza, CONAGUA

Public Policies for Water and Sanitation Services (FT3.48)

Convened by: National Water Commission (CONAGUA Mexico)

Objective: To gather, analyze and contribute to the basis of a platform for the exchange, capacity building and design of public policies to ensure sustainable access to water and sanitation for the citizens, while presenting recommendations of policies based on real local experiences.

Local Actions presented:

- *Program for Reimbursing Duties,* Mexico, CONAGUA (LA0924)
- *New Austria Water Sector Policy and its Local Implementation,* Austrian Development Agency (LA1346)
- *Importance of Community Participation in Water Management at the Mexico-USA Border and the Role of the Border Ecological Cooperation Commission and the North America Development Bank,* Mexico, Ecological Cooperation Commission (LA1593)
- *Experience in the Capacity Building of Local Actors in the Water and Sanitation Sector,* Nicaragua, Water and Sanitation Network (LA1610)
- *Program for the Modernization of Water Utilities,* Mexico, CONAGUA (LA1689)

Water and Sanitation in Human Settlements in Latin America and the Caribbean (FT3.37)

Convened by: Ministry of Social Development, (SEDESOL Mexico), United Nations Human Settlements Programme (UN-HABITAT)

Objective: To show the Latin American and Caribbean experiences in the water and sanitation sector.

Local Actions presented:

- *Habitat Program,* Mexico, Ministry of Social Development
- *Water and Sanitation in Peri-Urban Areas in Cali, Colombia,* Gender Water Alliance Latin America
- *Water and Sanitation in the Metropolitan Area of Lima,* Peru, SEDAPAL

Houria Tazi Sadeq, Maghreb-Machrak Alliance for Water (ALMAE)

Human Right to Water (FT3.47)

Convened by: Department of Human Rights of Mexico City, House and City Civil Association, Mexican Center for Environmental Law

Objective: To raise awareness on the need for more and better private and public investment to improve the quality of life of the poor by increasing the supply and sanitation of water in poor communities, in order to achieve the MDGs.

Local Actions presented:

- *Let's Take Care of the Present to Rescue the Future,* Mexico, RA YO DEJE A.C. (LA0570)

Delivering MDGs Session

Delivering Millennium Development Goals in Three Years: A Model-Setting Regional Initiative (FT3.21)

Convened by: United Nations Human Settlements Programme

Objective: To highlight country, regional, local and community level experiences that demonstrate practical ways to achieve the MDGs in relation to water and sanitation based on the Lake Victoria experience.

Local Actions presented:

- *Delivering MDGs in Three Years: Lake Victoria Region Water and Sanitation Initiative; Capacity Building in the Urban Water Sector in Small Towns, The Uganda Experience,* National Water and Sewerage Corporation (LA1734)
- *Sustaining Investment in Water and Sanitation,* Tanzania, Lake Victoria South Service Board I (LA1735)

Maude Barlow, Council of Canadians, Blue Planet Project

Securing the Right to Water; From the Local to the Global, Civil Society Perspectives (FT3.35)

Convened by: Blue Planet Project, Environmental Justice Coalition for Water, Friends of the Right to Water

Objective: To explore water from a rights-based approach and in contrast to a market-based approach from the local to the global level and across various sectors of society.

The Right to Water: From Concept to Implementation (FT3.36)

Convened by: Green Cross International, French Water Academy

Objective: To present and discuss *The Right to Water: From Concept to Implementation,* a report coordinated by the World Water Council and prepared by international experts from civil society, the public and private water sector, academia, governments, and institutions. Through this report, the concept of the right to water was not only defined, but also further established in how it is understood, where it is applied, who is responsible for its implementation, and what the scale of its limitations is. Issues such as how this theme is perceived at the global, national and local levels and the difference in the concept of its application in the ground were discussed.

Appropriate Operation and Maintenance of Water Supply and Sanitation Facilities (FT3.52)

Convened by: National Institute of Public Health, Japan, Japan International Cooperation Agency (JICA), International Water Association (IWA), Water Supply and Sanitation Collaborative Council (WSSCC)

Objective: To discuss factors for the improvement of operation and maintenance of water supply and sanitation facilities through exchanging information and sharing experiences on good examples around the world. Ranking of key factors and identification of future directions were also considered.

Local Actions presented:

- *Project on Capacity Building for Water Supply System in Cambodia,* Cambodia, Phnom Penh Water Supply Authority
- *Safe Water and Support for Community Activities,* Senegal, Ministry of Agriculture and Hydraulics
- *Improvement of Water Supply Management in Mexico City,* Mexico, Water System, Mexico City

Maria Cruz de la Paz, Mazahua, Mexico

Decentralization: The Role of Communities in Water Resources Management (FT3.01)

Convened by: Americas Operative Committee, Water Advisory Council (Mexico), Freshwater Action Network Central America (FANCA)

Objective: To show that the community has the legal, political and economic capacity to provide water and sanitation services with the support of the different levels of government in order to show that community management can be recognized as a successful and viable alternative for it to be strengthened both financially and institutionally.

Local Actions presented:

- *Agreed and Participating Construction of the Water and Irrigation Rights Law in Bolivia,* Bolivia, Sustainable Water (LA0852)
- *Water Body Network the Federal District (Mexico City), Mexico. Local Experience to be Replicated,* Mexico, Water Body Network of the *Federal District* (LA1388)
- *Project: Around Ypoa Wetlands: Participating Management for the Preservation and Rational Use of Wetlands,* Paraguay, Fundación Oñondivepa de Carepegua (LA1405)
- *"Di Moli" Wetland Conservation,* Panama, Comarca Kuna yala (ustupu) (LA1169)

Clean Water for People – US-Japan Initiative toward Achieving the MDGs in Water and Sanitation (FT3.02)

Convened by: Ministry of Foreign Affairs, Japan, U.S. Agency for International Development, Japan Bank for International Cooperation (JBIC), U.S. State Department

Objective: Progress and achievements of the Clean Water for People Initiative were presented and the next steps of the active collaboration of the world's two largest donors in the water and sanitation field were discussed. The local actions focused on the establishment of innovative financial collaboration between loan and investment guarantee in Philippines and India.

Local Actions presented:

- *Municipal Water Loan Financing Initiative and Philippine Water Revolving Fund,* Philippines, Japan Bank for International Cooperation (LA1270)
- *Improving Access to Water and Sanitation Services in the Bangalore Metropolitan Area,* India, USAID India (LA1271)
- *Medan Water and Waste Management Partnership in Indonesia,* Indonesia, Japan Bank for International Cooperation (LA1272)

Desalination of Seawater & Saline Groundwater (FT3.06)

Convened by: Ministry of Water & Electricity, Saudi Arabia

Objective: To exchange knowledge & experience among Desalination Technology users, manufacturers, consultants etc., to analyze trends in desalination technology and desalination as a strategic choice for water shortages.

Fehied Al-Shareef, SWCC and Leon Awerbuch, International Desalination Association

Local Actions presented:

- *An Optimal High Recovery, Energy Efficient, Dual Nanofiltration (Nf) Seawater Ro Process,* Saudi Arabia, Saline Water Conversion Corporation (LA0701)
- *Application of Novel Demisters In MSF,* Saudi Arabia, Saline Water Conversion Corporation (LA0702)
- *Recharging Groundwater Aquifer with Treated Wastewater,* Kuwait, Ministry of Energy - Electricity & Water (LA1519)

Strategies and Technologies for Arsenic and Fluoride Mitigation from Drinking Water (FT3.28)

Convened by: U.S. Geological Survey, Autonomous University of San Luis Potosi, Mexico, United Nations Children's Fund (UNICEF)

Objective: To create a better understanding of water quality issues in terms of their social, economic and environmental impact and their implications on human health, besides sharing of recent research outcomes on the occurrence, behavior and impact of arsenic, fluoride and other constituents in groundwater for human consumption.

Local Actions presented:

- *Applications on the Knowledge of the Presence of Fluoride and Arsenic in Consumption Water and*

its Effects on Human Health, Mexico, Autonomous University of San Luis Potosi (LA0150)
- *Use of the Extraction Regime for the Handling of Underground Water with High Concentrations of Fluoride in the San Luis Potosí Basin*, Mexico, Autonomous University of San Luis Potosí (LA0154)
- *Arsenic Remediation for Drinking Water*, U.S. Geological Survey (LA0421)
- *Fluoride Contamination and Treatment in East African Rift Valley*, Ethiopia, UNICEF Ethiopia (LA0669)

Monitoring and Targeting Drinking Water Supply and Sanitation (FT3.20)

Convened by: World Health Organization (WHO), United Nations Children's Fund (UNICEF), Water and Sanitation Program (WSP); Department of Water Affairs and Forestry, South Africa, International Secretariat for Water

Objective: To present various ongoing country-level sector monitoring experiences. Several complementary country experiences were reviewed which brought a better understanding as to how country monitoring is currently being undertaken, what are the difficulties and lessons learned and what can be done to improve monitoring at the country level.

Local Actions presented:
- *Formulating Local and Regional Environmental Indicator Systems for Environmental Authorities in Colombia*, Colombia, Quinaxi (LA1571)

The Way Forward for MDGs Country-Level Monitoring (FT3.50)

Convened by: International Secretariat for Water, United Nations Development Programme (UNDP), United Nations Children's Fund (UNICEF), United Nations World Health Organization (WHO), Water and Sanitation Program (WSP)

Objective: To review current country level practices and strategies towards monitoring of the MDGs and to generate recommendations on how to improve the current monitoring and targeting approaches at country, regional and global levels.

Local Actions presented:
- *MDG Roadmapping in Uganda*, Water and Sanitation Program
- *Blue Books in Burkina Faso, Mali and Niger*, International Secretariat for Water (LA1839)
- *UNDP MDG Country Report in Peru*, UNDP
- *Rapid Assessment of Water Quality*, World Health Organization

Safe, Accessible, Private and Nearby: Involving Women in Managing Water and Sanitation – Key to Meeting the MDGs (FT3.12)

Convened by: United Nations Development Programme (UNDP), The Earth Institute at Columbia University, United Nations Human Settlements Programme (UN-HABITAT), United Nations Children's Fund (UNICEF)

Objective: To identify and highlight what countries need to do to ensure that national policies and institutions for water supply and sanitation service delivery respond equally to the different roles, needs, and priorities of women and men.

Local Actions presented:
- *Gender Perspective in Rural Drinking Water Systems in Chile*, Gender and Water Alliance (LA0019)
- *Gender Mainstreaming in UN Habitat's Water for African Cities Phase II*, South Africa, Gender and Water Alliance and UN-HABITAT (LA1665)
- *Sanitation to Slum Dwellers*, India, The Society for the Promotion of Area Resource Centers (LA1738)
- *WASH in Schools*, Kenya
- *Surinam - Women for Water Partnership*, The National Women's Movement of Surinam (NVB)

Service Delivery and Local Empowerment (FT3.19)

Convened by: Mexican Institute of Water Technology (IMTA)

Objective: To share experiences in the application of appropriate and traditional (i.e. indigenous, historical, etc.) technologies and methods for the supply of water for human consumption and for small farm irrigation, as well as for basic sanitation.

Local Actions presented:

- *Sustainable Technology for Water Potabilization in Rural Communities,* Mexico, Autonomous University of San Luis (LA0157)
- *Towards Widespread Rainwater Harvesting in Ethiopia,* Rainwater Harvesting Implementation Network - RAIN Foundation (LA0892)
- *Eco-sanitation Pilots for Rural Areas,* Ukraine, MAMA-86 (LA1159)
- *Appropriate Technologies Regarding Water for Rural Communities at the Lake Patzcuaro Basin,* Mexico, Mexican Institute of Water Technology (LA1259)

Sector Wide Programme Approaches (SWAP) to Meet MDGs (FT3.25)

Convened by: Department of Water Affairs and Forestry, South Africa, European Commission

Objective: To clarify the concept of Sector Wide Approaches Programmes (SWAP) and what South Africa has learned through the implementation phase.

Local Actions presented:

- *Engaging Local Government Units (LGUs) in Scaling-Up Water and Sanitation Service Delivery to Ensure Meeting the MDGs: The Donia Flavie Experience on LGU-Initiated Community Managed Water System in Agusan del Sur,* Philippines, Streams of Knowledge (LA0447)
- *Monitoring and Evaluation,* South Africa, Department of Water Affairs and Forestry (LA0554)
- *Sector Wide Approach Programme,* South Africa, Department of Water Affairs and Forestry (LA0555)

Water Supply and Sanitation for All (FT3.05)

Convened by: African Development Bank (AfDB)

Objective: To discuss and to exchange experiences among key stakeholders on activities required to meet the MDG targets on water supply and sanitation.

Local Actions presented:

- *Social Marketing of Point-of-Use Drinking Water Product in Uganda,* Procter & Gamble (LA0395)
- *Rural Water Supply and Sanitation Initiative*, FDB (LA0655)
- *Kiambiu Water and Environmental Sanitation – KIWESA Project,* Kenya, Maji Na Ufanisi (Water and Development) (LA0709)

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

Scaling up Water, Sanitation and Hygiene Education for Schools (FT3.08)

Convened by: Centre for Community Health Research, India (CCHRI), United Nations Children's Fund (UNICEF), Women International Coalition Organization Africa

Objective: To scale up water, sanitation and hygiene education in schools. Experiences on school water, sanitation and hygiene education from different geographical areas especially Africa and Asia were presented, also partnerships and commitments for scaling up water, sanitation and hygiene education in schools were highlighted.

Local Actions presented:

- *The Role of Women in Water for Development in Africa*, Cameroon, Women International Coalition Organization Africa (LA0206)
- *WASH Campaign in Kerala - A Holistic Approach for the Reduction of Infant and Child Morbidity*, India, Centre for Community Health Research (LA0359)
- *Sanitation for a Rural Girls School in Uganda*, Austria, EcoSanClub (LA0394)

Voicing People's Interests - Civil Society Innovating Change in Water & Sanitation Policy (FT3.10)

Convened by: Freshwater Action Network (FAN)

Objective: To highlight the contribution of organized civil society to improved water governance and greater access to water supplies and sanitation for poor people.

Local Actions presented:

- UWASNET NGO Capacity Building Programme/ The Role of UWASNET in Building the Capacity of NGOs to Effectively Contribute to the Sector Goal in Uganda, Uganda Water & Sanitation Network (LA0653)
- *Civil Society Organizations' Experience in the Policy Making Process in Central America* Costa Rica, Freshwater Action Network Central America (LA0708)
- *The Mole Conference Series: A Rallying Point for Civil Society Advocacy in Ghana*, Ghana, Coalition of NGOs in Water & Sanitation (LA0772)
- *Total Sanitation: A Community Stake*, Bangladesh, NGO Forum for Drinking Water Supply & Sanitation (LA0965)

Asian Civil Society Innovating Change (FT3.09)

Convened by: NGO Forum on the Asian Development Bank, Freshwater Action Network (FAN)

Objective: To provide a platform for Asian civil society organizations to share their experiences and lessons from water and sanitation projects in the Asian countries and to identify the regional policies which provide the basis for financing the water and sanitation efforts of civil society.

Local Actions presented:

- *Building Dignity through Community Managed Rural Water and Sanitation in Orissa*, India, Gram Vikas (LA0115)
- *CBO Turns in to Development in the Southwest Coastal Region of Bangladesh*, Gana Unnayan Sangstha (LA0329)
- *Community-Involvement in Provision of Water and Sanitation*, Pakistan, Anjuman Samaji Behbood Faisalabad (LA0794)
- *Rainwater Harvesting in Drought Affected Areas in Sindh*, Pakistan

Accelerating Progress toward Millennium Development Target 10: What Will it Take? (FT3.14)

Convened by: United Nations Development Program (UNDEP), The Earth Institute at Columbia University, United Nations Human Settlements Programme (UN-HABITAT), United Nations Children's Fund (UNICEF)

Objective: To highlight local-level experiences which demonstrate practical ways to translate the principles and recommendations identified by the UN Millennium Project Task Force on Water and Sanitation into action on the ground.

Local Actions presented:

- *Sanitation Revolution in Ethiopia and WASH Movement in Ethiopia*, UNICEF (LA0665)
- *Sri Satya Sai Drinking Water Supply Project*, India, CITI Foundation (LA0899)
- *Delivering MDGs in Three Years: Lake Victoria Region Water and Sanitation Initiative; Capacity Building in the Urban Water Sector in Small Towns, the Uganda Experience*, UN-HABITAT (LA1734)

Making a Difference in Slums and Low Income Settlements: Towards Achieving MDGs in Water and Sanitation (FT3.15)

Convened by: United Nations Human Settlements Programme (UN-HABITAT)

Objective: To highlight community level experiences to demonstrate practical ways to achieve the UN Millennium Development Goals in relation to Water and Sanitation, linked to national and local government policies.

Maria Mutagamba and Anna Tibaijuka

Local Actions presented:

- *Pro-Poor Investments in Urban Water Supply and Environmental Improvement for Four Million plus Cities in Madhya Pradesh (India) to Achieve the Millennium Development Goals Relating to Target 10,* India, Urban Administration and Development Department (LA1736)
- *Making a Difference in Slum and Low-Income Settlements: Accelerating the Achievements of the MDGs in Water and Sanitation. Case Study on Kibera,* Kenya, Kenya, UN-HABITAT (LA1737)

Transfer of Organizational and Technical Know-How between Northern and Southern Countries (FT3.33)

Convened by: Veolia Water, Marseilles Water Group, Building Partnerships for Development

Objective: To answer some questions about the transfer of organizational and technical issues between southern and northern countries, such as: 1) What are the main obstacles to transfer know-how and how can they be overcome?, 2) How can we speed up the adoption of best practices and perpetuate them once they are in place?, 3) How can we reinforce the capacities of local management?, 4) How can we ensure diversity and more balanced exchanges: North-South, South-North, North-North and South-South?, 5) How can we adapt transfer of know-how to the specific cultural conditions of each country?, 6) How can we best encourage cross-fertilization of know-how from different cultures?

Local Actions presented:

- *Carrying Out of the Water Supply of a Malian Village, by an NGO in Partnership with an Operator Providing Technical Support, Assistance in the Management of the Water Utility and Training of Technicians Specialized in Hydraulics,* France, TRANSSAHARA (LA1329)
- *Social Engineering, Component in the Expansion of Services to Low Income Population of Greater Casablanca, Morocco,* SUEZ Environment / LYDEC (LA1345)
- *Vulnerable Population Connection to Water Service and Health Education, Morocco,* Veolia Water (LA1568)

Governance of Local Water and Sanitation Services (FT3.41)

Convened by: Association of Mayors of Large Cities in France (AMGVF), French Ministry of Ecology and Sustainable Development (MEDD), Marseilles Water Group, United Cities and Local Governments (UCLG)

Objective: To share experiences between Northern and Southern countries focusing on regulatory frameworks and tools, coordination and places for dialogue, modes of exercising control by local authorities over service providers, and ensuring good financial and technical knowledge for the local authorities.

Local Actions presented:

- *Quality and Performance of Water Supply and Sewage Services in the Adour-Garonne Basin,* France, Adour Garonne Basin Water Agency (LA0650)
- *Capacity Building for Lebanese Public Local Governments: Improving Governance for North-Lebanon Water Authority,* France, Grand Lyon Urban Community (France) and North Lebanon Water Establishment (LA0809)
- *Perspective of a US Mayor on Public-Private Partnerships for Water Systems,* United Sates, City of Rahway, New Jersey (LA1157)
- *Decentralized Cooperation as a Tool for Good Governance in the Field of Water and Sanitation,* France, Grand Nancy Urban Community (France) and ONEP (Morocco) (LA1283)

Governance for Local Water and Sanitation Services - Needs of Cities in Developing Countries and Responses from International Initiatives (FT3.17)

Convened by: French Ministry of Ecology and Sustainable Development (MEDD), Moroccan Office of Drinking Water (ONEP), French Local Authorities Federation for Water and Sanitation (FNCCR)

Objective: To bring together "the demand" and "the supply" in terms of governance of water and sanitation services. To create awareness about the different solutions that were envisaged for different challenges as well as a forum for constructive debate.

Local Actions presented:

- *Role and Implication of Nantes Urban Community (local authority) in the Organization of Exchanges between Stakeholders Involved for a Better Assessment of the Water Supply System,* France, Nantes Metropole (LA1020)
- *Implementation of the ISO TC 224 Standard in Two Moroccan Cities,* Morocco, ONEP (LA1313)
- *Building Trust in a Public-Private Partnership, a Prerequisite for Good Governance and Long Term Achievements,* France, Proactiva (LA1705)

Solidarity and Decentralized Forms of North/South and South/South Funding (FT3.03)

Convened by: Water Solidarity Program (pS-Eau), United Cities and Local Governments (UCLG), World Water Council (WWC)

Objective: To address alternative ways to meet the challenge of providing water supply and sanitation for all, highlighting the existence of a wide range of mechanisms to finance water and sanitation projects that are based on solidarity between peoples and decentralised forms of funding, and promoting such mechanisms as a means to contribute to reaching the MDGs.

Local Actions presented:

- *Solidarity between Users from France (cent/m^3) and from Niger to Develop Wells in Niger. District of Ouallam, Níger,* France, Intercommunal Union of the Orge Valley (SIVOA) (LA0124)
- *Impact of Solidarity Funding and of the Lever Effect of Partnerships (a water basin agency, a solidarity NGO and a professional NGO) with the City of Gumri (Armenia),* France, Aquassistance (LA0679)
- *Creating Sustainable Links between North and South to Finance Access to Water and Sanitation for All,* France, Paris Urban Region Water Union(SEDIF) (LA0804)
- *Creating Sustainable Links between North and South to Finance Access to Water and Sanitation for All,* France, WaterAid (LA0969)

Luis Alberto Moreno, President of IADB

Innovative Financing Mechanisms for Drinking Water and Sanitation: Local Government Alternatives (FT3.40)

Convened by: Inter American Development Bank (IADB), World Bank (WB), Water and Sanitation Program (WSP)

Objective: To present and discuss the latest experiences and initiatives of the three conveners related to access to financing for local governments.

Harnessing Local Providers to Deliver Water for All (FT3.23)

Convened by: BPD Water and Sanitation, French Development Agency (AFD), Streams of Knwoledge, PriceWaterhouseCoopers

Objective: To outline the important contribution that local service providers can make to delivering water to poor urban communities, small towns and rural areas. To highlight the crucial impact of four key factors which enable and disable these local providers, namely: 1) the providers' relationship with local authorities; 2) the financial framework; 3) the interpretation and design of the regulatory framework; 4) the skills and capacity available.

Local Actions presented:

- *MIREP, Small Scale Piped Water Supply Systems under Public-Private Partnership,* Cambodia, Reserch and Technological Exchange Group (LA0928)
- *Creation of "Water Committees" in Peri-Urban Areas,* Bolivia, Programa Agua Tuya (LA1199)

William Tsimwa Muhairwe, Jamal Saghir and Marlon Lara

Service Delivery and Local Empowerment: Turnaround of Public Utilities (FT3.16)

Convened by: The World Bank, Mexican Association of Water and Sanitation Utilities (ANEAS), German Technical Cooperation Agency (GTZ), Federal Ministry for Economic Cooperation and Development of Germany, U.S. Agency for International Development (USAID)

Objective: This session featured a few champions of public utility reform, cases serving as proof that it can be achieved. The session welcomed not only utility managers, but also policy makers and focused on the relationships between utilities and their environment.

Local Actions presented:

- *Turning around the NWSC: Improving Efficiency, Providing Service, and Creating Financial Sustainability,* Uganda, National Water and Sewerage Corporation (LA1744)
- *SABESB, Sao Paulo,* Brazil
- *ACP, Puerto Cortes,* Honduras
- *Water Supply and Sanitation Council,* Zambia

Sanitation, Hygiene, Education: Household Water Management (FT3.29)

Convened by: World Health Organization (WHO), Centre for Affordable Water and Sanitation Technology (CAWST), Pan-American Health Organization (PAHO)

Objective: To showcase promising educational and motivational approaches to catalyze sustained uptake of household water management approaches, to promote discussion relating to establishing an enabling environment to support scaled-up implementation, discuss experiences aimed to expand delivery of technologies through local entrepreneurship and use of targeted subsidies and to develop recommendations related to targeted subsidies, social marketing, microfinance, and education and training to enable widespread point-of-use management of drinking water.

Local Actions presented:

- *Household-based Ceramic Water Filters for the Prevention of Diarrhoeal Disease: An Assessment of Pilot Program in Colombia,* United Kingdom, London School of Hygiene and Tropical Medicine (LA0390)
- *Social Marketing of Point-of-Use Drinking Water Product in Uganda,* Procter & Gamble (LA0395)
- *Dissemination of the Kanchan Arsenic Filter in Rural Nepal through a Local Entrepreneurs Model,* United States, Massachusetts Institute of Technology (LA0786)
- *Household Water Treatment Technology Transfer in Haiti – a Case Study of a Replicable Program,* Canada, Centre for Affordable Water and Sanitation Technology (LA0925)

Hygiene Promotion: Improving the State of the Art (FT3.22)

Convened by: United Nations Children's Fund (UNICEF), U.S. Agency for International Development (USAID), International Water Association (IWA)

Objective: The session took a closer look at three hygiene improvements that have been shown to have a high impact on diarrheal disease reduction. Diarrhea is directly related to water and is the second killer of children under the age of 5 in African countries. The three hygiene practices are: 1) washing hands with soap, 2) disposing human feces safely and 3) treating and safely storing drinking water in the household.

Local Actions presented:

- *USAID/HIP Consumer Preferences in a POU Program in Nepal,* United States, Academy for Educational Development (AED) (LA0402)

- *Sanitation Revolution in Ethiopia and WASH Movement in Ethiopia*, Ethiopia, UNICEF (LA0665)
- Making Marketing Work—The Ghana PPP Hand Washing Program, United Kingdom, London School of Hygiene and Tropical Medicine (LA1034)
- *The Potential Power of Co-Branding National Handwashing Campaigns,* United States, Water and Sanitation Program, South Asia (LA1080)

Emerging Sanitation Paradigms-Economics and Capacity Building in ECOSAN (FT3.24)

Convened by: International Water Association (IWA), United Nations Educational, Scientific and Cultural Organization (UNESCO), German Technical Cooperation Agency (GTZ)

Objective: To deal with three key areas of interest in sanitation paradigms: 1) how to understand and refine decision making around a broader suite of options; 2) the economics and cost benefit analysis behind ecological systems and 3) an appreciation of the capacity requirements for ecological sanitation and other systems.

Local Actions presented:

- *Urine Separation and Re-Use Project at the Main Building of GTZ*, German Technical Cooperation Agency (GTZ) (LA0462)
- *Closed Loop Sanitation in Syria: Pilot Implementation of a Constructed Wetland*, Ministry of Housing and Construction of Syria (LA0468)
- *Navsarjan Ecosan Pilot Projects in Gujarat State*, India, Navsarjan (LA1140)
- *ACTS Ecosan Pilot Project in Bangalore*, India, ACTS (LA1263)

Access to Safe Water and Ecological Sanitation for Rural Areas, Good Practices in Latin America and Eastern Europe from a Gender Perspective (FT3.07)

Convened by: Women in Europe for a Common Future (WECF), MAMA-86, Ukraine, Earth Forever Foundation, Bulgaria

Objective: To show with real examples and success cases how the problems of access to water and ecological sanitation can be addressed and solved focusing on a gender perspective. The examples were then discussed with experts from the financial sector and the government on how these good practices can be upscaled and policies in this respect adopted by international agencies and financial institutions.

Local Actions presented:

- *Tapping Resources – Women for Sustainable Development*, Germany, Women in Europe for a Common Future (LA0044)
- *Ecological Sanitation – Dry Diverting Compost Toilets Improve Quality of Life, Hygiene and Protect Fecal Bacteria from Entering into Groundwater Used for Drinking*, Women's Coalition (LA1207)
- *Cooperation for Sustainable Rural Development. Involving Citizens and Local Authorities in Rural Ukraine in Improvement of Drinking Water, Sanitation and Agriculture*, Women in Europe for a Common Future (LA1597)
- *Hands that Work in favor of Water*, Mexico, Center of Alternative Technological Innovation (LA1609)

Ecological Sanitation: Closed-Loop Sanitation Approaches to Attain Healthy and Sustainable Cities and the MDGs (FT3.13)

Convened by: Stockholm Environment Institute (SEI), Sarar Transformation S.C (Mexico), University of Life Sciences

Objective: To underscore through local actions that additional economic and social benefits can be derived from the application of ecological sanitation approaches to protect human health and water resources for improved livelihoods worldwide and especially in the cities. To identify strategies for infrastructure planning, financing and implementation and to outline innovative approaches and management of sanitation.

Local Actions presented:

- *Community Empowerment through Ecological Sanitation,* the Philippines, Center for Advanced Philippine Studies (LA0558)
- *TepozEco- Municipal Ecological Sanitation Pilot Project,* Mexico, Sarar Transformation S.C. (LA0955)
- *China-Sweden Erdos Eco-Town Project,* Sweden, Stockholm Environment Institute (LA1153)
- *Sanitation and Farmer Production in Sabtebga,* Burkina Faso, Regional Center for Low-Cost Drinking Water and Sanitation (LA1155)

Governance of Water and Sanitation for the Peri-Urban Poor: Bridging the Gap between Policies and Practices (FT3.53)

Convened by: Development Planning Unit, University College London, United Kingdom

Objective: To improve guidance on governance and management of water and sanitation in peri-urban areas to increase access for the poor and promote environmental sustainability.

Local Actions presented:

- *Building Responsible Citizenship in the Peri-Urban Interface of Metropolitan Caracas,* Venezuela, Center of Development Studies (University of Caracas) (LA1649)
- *NEGOWAT: Facilitating Negotiation over Land and Water in Peri-Urban Areas,* International Water and Sanitation Centre
- *Water Local Authority (Moreno, Argentina),* International Institute for Environment and Development
- *Abating Impact of Rural-Urban Fragmentation in the Provision of Water and Sanitation Services – Sustainable Resource Management Plan for the 'IT Corridor' Chennai,* India, Citizens Alliance for Sustainable Living

Maria Luisa Torregrosa, FLACSO

The Public-Private Controversy in Water and Sanitation: Lessons in the Light of the MDGs Requirements (FT3.43)

Convened by: University of Newcastle upon Tyne, School of Geography, Politics and Sociology, United Kingdom

Objective: To analyze the efficiency of public and private mechanisms in order for governments to reach the MDGs related to water and sanitation, comparing the experiences and social equity reached in different countries.

Local Actions presented:

- *Lessons from the Economic-Financial Dimension: Cases from Argentina, Bolivia, Brazil, Kenya, Mexico and Tanzania*

Knowledge Generation & Innovative Technologies for the Sustainable Management of Water Resources in Europe and Worldwide (FT3.04)

Convened by: European Commission, Directorate General for Research, 'Environmental Technologies and Pollution Prevention' Unit, Netherlands Water Partnership

Objective: To demonstrate the scope and impact of public-private collaboration in the area of water technologies and the urgent need to jointly address barriers to their diffusion. Also the presentation of research results by various European projects and initiatives funded by the Community Research Framework Programme and their present and future impact on local actions.

Local Actions presented:

- *The Anammox Technology: Cost Effective and Sustainable Wastewater Treatment,* the Netherlands, Paques BV (LA1782)
- *MULINO (Multi-Sectoral Integrated and Operational Decision Support System for Sustainable Use of Water Resources at the Catchment Scale),* Italy, Foundation Enri Enrico Mattei and Milan State University (LA1783)
- *Real-Time Flood Decision Support System Integrating Hydrological, Meteorological and Remote Sensing Technologies,* Denmark, DHI Water & Environment (LA1784)
- FLOODRELIEF: *Forecasting Flood Events: European Technology at the Leading Edge*

Improving Local Services through Water Operator Partnership (WOPs) (FT3.44)

Convened by: National Association of Municipal Sanitation Services, Brazil, Stockholm Environment Institute (SEI), United Nations Department of Economic and Social Affairs (UNDESA)

Objective: To explore how and why Public-Public Partnerships are critical to capacity-building and institutional-building for sustainable water resources and sanitation management and to facilitate sustainable growth overall.

Local Actions presented:

- *PUP in Riga Water,* Japan, UNDESA (LA1710)

Dennis Martenson, American Society of Civil Engineers

Safe Drinking Water for All (FT3.27)

Convened by: US Environmental Protection Agency (USEPA), Federation of Civil Engineers' Associations of Mexico (FECIC)

Objective: To show on-the-ground work being done that improves drinking water quality and leads to better health, and describe initiatives and partnerships that are supporting these efforts. Specifically, to highlight a North American civil engineering alliance and a partnership between the Pan American Health Organization, Centers for Disease Control and US Environmental Protection Agency and the countries in Latin America and the Caribbean.

Local Actions presented:

- *Clean Water,* Mexico, Federation of Civil Engineers' Associations of Mexico (LA0059)
- *Saneamiento de Lagunas Litorales,* Mexico, UNAM (LA0306)

Public State Policy in Mexico Session

- *Water Safety Plans in Jamaica and Argentina*, United States, US Environmental Protection Agency
- *Water Safety Plans in Buenos Aires*, Argentina, University of Buenos Aires

Public State Policy Impact on Drinking Water Service Delivery Supply and Sanitation for Urban Use in Mexico (FT3.38)

Convened by: National Association of Water and Sanitation Utilities of Mexico (ANEAS), Alliance to Save Energy

Objective: To define challenges that drinking water supply, sanitation and sewerage services face at a municipal level, through the presentation of local actions.

Local Actions presented:

- *Integrated Water Management Plan for Ciudad del Carmen*, Mexico, Water and Sanitation Commission from the State of Quintana Roo (C.A.P.A) (LA0050)
- *Playa del Carmen Water and Sanitation - Actions Today for the Future*, Mexico, Water and Sanitation Commission from the State of Quintana Roo (C.A.P.A.) (LA0051)
- *Integral Projects for Efficient Water and Energy Use in Operating Water and Sanitation Organizations*, Mexico, Alliance to Save Energy (LA0074)
- *The Council of the Water System of Veracruz as a Governing Entity in the Comprehensive Management of the Water Resource in the State*, Mexico, Council of the Veracruz Water System (LA0396)

Successful Public Sector Experiences in Water and Sanitation (FT3.46)

Convened by: National Association of Municipal Sanitation Services (Brazil), Public Services International Research Unit (University of Greenwich), University of Newcastle upon Tyne (School of Geography, Politics and Sociology)

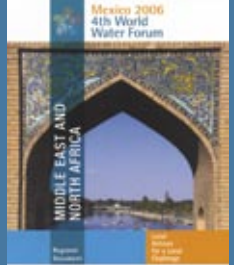
Objective: To analyze and present successfull cases of public enterprises in the water and sanitation sectors in order to show that public Institutions are a real, efficient and fair solution to the intense inequity problems in this sector.

Local Actions presented:

- *The Mexican Case:* Nuevo Leon and Monterrey
- *Successful Municipal Water and Sanitation Enterprises in Brazil*
- *Successful Experiences of Public Enterprises on Water and Sanitation in Europe*

Africa Regional Session

March 20, 2006				
	Morning		Afternoon	
Room	08:30 to 10:30	11:15 to 13:15	14:30 to 16:30	16:45 to 18:45
Valparaiso 2 and 3		FT4.01 Environmentally Sustainable Agriculture and Water Quality -AAFC/ NWRC Egypt/ IWMI	FT4.19 Effective Use of Irrigation Water through Participatory Irrigation Management (PIM) -JBIC/ INPIM/ ANUR	FT4.21 Adequation of Water Users' Rights and Productive Reconversion of Irrigation Districts -SAGARPA/ MXCID
Valparaiso 1		FT4.08 Financing Water for Agriculture -WWC/ GWP	FT4.32 Water and Cultural Diversity: Mediating for Sustainable Development -UNESCO-IHP/ JCAS/ NIH Japan	FT4.12 Water for Food and Ecosistems. The Way Forward -FAO/ IUCN/ MinLNV/ CONAGUA
Salón Iturbide 1	FT4.42 Sustainable Development of Humid Tropical Areas -CONAGUA	FT4.03 Drain for Gain -ENCID/ AWC/ ICID	FT4.04 Wetlands, Water and Livelihoods: Healthy Wetlands are Essential to Help Make Poverty History -Wetlands International	FT4.13 River Restoration in the Asia Monsoon Region -MLIT Japan/ MWR China/ MCT Republic of Korea
Salón Iturbide 2	FT4.40 Launching Session for the CSD WAND - Follow up for the CSD 13 and PWA Initiatives -MLIT Japan/ UNDESA/ USSD/ CONAGUA	FT4.38 Environmental Flows, Ecosystems and Livelihoods: A Challenge for IWRM -IUCN/ TNC/ GWP/ IWMI	FT4.30 Fostering Sustainability in Arid and Water Scarce Zones through Local Actions -IMET Italy/ UNESCO/ IDS/ FFEM	FT4.29 Payment for Environmental Services: National and Local Financing Mechanisms -CONAFOR/ WB
Salón Iturbide 3	FT3.54 Experiences and Responses of Water Utilities to Municipal Water Challenges and Problems -CCA/ ITESM/ ANEAS	FT3.39 Water Challenges and Perspectives in Megacities -CONAGUA	FT3.45 Governance as a Key Factor for Integrated Water Resources Management (IWRM) in Major Metropolises -GEMEX/ Metropolis/ UCLG	FT3.49 Water Challenges in Historic Cities -WMF/ FCHCM
Casa del Diezmo 1	FT4.47 Water Management Legal Modernization -CONAGUA	FT4.07 Improving Agricultural Water Productivity in Dry Areas -ICARDA/ AWC	FT4.37 Assessing Livelihood and Environmental Trade-Offs and Synergies for Water Management in Agriculture -CGIAR-CA/ Ramsar/ FAO/ FAN/ IWMI	FT4.35 Striving for a New Water Culture in Latin America and Europe -FNCA/ Univ. Newcastle
Casa del Diezmo 2		FT4.24 Investment in Agricultural Water Management in Sub-Saharan Africa: Diagnosis of Trends and Opportunities -IWMI/ AfDB	FT4.10 Water Accounting and Information Platforms -MOEJ/ IGES/ CONAGUA/ INEGI/ UNU/ JICA	FT4.25 Multiple-Use Water Services -IWMI/ IRC/ IDE/ GWP
Casa del Diezmo 3		FT4.26 Water Legal Education -BMA/ ICAM/ ABA/ CONAGUA	FT4.28 Water Education for Children and Youth -WET/ UNESCO/ IMTA	FT4.27 Environmental Education and Water Culture in Basic Education -SEP/ ANEA
Casa del Diezmo 4		FT4.41 Green and Blue Water Resources for Improved Livelihoods - Utilizing the Rains for Intended Gains -SIWI/ SEI/ IWMI/ IFPRI/ ASARECA/ IUCN	FT4.22 Approaches and Challenges to Creating Appropriate and Cost-Effective Mechanisms for Measuring and Monitoring Watershed Services for Ecosystem Markets at Different Scales -USFS/ EDF	FT4.16 Water Use Efficiency in Agriculture and Potentials for Water Saving in the Middle East Region -CIHEAM/ ps-EAU
Casa Montejo 1		FT4.14 Recycling Realities - Linking the Sanitation Challenge with Agricultural Benefits -IDRC/ IWMI	FT4.23 Virtual Water in the Arab Region -CAEU/ AWC/ CEDARE	FT4.15 Sustainable Paddy Water Use and Its Multifunctionality with Better Governance -INWEPF/ ASRWG-ICID
Casa Montejo 2		FT4.05 Water for Food, Livelihoods, and Environment: Bridging the Gap through Partnership in Research -CGIAR - CPWF/ NWRC Egypt/ CONDESAN	FT4.02 Innovations in Biosaline Agriculture Technology -Seawater/ Aqua Maris/ Prodimar	FT4.20 Capacity Development Strategies and Social Learning among Stakeholders for a Sustainable Irrigation and Drainage Sector -UNESCO-IHE/ IPTRID/ ICID/ WRC
Casa Montejo 3		FT4.06 Capacity Building in the MENA Region: Ministerial Panel -INWENT/ AWC	FT4.11 National and Regional Water Quality Management -NWRC Egypt/ METAP WB	FT4.34 Demand Management, Institutions, and Policy Options in the Middle East -AWC/ MWRI Egypt/ IDRC
Casa Montejo 4		FT1.17 Gender Mainstreaming and Water for Growth and Development: Diversity as an Agent of Change -GWA/ WSP/ W-Metropolis	FT4.39 Multistakholder Approach in Local Conflict Mitigation During Armed Conflicts -ICRC/ UNESCO	FT4.31 Ecological Management and Rainwater Catchment Systems -IRCSA/ EARCSA



SESSIONS PRESENTED ON MARCH 20, 2006

The focus of the day was "Water for Food and the Environment". The session "Financing Water for Agriculture (FT4.08)" was devoted to the presentation of the report prepared by the Working Group on Financing Water for Agriculture, which is comprised of representatives from GWP, WWC, FAO, World Bank and others. Panelists emphasized the use of non-traditional funding sources, the use of functional government funding, selective Official Development Aid, harmonized engagement of international financing institutions, and increased cost recovery.

The session "Green and Blue Water Resources for Improved Livelihoods –Utilizing the Rains for Intended Gains (FT4.41)" stressed the fact that blue water alone

(water from rivers, aquifers and lakes) would not be enough for producing the food that the world requires for the future. Panelists mentioned that most food in the world is produced in rainfed fields and therefore improvements in rainfed agriculture would increase food productions without requiring more blue water. They underscored the need to develop a new paradigm for water resources management that considers both blue and green water.

In the session "Virtual Water in the Arab Region (FT4.23)" participants underlined 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.

Also, on this day, three sessions were convened related to water and urban development, namely: "Water Challenges and Perspectives in Megacities (FT3.39)", "Governance as a Key Factor for Integrated Water Resources Management in Major Metropolises (FT3.45)" and "Water Challenges in Historic Cities (FT3.49)". The cases of Beijing, Calcutta, Los Angeles, Seville, Venice and Mexico City and how these cities are dealing with water issues were discussed and shared during these sessions.

Environmentally Sustainable Agriculture and Water Quality (FT4.01)

Convened by: Agriculture & Agri-Food Canada, Ministry of Agriculture, Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food, (SAGARPA Mexico), U.S. Department of Agriculture

Objective: To examine how different farm management practices can prevent the degradation of water quality and examine the different approaches which are used to encourage farmer utilization of practices that protect water quality, and hence the environment.

Local Actions presented:

- *North American Examples of Successful Watershed Projects,* United States, U.S. Department of Agriculture (LA0720)
- *Evaluation of Agricultural Policies for Protection of Water Quality,* United States, U.S. Department of Agriculture (LA0722)
- *The Role of Research in Providing a Foundation for Agricultural Practices to Protect Water Quality,* United States, U.S. Department of Agriculture (LA0723)

Effective Use of Irrigation Water through Participatory Irrigation Management - PIM (FT4.19)

Convened by: Japan Bank for International Cooperation (JBIC), International Network on Participatory Irrigation Management (INPIM), National Association of Irrigation Users (ANUR Mexico)

Objective: To discuss the experiences and lessons of Participatory Irrigation Management (PIM), by which farmer organizations take over operation and maintenance (O&M) in a common arrangement, through which water user associations can improve management efficiency by direct involvement in planning and O&M, a key element of which is the establishment of an efficient mechanism to promote PIM.

Local Actions presented:

- *The Network of Farmer Networks Involved in Participatory Irrigation Management in India,* India, Jalaspandana (LA0130)

- *Mahaweli System C Upgrading Project - "Village Self-help"*, Sri Lanka, Ministry of Agriculture, Environment, Irrigation and Mahaweli Development (LA1092)
- *Participatory Irrigation Management in Indonesia, Lessons Learned from Decentralized Irrigation Systems,* Indonesia, Directorate for Irrigation, Directorate General of Water Resources, Ministry of Public Works (LA1255)
- *Transfer of the Irrigation Districts to the Users in Mexico,* Mexico, ANUR (LA1687)

Loïc Fauchon, President of the WWC

Adequation of Water Users' Rights and Productive Re-Conversion of Irrigation Districts (FT4.21)

Convened by: Mexican National Committee of the International Commission on Irrigation and Drainage, Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food, (SAGARPA Mexico)

Objective: To review local actions which promote the modernization, financing, productivity increase and resizing of irrigation systems in order to achieve a more efficient use of water, increase production and contribute to the preservation of the environment.

Local Actions presented:

- *Redimensioning and Productive Reconversion of Irrigation District 001, Pavilion, Aguascalientes,* Mexico, CODAGEA (LA0196)
- *Gansu Water-Saving Irrigation Project (JBICs ODA Project),* Japan, JBIC (LA1268)
- *Help to the State of Ceará in the Implementation of Payments for the Use of Water in Agriculture, with the Implementation of the Irrigation Water Rational Use Plan at the Valleys of Jaguaribe and Banabuiú Rivers, Located in such State,* Brazil, National Water Agency (LA1315)
- *Incentives to Tecnify Irrigation in Morelos,* Mexico, SAGARPA (LA1483)

Financing Water for Agriculture (FT4.08)

Convened by: World Water Council (WWC), Global Water Partnership (GWP)

Objective: To present a progress report on the consultations of the Working Group on Financing Water for Agriculture, as part of the Gurria Task Force on Financing Water for All. It also aimed to interact with the participants on the key factors constraining and facilitating investments in water management infrastructure for agriculture.

Local Actions presented:

- *Water Forever Program,* Mexico, Alternativas y Procesos de Participación Social, A.C. (LA0510)
- *Funding Scheme to Build Picachos Project,* Mexico, Gobierno del Estado de Sinaloa (LA0574)
- *Chilean Experience with New Instruments to Finance Water for Agriculture*
- *Financing Water for Agriculture: Addressing the Challenge in Zambia*
- *Guerdane: From the Classic Approach to the Implementation of the Public-Private Partnership*

Alan Hall, Global Water Partnership (GWP)

Water and Cultural Diversity: Mediating for Sustainable Development (FT4.32)

Convened by: UNESCO International Hydrological Programme (IHP), Japan Consortium for Area Studies, National Institute for Humanities, Japan

Objective: To present and discuss examples of mediation and means of communication for the sustainable development of water resources. To promote best practice and community empowerment through the respect of cultural diversity as a crucial issue for both the identity of local communities and water resource management.

Local Actions presented:

- *Empowering Local Communities through the Internet-based Network of Water Anthropology (NETWA),* France, UNESCO-IHP (LA0508)
- *Spirit of Water and Water Concept for 21st Society, Exhibition Program,* France, Sepia Conseil and Kei Iwasaki Environmental Planning Co., Ltd. for the Moroccan National Office for Drinking Water (LA1360)
- *Presentation of the Book "What's Said about Water",* Mexico, CONAGUA (LA1714)
- *Lessons from de American Indian Cultures,* Uruguay, UNESCO (LA1716)

Water for Food and Ecosystems – The Way Forward (FT4.12)

Convened by: United Nations Food and Agriculture Organization (FAO), Netherlands Ministry of Agriculture, Nature and Food Quality, the World Conservation Union (IUCN), National Water Commission of Mexico (CONAGUA)

Objective: To show the contents of a strategy based on a water for food and ecosystems focus, its benefits and solutions and what it has to offer, the tools used and requirements.

Local Actions presented:

- *Restoring the Deschutes River,* United States, Deschutes River Conservancy (LA0129)
- *Building Multiple Use Water Services into Integrated Planning and Implementation Practice at Local Government Level in South Africa,* Association for Water and Rural Development (LA0141)
- *Economic Assessment of Irrigation Water in the South of Ahuachapan,* El Salvador, Ministry of Natural Resources and Environment (LA1128)

Sustainable Development of Humid Tropical Areas (FT4.42)

Convened by: National Water Commission (CONAGUA Mexico)

Objective: To highlight the importance of taking advantage of the humid tropics in a sustainable way and how IWRM is necessary. The active participation and organization of producers was stressed as a key factor.

Local Actions presented:

- *Innovative Achievements and Improvements in Water Management and Preservation at the Basin of Huehuetán River,* Chiapas, Mexico, CONAGUA (LA0472)
- *Water Management and Soil Conservation,* Mexico, Autonomous University of Tamaulipas (LA0677)
- *Hydroagricultural Infrastructure Conservation Fee in the Technified Rain-Fed District 010 San Fernando,* Mexico, Users of hydroagricultural infrastructure of San Fernando. (LA0718)
- *"Unified for Water" Tacaná Project Mexico - Guatemala,* Guatemala, Inter-Institutional Coordinator of Natural Resources of San Marcos-Guatemala (LA1125)
- *Building Small Containers to Avoid Earth's Erosion and Supply Water during Droughts,* Brazil, National Water Agency (ANA) (LA1384)
- *User Participation in the Management of Technical Seasonal Districts,* Mexico, User's Association from Nuevo Nayarit (LA1479)

Drain for Gain (FT4.03)

Convened by: Egyptian National Committee on Irrigation and Drainage (ENCID), the Arab Water Council (AWC), Working Group on Drainage of the International Commission on Irrigation and Drainage (ICID)

Objective: To show that drainage has many effects and impacts on other functions of the resource system. These effects and impacts could be positive or negative, within and outside the drainage area. Agricultural drainage proved to be extremely useful in enhancing crop productivity, increasing farm income, and improving the livelihoods in rural areas where the majority of the poor live. It could also contribute significantly to the national income of countries.

Local Actions presented:

- *The National Drainage and Drainage Water Reuse Programs,* Egypt, Ministry of Water Resources and Irrigation (LA0648)
- Drainage by Underground Plots in Mexico, National Water Commission (LA1055)
- Salinity Control in Irrigated Lands and River Flows, Australia, ICID Working Group on Drainage (LA1201)

Wetlands, Water and Livelihoods: Healthy Wetlands are Essential to Help Make Poverty History (FT4.04)

Convened by: Wetlands International

Objective: To integrate wetlands considerations into large scale infrastructure development and national and international policy actions for reducing poverty. It also showed the importance of wetlands as critically important ecosystems that keep people out of poverty and support livelihoods, how to integrate wetland management and development objectives, the opportunities and threats to maintaining and realizing the potential of wetlands in reducing poverty and the specific role of fish in wetlands as sources of nourishment that help to reduce poverty and support livelihoods.

Local Actions presented:

- *Research into Effective Water Management in the Upper Niger Basin,* Mali, Wetlands International (LA0140)
- *Working for Wetlands,* South Africa, WWF (LA0281)
- *Chilika Development Authority,* India, Chilika Development Authority (LA0469)

River Restoration in the Asia Monsoon Region (FT4.13)

Convened by: River Bureau, Ministry of Land, Infrastructure and Transport (MLIT), Japan, Ministry of Water Resource, P. R. China, Water Resources Bureau, Ministry of Construction and Transportation, Republic of Korea

Objective: In this session, Japan, China and Korea sought to agree on the terms of a river restoration suitable for the Asia Monsoon Region and to share their experience and information, taking into account the unique geographical and sociological features of the region.

Local Actions presented:

- *River Restoration in Japan,* Japan, River Bureau, Ministry of Land, Infrastructure and Transport (LA1320)
- *Restoration of Kushiro River in Japan,* Ministry of Land Infrastructure and Transport (LA1471)
- *River Restoration in the Republic of Korea,* Ministry of Construction and Transportation (LA1741)

Pasquale Steduto, FAO

Launching Session for the CSD WAND - Follow up for the CSD 13 and PWA Initiatives (FT4.40)

Convened by: Ministry of Land, Infrastructure and Transport, (Japan), United Nations Department of Economic and Social Affairs (UNDESA), US State Department, National Water Commission (CONAGUA, Mexico)

Objective: To present and establish the Water Action and Networking Database (WAND) and, through a brainstorming session, get feedback from participants on future contributions.

Local Actions presented:

- *Network of Asian River Basin Organizations (NARBO)*, Indonesia, Network of Asian River Basin Organizations (LA0156)

Margaret Catley-Carlson, GWP

Environmental Flows, Ecosystems and Livelihoods: A Challenge for IWRM (FT4.38)

Convened by: The World Conservation Union (IUCN), The Nature Conservancy (TNC), Global Water Partnership (GWP), International Water Management Institute (IWMI)

Objective: To present integrated water resources management initiatives, focusing on securing environmental goods and services for people and nature. Also to face the challenge of including technically accurate and politically appropriate Environmental Flows Regimes (EFR) in the main river basins, especially in biodiversity-rich developing countries.

Local Actions presented:

- *Restoring Instream Flows in the Columbia Basin*, United States, National Fish and Wildlife Foundation (LA0364)
- *Freshwater Inflows to Estuaries - Integrated Management*, Dominican Republic, The Nature Conservancy (LA1214)
- *Using the Environmental Flows approach in Vietnam*, IUCN (LA1838)
- *Establishing Public Participation for IWRM in the Senegal River Basin*, GWP (LA1840)

Fostering Sustainability in Arid and Water Scarce Zones through Local Actions (FT4.30)

Convened by: Italian Ministry for the Environment and Territory (IMET), United Nations Educational, Scientific and Cultural Organization – International Hydrological Programme (UNESCO/IHP), Institute of Development Studies (IDS), French Global Environment Facility (GEF)

Objective: (1) To disseminate best practices in integrated management of groundwater resources highlighting local and institutional aspects; and (2) to share the valuable experience accumulated in addressing water scarcity and desertification.

Local Actions presented:

- *Fight against Desertification: Groundwater Artificial Recharge in Vietnam*, UNESCO (LA0446)
- *Integrated Water Resources Management in a Critical Arid Basin of Iran (Mashhad Basin)*, UNESCO (LA0560)
- *The North West Sahara Aquifer System, an Example of Shared Management of a Cross Border Basin*, Algeria, National Water Resources Agency (LA0685)
- *Regional Training Courses on Desalination System Supplied by Renewable Energies*, UNESCO (LA1172)
- *Integrated Water Resources Management in Algeria*, UNESCO (LA1173)

Payment for Environmental Services: National and Local Financing Mechanisms (FT4.29)

Convened by: National Forestry Commission (CONAFOR Mexico), World Bank (WB)

Objective: To support new mechanisms of financing in local markets of environmental services by analyzing the requirements for development and strengthening which can help to reinforce existing environmental services fees.

Local Actions presented:

- *Platanar River Basin, Ciudad Quesada, San Carlos Alajuela*, Costa Rica, National Forestry Financing Fund (LA0001)

- *Preservating Biodiversity in the Sierra Gorda Biosfere Reservoir,* Mexico, Ecological Group Sierra Gorda – IAP (LA0148)
- *Implementation Project of the Charge and Payment System for Environmental Services in Salvador,* Ministry of Environment and Natural Resources (LA1338)

Experiences and Responses of Water Utilities to Municipal Water Challenges and Problems (FT3.54)

Convened by: National Association of Water and Sanitation Utilities (ANEAS, Mexico), BAL-ONDEO, Water Advisory Council (Mexico), Monterrey Technology Institute for Higher Studies

Objective: To highlight the local water management policies that have been developed at the local level as important contributions to the learning curve in order to improve the decision making process.

Local Actions presented:

- *Water Management at the Municipality Level in Mexico: Challenges and Responses from Operating Organizations,* Mexico Water Advisory Council (LA0571)
- *Standardized Reporting System used by Private Water Services Providers in the Framework of Contracts with French Municipalities",* Professional Association of French private water operators (LA1362)

Paul Shoenberger, West Basin Municipal Water District, US

Duan Wei, Beijing Water Authority, China

Water Challenges and Perspectives in Megacities (FT3.39)

Convened by: National Water Commission (CONAGUA Mexico)

Objective: To discuss on the theme of disaster risk reduction considerations incorporated into the water and sanitation sector priorities.

Local Actions presented:

- *Water Conservation, United States,* Los Angeles Department of Water and Power (LA1075)
- *Integrated Water Resource Management Solution: Central & West Basin Water Recycling Case Study,* United States, Central & West Basin Municipal Water Districts (LA1149)
- *Water Supply to the Mexico City Metropolitan Area,* Mexico, CONAGUA (LA1629)

Governance as a Key Factor for Integrated Water Resources Management in Major Metropolises (FT3.45)

Convened by: Government of the State of Mexico, World Association of the Major Metropolises, United Cities and Local Governments (UCLG)

Objective: To identify the common problems in big cities, as well as to show local actions on the IWRM framework based on political will as a key factor to promote coordinated development amongst key stakeholders.

Local Actions presented:

- *Regional Collaboration between Waterworks around the Baltic Sea*, Sweden, City of Stockholm (LA1729)
- *Integrated Water Management of Barcelona Metropolitan Area: A Scarce Resource*, Spain, Environment Metropolitan Entity, Barcelona (LA1767)
- *Building Bridges and Achieving Agreements on the Champlain Lake Basin: A Scientific and Civil Approach for the Improvement and Protection of Basins*
- *EMASESA 10 Years after the Drought: Development and Achievements*

Water Challenges in Historic Cities (FT3.49)

Convened by: Mexico City's Historical Center Foundation, World Monuments Fund

Objective: To internationalize the discussion regarding the risks posed by climate change to coastal cities such as Venice, to explain the proposal of the creation of an interactive museum in the city of Quito dedicated to illustrating the value of water and the importance of preserving water resources and the environment, to discuss a novel example of cooperation between academia and private industry in Mexico to help the government use science to improve its decision making, to illustrate how politics can get in the way of long-term planning and the implementation of comprehensive solutions to regional and urban water problems, and to explore alternative ways of communicating water-related information to society as a whole.

Local Actions presented:

- *Water Museum "Yaku"*, Ecuador, FONSAL
- *Assessment of Flooding and Environmental Challenges for Venice and Its Lagoon: State of Knowledge*, Italy, The Venice in Peril Fund
- *Who Pays for the Costs of Groundwater Extraction? The Mexico City Example*, National Autonomous University of Mexico (UNAM)

Water Management Legal Modernization (FT4.47)

Convened by: National Water Commission (CONAGUA, Mexico)

Objective: To present the changes made to the Legal and Regulatory Framework of Water in Mexico, the relevant aspects considered in the reforms to the National Water Law and the proposal of the regulation of this law as well as some aspects of tax legislation in relation to the payment of services.

Improving Agricultural Water Productivity in Dry Areas (FT4.07)

Convened by: International Center for Agricultural Research in Dry Areas (ICARDA), Arab Water Council (AWC)

Objective: To raise awareness and better understanding among policy makers and other stakeholders on the urgency of improving agricultural water productivity as a response to increasing water scarcity in dry areas and developing recommendations for future action by concerned countries to alleviate the effects of water shortages on agriculture, to improve people's livelihoods.

Megacities Session

Local Actions presented:

- *Supplemental Irrigation for Improved Rainfed Wheat Yield and Water Productivity in Syria*, Syria, ICARDA (LA0142)

Assessing Livelihood and Environmental Trade-Offs and Synergies for Water Management in Agriculture (FT4.37)

Convened by: The Comprehensive Assessment of Water Management in Agriculture of the Consultative Group on International Agricultural Research (CGIAR) hosted by IWMI/CGIAR, Ramsar Convention on Wetlands, United Nations Food and Agriculture Organization (FAO), International Water Management Institute (IWMI), Freshwater Action Network (FAN)

Objective: To discuss and debate the Comprehensive Assessment's findings on water, agriculture, livelihoods and the environment, unveiling challenges and potential options for investments. The Forum was the last event for user input into the Assessment before publishing to promote dialogue between people with different points of view about how water is managed in agriculture.

Local Actions presented:

- *Negotiations between Users and Agencies to Rescue Lake Chapala in Mexico*, Mexico, Mexican Institute of Water Technology (LA0063)
- *Multiple Water Use Systems by Design: New Low-Cost Tools for Irrigating Small Plots with a Limited Water Supply, Experience from Nepal and India*, United States, IDE International (LA0128)

Martha Delgado, Mexican Alliance for a New Water Culture

Striving for a New Water Culture in Latin America and Europe (FT4.35)

Convened by: Foundation for a New Water Culture, School of Geography, Politics and Sociology, University of Newcastle upon Tyne, United Kingdom

Objective: To promote a new water culture by showing experiences from Spain and Mexico in order to encourage society to participate in the decision making process to achieve sustainable development.

Investment in Agricultural Water Management in Sub-Saharan Africa: Diagnosis of Trends and Opportunities (FT4.24)

Convened by: International Water Management Institute (IWMI), African Development Bank (AfDB)

New Water Culture Session

Objective: To highlight and discuss opportunities for innovative, cost-effective investment in agricultural water management that foster high agricultural growth and rapid poverty reduction; to showcase the range of smallholder land and water management innovations for securing human livelihoods and generating multiple goods and services and to provide guidance for improved design and implementation of agricultural water development projects and enhanced returns to investments in agricultural water.

Local Actions presented:

- *Smallholder Systems Innovation in Integrated Watershed Management (SSI): Lessons from Tanzania and South Africa,* IWMI (LA0639)

Water Accounting and Information Platforms (FT4.10)

Convened by: Ministry of the Environment, Japan (MOEJ), Institute for Global Environmental Strategies (IGES), National Water Commission (CONAGUA Mexico), National Statistics, Geography and Informatics Institute of Mexico (INEGI)

Objective: To encourage water environmental conservation efforts in the world through sharing views on the development of information platforms and water accounting related to water environmental conservation.

Local Actions presented:

- *Water Environment Partnership in Asia,* Japan, The Secretariat of WEPA, Institute for Global Environmental Strategies (LA0084)
- *Development of the Economic and Ecological Basin System of Mexico,* Mexico, INEGI (LA0417)
- *Unified System of Basic Water Information,* Mexico, CONAGUA (LA1608)

Multiple-Use Water Services (FT4.25)

Convened by: International Water Management Institute (IWMI), International Water and Sanitation Centre (IRC), International Development Enterprise (IDE), TEC Global Water Partnership (GWP)

Objective: To highlight the merits of multiple needs-based approaches compared to conventional single-use water services approaches. The session also identified principles at the community, intermediate and national level that need to be adopted in order to implement and upscale multiple-use water services approaches and their benefits at a significant scale.

Local Actions presented:

- *Multiple Water Use Systems by Design: New Low-Cost Tools for Irrigating Small Plots with a Limited Water Supply — Experience from Nepal and India,* IDE International (LA0128)
- *Implementing Multiple Use Water Services in Valle del Cauca,* Colombia, Ministry of the Interior of the Valle (LA0153)
- *Walawe Left Bank Irrigation Upgrading and Extension Project - Sri Lanka,* Japan Bank for International Cooperation (JBIC) (LA1229)
- *Creation of "Water Committees" in Peri-Urban Areas,* Bolivia, Your Water Program (LA1199)
- *SWELL: Securing Water to Enhance Local Livelihoods, South Africa*, Association for Water and Rural Development (AWARD)

Legal Water Education (FT4.26)

Convened by: Mexican Bar, Lawyer's School, Madrid School Lawyers, Spain, American Bar Association, Commission for Environmental Cooperation (CCA)

Objective: To understand and share local experiences in the area of legal water education, so as to define new references to reproduce successful experiences in the area of legal water education.

Local Actions presented:

- *Legal Education in the Area of Water,* Mexico, Mexican Bar, Lawyers´s School, A.C. (LA0280)
- *Dividing the Waters: A Project for Judges Involved in General Stream Adjudications & Other Complex Water Litigation,* United States, Dividing the Waters (LA1682)

Water Education Session

Water Education for Children and Youth (FT4.28)

Convened by: Project WET International, United Nations Educational, Scientific and Cultural Organization (UNESCO), Mexican Institute of Water Technology (IMTA),

Objective: To highlight the importance of water education to successfully implement integrated and sustainable water resources management, also to present a variety of water education programs which can serve as models for agencies and organizations interested in water education for youth and children.

Local Actions presented:

- *Education for an Integrated and Sustainable Management of the Water Resources in Chile,* Chilean General Directorate of Water (LA0025)
- *Water Education Workshops for Elementary and Junior High School Teachers in Taiwan,* Taiwan International Institute for Water Education (LA0136)
- *Project WET International Water Education Programs Implemented at the Local Level across the World,* Project WET International Foundation (LA0458)
- *Discover a Watershed: The Colorado River,* United States, Project WET International Foundation (LA1646)
- *Water and Education for the Americas,* UNESCO International Hydrological Programme (LA1672)
- *Discover a Watershed: The Patzcuaro Lake,* Mexico, Mexican Institute of Water Technology (LA1690)

Environmental Education and Water Culture in Basic Education (FT4.27)

Convened by: Ministry of Public Education, (SEP Mexico), National Environmental Education Academy, Mexico

Objective: To analyze different forms of inclusion and promotion of environmental education in general as well as to analyze some Latin-American educational systems.

Local Actions presented:

- *National Environmental Certification System of Educational Establishments,* Chile, Ministry of Education (LA0041)
- *Educational Program Design and Development, Mexico,* National Pedagogical University (LA0042)
- *Water Culture Promotion in Basic Education,* Mexico, SEP (LA0288)

Green and Blue Water Resources for Improved Livelihoods - Utilizing the Rains for Intended Gains (FT4.41)

Convened by: Stockholm International Water Institute (SIWI), Stockholm Environment Institute (SEI), International Water Management Institute (IWMI), the World Conservation Union (IUCN), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)

Objective: To increase the understanding of the role of blue and green water flows in poverty reduction and ecosystem sustainability. Whereas one-third of the precipitation feeds rivers, lakes and aquifers, two-thirds take the green water path, i.e. generate water in the soil consumed in plant production and return to the atmosphere as evapo-transpiration from the landscape. With regard to livelihood support and environmental stability, it is crucial to recognise this significant component of the water cycle. A related objective was to emphasise that there is a significant potential

to increase food production if a more realistic water perspective permeates policy, extension services and development initiatives.

Local Actions presented:

- *Sustainable Livelihoods and Green-Blue Water Management through Conservation Agriculture in East Africa,* Sweden, SEI (LA1746)

Approaches and Challenges to Creating Appropriate and Cost-Effective Mechanisms for Measuring and Monitoring Watershed Services for Ecosystem Markets at Different Scales (FT4.22)

Convened by: United States Forest Service, EcoLogic Development Fund

Objective: To exchange information on, and gain a better understanding of, appropriate and cost effective measures of watershed services provided by ecosystems in order to create realistic markets for these services.

Local Actions presented:

- *Village-Led Watershed Management in Honduras,* Honduras, EcoLogic Development Fund (LA0494)
- *Payment for Hydrologic Forest Environmental Impacts at the Municipality of Coatepec,* Mexico, FIDECOAGUA (LA1113)
- *Preservation Program of Private Forest Lands and Regional Management of Protected Natural Areas from Puerto Rico,* Foresting Service of Puerto Rico, Department or Natural and Enviromental Resources of Puerto Rico (LA1491)

Water Use Efficiency in Agriculture and Potentials for Water Saving in the Middle East Region (FT4.16)

Convened by: CIHEAM-Bari, Mediterranean Agronomic Institute of Bari, Italy, Meditteranean Water Solidarity, France

Objective: To focus on the major technical and non-technical solutions of water demand management that can be used in order to overcome the already existing severe water scarcity, through the presentation of the RAP-WRM project (Regional Action Programme, "Water Resources Management"), its objectives and its outputs, in addition to a case study about the impact of water efficiency programs on Jordan's water demand.

Local Actions presented:

- *Potentials for Improving On-Farm Water Use Efficiency and the Use of Non-Conventional Water Resources in Irrigated Agriculture of the Middle East and North Africa Region,* Italy, CIHEAM – Mediterranean Agronomic Institute of Bari (LA0169)

Recycling Realities - Linking the Sanitation Challenge with Agricultural Benefits (FT4.14)

Convened by: International Development Research Centre (IDRC), International Water Management Institute (IWMI)

Objective: To show that many livelihoods depend on irrigation with polluted water and that there exist safe options for linking the sanitation challenges with food supply for the benefits of society – including in low-income countries where sound wastewater treatment is financially and institutionally constrained.

Local Actions presented:

- *Management of Waste Water for Urban Food Production,* India, Kolkata Metropolitan Development Authority (LA0017)
- *From Farm to Fork: Addressing the Health vs. Livelihoods Dilemma of Wastewater Use in Agriculture,* Ghana, University of Kumasi (LA1305)

Virtual Water Session

Virtual Water in the Arab Region (FT4.23)

Convened by: Council of Arab Economic Unity (CAEU), Arab Water Council (AWC), Center for Environment and Development for the Arab Region and Europe (CEDARE)

Objective: (1) To shed some light on a few agricultural policies through studying the distribution of export and import products; (2) Provide an overview and valuation of the quantity of virtual water for different agriculture products through exports and imports; and (3) Propose a shared strategic view for agricultural production in the Arab region.

Local Actions presented:

- *A Study on Virtual Water in Egypt*, CAEU (LA0676)
- *Virtual Water in the Arab World*, Egypt, National Water Research Center (LA1505)

Sylvanie Jardinet, Action Against Hunger

Sustainable Paddy Water Use and Its Multifunctionality with Better Governance (FT4.15)

Convened by: International Network for Water and Ecosystem in Paddy Fields (INWEPF), Asian Regional Working Group, International Commission on Irrigation and Drainage (ASRWG, ICID)

Objective: To formulate common understanding in paddy farming and water, and establish sustainable paddy farming and its water systems with better governance.

Local Actions presented:

- *International Network for Water and Ecosystem in Paddy Fields*, Japan, International Network for Water and Ecosystem in Paddy Fields (INWEPF) (LA1278)
- *Enhancing Diversities and Multifunctionality through Better Water Management and Eco-Agriculture*, Japan, Enhancing Diversities and Multifunctionality through Better Water Management and Eco-Agriculture (LA1724)

Water for Food, Livelihoods, and Environment: Bridging the Gap through Partnership in Research (FT4.05)

Convened by: CGIAR Challenge Program on Water and Food (CPWF), National Water Research Centre, Egypt, and the Consortium for Sustainable Development of the Andean Region (CONDESAN)

Objective: To stimulate discussion and debate about proposed solutions to livelihoods and environmental trade-offs. It also highlighted the major contribution made by research to inform local actions in water food

initiatives. Similarly, the discussion will draw attention to ways in which local actors can use research to further their goals.

Local Actions presented:

- *Mekong Program on Water, Environment and Resilience*, Thailand, M-POWER (LA1821)
- *Payment for Environmental Services as a Mechanism for Promoting Rural Development in the Upper Watersheds of the Andes*
- *Links between International and Local Research and Local Actions in Uganda*

Jan Luijendijk, UNESCO-IHE

Innovations in Biosaline Agriculture Technology (FT4.02)

Convened by: Seawater Foundation, Arab Water Council (AWC), International Center for Biosaline Agriculture (ICBA), Islamic Development Bank (IsDB)

Objective: To provide a forum for experts, scientists and the private sector to highlight success stories of local actions in biosaline agriculture, also to share their lessons learned and experiences.

Local Actions presented:

- *Re-Use of Oilfield Wastewater for Agro Forestry using Natural Wetland Treatment Systems in a Desert Environment in Oman*, Oman, Petroleum Development Oman (PDO) (LA1289)
- *SALTMED Model for Use of Poor Quality Water*, United Kingdom, Center for Ecology and Hydrology (LA1683)
- *Establishment of the International Center for Biosaline Agriculture*, United Kingdom, International Center for Biosaline Agriculture (ICBA) (LA1684)

Capacity Development Strategies and Social Learning among Stakeholders for Sustainable Irrigation and Drainage Sector (FT4.20)

Convened by: United Nations Educational, Scientific and Cultural Organization Institute for Water Education (UNESCO-IHE), International Programme for Technology and Research on Irrigation and Drainage (IPTRID), International Committee on Irrigation and Drainage (ICID)

Objective: To get an impression and share experiences on local action by local actors on capacity building for water use and food production in an environmental context; to identify the constraining and facilitating factors and measures to remove these constraints and to see to what extent successful local actions can be scaled up.

Local Actions presented:

- *Educational Program for School Children about Sustainable Management of Water Resources in Chile*, Water Center for Arid Zones of Latin America and the Caribbean and Chilean Directorate of Waters (LA0026)
- *Capacity Development for Food Security in Nicaragua*, Nicaragua, Action Against Hunger (LA1309)
- *Revitalisation of Smallholder Rainfed and Irrigated Agriculture in South Africa*, South Africa, The Water Research Commission (LA1363)

Carlos Garces Restrepo, FAO

Capacity Building in the MENA Region: Ministerial Panel (FT4.06)

Convened by: InWent Capacity Building International, Arab Water Council (AWC)

Objective: To promote human resources development through capacity building through the example of the local actions programs, to receive feedback from the expert panel of ministers and the experts in the plenary, to serve as a platform of exchange, to contribute to harmonisation with other local actions in the region and to help to establish new partnerships, and finally to come up with concrete conclusions and recommendations on strengthening local action for capacity building.

Local Actions presented:

- *Capacity Building for the Water Sector in the MENA Region,* InWEnt Capacity Building International (LA0097)
- *Capacity Building and Networking for the Water Sector in the Nile River Basin,* Egypt, The Hydraulics Research Institute (HRI) (LA0178)
- *Regional Training and Education Center*

National and Regional Water Quality Management (FT4.11)

Convened by: National Water Research Center, Egypt (NWRC), World Bank, Mediterranean Environmental Technical Assistance Programme (METAP – WB)

Objective: To show local and regional experiences in water quality management, lessons learned, the qualifications required, techniques in providing data in a user friendly interface as a major tool in managing scarce water resources, by taking key issues such as water quality challenges versus water scarcity limitations, cooperative activities within the Arab countries, and to recommend cooperative frameworks at the regional level.

Local Actions presented:

- *National Water Quality Management in Egypt*
- *Management of Water Quality in Mashreq and Maghreb Countries*
- *Water Quality Management, Guidelines for Policy Coordination in METAP Mashreq & Maghreb Countries*
- *Joint APP/MWRI Cooperation for Water Quality Management Assessment*

Demand Management, Institutions, and Policy Options in the Middle East (FT4.34)

Convened by: Arab Water Council (AWC), Ministry of Water Resources and Irrigation, Egypt, International Development Research Centre (IDRC)

Objective: (1) To showcase actions that promote water demand management as an alternative to supply management, and push it higher on the agenda of policy-makers and stakeholders. (2) To provide a platform for policy-makers to synthesize effective local actions for better management of water resources in the MENA region. (3) To promote alternative mediums for communication and awareness-raising through performances, cultural expressions, posters and creative mechanisms. (4) To open channels of communication, understanding and trust for improved knowledge exchange between youth and policy-makers.

Local Actions presented:

- *Shaping Water Policy in Egypt: Egyptian Youth Take the Local Message from the Nile Valley to the World Water Forum,* IDRC (LA0311)
- *Innovations in Agricultural Waters Project Design, Planning and Implementation in sub-Saharan Africa,* South Africa, IWMI (LA1733)

Gender Mainstreaming and Water for Growth and Development: Diversity as an Agent of Change (FT1.17)

Convened by: Gender and Water Alliance (GWA), Water and Sanitation Program - Latin America and the Caribbean (WSP-LAC), Metropolis - Women (and local Governance) International Network's Regional Antenna

Objective: To explore how a gender focus in water management furthers the goals of establishing world water security and reducing economic and social vulnerability.

Local Actions presented:

- *Mainstreaming Gender Perspective in Integrated Water Resources Management Policies: Brazil Case Study,* Institute of Advanced Research in Economy and Environment, Ipanema Institute (LA0024)
- *Gender Mainstreaming in the Water Sector in South Africa,* Department of Water Affairs and Forestry (LA0556)
- *Gender Intermediation in Uboma, Nigeria: A Model for Sustainable Access to Clean Water for the Rural Poor,* Nigeria, Rural Africa Water Development Project (LA1658)
- *The Blue Agenda of Women,* Mexico, Gender and Environment Network (RGEMA) (LA1659)
- *Gender in Multiple-Use Water Services,* South Africa, International Water Management Institute, Southern Africa Regional Office (LA1664)
- *Altos de Menga Experience in the Operation of Community Supply Systems with a Gender Focus in Peri-Urban Sectors in Colombia,* Barrio altos de Menga, Cali (LA1753)
- *Women and Pluviomentry of the Northeast Argentina Republic Basin, Argentina,* National University or Tucuman (LA1754)

Multistakeholder Approach in Local Conflict Mitigation during Armed Conflicts (FT4.39)

Convened by: International Committee of the Red Cross (ICRC), United Nations Educational, Scientific and Cultural Organizations (UNESCO)

Objective: To raise awareness among concerned stakeholders on the importance of addressing emerging conflicts and their consequences on the well-being of populations facing armed conflicts and whose livelihoods have been threatened, considering that the mitigation of local conflicts related to water resources can alleviate international ones. Also that armed conflicts can exacerbate the competition over shared water resources.

Safwat Abdel-Dayem, AWC

Local Actions presented:

- *Integrating Emergency and Development Activities in a Conflict Area with Concomitant Natural Disaster involving all Levels of Stakeholders. The Example of Goma RDC,* International Committee of the Red Cross (LA1599)

Ecological Management and Rainwater Catchment Systems (FT4.31)

Convened by: International Rainwater Catchment Systems Association (IRCSA), Rainwater Catchment System Association - Brazil

Objective: To show that, among the various alternative technologies to augment freshwater resources availability, rainwater harvesting and utilization is a decentralized, environmentally sound solution, which can avoid many environmental problems, often created using centralized, conventional, large-scale project approaches, so as to adequate water supply to meet the demand of an ever-increasing population and to ensure equitable access, through alternative water resources.

Local Actions presented:

- *P1MC and P1+2, Two Rainwater Harvesting Programs in the Brazilian Semiarid Tropics,* Brazilian Rainwater Catchment and Management Association (LA0523)
- *Research, Demonstration, Training and Extension on Rainwater Harvesting,* China (LA0866)

	March 21, 2006			
	Morning		Afternoon	
Room	08:30 to 10:30	11:15 to 13:15	14:30 to 16:30	16:45 to 18:45
Valparaiso 2 and 3		FT5.05 Hurricane Katrina and Other Major Water-Related Disasters: Lessons Learned for Managing Risks -USACE/ MTPWWM Netherlands	FT9.21 Closed Ministerial Meeting	FT5.27 Intergenerational Dialogue -UNICEF/ IMTA/ JWF
Valparaiso 1			FT5.28 Extreme Hydro-Meteorological Events (Hurricanes, Especially Wilma and Stan) -UNAM/ UNU/ COLTLAX	FT5.26 Water Quality and Public Health -SS/ AIDIS/ COFEPRIS
Iturbide 1		FT5.30 The Global Climate Change and Urban Flood Mitigation NWP	FT4.46 Preserving Water -IMAC	FT3.60 Mexican Local Actions in Water Supply and Sanitation -CONAGUA
Iturbide 2	FT2.52 The Contribution of Coastal Zones and Wetlands Sanitation to Development of New Communities and Ecosystems -SEMAR	FT5.04 Partnership Building at Community Level -SEMARNAT/ CPWC/ IVM/ BothEnds/ PIK/ IUCN/ DPWH/ NWCF	FT5.29 Water Resources Information System -MCT Republic of Korea/ MWR China/ MLIT Japan	FT5.24 Flood Management -MWR China/ MCT Republic of Korea/ MLIT Japan
Iturbide 3	FT4.45 Integrated Management of Water Sector Under Conditions of Uncertainty and Scarcity – Part II -WC Israel/ Mekorot-Israel	FT3.55 Water Supply and Sanitation. Hispanoamerican Vision -CONAGUA	FT5.22 Integrated Risk Management in Mediterranean Towns: Experience Sharing -GEM/ IME	FT5.13 Development and Implementation of Water Information Systems -OIEau/ CONAGUA/ CPWC/ INEGI
Casa del Diezmo 1		FT5.00 The Sustainability of Water and Sanitation Services in the Context of Disaster Risk Reduction - A Contribution towards the Implementation of the Hyogo Framework for Action: 2005-2015 -UNISDR/ PAHO/ UNICEF/ IFRC	FT5.25 The Management of Extreme Water Phenomena: Floods and Droughts -MOE Spain	FT5.16 Role of Dams and Reservoirs in Integrated Flood Management -SPANCOLD - ICOLD
Casa del Diezmo 2		FT5.03 Risk Management Assessment in River Basins -MWRI Egypt/ AWC	FT5.21 Environmental Vulnerability: The Importance of an Integrated and Multidisciplinary Approach -UNAM/ MOFA Italy	FT5.07 People-Centered Early Warning Systems for Water-Related Disasters -UNISDR/ IFNET
Casa del Diezmo 3		FT5.20 Flash Floods -WMO/ FOEN/ NWS USA	FT5.10 The Role of Forests in Water-Related Natural Disaster Risk Management -IUCN/ FA Japan	FT5.18 Space-Based Water Observations - Alliances for Providing Information Essential for Managing the World's Water Resources -IAHS/ IGWCO/ UNESCO/ ESA/ WCRP/ GEO
Casa del Diezmo 4		FT5.23 Floods, Droughts and Risk Management -WB/ UFRGS	FT5.11 Managing Drought Risks - Role of Improved Preparedness and Management -WMO/ NDMC/ USDA/ AGRHYMET	FT5.01 Opportunities of River Flood Risks: Social, Economic, Spatial and Communication Aspects -MTPWWM Netherlands/ RU/ UNACH/ NVE
Casa Montejo 1		FT5.15 Broadening Perspectives in the Face of Increasing Risks -EU DG/ UNU/ NeWater Project	FT5.12 Tools for Capacity Building in Risk Management -CPWC/ ISET	FT5.14 Tsunami - 15 Months Later -JWF/ ISDR India
Casa Montejo 2		FT5.31 Conflict and Water Management -UNAM/ UNU/ COLTLAX	FT5.06 Sharing Experiences for Water-Related Disaster Risk Management -UNESCAP - WMO (TC)/ IFNET	FT5.33 The Manifold Dimensions of Groundwater Sustainability -RAS/ NGWA/ IGM Spain
Casa Montejo 3		FT5.02 Reducing West Africa's Vulnerability to Climate Impacts on Water Resources -CILSS/ AGRHYMET/ GWP/ IUCN	FT5.09 Groundwater and Risk Management: Coping with Water Scarcity, Climate Change and Emergency Situations -IGRAC/ UNESCO/ RGWB	FT5.19 Collaborative Approach among International Agencies for Effective Flood Management - International Flood Initiative (IFI) -PWRI/ WMO/ UNESCO/ UNU
Casa Montejo 4		FT5.17 Managing Safe Drinking Water in Areas or Armed Conflict and Ecological Disaster from a Gender Perspective -WECF/EPRC	FT5.08 Coastal Development and Defense in the Low Lands -Noord-Holland/ CBE	FT3.51 Empowerment and Democratization Multistakeholder Panel -CONAGUA/ UNAM

SESSIONS PRESENTED ON MARCH 21, 2006

The focus of the day was Risk Management. In the session "Hurricane Katrina and other Major Water-Related Disasters (FT5.05)" panelists mentioned that disasters and relief are now globalized phenomena and international parternships are important to keep each other alert. They underscored the need to rethink how we cooperate in prevention as well as reaction.

The session "Tsunami-15 Months Later (FT5.14)" was devoted to the presentation of the lessons learned after the devastating tsunami that hit several countries around the Indian Ocean in December 2004. The panelists highlighted the involvement of youth groups from Japan who played a central role in encouraging local reconstruction efforts in Sri Lanka. Panelists also urged the international community to consider the Hangen target of halving, by 2015, the number of lives lost to water-related disasters. The target is based on the concept that almost all water-related disasters are predictable, and so the loss of life can be minimized through adequate warnings and evacuation.

The session "Flood Management (FT5.24)" presented experiences from China, Korea and Japan. Panelists highlighted the importance of preparedness with a good mixture of structural and non-structural measures. The representative from Korea stressed the fact that the population growth in flood prone areas linked to the fact that rainfall intensity is increasing generates increased vulnerability.

Panelists in session "Groundwater and Risk Management (FT5.09)" mentioned that groundwater resources are important in risk mitigation, but are often exposed to natural and anthropogenic degradation risks. Therefore, their exploitation should be accompanied by adequate protection and management. It was also mentioned that artificial groundwater recharge using sand dams - as pioneered in Kenya - appears to be an affordable and effective approach to augmenting water resources in water-scarce regions.

Hurricane Katrina and other Major Water-Related Disasters: Lessons Learned for Managing Risk (FT5.05)

Convened by: United States Army Corps of Engineers (USACE) Institute for Water Resources, Ministry of Transport, Public Works and Water Management, the Netherlands

Objective: To share lessons learned from the devastating impacts that resulted from Hurricane Katrina upon the cities of New Orleans and Los Angeles and other water-related disasters. Multiple stakeholders from Japan, the Netherlands and US and other organizations sharet their views, thoughts and concerns regarding these issues, considering that disaster risk reduction considerations must be incorporated into the water and sanitation sector priorities.

Local Actions presented:

- *Evolution Tsunami & Water Related Disasters,* India, Institute for Sustainable Development and Research (LA0033)

Introduction to the Framework Theme Risk Management

- *Intervention of a Task Force Composed of Professional Technicians of the Water in Sri Lanka following the Tsunami in December 2004*, France, Marseilles Water Group (LA1344)
- *ESCAPE Project – The Zeeland Province of Netherlands*

Steve Stockton, USACE

Intergenerational Dialogue (FT5.27)

Convened by: United Nations Children's Fund (UNICEF), Mexican Institute for Water Technology (IMTA), Japan Water Forum (JWF)

Objective: To discuss the critical need to provide access to safe drinking water, healthy environments and adequate sanitation facilities to all children, and also to address the importance of taking children's opinions and needs seriously, as key partners in development.

Local Actions presented:

- *WASH Movements in Kenya Schools, Kibera, Kenya*
- *Youth and Children Radio Programme on Water, Sanitation and Hygiene in Peoples Democratic Republic of Laos*
- *Water Awareness and Conservation Campaign, Mexico*
- *Arizona Water Activists Caring for the Environment, United States of America*
- *Preserving Water Environments in Japan*

Extreme Hydro-Meteorological Events (hurricanes, specially Wilma and Stan) (FT5.28)

Convened by: National Autonomous University of Mexico (UNAM), United Nations University (UNU), United Nations University and el Colegio de Tlaxcala

Objective: To discuss the link between climate change and the increase in the number and intensity of hydro-meteorological events, focusing on the areas with high social vulnerability that have experienced larger fatalities and persons affected.

Local Actions presented:

- *Stan and Wilma Affecting in Mexico*, Mexico, UNAM-UNU-EHS, el Colegio de Tlaxcala (LA1823)
- *Management of Extreme Hydro-Meteorological Events: Stan, Katrina and Wilma and the Role of Insurance Companies*
- *Vulnerability: A Concept and a Social Reality*
- *Communitarian Protection Confronted with Hurricanes*
- *Resilience Building at Communitarian Level through Practices of Early Warning, Evacuation Practices and*

Intergenerational Dialogue Session

Rebuilding Strategies during Hydro-Meteorological Events in Central America
- *Vulnerability Analysis during the Tsunami in Sri Lanka*

Water Quality and Public Health (FT5.26)

Convened by: Ministry of Health, Mexico, Inter-American Association on Sanitary and Environmental Engineering (AIDIS), Federal Commission for the Protection against Sanitation Risks, Mexico (COFEPRIS)

Objective: To share experiences that allow the development or improvement of monitoring systems, to develop indicators that allow the progress reached to be measured, as well as to share alternatives to improve water quality, adapted to each country or region, considering their geographical, economic, cultural and social situation, and in this way, respond to the challenges of protection against health risks derived from the consumption, management and use of water.

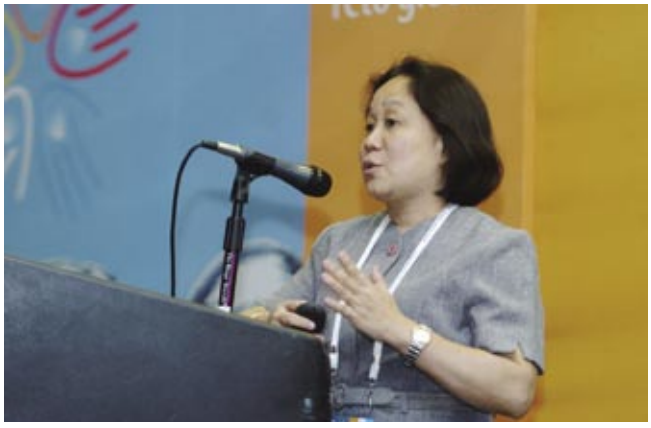
Local Actions presented:
- *Removal of Arsenic through Built Wetlands,* Mexico, Center of Research in Advanced Materials (LA0846)
- *Disinfection of Water by Solar Radiation,* Mexico, Center of Research in Advanced Materials (LA0929)
- Acid Drainage of Mines Effects and Treatment, Honduras, Autonomous National Service of Aqueducts and Sewerage (LA1711)
- *Removal of Arsenic from Water for Human Consumption, the Experience of Rural Communities in Chihuahua,* Mexico, Chihuahua Municipal Water and Sanitation Committee (LA1712)
- *Interamerican Water Week in Rio Grande do Sul, a Tool for Mobilization for the Health Service,* Brazil, Brazilian Association of Health and Environmental Engineering (LA1713)

The Global Climate Change and Urban Flood Mitigation (FT5.30)

Convened by: Netherlands Water Partnership (NWP)

Objective: (1) To find the possible actions to minimize the damages during flooding; (2) Managing residual flood risk in the urban environment.

Local Actions presented:
- *Urban Flood Management Master Plan for European Cities,* Netherlands, Netherlands Water Partnership



Dolores Hipolito, Philippines

Preserving Water (FT4.46)

Convened by: Mexican Institute for Conservation for Learning

Objective: To present local actions implemented in Mexico in order to reduce water consumption, both in the cities and in agricultural areas.

Local Actions presented:
- *The Historical Voluntary Hand Labor, TEQUIO, as the Local Contribution for an International Financing Covering Water Supply for Rural Areas,* Mexico, Environmental Infrastructure Trust of the Istmo (LA0258)
- *Youth Summit in Morelos for the Environment, Mexico,* Water and Environment Commission, Government of Morelos (LA0366)
- *Eco-Efficient Use of Water and Zero Discharge,* Mexico, NHUMO (LA0675)
- *Efficient Water Management, Based on the Integrated Reduction of Losses,* Mexico, Water Commission of the State of Veracruz (LA0756)
- *Integrated Management of the Hydrological Accounts in the Central Valleys of Oaxaca,* Mexico, Mexican Association of Hydraulics (LA1211)
- *Ecological Restoration of Littorals for the Protection of Native and Endemic Biodiversity,* Mexico, Fishing Commission of the State of Michoacan (LA1715)

Mexican Local Actions in Water Supply and Sanitation (FT3.60)

Convened by: National Water Commission, (CONAGUA Mexico)

Objective: To discuss and share with participants Mexican experiences in water supply systems and sanitation, through the examples of local actions.

Local Actions presented:

- *Desalinization of Seawater, its Purification, Piping and Delivery in the City of Cabo San Lucas,* Mexico, Los Cabos Drinking Water and Sewerage System Operator (LA1766)

The Contribution of Coastal Zones and Wetlands Sanitation to Development of New Communities and Ecosystems (FT2.52)

Convened by: Ministry of the Navy (SEMAR Mexico)

Objective: To open a process of analysis and debate with successful national and international experiences about sanitation of coastal zones and wetlands, and how the results can contribute to community and ecosystem development.

Local Actions presented:

- *Wetland's Conservation Strategy in the Mexican Southeast: through Multisectorial,* Mexico, PRONATURA (LA0105)
- *Integrated Ministry of the Navy Resources Systems for Wastewater Treatment and Re Use,* Mexico, SEMAR (LA0273)
- *Quality of Marine Water in the Coastal Zone in the State of Yucatan,* Mexico, SEMAR (LA0432)
- *Management and Conservation of Coastal Wetlands in Coquimbo, Chile: Experiences and Learning of an Intervention Model in the South America Pacific,* Chile, Aquatic Environments Corporation of Chile (LA0703)
- *Desalinization as an Alternative for Development of Coastal Communities in Arid Zones,* Spain, INIMA (LA1688)

Partnership Building at Community Level (FT5.04)

Convened by: Both ENDS, Cooperative Programme on Water and Climate (CPWC), Institute for Environmental Studies (IVM), World Conservation Union (IUCN), Nepal Water Conservation Foundation, Department of Public Works and Highways, PMO Flood Control and Sabo Engineering Center, Potsdam Institute for Climate Impact Research (PIK), Ministry for the Environment and Natural Resources (SEMARNAT Mexico)

Objective: (1) To allow citizens participating in spaces of social coordination to have an impact on the decision making process for the design, execution, assessment, and follow up of sustainable water management; (2) A paper on adaptation and local actions in water management; (3) Embedding of some cases within the ADAPTS program, which aims to develop local water management adaptations; (4) To find from long-term research on local water management the benefits of enhanced local capacity to respond to water problems, and opportunities of working with similar groups; (5) Formulation of appropriate strategies to promote community-based practices for water-related disaster mitigation by sharing lessons learned from case studies.

Local Actions presented:

- *Water Based Livelihood Improvement through Social Auditing Functions,* Nepal Water Conservation Foundation (LA0134)
- *Analysis and Prediction of Weather Scenarios Related with Rain and Sea Temperatures in the Slope of the Pacific of Baja California,* Mexico, CRIP/INP/SAGARPA-FCM/UABC (LA0234)
- *Public Spaces of Participation and Social Coordination for Sustainable Management of Water at National Level,* Mexico, Center for Scientific Research and Higher Education of Ensenada (LA0307)
- *Kenya Sand Dams,* IVM-VU (Free University Amsterdam) (LA0385)
- *Basic Study for Non-Structural Disaster Prevention Measures,* Camiguin, Philippines, PMO-Flood Control & Sabo Engg Center (LA0434)

Flood Management Session

Water Resources Information System (FT5.29)

Convened by: Ministry of Water Resources, P. R. China (MWR), Water Resources Bureau of Ministry of Construction and Transportation, Republic of Korea (MCT), River Bureau, Ministry of Land, Infrastructure and Transport, Japan

Objective: To show how to effectively integrate the water-related data formats from various organizations into one common format through the presentation of local actions in this field and the discussion on what kinds of data should be dealt with, and how the universally integrated online system should be mobilized into service.

Local Actions presented:

- *River Information Management in Japan*, Japan, MLIT (LA1473)
- *Water Resources Information System*, Republic of Korea, MCT (LA1626)

Flood Management (FT5.24)

Convened by: Ministry of Water Resources, P. R. China, Water Resources Bureau of Ministry of Construction and Transportation, Republic of Korea (MCT), River Bureau, Ministry of Land, Infrastructure and Transport, Japan

Objective: To showcase the major strategies and local actions in China, Japan and Republic of Korea, on how to find solution to floods, technologies of flood water utilization, risk management, etc.

Local Actions presented:

- *Tsurumi River Basin Water Master Plan*, Japan, MLIT (LA1470)
- *Flood Management in Huai River Basin from 2003 to 2005*, China, Ministry of Water Resources (LA1548)

Wang Shucheng, Minister of Water Resources, China

Integrated Management of the Water Sector under Conditions of Uncertainty and Scarcity – Part II (FT4.45)

Convened by: Water Commission (Israel), Mekorot Water Company Ltd. Israel

Objective: To present the three major aspects of the new approach for stabilization of the water sector in water-stressed environments, such as Israel, for effective management on a sustainable basis. During the session, examples of efficient exploitation of existing water resources

were presented, through the operation of water systems at the national level, exploitation and reuse of marginal water resources and development of new water resources.

Local Actions presented:

- *Establishment of National Water Authority—Directions towards Implementation*, Israel Water Commission (LA1790)
- *Flexible Economic Instruments for Integrated Water Management – the Example of Progressive Production Fees*, Israel, Water Commission (LA1791)
- *Remediation and Sustainable Development of the Coastal Aquifer of Israel - Reflection of Past Activities on Future Management*, Israel Water Commission (LA1792)
- *From Wastewater to Sustainable Agriculture The Dan Reclamation Project*, Israel, Mekorot National Water Company (LA1818)

Jesus Campos, CONAGUA

Water Supply and Sanitation: Hispanoamerican Vision (FT3.55)

Convened by: National Water Commission (CONAGUA Mexico)

Objective: To present the general situation of the utilities responsible for the water and sanitation services at the local level in Mexico, Colombia and Spain, concluding that the problems with the service are not due to the lack of infrastructure but because of the lack of continuity in the management of these utilities.

Local Actions presented:

- *The Situation of Water Services in Mexico*, CONAGUA
- *Challenges of the Water Utility in Freshwater of Mexico*, ANEAS,
- *Baseline Policy of the Water Supply and Drainage Systems in the Republic of Colombia*, Ministry of the Environment, Dwellings and Territorial Development
- *Impact of Water Management on Indigenous Towns, Mexico*
- *Water and Sanitation Services in Spain*

Integrated Risk Management in Mediterranean Towns: Experience Sharing (FT5.22)

Convened by: Mediterranean Water Institute (IME), Marseilles Water Group

Objective: To present initiatives which bring together a sustainable development policy according to strategies of development at regional and city levels in order to minimize the impact of floods in urban zones.

Local Actions presented:

- *Early Warning Systems for Stormwater in Cities of South of France*, France, BRL (LA0767)
- *Inunda*, France, CG34 (LA1337)
- *Risk Management of Urban Rain Events in a Coastal City: the Case of Marseilles*, France, SERAM (LA1341)
- *Protection against Flooding in Great Tunis*, MEAT of Tunisia (LA1563)

François Guerquin, Marseilles Water Group

Hans Spruijt, UNICEF

Development and Implementation of Water Information Systems (FT5.13)

Convened by: International Office for Water, National Water Commission (CONAGUA Mexico), National Statistics, Geography and Computing Institute (INEGI Mexico), Cooperative Programme on Water and Climate (CPWC)

Objective: To focus on the advantages of shared water information systems as prioritary tools that must be implemented for the proper governance and management of water resources and risk prevention.

Local Actions presented:

- *The French Water Information System Ministry of Ecology and Sustainable Development*, France, Ministry of Ecology and Sustainable Development (LA0404)
- *The Euro-Mediterranean Information System on Know-How in the Water Sector*, France, EMWIS (LA0470)
- *Implementation of the National and Regional Water Information Systems in Mexico*, Mexico, CONAGUA (LA1671)
- *Vulnerability Index, Co-operative Program on Water and Climate and Department of Public Works of the Philippines*, Japan Water Forum (LA1758)
- *Information System for Water Management of the Irtysh Basin, Transboundary between Russia and Kazakhstan (IRBIS), Irtysh Basin Committee – Russia*, International Office for Water (LA1813)
- *Information System for Water Management in Hungary and Rumania*, Ministry of Water and Environment of Hungary and National Water Authority of Romania, International Office for Water (LA1814)
- *WISE "Water Information System for Europe", European Commission*
- *Information System for the Senegal River Basin, Organization for the Development of the Senegal River (OMVS)*

The Sustainability of Water and Sanitation Services in the Context of Disaster Risk Reduction - A Contribution towards the Implementation of the Hyogo Framework for Action: 2005-2015 (FT5.00)

Convened by: United Nations International Strategy for Disaster Reduction (UN-ISDR), Pan-American Health Organization/World Health Organization (PAHO/WHO), United Nations Children's Fund (UNICEF), International Federation of the Red Cross and Red Crescent Societies (IFRC)

Objective: To incorporate disaster risk reduction strategies into water and sanitation sector management priorities.

Salvano Briceño, UN International Strategy for Disaster Reduction

Local Actions presented:

- *Experience of the Water Network and the Sanitation of Honduras during the Emergency of Hurricane Mitch. Impact for the Approval of Laws for Modernization of the Sector*, Honduras, Regional Water and Sanitation Network of Central America (LA0497)
- *Evolution of Water and Sanitation in Disaster Mitigation*, Ethiopia, UNICEF (LA0686)
- *Prevention, Attention during the Emergency and Recovery of the Services of Drinking Water, Sewerage*

and Sanitation faced with the Presence of Hurricane Wilma in the Cities of Cancun and Isla Mujeres in Quintana Roo, Mexico, BAL-ONDEO (LA1024)
- *Risk Analysis, a New Approach for Water Supply Master Plans in Urban Areas,* France, Marseilles Water Group (LA1350)

The Management of Extreme Water Phenomena: Floods and Droughts (FT5.25)

Convened by: Ministry of the Environment, Spain

Objective: To present the lessons learned in Spain on the elaboration of action plans which establish protocols for the prevention and solution of droughts. These plans include assessment criteria and risk management along with integrated water resources management and the supply system's planning and operational tasks.

Local Actions presented:
- *Integrated Flood Protection Project in the Tabasco Plain,* Mexico, Ministry of Social Development and Environmental Protection, Government of Tabasco (LA0597)
- *Operative Planning and Management of the Risk of Droughts. Example of the Supply to the Community of Madrid,* Spain, Isabel II Channel (LA1627)
- *The Automatic System of Hydrologic Information-Ebro: An Information and Support System for Decision Making for Flood Forecasting and Management of Water Resources of the Hydrological Catchment Area of the River Ebro,* Spain, Hydrographical Confederation of the Ebro (LA1647)

Ute Collier, WWF

Role of Dams and Reservoirs in Integrated Flood Management (FT5.16)

Convened by: Spanish National Committee on Large Dams. (SPANCOLD)

Objective: To analyse the problem of floods and their impacts, as well as to describe the role of dams and reservoirs in flood mitigation, focused on the advantages, drawbacks, limitations and trends and challenges in relation to different climate change scenarios.

Local Actions presented:
- *Flood Management Plan in Segura River Basin,* Spain, Confederación Hidrográfica del Segura (LA0706)
- *Flood Management Strategy Study*, China Institute of Water Resources and Hydropower Research (LA0883)

Yosuke Tomizawa, Ministry of Land Infrastructure and Transport, Japan

Risk Management Assessment in River Basins (FT5.03)

Convened by: Ministry of Water Resources and Irrigation, Egypt (MWRI), Arab Water Council (AWC), Delft Hydraulics

Objective: To promote awareness about risk management, receive feedback from the expert panel and the experts in the plenary, serve as a platform for exchange, contribute to harmonising with other local actions in the region and help to establish new partnerships. Finally to come up with concrete results and recommendations on strengthening local action for risk management in river basins.

Local Actions presented:

- *Risk Management in Jordan River,* Egypt, MWRI
- *Lake Nasser Risk Management, Integration with Climate Change Uncertainty and Flooding Risks*
- *Climatic Hazards and Counting on the Desalinization of Seawater as an Equilibrium Factor, Algeria*

Environmental Vulnerability: The Importance of an Integrated and Multidisciplinary Approach (FT5.21)

Convened by: Ministry of Foreign Affairs, Italy, National Autonomous University of Mexico (UNAM)

Objective: To show the importance of disaster prevention to soften environmental risk impact, from the human, environmental service and economic viewpoints.

Local Actions presented:

- *Action Program for Flood Prevention in the Orb Valley,* France, French Water Academy (LA1628)
- *Proposal to Extend IWRM to Environmental Water Resources Management (EWRM), Including the Pre-Hispanic Environmental Knowledge of Malinalco, Tested over 10 Centuries,* Mexico, UNAM (LA1633)
- *Campaign for Reduction of Loss of Life by Water-Related Disasters,* Japan Water Forum (LA1723)
- *Umbrella Action: Promotion of a Bottom-up 'Italian Model' through an Integrated Paradigm of Technical Instruments, Good Governance and Strategies of International Cooperation Built on the Best Local Actions,* Italy, Ministry of Foreign Affairs (LA1750)
- *Results of the Hydroscope in Latin America (as a tool to mitigate environmental vulnerability),* Argentina, UNEP Network of Environmental Training (LA1761)

People-Centered Early Warning Systems for Water-Related Disasters (FT5.07)

Convened by: International Flood Network, United Nations International Strategy for Disaster Reduction (UNISDR)

Objective: To promote the importance of people-centered early warning systems in water-related disasters, as a step towards implementing the Hyogo Framework for Action, agreed by all governments at the World Conference on Disaster Reduction held in Kobe, in 2005.

Local Actions presented:

- *Non-Structural Measures – Also Significant Factors of Flood Disaster Reduction in Slovakia,* Slovakia, Slovak Hydrometeororogical Institute (LA1835)
- *Making a Difference in Managing Water-Related Disaster through Survey and Assessment,* Philippines, Department of Environment and Natural Resources / Miriam College (LA1836)

Flash Floods (FT5.20)

Convened by: Commission for Hydrology of the World Meteorological Organization (WMO), Risk Prevention Division - Swiss Federal Office for the Environment (FOEN), National Weather Service, USA

Objective: To convene for a strong partnership between international agencies, NGO's, regional groups, national and local governments, the community and the media, especially the close participation of the national meteorological and hydrological services in order to improve the flash flood and multi-hazard forecasting and warning capabilities through the implementation of technology and institutional procedures.

Local Actions presented:

- *Prevention Measures for Flash Floods. Recent Events of 2005 in Switzerland,* Switzerland, Federal Office for the Environment (FOEN) (LA0391)
- *Project for the Control of Torrents in the Rio Blanco Basin,* Mexico, Federal Commission of Electricity (LA1237)
- *Countermeasures for Debris Flow & Flashflood, Quezon Province,* Philippines, DPWH, PMO-Flood Control & Sabo Engg. Center (LA1550)

The Role of Forests in Water-Related Natural Disaster Risk Management (FT5.10)

Convened by: The World Conservation Union (IUCN), Forestry Agency of Japan

Objective: The session reviewed common narratives on the interactions between forests and water and their relationship to risk management and to arrive at coherent and consistent ways to communicate the relationship between forests and water to both sectors.

Local Actions presented:

- *International Network on Water and Forests*, Japan, Kyoto University (LA 1553)
- *Exploring and Developing Reward Mechanisms for Upland Farmers for Watershed Functions in Sumberjaya Watershed*, The World Agrofrestry Centre ICRAF SEA (LA1798)
- *The Role of Micro Insurance in Reducing the Vulnerability of the Poor after a Natural Disaster and the Challenges ahead to Develop Micro Insurance, the Way Microcredit Has Been Developed*, Germany, Munich Re Foundation

Space-Based Water Observations - Alliances for Providing Information Essential for Managing the World's Water Resources (FT5.18)

Convened by: European Space Agency (ESA), Integrated Global Water Cycle Observations Executive Committee (IGOS), International Association of Hydrological Sciences (IAHS), United Nations Educational, Scientific and Cultural Organization (UNESCO)
Objective: To demonstrate to the broader water community through specific examples that the use of satellite data products and emerging earth observation analysis tools hold promise to help to overcome deficiencies in water management resulting from the lack of relevant data.

Local Actions presented:

- *Status and Trends in Water Clarity of Wisconsin Lakes via Satellite Remote Sensing*, USA, Wisconsin Department of Natural Resources (LA0103)
- *AQUIFER: Tunisia Exploiting Space for the Management of the Transboundary Aquifer NWSAS (SASS)*, Tunisia, Ministry of Agriculture (LA0464)
- *Use of Satellite Observations in the Mekong Basin*, Cambodia, Mokong River Commission (LA0577)
- *Hydrological Forecasting for Farmers Using Satellite Observations*, Thailand, Royal Irrigation Department (LA0595)

Floods, Droughts and Risk Management (FT5.23)

Convened by: World Bank (WB), Federal University of Rio Grande do Sul

Objective: To analyze and disseminate lessons learned, discuss and analyze ways to mitigate the risks of natural hazards and the role and importance of local participation in the definition of risk management programs.

Local Actions presented:

- *Risk Management of Urban Rain Events in a Coastal City: the Case of Marseilles*, France, SERAM (LA1341)
- *Integrated Urban Flood Management in Piura, Barranquilla, Rosario and Porto Uniao*, Brazil, Federal University of Rio Grande do Sul (LA1484)

Managing Drought Risks - Role of Improved Preparedness and Management (FT5.11)

Convened by: The World Meteorological Organization (WMO), National Drought Mitigation Center - University of Nebraska, United States Department of Agriculture (USDA), Regional Center of Meteorological Applications for Development of the Inter-State Committee for Drought Control in the Sahel (CILSS - AGRHYMET)

Objective: To analyze the risk-based management of droughts and how better preparedness and management strategies can help cope with drought risks, as well as to consider an internationally coordinated effort in drought risk management in a similar manner to that established for floodplain management and water resources assessment.

Local Actions presented:

- *Development of Scientific Research Projects on the Meteorological and Climatic Phenomena that Affect the North-East Region of Mexico*, Center

of Scientific Research and Superior Studies of Ensenada (LA0233)

- *Sustainable Use of Water Resources - Role of Environmental,* United Kingdom, Mott MacDonald Group (LA0799)
- *Gender Roles in Sustainable Use of Water Resources – The Case of an Environmental Education Programme in the Semi-Arid Region of Northeast Brazil,* Gender and Water Alliance (LA0800)

Opportunities of River Flood Risks: Social, Economic, Spatial and Communication Aspects (FT5.01)

Convened by: Ministry of Transport, Public Works and Water Management, the Netherlands, Norwegian Water Resources and Energy Directorate, Radboud University Nijmegen, the Netherlands, Autonomous University of Chiapas, Mexico

Objective: To facilitate a joint planning between different levels of government, to include private interests to optimize economic and other benefits and to reach a better stakeholder communication and participation.

Local Actions presented:

- *Freude am Fluss,* Netherlands, Ministry of Transport, Public Works and Water Management (LA0576)

Broadening Perspectives in the Face of Increasing Risks (FT5.15)

Convened by: European Comission DG Research/ Wageningen University and Research, The Netherlands, United Nations University

Objective: To exchange experience in dealing with water-related risks, discuss the effect of global climate change scenarios on water management and how adaptive water management in the regions could or should be able to respond to water-related risks from future scenarios, to understand the role of learning in adaptive water management under conditions of uncertainty and how the communities in the five regions are able to incorporate this and to find ways to improve adaptive water management in a dialogue with local actions from the two hosting projects and other participants of the Forum.

Local Actions presented:

- *Study on the Future of Water,* Mexico, World Future Society – Mexican Chapter (LA0367)
- *Hydrological Sustainability of Urbanizations in Hill Foots,* Argentina, National Water Institute (LA0845)
- *Mitigation of Rising Water Levels,* Argentina, National Water Institute (LA1079)
- *NeWater Project (Guadiana Basin Case Study),* Spain, Complutesian University of Madrid (LA1781)
- *New Approaches to Adaptive Water Management under Uncertainty (NeWater) – the Amudarya Basin Case Study,* Uzbekistan, UZGIP – Design and Research Institute of the Uzbek Ministry of Agriculture and Water Resources (LA1796)
- *Southern Africa, Orange Basin: Poverty Alleviation and Ecological Integrity*

Tools for Capacity Building in Risk Management (FT5.12)

Convened by: Cooperative Programme on Water and Climate (CPCW), Institute for Social and Environmental Transition (ISET)

Objective: To discuss the scope, availability and need for training materials and tools to deal with uncertainty and increasing water-related risks.

Local Actions presented:

- *Perspectives Based Water Resources Management Planning*, ISET
- *Resource Kit on IWRM*, India, World Water Institute
- *Experience with Decision Support Simulation Game for High Level Decision Makers*, UNESCO–IHE
- *WEAP Planning Tool*, NHI & IMPTA

Tsunami - 15 Months Later (FT5.14)

Convened by: Japan Water Forum (JWC), Institute for Sustainable Development and Research, India (ISDR)

Objective: To take the first steps towards the achievement of the Hangen target (halving by 2015 the number of lives lost to water related disasters) in order for the international community to be aware of the importance of this target.

Suresh Yavalkar, ISDR, India

Local Actions presented:

- *Tsunami and Water Related Disasters-ISDRs International Initiatives*, India, ISDR (LA0033)
- *Sri Lanka-Japan Local Response to the Tsunami Challenge*, Japan, JWCF (LA1552)

Conflict and Water Management (FT5.31)

Convened by: National Autonomous University of Mexico (UNAM), United Nations University Tokyo (UNU), United Nations University EHS Bonn, Colegio de Tlaxcala, Mexico.

Objective: To highlight that water and sustainable basin management may contribute to the prevention and resolution of conflicts.

Rei Asad, JWF

Local Actions presented:

- *Jacques Labre and Hugo Contreras, Suez and Aguakan: Crisis Management of the Water and Waste Water Services in Cancun before, during and after Hurricane Wilma*
- *Alejandra Cortes, Jaime Durazo and Stefanie Kralisch, Geophysics Institute, UNAM: Isotopic Modification of Groundwater. Case of Intense Rain Affecting Mexico in Recent Years*
- *Michael Glantz, National Centre for Atmospheric Research, USA: Learning the Earliest Lessons from Societal Impacts of El Niño and La Niña*
- *Juan Carlos Villagran, UNU-EHS: Resilience Building at Community Level through Practices of Early Warning, Evacuation Practices and Rebuilding Strategies during Hydro-Meteorological Events in Central America*
- *Laura Collin, El Colegio de Tlaxcala: Vulnerability: a Concept and a Social Reality*
- *Fabrice Renaud, UNU-EHS, Germany, P. Hewage, University of Ruhuna, Sri Lanka, and S. Raveendranath, Eastern University, Sri Lanka: Environmental Components of Vulnerability after the Tsunami in Sri Lanka*

Sharing Experiences about Local Actions Taken for Water and Typhoon Related Disaster Reduction (FT5.06)

Convened by: UNESCAP/WMO Typhoon Committee (TC), International Flood Network (IFNet)

Objective: To promote good practices of local actions through sharing extensive experiences in the management of water-related disasters, making use of best practices

and appropriate countermeasures from these good practices, for water-related disaster risk management to reduce human and socio-economic losses, to enhance partnership between the TC, IFNet and other initiatives for more effective exchange of experiences and knowledge.

Local Actions presented:

- *Global Flood Alert System (GFAS) Project,* Japan, IFNet (LA1546)
- *Flood Risk-Management and Water Resources Strategy-Formulation in Nepal,* Nepal's Former State Economic Planning Commissioner for Water Resources (LA1556)

The Manifold Dimensions of Groundwater Sustainability (FT5.33)

Convened by: Royal Academy of Sciences, Spain (RAS), National Groundwater Association, USA (NGWA), Geological and Mining Institute of Spain (IGME)

Objective: To present and to discuss the results of the International Symposium on Groundwater Sustainability (Alicante, Spain, in January 2006) and the resulting Alicante Declaration.

Local Actions presented:

- *Stabilization of the Aquifer of Santo Domingo Valley,* Mexico, Irrigation District 066, Santo Domingo (LA0598)
- *Determination of the Annual Mean of National Waters,* Mexico, CONAGUA (LA1698)
- *Information System of Groundwater in Spain,* Geological and Mining Institute of Spain (IGME) (LA1764)
- *Groundwater Bodies Characterization in Spain,* Geological and Mining Institute of Spain (LA1765)

Reducing West Africa's Vulnerability to Climate Impacts on Water Resources (FT5.02)

Convened by: Regional Center of Meteorological Applications for Development of the Inter-State Committee for Drought Control in the Sahel (AGRHYMET), Global Water Partnership (GWP), World Conservation Union (IUCN)
Objective: To share ideas on practical adaptation measures that could help reduce the high level of vulnerability of the West Africa region to climate change and variability and to present The Platform – Water for the Sahel: Developing Water Resources to Combat Poverty in the Sahel, which the member countries of CILSS adopted in early March 2006.

Local Actions presented:

- *Water and Soil Management in the Central Plateau of Burkina Faso,* Niger, AGRHYMET Regional Center (LA1330)
- *Floods Forecasting System for Integrated Natural Resources Management in the Niger Inner Delta in Mali,* Niger, AGRHYMET Regional Center (LA1496)
- Impacts & Lessons from Regional Dialogue on Water and Climate in West Africa, IUCN

Groundwater and Risk Management: Coping with Water Scarcity, Climate Change and Emergency Situations (FT5.09)

Convened by: International Groundwater Resources Assessment Centre (IGRAC), United Nations Educational,

Ground Water and Risk Management Session

Scientific and Cultural Organization (UNESCO), Research Group of Water Balance and its future expectation on alluvial fan (WEF) Japan

Objective: To highlight and discuss groundwater in the context of risk management, mainly from the perspective of groundwater availability, especially focused on water scarcity, either steadily developing in poorly water-endowed environments under human and/or climatic pressure, or caused by disasters.

Local Actions presented:

- *River Toyohiragawa Alluvial Fan,* Japan, WEF (LA0035)
- *Kenya Sand Dams,* Netherlands, Free University Amsterdam (LA0385)
- *Tsunami and the Indian Coastal Groundwater and Emergency Remediation Strategy,* India, UNESCO (LA0452)
- *Groundwater for Emergency Situation with Respect to the Catastrophic Flood on the Labe (Elbe) River in the Czech Republic in August 2002,* Czech Republic, Charles University (LA0471)

Collaborative Approach among International Agencies for Effective Flood Management - International Flood Initiative (IFI) (FT5.19)

Convened by: Public Works Research Institute (Japan), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Meteorological Organization (WMO), United Nations University (UNU)

Objective: To promote international cooperation activities for integrated flood risk management among various UN agencies and related intergovernmental organizations.

Local Actions presented:

- *Flood Hazard Map Training Course,* Japan, PWRI (LA0328)
- *Tsurumi River Basin Water Master Plan,* Japan, MLIT (LA1470)

Managing Safe Drinking Water in Areas of Armed Conflict and Ecological Disaster from a Gender Perspective: Learning from Local Actions in Central Asia and Latin America (FT5.17)

Convened by: Environment and Population Research Centre Bangladesh, Women in Europe for a Common Future (WECF), Katachel, Afghanistan, Mehriban, Uzbekistan

Objective: To present successful local actions of women's organisations in five conflict and disaster-prone regions, especially to show how to provide safe water and / or sanitation to poor families in order to reduce the risk of conflict and disaster.

Local Actions presented:

- *Bangladesh Regional Consultation on Policy Disconnects in Management of Environmental Health and Priority Needs of Women in Disasters,* Bangladesh, Environment and Population Research Center (LA0144)
- *TMF Project Afghanistan,* Afghanistan KATACHEL (LA0398)
- *Local Development in the Colombian Pacific Coast,* Colombia, CONSAM LTDA – Sanitary and Environmental Consulting (LA0409)
- *Tsunami and Sanitation in Sri Lanka – Turning Tragedy into an Opportunity for Improving Sanitation,* Sri Lanka, NetWWater and WfWfW (LA0550)
- *Tapping Resources: Use of Women's Strength for a Sustainable Development in Karakalpakstan, Uzbekistan,* Germany, MEHRIBAN Uzbekistan (LA1230)
- *Your Water,* Bolivia

Coastal Development and Defense in the Low Lands (FT5.08)

Convened by: Centre for Built Environment (CBE), Province of Noord-Holland, Provinces of Zuid-Holland and Zeeland

Objective: To exchange knowledge and concrete examples based on hands-on project experiences dealing with local policy and actions regarding coastal development and defense. The emphasis was on the way

we are able to live with water in the delta zones and fit in economic growth and other goals.

Local Actions presented:

- *Innovative Technology for Water Development*, India, Interdesign International (LA0030)
- *The Example of the SIAGNE: A New Approach to Flood Risk Management*, France, French Water Academy (LA1592)

Pedro Arrojo and Barbara Frost, Empowerment Panel

Empowerment and Democratization Multistakeholder Panel (FT3.51)

Convened by: National Water Commission (CONAGUA Mexico), National Autonomous University of Mexico (UNAM)

Objective: To establish a dialogue in order to support the processes which confer a central role to local, political and social institutions in sustainable development and water management.

Local Actions presented:

- *Thai Baan Research: Local Wisdom for Resources Management. Mahasarakham, Thailand.*
- Sesan, Srepok and Sekong Community Network in Cambodia (SSSCN). *Citizens' Action: Towards Bridging the Gap in Ghana.*
- Action: *Towards Bridging the Gap in Nepal.*
- Empowerment with a Gender Perspective in the *Community of Hormiguero*, Cali Colombia
- *Lessons Learnt by the Agua Tuya Program in Cochabamba*, Bolivia
- *Intermunicipal Initiative for the Management of the Rio Ayuquila Basin*, Mexico.
- *The Mexican Experience in Integrated Water Resources Management, a Concrete Case of the Inter-State Zone Valle de Ojocaliente-Aguascalientes*-Encarnación, Mexico.
- Equity, Democracy and Community Participation in the Access to Drinking Water in the Peri-Urban Interface of Caracas, Venezuela.

Danfoss

Local Actions

More than 1,600 local actions from around the world were registered for the purpose of the Forum. Most of these actions have characteristics that make theme replicable in some other parts of the world. The actions were submitted by governments, international organizations, NGOs and private organizations, and in most cases the actions are the joint efforts of them.

As of the 1992 Dublin Conference on Water and the Environment, the importance of the local level has been stressed in different ways. Recent world summits have offered numerous occasions to debate environmental problems (Kyoto 1997), commit governments (Johannesburg, 2002 Millennium Summit), and define appropriate policies (CSD meetings 2004-05). At all of the above, the conclusion has been reached that the next, urgent step is to take action.

Water-related problems and challenges are global, but solutions for them may be implemented at the local level, defined according to the principle of subsidiarity as the "lowest appropriate level." In that sense, one of the objectives of the 4th World Water Forum was to prepare concrete proposals for strengthening actions undertaken locally, as a means of contributing towards the attainment of global goals.

A local action is defined here as any activity or group of activities focused on solving a problem that has been identified and faced by a local interest group when managing its water resources or services. A local action is not necessarily a "project." Rather, it may include a variety of interconnected activities aimed at addressing a particular problem. This includes structural or non-structural actions having an impact upon local water management.

Posters at the 4th World Water Forum

The main purpose of a local action is to seek sustainable development options for a community or region without compromising the preservation of local ecosystems. The scale of a local action will be the scale at which an effective solution may be implemented, and depends on the magnitude of the problem to be solved.

In view of the above, an open call was issued to the world community in search of local experiences and actions to be identified and registered. This was done with the support of the Forum's five regional coordinators. As a result of this process, a total of 1,631 local actions from 119 different countries were compiled. Around 10% were eliminated because they failed to meet the required characteristics, namely because they were duplicated or incomplete, and the rest came to form part of the electronic compendium considered for analysis.

Local Actions at the Forum

So as to avoid purely theoretical debates, the structure of the topic-sessions was designed to truly focus on the implementation of local action. Session conveners included in their topic sessions a total of 530 presentations of local actions from the electronic compendium, to illustrate the issues related to the topic of their session, as well as corresponding to the different regions, framework themes and crosscutting perspectives.

Moreover 60 local actions were selected by the Forum Secretariat to be presented at the Forum as posters. This allowed Forum participants to learn more about the various actions being implemented in different parts of the world, and the factors behind their success. The proponents of the actions were able to discuss with Forum participants to explore possibilities of exchange, knowledge sharing and possible future collaborations.

Furthermore, as part of the Kyoto World Water Grand Prize, 30 local actions that had presented their candidature were selected to attend the Forum and present their works to Forum participants and an International Panel of Judges, resulting in one winner being selected, Gram Vikas, an NGO from India, which received 5 million Japanese yen to continue the excellent work that had them win the Prize. However, all 30 candidates were winners, in that the Forum provided them with the opportunity to present their local actions to an interested global community, and to learn from each others' presentations.

All the local actions collected through the Forum's preparatory process are included in the electronic compendium (WALAC), which is available as a CD, included in this report, or through the Forum website www.worldwaterforum4.org.mx The WALAC allows you to read the detailed information and context of each local action, as a contribution to sharing the lessons learned from local water management around the world.

General Analysis of Local Actions

The basic premise for characterizing and analyzing the local actions registered for the Forum was that those experiences represent a brief overview of the activities currently underway to attempt to solve water-related problems. It also recognizes that the sum of those activities leads to specific global impacts.

It is assumed that the compendium of local actions registered comprises a current, valid and representative framework of reference for knowledge about the multiple relationships between human beings and water at the local level. Nevertheless, this does not imply a failure to note certain limitations and biases in this "state of the art," such as access to the Internet for registering local actions and the influence of factors such as geographic and linguistic proximity with Mexico, the host country of the Forum.

Juan Carlos Hernandez, Sierra Gorda Ecological Group, presented on local experiences from Queretaro, Mexico

In addition, in view of the universal nature of water, the spirit guiding all of the analysis described in this chapter recognizes the unavoidable responsibility to facilitate the sharing and transmission of the experiences and knowledge forming part of this compendium. A constant effort is made to transcend oversimplified statistics in order to perform a deep and enriching analysis.

First, a general assessment of these local actions is presented. The prime objective of this assessment was to detect trends and traits common to all of them. Once that had been done, it was possible to conduct a much more refined analysis of the aspects deemed to be most relevant, accompanied by references to concrete experiences; said analysis is presented in the final part of this document.

The aim of this chapter is to determine general trends and characteristics of the local actions registered, as well as to indicate the mechanisms for solving water-related problems presently being developed at the local level. It was then possible to form an overview of the particular actions taken by different actors when confronting problems in the water sector.

Thanks to the great response from so many countries, it was possible to register a vast amount of information on the water problems that arise in the different regions of the world and the means adopted to solve them. However, to analyze and classify that information it was necessary to clearly define the specific parameters to be evaluated and the related methodology to be used for that purpose.

One of the first questions that arose when reviewing the electronic compendium was how difficult it would be to replicate or adapt a particular local action in any other part of the world. So the first parameter to be analyzed is Replicability, which involves the ease of applying a solution proposed in one place in another region, with minimal adjustments or modifications and with a likelihood of success.

Subsequently, it was deemed essential to determine whether the local actions analyzed had been completed, were underway or were plans for the future, thus specifying the Degree of Progress in implementing a particular local action.

Another aspect of great interest when reviewing local actions is to ascertain who promotes these actions, in other words, what kind of stakeholders are involved in their implementation. Hence the parameter Types of Promoting Agents was established; such agents may be: governments, non-governmental organizations (NGOs), civil society associations, the private sector or intergovernmental agencies.

Moreover, the Orientation and Scope of the actions being studied were established as priority parameters. While the former refers to whether the actions are preventive or corrective, the latter determined if the above-mentioned actions were part of a plan or program, or simply isolated local actions.

An additional parameter for classifying local actions involves the final use to which water resources are put. To that effect, the framework themes defined for the 4th World Water Forum –Water for Growth and Development; Implementing Integrated Water Resources Management; Water Supply and Sanitation for All; Water Management for Food and the Environment; and Risk Management– were considered to be valid criteria for characterizing local actions in terms of their Thematic Relevance.

In order to consider possible links between local actions and the geographical areas where they take place, the Scale was specified as an assessment criterion. Four different scales were distinguished for local actions: city, district, basin or country.

The last of the parameters defined is concerned with the degree to which local actions from different countries

are represented in the electronic compendium; this parameter is Spatial Distribution.

The findings of the evaluation of the above-mentioned parameters with regard to the general features of local actions are presented below.

Replicability

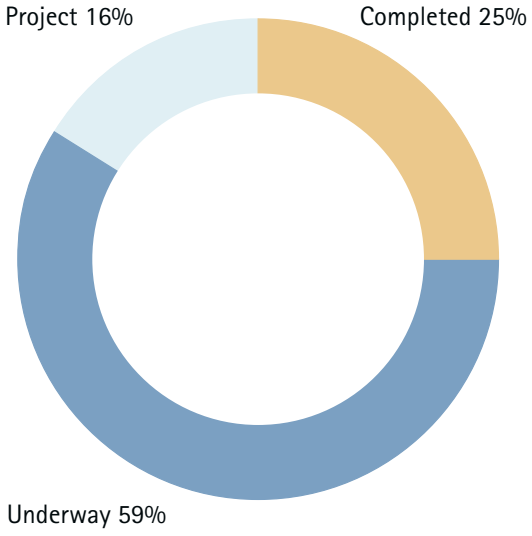
The replicability of a local action should be understood, in this case, as the ability to reproduce it under similar conditions, i.e., the degree of difficulty for transferring that action with minimal or only minor modifications, and with the greatest possible chances of success. Non-replicability occurs when said local actions are very specific or in cases in which they solve very particular problems. In such cases, they become quite difficult to reproduce due to the original physical, economic, social or environmental conditions of the problem in question.

After reviewing the local actions registered, it was possible to identify a good number as being replicable, specifically 83%, whereas only 17% were not considered to be easily replicable. The successful implementation of each action is subject to the particular context of the locality and stakeholders involved, so a thorough analysis of the particularities of each action, as explained by the local action proponent, should be undertaken before considering their replication in other contexts. This analysis can thus maximize the potential for learning and knowledge sharing of these actions.

From a practical standpoint, this means that the great majority of local actions registered can be reproduced feasibly, i.e., they could serve as examples of good practices for other sites or regions with similar problems. This maximizes the impact of what was presented at the Forum, since it can be considered a catalyst for the exchange of knowledge and experiences that can be replicated relatively easily. Added to this, it would be possible to generate ties for communication and cooperation among stakeholders of different types interested in solving similar or related water problems.

Degree of Progress

This parameter shows whether the local action had already been completed when it was registered for the Forum, whether it was underway or if it was an action to be taken at some future time, specifying its present stage of development.



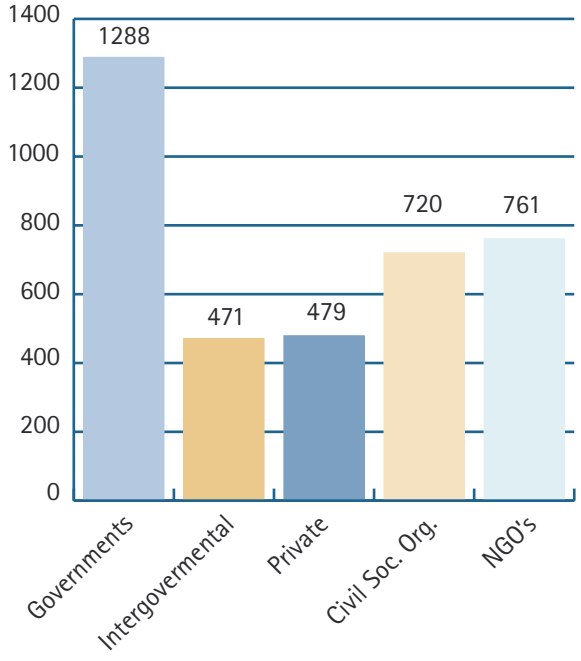
With this analysis, it was possible to observe that a considerable number of local actions were currently underway (59%), whereas completed actions accounted for 25% of the total, and only 16% were at the project stage. This reflects a period of great activity and drive to bring to fruition different initiatives aimed at solving water problems.

Types of Promoting Agents

Promoting agents are all those entities, organizations, associations, individuals or companies that take part in the process of developing or implementing a local action. In other words, they are the stakeholders who participate in the process for putting said local action into practice.

The types of agents included in this analysis were: governments, intergovernmental or multinational organizations, private enterprises, civil society organizations, and non-governmental organizations (NGOs). It is important to note that, for the purpose of this analysis, civil society organizations are those grass-

roots gatherings that are established on an ad-hoc basis to attend to a specific necessity, often in the short term and without any sort of formal funding or structure. On the other hand, NGOs are considered as more formal, recognized structures, with a longer-term vision and broader scope. For the purpose of this analysis, the term NGOs also includes universities and research centers.



It is important to note that these different types of stakeholders were not mutually exclusive, i.e., a single local action could be promoted simultaneously by various stakeholders, with joint participation during the process of designing and implementing the action; there was a wide range of possible combinations of these stakeholders.

After the corresponding evaluation, the following frequencies were observed as regards the types of promoting agents:

Without overlooking the fact that there is simultaneous participation of various agents, it was possible to clearly observe that governments, with 88% of all actions supported and promoted, are most interested and participate intensely in solving problems of this type. Civil society organizations and non-governmental organizations are present to a lesser extent in supporting and promoting local actions.

Orientation

This parameter analyzes whether local actions are corrective or preventive in nature, i.e., whether they are focused on solving existing or preventing future problems.

To that effect, it was found that 52% of the actions are preventive, while the other 48% are corrective. This would imply that the efforts to solve water problems are not concentrated solely on what is urgent, but rather there is virtually the same awareness or importance assigned to preventing problems as to correcting them.

All of the above could be seen as proof of the presence of a growing planning culture, i.e., there is a future-oriented vision of this resource, but the need to solve current problems is also taken into account. Given the much greater cost of corrective action as compared to preventive ones, it is to be hoped that the corresponding percentage of preventive actions can further increase in the coming years.

Scope

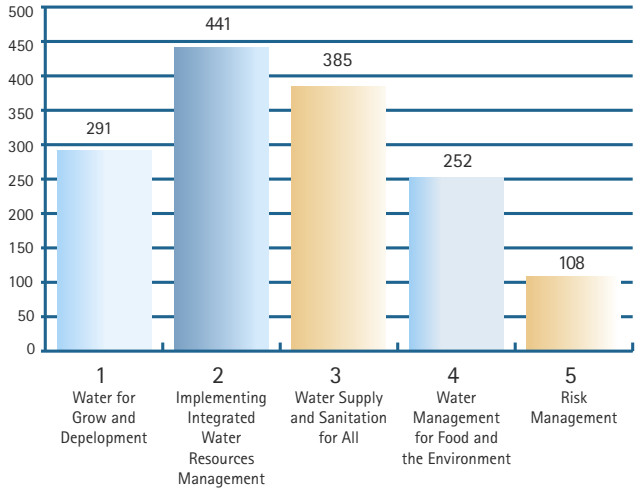
In an attempt to delve a little deeper into the planning of local actions, the parameter called "scope" was analyzed; this parameter determines whether a local action presented is part of a plan or program or if it is an isolated action in response to a particular problem or series of problems.

The findings indicate that 50% of the actions analyzed are isolated, whereas the other 50% are part of a plan or program. This corroborates the assumption that there is almost the same degree of concern for planning as for the solution of urgent and/or specific problems.

Thematic Relevance

The concept of thematic relevance is directly linked to the distribution of local actions among the 4th World Water Forum's five framework themes: Water for Growth and Development; Implementing Integrated Water Resources Management; Water Supply and Sanitation for All; Water Management for Food and the Environment; and Risk Management. The assessment of

this parameter considered that, although water is put to multiple uses, each action seeks to solve a specific type of problem and, thus, local actions could only be included in a single framework theme.



Once this evaluation had been completed, it was discovered that 31% of the local actions belonged to the framework theme "Implementing Integrated Water Resources Management", which reveals the importance of the management of this resource as the foundation for its appropriate utilization.

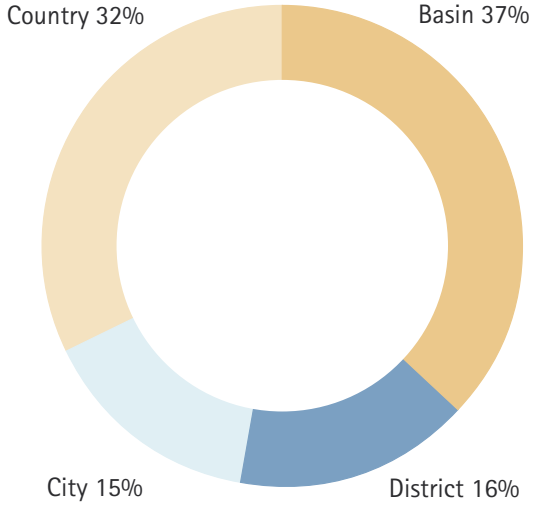
In second place, 27% of the local actions are associated with the framework theme on "Water Supply and Sanitation", indicating the importance, from the local viewpoint, of meeting the population's most basic needs. In third place we find the theme

"Water for Growth and Development" (18% of local actions are related to this theme), followed very closely by the theme "Water Management for Food and the Environment" (17%). "Risk Management" is in last place, with 7%.

This hierarchy in terms of themes highlights the relative importance given, at the local level, to water-related topics, and thus provides an overview of the lines of action observed or trends according to their importance.

Scale

This parameter is related to the spatial impact to be made by the local action, in other words, the geographical scope of the action itself. According to that scope, it is possible to determine the magnitude of the actions undertaken in terms of the territory benefited or affected.



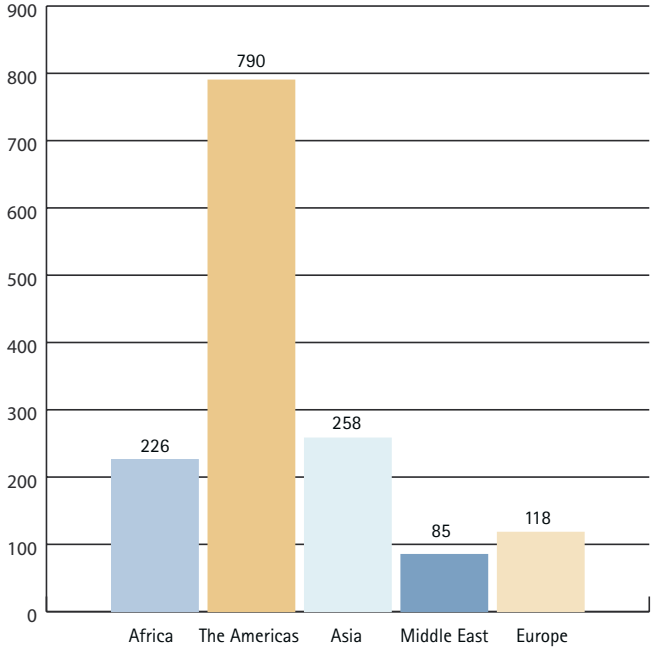
With this analytical perspective, the magnitude of the action being assessed can be determined. The perspective also provides information on its possible repercussions at the time it is executed or carried out. This is mainly due to the fact that not all local actions exhibit the same scale in geographical terms because they are related both to resources and to the stakeholders.

It can be noted that the scope of 563 local actions, i.e., 37% of the total, is at the river basin level. This is in keeping with the worldwide tendency to address water problems on the basis of hydrological units instead of administrative ones, supported on a number of occasions during the Forum, since this enables stakeholders to deal with the problem in units that consider the hydrological cycle as the basic foundation for planning and management, and based on that cycle, anthropogenic activities may be linked with natural occurrences.

Another aspect worthy of mentioning has to do with the country scale. Because this scale accounts for 32% of local actions, we can confirm the interest on the part of central or federal governments in improving situations caused by watetr problems.

Spatial Distribution

This parameter refers to the representativeness of different countries as regards the number of local actions submitted, i.e., the frequency of said actions when grouped by country and when countries are grouped by specific geographical regions, so that participation trends by region may be determined.

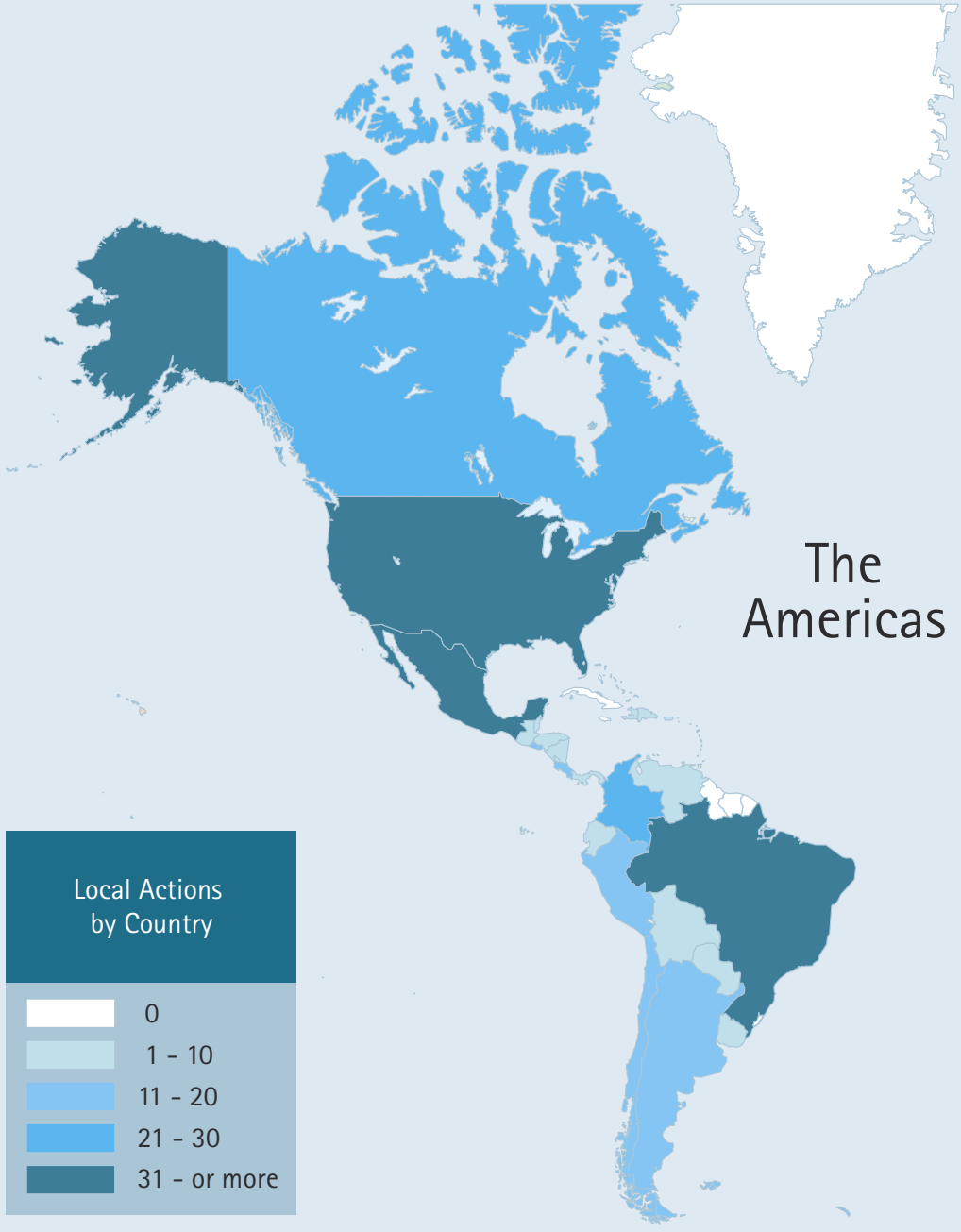


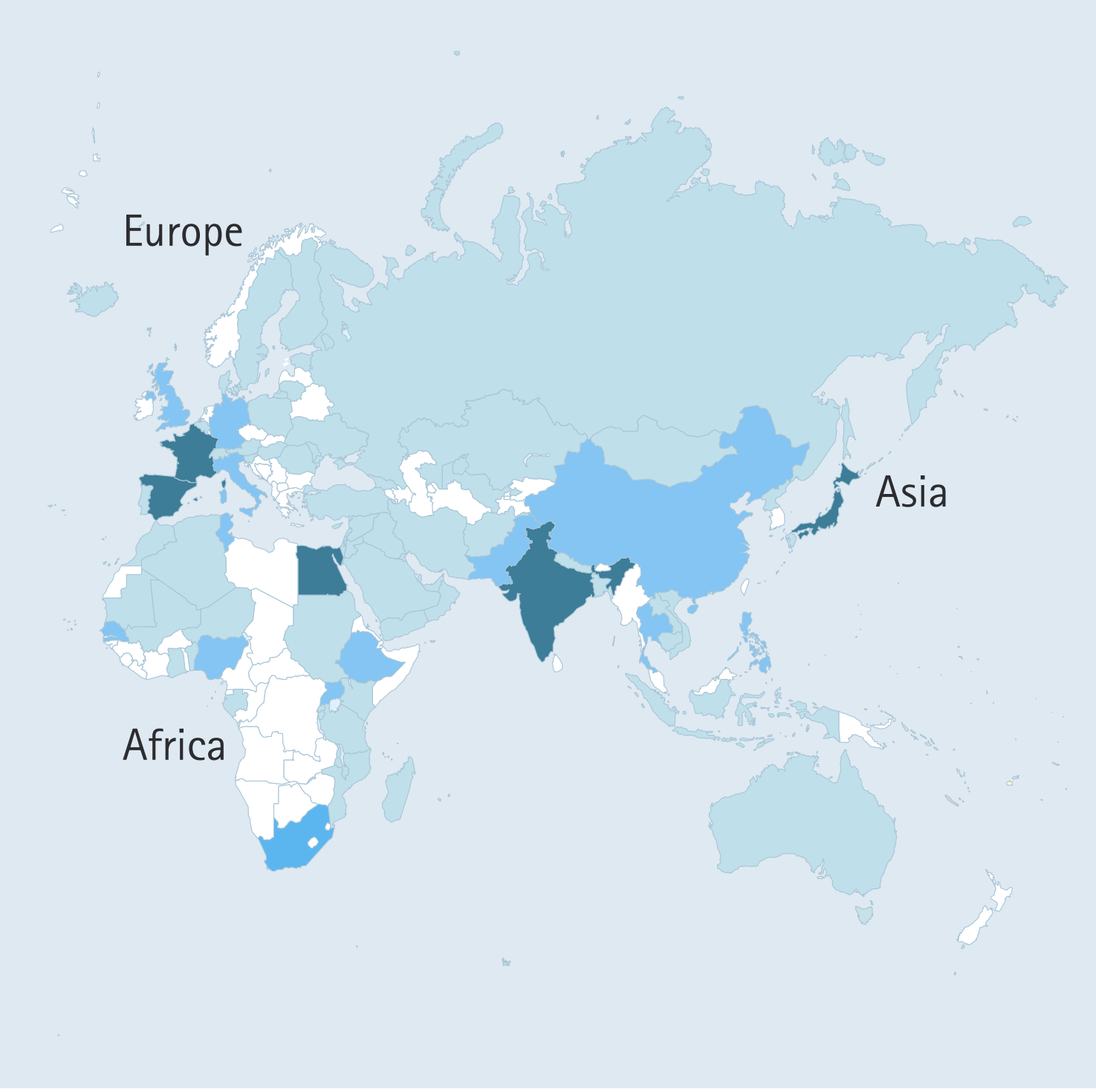
Reviewing the number of local actions by country and region, it was found that the largest number of actions submitted are in the Americas, with 53%, followed by Asia-Pacific with 18% and Africa with 15%, while Europe holds fourth place with 8% of local actions and, lastly, the Middle East, with a 6% share of actions.

It should be noted that the huge quantity of local actions submitted by countries on the American Continent is attributable rather to a sense of territorial, linguistic, and geographical unity than to any other motive that might be construed as more important. And within that region, Mexican local actions have a significant share of the total (64% of the actions submitted from the Americas region). These percentages take account of demographic and geographical factors, the Middle East for example being by far the smallest of the five regions in terms of population and surface area.

Examining the following thematic maps, it can be pointed out that there is clear representativeness of a large proportion of the countries of the world. This could serve both as a significant opportunity for disseminating water-related issues and as a diagnosis of the current situation as concerns actions aimed at solving water problems.

The following is a thematic map showing the number of local actions for each country. This map indicates concentrations of local actions in each of the different regions.


The Americas
Local Actions by Country
0
1 - 10
11 - 20
21 - 30
31 - or more


Europe
Asia
Africa

Specific Analysis and Related Examples

After completing the general analysis of local actions, and based on the trends observed, it was considered worthwhile to conduct a more detailed study on some of the items that were of particular interest in the above-mentioned inquiry. The purpose of this part of the chapter is to delve deeper and gain a more accurate picture, confirming trends or exploring the results obtained.

This in-depth analysis was performed by examining the interrelationships between the parameters used in the general analysis so as to delve into more detailed or specific features. The following is a discussion of the basic features to be assessed, that is, replicability, planning trends, participation of governments and civil society, and river basin management, along with several related examples of local actions.

Replicability

In view of the importance of replicability within the context of water management, an assessment was made of the possible interrelationships between replicability and parameters such as scope and type of promoting agents.

It was determined that of the 1 219 local actions considered to be replicable, 90% are part of a plan or program, whereas 90% are isolated actions. In essence, these figures confirm the same tendency observed in the corresponding section on Scope of the general analysis.

Moreover, replicable local actions have the following breakdown in terms of types of promoting agents:

Type of agent	Local actions (LA)	Percentage of replicable LA[1]
Governments	1,064	86%
Multilateral	404	33%
Private	394	31%
Civil society organizations	606	49%
NOGs	612	49%

[1] The sum of these percentages is more than 100 due to overlapping.

Once more, it is possible to observe the same general trend noted previously, i.e. greater participation by governments, followed by civil society organizations and NGOs.

Planning Trends

Planning the actions to be taken to improve water management is fundamental for ensuring sustainable and increasingly efficient use of this precious resource; hence the need for a more thorough analysis of this parameter.

In the first place, when evaluating the interaction between planning and the degree of progress achieved by local actions, it was found that of the 728 actions forming part of a plan or program, 15% have been completed, 65% are underway, and the remaining 20% are actions to be taken in the future.

Comparing these figures with those presented in the general analysis, certain variations are evident. For one, there is an increase in actions underway and to be taken in the future, while the percentage of completed actions is lower, as can be seen in the following table:

Degree of progress	Local actions in the general analysis	Local actions in a plan or program
Completed	25%	15%
Underway	59%	65%
Future	16%	20%

Therefore, it is possible to confirm a period of great activity and drive as regards the initiatives underway or to be taken in the future (over 85% of all local actions forming part of a plan or program).

One example of a local action to be taken in the future and which is part of a plan or program is LA0016 in Pakistan (see action sheet). This local action proposes integrated water resources management as a solution for enhancing the environment and, consequently, the quality of life in the region.

Action sheet LA0016 from Pakistan

ID	LA0016	Region / Country	Middle East / Pakistan
Name of the Local Action	World Water Day Celebration on March 22, 2004		

Description of the Local Action

The Southern Districts of the North-West Frontier Province (NWFP) of Pakistan make up the most neglected parts of the country. Every individual is upset by water. Its abundance causes crisis and its scarcity causes desertification. There is a lot of moisture that can trigger a favorable environment in the region. All seven districts stretch out from north to south and from west to east. River Indus in the east is the only large water resource in the region. Western slopes need windmills to support east-west hydro cycles. Poverty, fake education and the deteriorating environment have generated sham scientific-culture from top to bottom. Poor hydro cycles and a shortage of water experts from our universities have created water conflicts in the area.

Integrated Water Resources Management is the only solution to improve the environment, which can help recover the quality of life in the region, but widespread lack of water wisdom is the core of the problem. Bringing relevant implementing agencies from agriculture to environment and from doctors to policy makers and stakeholders in sync on one neutral forum to achieve IWRM was the core problem. The workstation and requisite funds were needed to initiate the issue among local, provincial, national and international agencies to reach IWRM to resolve the water conflicts in the region. Internet facility introduced by the government created a ray of hope for the millions suffering from water conflicts for centuries.
The Global Water Partnership directed us to contact the Pakistan Water Partnership for crisis resolution and in this way the story of a local area water partnership was unfolded. Soon the Southern Districts Area Water Partnership (SD-AWP) was constituted. Its Steering Committee worked hard and soon it registered with the Pakistan Water Partnership and many other online national and international water agencies. A Steering Committee thus duly constituted proposed the launching of World Water Day celebrations every year to communicate United Nations MDGs to every stakeholder in the area. This international activity required sufficient funds and genuine commitments of the Steering Committee. Southern Districts Area Water Partnership had no funds in the beginning. Serious deliberations with provincial and national government agencies rewarded us with positive attitudes

Impacts of the Activity

Sheladia, an American firm of consultants working on the Right Bank Canal, a mega project in the area invited us to conduct studies on the impacts of ongoing water projects in the area. We found positive social, environmental and economic impacts of canals, dams and reservoirs in the area. The paying capacity of the people has increased many times. Educational institutions have increased. The SD-AWP was invited to provincial, national and international seminars, workshops and symposiums. Apparently an insignificant water event of World Water Day Celebrations stimulated water related governmental and non governmental organizations to achieve IWRM and to alleviate poverty by creating employment and growing more food by bringing more land under cultivation.

Local, provincial and federal Governments llocated more funds to provide clean drinking water to the people. The World Bank and Asian Development Bank came forward with financial and technical support to work out the water crisis in the area. The entire region was transformed. New schools and colleges for girls and boys mushroomed in villages and towns. Those people who used to sell wood on the back of donkeys in the past are now economically prosperous. They are building houses, buying TVs, fridges and electronic appliances for personal comforts. Modern agriculture is finding its way to these areas. The provincial government has announced 20 new small dams in the area whereas federal government has provided funds for the building of a large dam at Gomal Zam. The SD-AWP believes it has played a pivotal role in this progress.

Contact

Name	M. Shah Jahan Bhatti
Organization	Southern Districts Area Water Partnership
E-mail	chairman@bluerevolution.net

Moreover, when analyzing the combination of local actions that are part of a plan or program vis-à-vis their particular orientation, it was possible to observe that 48% are of a corrective nature, while 52% are preventive.

Participation of Governments

Having ascertained the importance of participation by governments as facilitators of local actions, it was imperative to review this point in greater detail. Thus, based on the 1 288 local actions in which there is government participation, and comparing them in terms of their orientation, it was found that 52% are corrective, while 48% are preventive. This corroborates the general trend previously mentioned.

An illustration of a corrective local action promoted by a government is LA0711 in Cyprus (see action sheet), which proposes drinking water conservation by means of grey water reuse and treatment at the household level. An example of a preventive local action promoted by a government is LA1444 in Mexico (see action sheet), which proposes the establishment of a research agenda in the field of water. In both cases, there is evident participation on the part of the government, either to correct a specific problem or a series of problems or to prevent a possible future scenario.

Action sheet LA0711 from Cyprus

ID	LA0711	Region / Country	Europe / Cyprus
Name of the Local Action	Conservation of Drinking Water by the Reuse of Treated Grey Water (for Toilet Flushing and Garden Irrigation) at Household Level		

Description of the Local Action

For the period 1960-1996, a lot of large and medium size water projects using conventional sources (dams, main conveyors, etc), were constructed for both irrigation and drinking water supply. Each of these projects, built for the solution of the water problems of Cyprus, was bigger than the previous. At the same time, not only has the problem not improved, but it is growing each year. Therefore for many years the supply of potable water to most households had been restricted to three or more days per week and a lot of claims for progress in this situation hare been made by the consumers to the Government of Cyprus (GoC).

In order for this situation to improve, as from 1997 onwards, the GoC decided, in parallel with new projects, to use non-conventional resources such as desalination, and the implementation of water conservation measures at the household level in built-up areas such as the recycling of grey water (GW).

Conservation of drinking water by the recycling of GW has been initiated as a practical means of assisting water demand management. Potable water used in households and industry is normally taken directly from the drinking water system and discharged into an onsite wastewater system. Water suitable for potable use is therefore taken from the supply system and used for other purposes. It is quite obvious that water of this quality is not needed for many domestic and industrial applications like toilet flushing, garden irrigation, car washing etc. In Cyprus over 50% of the demand for drinking water could be met by water of a lower quality.

To meet these non-potable water demands with an appropriate quality of water, the cheapest solution is the decentralized recycling of at least a suitable part of the discharge water i.e GW for reuse for garden irrigation and toilet flushing of the same household. In Cyprus, lightly polluted or grey water from baths, showers, hand or wash basins and washing machines is kept separate from heavily polluted or black water from WCs and kitchens. As a result it is relatively easy to intercept each type of wastewater at the household level for subsequent treatment and reuse.

Impacts of the Activityt

Initial research was carried out to identify the real per capita water consumption in urban and rural areas. The water consumption was categorized into grey water, black water and water for irrigation and other uses. This research covered 188 villages, which corresponds to 47% of the total number of villages in Cyprus and 4 towns which correspond to 67% of the total number of towns of Cyprus (excluding the area of Cyprus, approximately 40%). The water consumption of each visitor at hotels and hotel apartments was also covered.

It was concluded from this research that more than 35% of the per capita drinking water consumption is discharged as grey water and more than 50% of the water used in a household is not necessary to be of drinking quality. After the installation of Grey Water Treatment Plants (GWTP) it was found that the discharge of grey water was more than 40% of the per capita water consumption. These facts showed that recycling could provide a substantial help in the conservation of drinking water because more than 40% of the drinking water can be reused for garden irrigation and/or WC flushing at the household that the grey water was produced from with acceptable quality . In this way the recycling of grey water at household level (decentralization) has an advantage over the recycling of treated effluents from the central sewage systems, because this is done in the establishment from which the grey water comes. Hence, true saving of drinking water is accomplished at residential areas where there is a water shortage. This means that the conservation of drinking water from every two persons covers the needs of a third person.

Contact

Name	Chrysostomos KAMBANELLAS
Organization	Water Development Department
E-mail	kambanel@cytanet.com.cy

Action sheet LA1444 from Mexico

ID	LA1444	Region / Country	Americas/ Mexico
Name of the Local Action	Establishing a Water Research Agenda for Mexico		

Description of the Local Action	Impacts of the Activity
National water plans are established in Mexico with each incoming administration. Often, however, when a new administration comes in, the old plan is thrown out, and a new plan is developed. Thus, typically, there is no historic memory, either of positive or negative actions. Following the lead of the Water Science and Technology Board of the United States National Academies of Science, the Water Network has started a process to identify the key scientific issues regarding water that will affect Mexico over the coming century. Since scientists have a longer institutional memory than policy makers, we hope to be able to work with our policy makers at all three levels to retain some of the historic memory.	Since we have just started this analysis, it is too early to tell what impact it will have. However, one of the concerns that we will be prepared as a nation to deal with, is how will global climate change affect the distribution of water resources in Mexico (particularly in the semi-arid and arid areas of Mexico). Little research has been conducted in these areas, and it is needed if we want to be able to forecast what changes will be coming our way, and how to best prepare for them. As water-related problems increase in complexity, the scientific communities of each region, country, etc. need to participate in their solution. We can no longer afford to conduct research that is far from the needs of the citizens. We need to have scientists who work in the different water-related fields lend their expertise to solve national, regional, and local problems faced by all.

Contact	
Name	Luis E. Marin
Organization	Mexican Academy of Sciences
E-mail	lmarin@geofisica.unam.mx

Then, when evaluating government participation from the standpoint of the scope of local actions, it was found that 49% of the actions are isolated, whereas 51% belong to a plan or program. Once again, ratios similar to those included in the corresponding section on Scope of the general analysis were obtained; this indicates that governments are duty bound to implement corrective action, but that just as many are thinking ahead to seek to avoid having to adopt corrective action subsequently.

An example of an isolated local action promoted by a government can be found in the case of LA0900 from Slovakia (see action sheet), which presents a strategic document for integrated water restoration and conservation in the community of Kosice, where there is a belief that the participation of its government to ensure optimum performance and application of the strategy being executed is essential.

Action sheet LA0900 from Slovakia

ID	LA0900	Region / Country	Europe / Slovakia
Name of the Local Action	City Kosice		

Description of the Local Action	Impacts of the Activity
The City Council of Kosice (Slovakia) has approved a strategic document for the integrated conservation and restoration of water at the community level, titled "The Kosice Water Protocol for the 21st Century". Created as a result of a communication process among the stakeholders, the Protocol is based on the idea that the community is fully responsible for the conservation, restoration and use of water resources within its territory, and that the community has to define its prosperity by the state of water in its territory. The Kosice Water Protocol was approved on February 24, 2005. Kosice City itself consumes ca 20 million cubic metres of water annually. In parallel, the same amount of rainwater, i.e. ca 20 million cubic metres, is canalized and drained out of the city's urban area by urbanization. In order to provide its economic prosperity and social coherence, environmental sustainability and climatic stability, the city's perspective depends on having sufficient water. Therefore, through the Kosice Water Protocol, Kosice City has the ambition to bear responsibility for the state of water in the city's territory. To these days, there are no incentives and tools in Slovakia to encourage the active participation of communities in protecting water resources, and the Kosice Water Protocol is the first step made in the country towards the strengthening of communities´ responsibilities for water.	The existing water policy in Slovakia positions water management out of the local governments' responsibilities. The local governments have no possibility to participate in the decision-making processes regarding the country's water policy; therefore, we witnessed many decisions made in the past that have caused conflicts in the municipalities. As one of the region's key cities (250 000 inhabitants), Kosice was developed at the expense of other cities, breaching the basic principles of tolerance and solidarity with communities, which possessed quality water resources. Therefore, the Kosice Government decided to adopt a strategic document aimed to strengthen the principles of tolerance and solidarity with the region's communities. In parallel, it will encourage all community members to adopt more careful water management (as regards water quality and quantity) in their own environment, and to strengthen all community members´ responsibilities for the state of water in ecosystems, so that the city area would not be dried out by the urbanization, and there would be enough water for citizens, food and nature, and the negative impacts of climatic shifts would be mitigated. The Kosice Water Protocol launched also other water conservation processes within the city's urban area, i.e. through projects providing flood-defence measures, and the use of rainwater for sanitation in public buildings, as well as water resources creation by the ecosystem water conservation in the Kosice City forests. By using new innovative conservation technologies, all these steps help to save not only water, but also community's financial resources, and contribute to cheaper water prices in the market. This initiative of the Kosice community not only introduces new technologies in the water conservation and restoration at the community levels, but it can also serve as a source of inspiration to strengthen all partners in their water conservation in all watersheds and regions of the world.

Contact	
Name	Eugen Cuno
Organization	City Council Kosice
E-mail	cuno@kosice.sk

Participation of Civil Society

The importance of the participation of civil society in solving water problems lies in its degree of commitment and, therefore, in the existence of organized collaboration in labor tasks, coordination, awareness raising, and other forms of support that civil society may offer. This means that in many instances, people become active and seek to be part of the solution. For that reason, it is of great interest to delve somewhat deeper into an analysis of citizens' participation.

Analyzing the orientation of the 720 local actions in which there is participation by civil society, it was discovered that 52% are corrective, while the remaining 48% are preventive. This demystifies the image of civil society as being devoted exclusively to solving urgent problems with no view to the medium and long term.

An example of participation by civil society in preventive local actions is LA0057 in Mexico (see action sheet). This local action shows the role of civil society in the management and operation of a protected natural area that functions as an aquifer recharge zone, thus linking civil interests with activities that civil society usually expects the government to carry out, i.e., society participates in the care and preservation of this resource.

Action sheet LA0057 from Mexico

ID	LA0057	Region / Country	Americas / Mexico
Name of the Local Action	A Project for the Saltillo Hydrologic Basin		

Description of the Local Action

The city of Saltillo, Coahuila, located in the northeast of Mexico in the yield zone between the Chihuahua desert and the Sierra Madre Oriental, has experienced a growth of more than 1000% in the last 40 years due to industrial growth and to the demographic development concentrated in the city. Due to the fact that it is located in the highest part of the Rio San Juan sub-basin, that is part of the Bravo-Conchos Hydrologic Basin, access to new sources of water becomes very expensive from the environmental and economic point of view, especially because the water comes from underground sources.

Unfortunately most of the 650 000 inhabitants of the city are unaware of the present conditions of the water sources, the restrictions for drafting it and the hazards of lack of supply due to a deficit in the hydrologic balance of the basin, therefore it is necessary to get them to be actively involved in the agreements and the necessary measures to guarantee sufficient supply for a city that will increase its population by almost 250,000 inhabitants in less than 30 years.

Taking into consideration how important the water sources are, in this case the Sierra de Zapaliname, which is a cross-section massif of the Sierra Madre Oriental, where more than 70% of the water that supplies the population is extracted from, and which is used exclusively for domestic purposes, and for use related to the urban area, the Government of the State declared this site a natural protected area and it has entrusted the Association Protection of Mexican Fauna with its management and operation since 1997.

Additional sources of income are needed in order to operate this area so that beneficial actions can be implemented for the site, and so that the inhabitants of the mountain can take part in the actions, since they feel they have been excluded from the project because the declaration imposes restrictions for some productive activities. In order to be able to carry out actions other than protection, we thought about requesting the citizens, who are the users of water produced by the mountain, to take part as volunteer donors, making an additional payment on their water bill.

Impacts of the Activity

The goal of the first part of the project was to have the users, who are in charge of paying for that intake, register in the volunteer donors list, bearing in mind the goal of reaching 5 000 out of the 160 000 intakes that are in the city. For the second stage, the goal was to increase the number of donors to 20 000 for 2008.

The goal of the first stage was satisfactorily accomplished in 2004 and for the first semester of 2005 there were already 10 000 donors accounting for 8% of the total intakes. It has been possible to reach the goals because the project is based on an interpersonal communication proposal supported by an environmental program and a program of actions to prevent and refurbish the protected area that will allow the donors to acknowledge how important the mountains are and to appreciate the work performed by the national park rangers and by the members of the brigade that are part of this project staff.

The resources that are currently collected, approximately $2 500 US per month, are mostly intended to pay the wages of a group of peasants who devote most of their working time to performing fire prevention and fire control activities, refurbishment, information and community work. Nowadays 12 heads of families are paid this wage. This income is significant in the communities where they work, due to the fact that they support the creation of other work proposals where other people led by members of the brigade work.

Another additional result is the payment of environmental services by the National Forest Fund that has allowed high impact activities to be carried out in some areas. This project also allows some actions intended to preserve the soil and water to be carried out, among which, reforestation is very important. These actions have also allowed areas to be recovered that did not regenerate naturally and to refurbish some abandoned agricultural land pieces.

Contact

Name	Eglantina Canales
Organization	Protection of Mexican Fauna (PROFAUNA)
E-mail	ecanales@profauna.org.mx

As for an example of a corrective local action, there is LA1529 from Italy, applied in the Middle East (see action sheet), which proposes improvements in water use efficiency on farms and the non-conventional use of water resources in the Middle East and North Africa Region. Here it is possible to observe the interest of private enterprises in improving existing conditions, providing aid and support, and fostering research aimed at solving current problems.

Action sheet LA1529 from Italy with application in the Middle East

ID	LA1529	Region / Country	Europe / Italy
Name of the Local Action	Potentials for improving on-farm water use efficiency and the use of Non-conventional Water Resources in irrigated agriculture of the Middle East and North Africa Region		

Description of the Local Action

In the Middle East and North Africa (MENA) region, we are confronted with increasing population, fast urbanization and the associated expansion of economic activities, all of which require more water, putting strain on the already limited and fragile resources, the local actions are focused on the improvement of the on-farm water use efficiency and the sustainable use of non-conventional water resources.

The improvement of water use efficiency is possible through the implementation of deficit irrigation management strategies, better scheduling of water supply, The local actions are based on the activities of the partners of the Collaborative Irrigation Network of CIHEAM/IAMB which translate the ideas, conclusions and recommendations of the Network activities to the actions on the ground in the MENA region.

Action 1: Deficit irrigation of orchards with low quality water in the Mornag area (Tunis, Tunisia) in cooperation with INAT (Tunisia) and local Water User's Associations. Fruit trees cover about 40% of the irrigated lands and represent an important component of the productive farming system in the country. However productivity is usually low and irrigation with waters having more than 1.5 g/l total dissolved solids is commonly practiced without provision of drainage and consequent high salination hazard in irrigated orchards. In the absence of a drainage system, techniques based on irrigation restrictions seem to be reasonably appropriate. The Regulated Deficit Irrigation (RDI) can be used. RDI is based on the concept that water supply can be reduced to control vegetation growth during specific periods of the season, while fruit growth remains little or not affected.

Action 2: Improvement of irrigation systems performance and water use efficiency in Ghezala Irrigation District (Tunisia), in cooperation with IRESA (Tunis, Tunisia) and local Water User's Associations. Existing large-scale pressurized irrigation systems in the selected area operate at a low performance level, with consequent high water losses and wastage. With this outlook on the existing irrigation systems, the main need is the development of criteria improving irrigation system performance and management activities to save freshwater from agriculture.

Action 3: Re-cycling of drainage water for sustainable irrigated agriculture in Haris Behira Governorat (Western Nile Delta, Egypt), in cooperation with the National Water Research Center (Cairo, Egypt) and local Water User's Associations. The National Water Research Centre of Egypt initiated a long term management program on a small scale perimeter located in the central delta with 30 farmers in an area of 26 ha. The aim of this research is to overcome factors that threaten the sustainability of agricultural production in Egypt. Trials are conducted on the farm level and we will be testing different management practices and monitoring their impact on the soil, crop yield, and groundwater pollution.

Impacts of the Activity

Action 1: It is expected to improve water use efficiency and water productivity in irrigated orchards and to reduce salt input and environmental degradation. The social and economic benefits are particularly related to the farmers who will make better profit out of agricultural production. Water restrictions during the whole growing season seem to improve sugar content and the dry weight of fruits, while the salts are mainly concentrated near the trunk.

Action 2: The pilot area suffers from high water shortage and freshwater is overexploited. Moreover, the low performance of distribution systems induces farmers to withdraw water through uncontrolled wells with consequent overexploitation of groundwater, causing salination hazards. All these negative impacts should be overcome by the improvement of irrigation systems performance at district and farm scale.

Action 3: The project is carried out in two stages: the first stage is to set up the experimental field to test the irrigation practice with low water quality and the second stage is to test the impacts of the on farm management to overcome the different field stress conditions. The expected output from both stages is to develop the farm management guidelines to manage drainage water reuse, introduce possible potential drainage water reuse for irrigation purposes in areas suffering from shortage of water due to limited supply: i.e. areas located at the tail end of irrigation canals; and dry soil moisture condition where natural drainage systems exist.

The overall expectations of the local action are to improve water use in irrigated agriculture and to increase the use of non-conventional water resources. The overall output of each of three actions should be the guidelines for improvement of water use efficiency and sustainable use of non-conventional water resources in irrigated agriculture.

The overall scale of application of all actions is local (farm and irrigation district scale), although it is expected that they will have an impact over the whole MENA region, because they are conducted by the leading water and irrigation organizations in the region and they are supported by the local governments, providing a direct link to the farmers. New strategies for using saline water without any harm to crops and soil will be implemented. With the implementation of these strategies, freshwater will be saved and saline water will substitute freshwater in the irrigation sector.

Contact

Name	Atef Hamdy
Organization	CIHEAM – Mediterranean Agronomic Institute of Bari
E-mail	hamdy@iamb.it

In terms of the scope of local actions in which civil society organizations took park, it was determined that 50% are isolated actions, while 50% are actions forming part of a plan or program, and so the trend observed in the general analysis is repeated here.

As has been mentioned previously, local actions may be promoted by different stakeholders. Hence the need to identify the additional forms of support that civil society organizations had for executing the local actions they had promoted. For this information, please refer to the following table:

Combination of Stakeholders	Local Actions	% of Local Actions Promoted by Civil Society Organizations[1]
Civil society organizations and governments	654	89%
Civil society organizations and multilateral	233	32%
Civil society organizations and private	246	34%
Civil society organizations and NGOs	364	50%

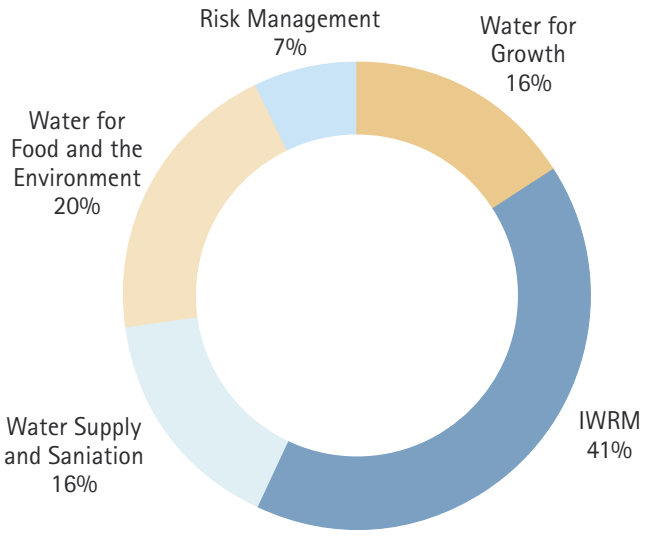
[1] The sum of these percentages is more than 100 due to overlapping.

In conclusion, the main source of support for civil society organizations are governments, whereas multilateral agencies and private organizations provide support to a much lesser extent.

Basin Management

In the section on Scale of the Local Actions of the general analysis, it was observed that 37% of local actions are implemented at the basin level, and the importance of basin management was stressed because basins or watersheds are the basic territorial working unit. The Following is a classification of local actions whose scope is the river basin or watershed according to the 4th World Water Forum's framework themes.

On the basis of this classification, it was possible to note great emphasis on Integrated Water Resources Management, a case similar to that found in the general

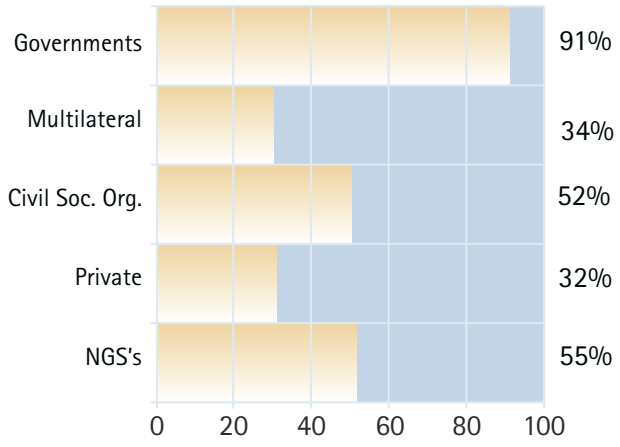


analysis. This is an extremely important finding, mainly because attention is being given to water management in terms of river basins or watersheds, i.e., the spatial units associated with the hydrological cycle, and not political boundaries or other considerations.

As might be expected, problems associated with food held second place, whereas sanitation and growth shared third place in importance as regards the solution of water-related problems associated with river basins. This reflects the same trend as that observed in the general analysis.

A subsequent analysis related to the scope of basins led to questioning whether local actions associated with integrated water resources management in those spatial units are replicable. It was then discovered that of the 464 local actions considered, in effect, 80% could be transferred to other geographical areas.

Moreover, the participation of promoting agents in Integrated Water Resources Management at the basin level was analyzed. It was found that more than 90% of the local actions are promoted by governments, with private organizations and NGOs holding second place.



Conclusions

The findings obtained with this assessment of the electronic compendium of local actions confirm the importance of individual activities as an integral part of the solution for global problems. Thus, the cumulative effect of efficient solutions to water-related problems in particular makes a very significant contribution towards mitigating general conflicts.

A salient feature of the analysis conducted in this chapter is the high degree of replicability found among local actions. On the one hand, this permits or facilitates a revision of the general range of possible solutions presented for similar problems and the results obtained in each case. And, on the other hand, the electronic compendium generated can also serve as a means for establishing ties between stakeholders involved in problem solving in the realm of water, thanks to the contact information associated with each local action.

Therefore, this double advantage of the electronic compendium makes it possible to not have to start from scratch to solve a specific problem, since the solutions presented concerning the topic in question may be consulted through specific searches. And it also aids users in establishing contact with the people involved in the process and development of those solutions, and this leads to even greater mobility of the information in question.

Another important aspect about the electronic compendium is that while this chapter provides certain interesting data based on a review of the local actions registered, with the compendium that analysis can be taken to even more thorough and detailed levels, given the possibility of making concrete searches for specific information using filters to attain the desired degree of detail.

By promoting and utilizing the electronic compendium, it is possible to perpetuate the goal and objectives of the 4th World Water Forum. The electronic compendium enables users to grasp the complexity of the different aspects that normally comprise water-related problems and, in turn, to study and analyze them even further. And so, at the global level, it will be possible to achieve truly sustainable solutions for the grave water problems the world is currently confronting.

Examples of Local Actions

The following action sheets show different examples of local actions that can be found in the electronic compendium of local actions.

Example of a local action that is: replicable, completed, corrective, part of a plan, and was implemented with the participation of the government and civil society.

ID	LA1100	Region / Country	Americas / Mexico
Name of Local Action	Management of Basins and Alimentary Autonomy		

Description of Local Action	Impacts of the Activity
In the State of Puebla there exist numerous micro basins that require an integrated management of rainwater catchment works, of activities to foster underground aquifers recharge and of water and soil conservation works. Wind energy, water and induced erosion result in the loss of soil at a magnitude greater than the original rate of formation, i.e. an eroded area without vegetation loses 76.0 tons of soil per hectare annually, whereas forests and pastureland generate 2.19 tons per hectare per year and consequently the deficit amounts to 73.81 tons/ha/year. In regions such as the Mixteca there is an average rainfall of 6,000 m3/ha; 70% is evaporated, about 17% infiltrates and the rest runs into the sea. The available water is therefore increasingly in short demand to satisfy the domestic and productive needs. The loss of topsoil prevents seepage of rain water at a rate of less than 22% therefore inducing draw down of the groundwater level at a rate of up to one meter a year. High construction costs in conventional works to store water are usually encountered. Since 2001, the State of Puebla has built 1064 works for soil and water conservation in 671 localities using state and federal funding. In 2004 the National Commission of Arid Zones and the State Government made an investment of 29 million 973 thousand pesos for the execution of 481 works of water collection and infiltration into aquifers and carried out actions for the conservation of soil and water in 182 hectares of micro-basins in 15 municipalities of the Mixteca Poblana region.	Higher productivity of the natural resources and their maintenance was achieved, in accordance to the State's demands, and degraded areas restore in order to regulate the hydrologic regime. In 2004 construction of 43 levees took place representing a work volume of 51,000 m^3 (1,801,048 cubic feet) to collect 348,000 m^3 (12,289,504 cubic feet) of water per year, 45 rubblework ditches, 131 gabion dams, 262 hand placed stone dams, 183 has of Xoconoxtle, Maguey, cattle food nopal, pitahaya, sabila and ash tree cultivation, 343 km (213.13 miles) of terrace for ditches and reinforcement planks, 8 700 m^3 (307.24 cubic feet) of parcel reinforcement planks, 1 609 m3 (56.82 cubic feet) of retaining walls and 47.6 km (29.58 miles) of wiring. The impacts obtained with this type of actions and works were: 6 312 direct beneficiaries; 36,254 indirect beneficiaries; an increase of water availability in 54 communities of 15 municipalities of the Mixteca region to benefit 8,420 families; water infiltration and downstream collection through chain pumps and dikes; fertile land retention, seasonal water mirrors for cattle drinking troughs. These works were built sharing 90% of non specialized community labor. Aquifer recharging actions unify the efforts of the community inhabitants therefore increasing the availability of water and opening large possibilities for productive advancement.

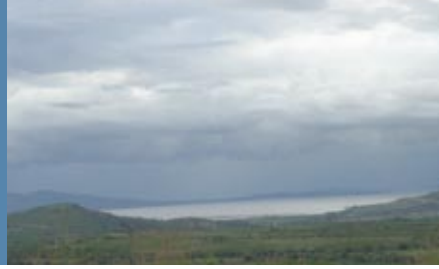
Contact	
Name	Alberto Jimenez-Merino
Organization	Secretaria de Desarrollo Rural del Gobierno del Estado de Puebla
E-mail	f_alberto05@yahoo.com.mx

Example of a local action that is: replicable, completed, preventive, part of a plan, and was implemented with the participation of the government, private enterprises and civil society organizations.

ID	LA1239	Region / Country	Americas / Colombia
Name of Local Action	Optimization of Public Services and Preparation of an Environmental Development Plan		

Description of Local Action	Impacts of the Activity
The islands of Providencia and Santa Catalina (5,000 inhabitants), located in the Colombian Caribbean Sea, experienced problems with the management of the domestic public services and for the conservation of their natural resources when confronted with the development of tourism envisioned for the municipality. The French group VINCI-Construction prepared an action plan for improving the drinking water supply, basic sanitation services and conservation of the hydraulic and edaphologic (soil) resources. For this purpose, an eight-month long field work was performed in tight collaboration with the local population and institutions of the islands. The objective of the project was to integrate the various fields related to residential public services following environmental criteria for the conservation of the natural resources through the creation of a Community Utility. This was achievable through a good coordination between the different sectors involved, such as drinking water supply, basic sanitation, handling of hazardous residues, conservation of water resources and management of soil resources. The main achievement of this project was to gain the trust of the population and to have gathered all institutions of the islands as parties involved in the project thanks to the permanent presence of the staff in the field and particularly through the realization of pilot works jointly with various local organizations. In this manner a clear definition of the role to be played by the utility was defined, since it was created and managed by the community organizations of the islands. It was therefore possible to establish a public company that not only will handle public services but will also participate constructively in the conservation of the water, edaphologic and ecological resources of the islands.	The main objective of the project was to perform a diagnosis for improving the residential public services. However, when the field work started, very specific problems developed and only part of them could be resolved in the short term. The interest of the islands for ecological tourism also became evident as well as the unsuitable management of the natural resources. As a result, the project was focused on the creation of a community-operated utility for the purpose of improving the living standards of the inhabitants and to integrate the environmental factor at the same time. The social effects were achieved through improvement of the drinking water supply, by means of regulating systems of the volume of water distributed. Furthermore, works related to solid waste management were implemented. The first of them was a campaign to collect 80 tons of scrap accumulated along the major thoroughfare. Pilot schemes were also carried out to handle the sludge from septic wells and the organic residues resulting from the ecological management of the agricultural soils of these islands. The integration of all activities was structured around zoning of the hydrographic basins of the islands. The Community Utility already possesses all the necessary elements to achieve a sound management of the public services in the long term in parallel with the conservation of the natural resources

Contact	
Name	Stéphane Roux
Organization	VINCI Construction
E-mail	stephane.roux@cable.net.co



Example of a local action that is replicable, completed, corrective, isolated, and is implemented with the participation of the government, NGOs and civil society organizations.

ID	LA1697	Region / Country	Europe / Turkey
Name of the Local Action	Sanitation Systems and Environmental Protection Activities in the Metropolitan Areas of Istanbul		

Description of the Local Action	Impacts of the Activity
This study reports the local and regional sea pollution investigations in the Bosphorus and Marmara Coastal lines due to the Metropolitan Municipality wastewater discharges. The necessary precautions for locally generated pollutants have been taken since 1995 by spending and investigating 100 millions US dollars each year for the improvement of the existing sanitation systems and wastewater treatment plants. The accumulated effects of these investments since 1995 have resulted in major improvements in the sea water quality in the Bosphorus and the Golden Horn as well as Marmara Sea coastal lines. Water quality modelling studies resulted in a tertiary level of treatment being needed for effluent discharges into the Marmara Sea and primary treatment for discharges into the Black Sea and low layers of the Bosphorus produced by deep sea outfalls. The following projects were the application of preliminary treatment followed by marine discharge system as the best available technology to be applied to the Marmara Sea. In the future, it is determined to apply biological treatment to these systems especially in regions where the currents are less significant and where the sea depth is limited.	The Bosphorus and Marmara Sea coasts are polluted as a result of the city municipal outfalls. Istanbul Water and Sewerage Administration took the necessary measures for the offshore marine outfalls to control the environmental effects of municipal pollution sources. Short and long term strategies for the treatment and disposal of wastewaters based on the water quality modelling studies where the effluents are given to the bottom layer which conveys them into the Black Sea basin. A comprehensive three dimensional water quality modelling study has concluded that tertiary treatment including nitrogen and phosphorus is required for the discharges into the Marmara Sea. However, enhanced primary or even primary treatment has been found satisfactory for discharges into the lower layers of the Bosphorus and Black Sea. Provisions for upgrading to secondary treatment were recommended.

Contact	
Name	Dursun Ali Codur
Organization	ISTANBUL WATER AND WASTEWATER ADMINISTRATION (ISKI)
E-mail	dacodur@iski.gov.tr

Example of a local action that is replicable, completed, corrective, isolated, and is implemented with the participation of the government, NGOs and civil society organizations.

ID	LA1405	Region / Country	Americas/ Paraguay
Name of the Local Action	Project: Participative Management for the Conservation and Rational Use of Ypoa Wetlands		

Description of the Local Action	Impacts of the Activity
Ypoa wetlands constitute a Ramsar site and a national park at the same time. Its basin covers 920,000 ha and holds a population of 200,000 inhabitants distributed in 17 municipal districts and three regional or departmental governments. None of the municipalities has implemented a sustainable Management and Development Plan including conservation of the wetlands. Citizens and authorities in general were not sensitized by the problem. The Project lasted one and a half years from January 2004 to August 2005. The local organizations, as community leaders, are working with the authorities to develop strategies for implementing local policies. The local government comes along with all initiatives. Academics develop awareness activities among their students.	Expected results: create awareness among the population; promotion of the site; training of local human resources; information collection. Results achieved: Awareness among the population through media and discussions; organization of ecological tours for environmental education in the park premises. Two hundred people with the capacity to prepare and execute local development projects. Education of local governments by the Ministry of Sustainable Development. Execution of 10 local micro-projects. Creation of an Information Centre of the Basin. Most of the projects that work in protected areas only deal with environmental, conservation or strictly technical components. Our experience was obtained through the articulation of scientific and technical knowledge, in association with civil society and the local authorities, in such a way that all of them feel a part of the local action development for the sustainable use of the wetlands.

Contact	
Name	Juan Valentín García-Miró
Organization	Fundación Oñondivepa de Carapegua
E-mail	jvmiro@yahoo.com

Example of a local action that is corrective and is implemented with the participation of the government and civil society organizations at the basin level.

ID	LA0128	Region / Country	Asia-Pacific / USA
Name of the Local Action	Multiple Systems for the Use of Water by Design: New Low-Cost Tools for Irrigation of Small Parcels with Limited Water Availability – Experience Gained in Nepal and India		

Description of the Local Action

Research and development of irrigation and agriculture technology over the past four decades have contributed to a tremendous increase in cereal production. As a result, world food supply has increased more rapidly than the demand from an ever-expanding population, providing secure food stocks in most countries. However, rural poverty persists with over 800 million families trying to survive with income of less than US$1 per day.

In addition to household labor, many, perhaps most, rural poor have access to some land for farming but frequently their fields are a collection of scattered plots of less than 1000 m^2. Even if they had capital for purchasing irrigation and other agricultural inputs, the small plots they farm are not well suited for equipment and supplies available in the market. So the vast majority of small farms are dependent upon rainfed cropping with constant risk of drought wiping out most or all of their production.

Manual pumps, especially the foot powered treadle pump, are ideally suited for irrigating very small plots. More that 2 million pumps have been installed by small farmers in the Gangetic basin giving them control over water for dry season crops. Over the past 15 years IDE has experimented with various forms of drip irrigation to find a way to make it affordable for small farms.

By packaging drip irrigation systems such as kits in sizes that match small-scale farmers' plots, even small quantities of water can be productive, especially if used for high-value crops. This innovation in drip irrigation technology has opened opportunities for combining household level irrigation with domestic water systems. Case studies from Nepal may be used to illustrate design of systems to incorporate both productive use (irrigation) and domestic water delivery systems.

Impacts of the Activity

To introduce the impact of low-cost drip irrigation for resource poor farmers, our local action example area on the experience of a recently completed project in Maharashtra, India. This three-year project, which IDE completed in India in 2004 illustrates the results that can be achieved when drip irrigation equipment becomes cheap enough for even very poor farmers. This reached over 28,000 smallholder farmers in 15 of the 35 districts. These farmers purchased products and services from 278 small rural businesses set up by the project. The total donor investment in the program was $750,000, equivalent to $26.60 per family. This investment resulted in an average increase in net income per household from $400 per year to $750 per year. Many households with incomes of less than one dollar per day at the beginning of the project were able to increase their income three-fold in the three-year period.

Smallholding farmers in Maharashtra were not accustomed to being able to participate in cash crop production. Even though the project was making irrigation technologies available, farmers initially would not consider that the limited water available in their wells was enough for cultivation. Marketing campaigns were designed to deliver a dual message—first to make the poor, even the effectively landless poor, realize that it was now possible for them to participate in these new markets, and second, to promote the specific technologies that would enable them to do so.

A project similar to that described for Maharashtra is being implemented in Nepal by the IDE and partners in order to promote the growing of vegetables for small-scale farmers in hills so that some homes could successfully use the drip irrigation tools to produce sufficient vegetables for domestic consumption and some surplus to be commercialized in local markets.

Contact

Name	Robert Yoder
Organization	IDE International
E-mail	ryoder@ideorg.org

Example of a local action that is replicable, completed, preventive, part of a plan, and was implemented by governments, civil society organizations and NGOs.

ID	LA0745	Region / Country	Europe / France
Name of the Local Action	"Rhine-Net" for Enhancing Good Practices in Public Involvement		

Description of the Local Action	Impacts of the Activity
The Rhine basin, located at the core of one of the most populated and industrialized regions of Europe, has a rich and varied local knowledge of water management, together with many initiatives from citizens, associations, the private sector, the public sector, municipalities and transboundary organizations. These good local practices are especially significant for implementing the European Water Framework Directive (WFD), which promotes a new public involvement in water management as early as possible, with true citizen participation. The aim of the Rhine Network was to identify and develop local practices of participatory management of water resources, to strengthen European cooperation on the scale of the river basin and to disseminate the acquired local knowledge. Participatory practices were evaluated and then disseminated to promote the best ones: • revitalization of the upper Rhine, • development of the Dreisam in Feiburg, • protection of springs in Luxembourg, • classification of the delta wetlands, • flood prevention in the Moselle/Saar basin. The lessons learned from the various participating practices were summarized in the "Operational Guide for the Participation", addressed to all parties involved in water management.	The main environmental and participatory objectives were to: 1). Familiarize the water managers with the WFD, to make the political authorities favorable to a transboundary initiative, to raise the citizens' awareness of the rivers, the basin concept, the ecological and eco-citizenship concepts of water resource protection and water saving, to raise the awareness of municipalities and inhabitants and make them responsible, to take into account their needs and their expectations, to know their opinions and their proposals, the ideas of NGOs, and to arouse interest and curiosity in the river. 2). Index the wetlands requiring special protection and develop a program of measures for their management and protection (long-term river contract), to reconstitute on the Old Rhine an alluvial zone close to natural status, to reconcile the citizens with their rivers, to return the rivers to recreational spaces. Successes/strong points: * An interdisciplinary project, a realistic, concrete and poetic vision, collective work; * Water savings enable financial economies, the households are thus very concerned; * Cooperation at the national level; * Opening-up, creativity, collective work, educational program adapted to 5 countries; * Close cooperation between the coordinators for the adaptation of an educational guide; * Organization of events on a large scale, mobilization and cooperation of the NGOs of each country; * Active participation of local representatives.

Contact	
Name	Christine Bismuth
Organization	Solidarité Eau Europe
E-mail	christine@s-e-e.org

Example of a local action that is replicable, a project, preventive, part of a plan, at the basin level and with the participation of the government, private entities and NGOs.

ID	LA0061	Region / Country	Asia-Pacific / Uzbekistan
Name of the Local Action	Testing of the Practical Ways to Implement the IWRM Concept in Central Asia within Pilot Projects		

Description of the Local Action	Impacts of the Activity
Integrated Water Resources Management (IWRM) may be achieved successfully if a suitable transition exists based on the implementation: • From administrative boundaries to hydrographic ones (within a basin or system); • From sector governance to inter-sector one (inter-departmental coordination); • From the authoritarian principle "top-down" to a two-fold and more democratic principle of "bottom-up" (water requirements and participation) and of "top-down" (restrictions and support); • From the administrative-command method to the corporative method with water users and the participation of other stakeholders at all hierarchical levels; • From resource management to demand management; • From closed professional systems of water managers to open and transparent information systems with the implication of water users and of stakeholders. Several pilot projects ongoing in the region are a good basis to justify practical measures in water management reforms. The following projects are taken into account: 1. "IWRM at Fergana Valley" financed by Swiss SDC and implemented by the Kyrgyz Republic, Tajikistan and Uzbekistan. 2. "Feasibility study for IWRM in the lowlands of Amudarya and Syrdarya" financed by the USA State Department and implemented in Kazakhstan, Turkmenistan and Uzbekistan. 3. "National IWRM and Water Efficiency Plan for Kazakhstan" funded by Norway, facilitated by UNDP and GWP CACENA.	Impact of implemented activity: Based on the outputs of the listed pilot projects including organizational, institutional, technical and other measures under conditions of satisfactory funding and capacity building, real progress can be achieved in water resources management reform in the Central Asian region: • Achieving stable water availability; even and equitable water distribution by sub-basins along with significant reduction of unproductive losses; • Introduction of water democratic management principles by involvement of all concerned parties; • Partial solution of social problems connected with population equitable water supply, especially safe drinking water; • Solution of ecologic issues connected with human activity; • As a final goal, water and land resources productivity will increase.

Contact	
Name	Victor Dukhovny
Organization	Scientific-Information Center ICWC
E-mail	dukh@icwc-aral.uz

Example of a local action that is replicable, completed and was implemented with the participation of government and civil society organizations.

ID	LA0483	Region / Country	Africa / Egypt
Name of Local Action	The National Community Water Conservation Program (NCWCP)		

Description of the Local Action	Impacts of the Activity
Water is a crucial resource in Egypt as well as in the whole of North Africa and Middle East. Egypt is at the end of the Nile Basin countries. Egypt's primary source of water in the River Nile, which provides the country with 97% of its water resources requirements. Egypt's share of the Nile River since ages is constant 55.5 km3; whereas the population growth rate is high. Since the 90s Egyptians have started to be under the water poverty limit of 1,000m³. AOYE began to feel the danger and tried to find a quick solution according to the obvious absence of Decision Makers, Local Authorities and private sector in putting this crucial issue into their consideration. Studies and reports have shown that the major causes of water loss in Egypt are improper use, network leakage, poor quality of plumbing fixtures and devices, and inadequate maintenance. The water loss from the Water Utility till the end users was around 50% and there were 50% of water losses in the households and buildings after the water meters. Reduction of water loss in households and public buildings was mainly counting on three dimensions; community participation, good water devices and pipelines and government will. The National Community Water Conservation Program (NCWCP) was created to address the problem of potable water loss, mainly through conservation activities directed at the national and local levels. These activities demonstrated the social, technical, and economic viability of water conservation in Egypt and support long-term conservation efforts. The NCWCP involved all decision makers as partners in all processes. The concerned parties such as NGOs, the private sector, industrialists, buildings owners and religious leaders were summoned in many of the activities so as to develop in parallel with the program all actions required to reduce potable water losses through a change in consumption habits, industrial development and other activities covered by the funds assigned that were to be invested for rehabilitation and maintenance of the potable water system. Funds were also available to supply water to the most needed areas.	The NCWCP was the first program ever to deal with water conservation in Egypt, and the first program also that had the full partnership of the government, the private sector, international organizations and NGOs, with the lead of the whole process technically and financially through the NGO AOYE. The results after the program were acceptable, as regards its short term and long term impact and they could be concluded in the following points: Raising Awareness of more than 100 000 housewives, 7 500 school students, 3 500 youth people, 350 religious leader, Muslims and Christians, 200 governmental officers and thousands of indirect users through intensive mass media campaigns. The implementation of 147 pilot projects in the three governorates reduced water loss between 30-90%. The project succeeded in targeting all kinds of users: households, government buildings and compounds, schools, mosques, churches, youth centres, gas stations and private buildings and clubs. Three Water Management Strategic Plans were designed for the three governorates that were designed and drawn by all of concerned parties in each governorate and were signed from the higher executives to guarantee full commitment. Water Conservation Departments were established in the General Water Authority and Ministry of Irrigation as independent entities for the Water Conservation Program after the end of the NCWCP. The project also offered job opportunities for more than 350 young people in the three governorates.

Contact	
Name	Essam Nada
Organization	Arab Office for Youth and Environment (AOYE)
E-mail	aoye@link.net

Example of a local action that is replicable, completed, corrective and part of a plan.

ID	LA0648	Region / Country	Middle East / Egypt
Name of the Local Action	The National Drainage and Drainage Water Reuse Programs, Egypt		

Description of the Local Action

Security of food supplies in the fast growing population of Egypt demanded actions to intensify vegetable production within already irrigated areas. The construction of the High Aswan Dam (HAD) allowed total year-round irrigation at the Nilo Delta and Valley. This put the limited fertile land under the risk of access to water and salinization.

Provision of effective drainage systems was an obvious mitigation measure included in the early planning of the HAD construction in the early sixties. A strategic vision and political decision were behind the decision to launch a program that covers all the irrigated lands (about 6 million acres at that time) with drainage infrastructure. The implementation of a phased program started in 1970 and continued to cover more than 5 million acres at present.
Water logging and salinity have been controlled in all areas provided by drainage infrastructure. This enhanced crop productivity and increased yields. This combined with other production inputs made Egypt at the top in terms of wheat and rice yields per unit area and among the top five countries in corn. Institutional capacity has been developed at the national and local level to operate and maintain a complex on-farm and main drainage infrastructure. Meanwhile skills and expertise have developed within the public and private sectors for design and construction of open and subsurface drainage systems. Industrial capacity to produce drainage materials has been developed to meet the needs of the program.

The drainage infrastructure provided means for maximizing water use efficiency through reuse of drainage water for irrigation in downstream areas. Criteria and guidelines for reuse were developed through applied research. At present, 5 billion cubic meters of drainage water are annually reused representing about 10% of the annual Nile flow.

Impacts of the Activity

The main objective of the drainage program is to control water logging and salinity and hence enhance crop productivity, which leads to economic growth, rural envelopment and sustainable development. After implementation of drainage projects crop yields increased by 10-30% compared to the average yields in areas without improved drainage. It also allowed crop diversification. Cultivation of high cash crops such as vegetables and fruits increased in many areas with improved drainage. The drainage program created many job opportunities on-farm and off-farm during construction as well as a result of increased crop yield.

Drainage benefits went beyond the direct objective of increasing agricultural productivity to improving health conditions, protecting built-up structure and archeological sights against rising water tables, and improving sanitation conditions in the rural areas.
The environmental impacts of drainage were mixed. Improved drainage eliminated water logging and salinity as features of land degradation. However, the drainage system became a disposal place for untreated domestic and industrial waste water and solid waste causing pollution of the downstream water bodies. It further diminished the potential of drainage water reuse creating a challenging situation for meeting the local and national water demands.

Experience has shown that drainage has many effects and multiple impacts that go beyond the sole objective of agricultural productivity. The effects and impacts extend beyond the borders of the project to the whole drainage basin. Many stakeholders other than farmers share the benefits and may pay the cost of drainage interventions.

Contact

Name	Safwat Abdel-Dayem
Organization	Ministry of Water Resources and Irrigation
E-mail	safwat@mwri.gov.eg

Example of a local action at the basin level corresponding to framework theme "Water for Growth and Development"

ID	LA0943	Region / Country	Africa / France
Name of the Local Action	Charter Loire-Niger, Strategic Orientations for a River-to-River Decentralised Cooperation		

Description of the Local Action	Impacts of the Activity
The Niger River in Mali constitutes an exceptional cultural and natural reservoir that is endangered. This 4 200 km long river has shaped a unique cultural landscape, gathering populations on its shores and nourishing specific and lively cultural habits. The UNESCO "River and Heritage" study carried out in 2003 has highlighted the importance of developing a global project in order to value the cultural and natural resources at the scale of the Niger basin. It recommends the definition of a common framework mobilising local and national governments and their international partners – local and national authorities, financing agencies, etc. The river should be considered as a red tape to organise the network of decentralised cooperation actions developed by local authorities along the river Niger. On the other side, the Val de Loire is on the list of the UNESCO World Heritage. In this context, a river-to-river cooperation has emerged and could be first experimented between the French and the Malian partners. General Objectives a. Setting up a global project of development for Niger basin territories. b. Accompanying local authorities on actions of decentralised cooperation. c. Implementing an experimental framework of decentralised cooperation between Malian and French local authorities situated along the two rivers. d. Developing an integrated management system of water resources by reinforcing governance and appropriation of cultural and environmental resources	The Loire-Niger cooperation is part of a more global action dealing with fighting poverty and reinforcing local governance. The aim is to set up a sustainable development framework based on the priorities expressed by local elected officials and the represented populations.

Contact	
Name	Jean-Claude Antonini
Organization	City of Angers (France) and Associations des Municipalités du Mali (Mali)
E-mail	luc.tapie@angersloiremetropole.fr

Example of a local action implemented at the basin level corresponding to framework theme "Implementing IWRM"

ID	LA1322	Region / Country	Africa / Swaziland
Name of the Local Action	Institutional Roles in the Management of the Komati River Basin		

Description of the Local Activity

As early as the 1940s there was a growing problem of lack of trust related to water sharing between Swaziland, South Africa and Mozambique in the Komati River Basin. This problem goes beyond an act of trust between the countries but also among water user groups in each country. The establishment of the Joint Permanent Technical Committee (JPTC), Tripartite Permanent Technical Committees (TPTC) and the Joint Water Commission between the countries has drastically reduced tension over the sharing of the water resources of the Komati River Basin.

The establishment of the Komati River Basin Authority between South Africa and Swaziland has assisted all three countries to raise funds to implement the Komati River Basin Development Project as a joint river basin project, something each country alone would have not been able to do.

The establishment of the Komati Joint Operations Forum (KJOF) comprised of water users in the three countries has fostered good relations and trust amongst the water users in the three countries. The KJOF is advised by the implementing agency KOBWA on operational matters of the Komati River Basin. The monthly meetings held by the KJOF and KOBWA have greatly improved communication and trust amongst water users in the Basin as well as improving relationships between the three countries. Data collected by KOBWA on the water resources are shared between all stakeholders via e-mail, the Internet and other media.

Impacts of the Activity

The institutional initiatives taken on the management of the Komati River basin have resulted in a number of benefits. The Komati River Basin Development Project between South Africa and Swaziland has made it possible for the countries to manage the river from a river basin context without the barrier of political boundaries. Dam sites have been selected based on economic and technical grounds irrespective of the country they are located. The establishment of KOBWA has made it easier for the countries to obtain funding for the project without being limited by national constraints. KOBWA has been able to level the playing field when it came to resettlement and development matters. Affected people from both countries were treated equally despite the disparity in the economic, social and political status of the countries.

The policy remains to be that of ensuring that the affected people are left better off than they were prior to project implementation. This has been particularly important for poor and previously marginalized groups of society. As a result of this cooperation the environment at large has benefited immensely. Through the cooperation and the management of the river in a river basin context, the implementation of environmental flow requirements as well as continuous monitoring of the impacts of development on the aquatic ecosystem of the river basin have been made possible.

Contact

Name	Enoch Dlamini
Organization	Komati Basin Water Authority (KOBWA)
E-mail	enockobwa@mweb.co.za

Example of a local action at the basin level corresponding to framework theme "Implementing Integrated Water Resources Management".

ID	LA1771	Region / Country	Americas / USA
Name of the Local Action	Tennessee Valley Authority		

Description of the Local Action	Impacts of the Activity
This water resources organization was created in order to control the devastating floods of the region. These devastating floods were directly contributing to the unemployment rate of the region, which at the time was the nation's highest. As a result of the high unemployment rate, this segment of the country also experienced the highest poverty and illiterate rates of the nation. TVA, which transformed this segment of the US from what it was in the 1930s to what it is today, needs to be shared with the rest of the world. TVA was established in the Tennessee Valley, United States, in 1933, as an autonomous regional entity granted with the power to develop the region's natural resources as needed to bring economic growth. Its multipurpose activities included flood control, power generation, navigation, malaria prevention, introduction of new farming techniques and expansion of the use of fertilizer, reforestation, and erosion control, provisions of small-scale credit, and a variety of education and public health initiatives. The autonomy of the Authority was largely achieved through the generation of revenues from power and its bonding authorities, combined with large initial federal funding provided for an effective response to the region's problems. Its integrated management allowed the use of cross-subsidies to recover part of the cost of non-power activities using power revenues. TVA combined the best of both public and private initiatives. Within federal United States, the main oppositions to the creation of a regional authority such as TVA came from federal and state governments which saw TVA as a threat to their power, private utilities which wanted to keep control over the electricity market, and advocates for limited government intervention in general.	Within a generation after the start of TVA, the income level had caught up with national levels, life expectancy was in the 70s, household access to electricity increased ten-fold, cheap electricity attracted industries to the region, agricultural productivity increased two-fold, erosion was under control, many farmers adopted the use of fertilizers, and millions of flood damages had been prevented. Sustainability of the TVA initiative was ensured thanks to strong local support, financial security of Congressional appropriations, coordinated actions with other agencies and results-based monitoring. Some of the challenges faced by TVA have been to define its areas of operations over the years in order to adapt to changing needs, as well as to ensure its financial viability. Recently, a major issue has been the share of TVA's power program relatively to its other programs. In addition, appropriations from Congress have declined over the years forcing TVA to cut on its least remunerating activities while increasing its power revenues. TVA asserted itself as a major player in the energy sector in the region and faces a set of challenges from deregulation of this sector. TVA combines the best of both public and private initiatives. TVA is a federal agency with a centralized decision-making, yet decentralized planning. It responds to both federal and local needs. Its financing is a combination of federal money and revenues from its activities. Being a basin-wide initiative, it can cross-subsidize non-commercial activities or activities generating low revenues (i.e. reforestation, malaria prevention).

Contacto	
Nombre	Jerry Delli-Priscoli
Organización	USACE Institute for Water Resources
E-mail	priscoli@maill.erols.com

Example of a local action that is implemented at basin level and corresponding to framework theme "Water Supply and Sanitation for All"

ID	LA1201	Region / Country	Asia-Pacific / Australia
Name of Local Action	Salinity Control in Irrigated Lands and River Flows, Australia. (Murray Darling Basin Salinity and Drainage Strategy combined with regional Salinity, Land and Water Management Plans)		

Description of the Local Action	Impacts of the Activity
In the major irrigated regions along the Murray and Murrumbidgee rivers in the States of South Australia, Victoria and New South Wales irrigators and local State agency staff agitated for action with regards to the waterlogging and salinity impacts that appeared to be threatening the viability of much of the irrigated areas. This led to the development of Salinity, Land and Water Management Plans (SLWMP) funded by the State governments. The plan development was managed by committees made up of irrigators, water supply companies, urban councils and State agency personnel (technical agricultural, irrigation and drainage skills). The committees led development of the plans in close consultation with the local communities. The plans included activities and subsidies for improvement of irrigation practices, installation of surface and subsurface drainage and education and training programs for irrigators. The plans were then submitted to government for funding. Concurrently the Murray Darling Basin Commission (MDBC) was developing the Salinity and Drainage Strategy (SDS) to improve the water quality in the Murray River, control existing land degradation, conserve the natural environment and preserve sensitive ecosystems with respect to salinity. The program comprised four main elements: 1 salt interception schemes, 2 new operating rules to minimize evaporation from storages, 3 improved land management techniques, more efficient irrigation and salt resistant crops, and 4 land management schemes to control land salinisation and waterlogging in dry-land salinity areas.	The SLWMP's outcomes on the ground have been that salinity and waterlogging has been controlled to the point where only about 5% of irrigated lands are affected. In general terms soil salinity monitoring has shown that salinity levels are stable or falling over most of the irrigated areas. River Murray salinity levels have been controlled, but there is a marked decrease in flows due to irrigation extraction and the massive reduction in return flows due to the implementation of more efficient irrigation and recycling and reuse systems. A balance needs to be found between reducing saline (returning) flows to the Murray River and supplying enough water to ecological important wetlands along the Murray-Darling river system. The SLWMP's have had positive social impacts in promoting awareness of salinity issues and providing an agreed framework for tackling the problems. This has provided communities with a sense of direction, clear goals and positive mindset that the problems would be tackled and overcome. Other social benefits have been in education and training in related issues. The main benefit of the SDS has been getting stakeholders and governments to see the system as a whole and that one should not export problems downstream or retain them solely in the area but find a balanced solution that will result in sustainable improvement of quality of life.

Contact	
Name	Willem Vlotman
Organization	ICID Working Group on Drainage
E-mail	wvlotman@skm.com.au

Example of a local action implemented at the basin level corresponding to framework theme "Water and Sanitation for All"

ID	LA0974	Region / Country	Americas/ Venezuela
Name of the Local Action	Environmentally Sustainable Community Development, La Caña Micro-Basin, Mucujun River Sub-Basin, State of Merida		

Description of the Local Action

The Mucujun River supplies water to 80% of the population of the city of Merida. Its waters are contaminated by the discharge of wastewater, pesticides and sediments. This problem affects 600 inhabitants of the La Caña community and 300 000 inhabitants of the city of Merida. La Caña covers an area of 600 hectares with moderate to steep slopes, sandy soils with high rocky content and vast water resources. The population belongs to the low-income group and engages in agricultural activities.

Actions developed were aimed at sanitation works through the construction of crude treatment plants for wastewater, works for soil conservation such as stone walls, internal drainage, work farming, reforestation, and micro-sprinkling irrigation works. Difficulties encountered included the negative attitude of residents toward the success of the project and their reluctance to implement the actions, and on the other hand, the lack of sufficient resources. The community demanded potable water supply services and technical assistance. The execution of the project started in 2003 and its first stage was completed in May 2005; the second stage 2005-2006 is presently in progress whereas the third stage is scheduled for 2007. There is a large degree of awareness because the campaign for an extended agricultural conservation action has been implemented since 2000.

Farmers were trained in water sanitation techniques and agricultural productivity. The infrastructure works take into account environmental aspects, sanitation practices and soil and water conservation efforts. Effective and efficient use of water is accomplished through the application of micro-sprinkling irrigation and treated wastewater for irrigation. It also acknowledges the local culture to program the works and labor-intensive technology was applied to be compatible with the characteristics of this population center.

Impacts of the Activity

The community develops actions such as the construction of crude plants for wastewater treatment, stone walls, internal drainage, worm farming, reforestation, production of vegetative material, and labor-intensive micro-sprinkling irrigation. The living standards of the population will be improved, smaller rates of sediment runoff, and use of chemicals for agriculture will be restricted. From a local point of view water quality has been improved in the La Caña community and within a regional scope the quality of water of the Mucujun River has also been enhanced.

The whole community (farmers, housewives, teenagers and children) were involved, some of them individually and others through organized groups (neighborhood associations, housewives clubs, sporting clubs, La Caña School and producers), to gain acceptance of the project and to commit themselves to maintaining the works and to achieving their consolidation at the end of the three-stage period. Integration of the community was achieved to reach a common benefit and a community nursery was established.

This community has become an example to demonstrate the exchange of knowledge and to contribute this experience for extrapolation to the whole Mucujun River sub-basin and to other water-supplying basins within the State of Merida. The community also serves as a demonstrative area in various courses offered by the Inter-American Center for Environmental and Territorial Development (CIDIAT, in Spanish) and of other educational institutions.
As a result of the project implementation the community has been unified and the works were implemented by members of the community with a labor-intensive approach.

Contact

Name	Rodolfo Roa
Organization	Ministerio del Ambiente, Venezuela
E-mail	rroa@marn.gob.ve

Example of a local acttion that is replicable, completed, corrective, corresponding to framework theme "Water Management for Food and the Environment"

ID	LA0142	Region / Country	Middle East / Syria
Name of the Local Action	Supplemental irrigation to improve rainfed wheat production and water productivity in Syria		

Description of the Local Action

Water scarcity is increasing in Syria and the dry areas. As the population grows at a high rate the per capita share of agricultural water is steadily decreasing while the demand for food is increasing. The only way to overcome shortages is to increase agricultural water productivity. Rainfed wheat is an important contributor to food security in Syria. However, due to low precipitation amounts and suboptimal distribution, the rainfed yields and water productivity are very low. The consequences are farmers in the rainfed areas having low and unstable income.

The objective of this initiative is to provide improved and more stable rainfed wheat productivity in Syria through developing and transferring to farmers in rainfed areas improved supplemental (SI) irrigation technology in an integrated package.
Supplemental irrigation is the application of limited amounts of water to rainfed crops in critical periods, when rainfall can not provide sufficient moisture for the crop, to improve and stabilize yields. Research work at ICARDA had shown great potential for this technique in Syria and the Middle East. Yields and water productivity were substantially increased with little water and cost. ICARDA and partners in the national program in Syria had developed a supplemental irrigation package to be transferred to farmers in rainfed areas.

The package included 1) optimal irrigation scheduling (timing and amount), 2) deficit supplemental irrigation, 3) improved germplasm and 4) nitrogen fertilization. The package was demonstrated to farmers against conventional rainfed strategies at several locations in Syria, since the early 90s.

The farmers' fields were divided into four parts to compare various strategies. Rainfall, irrigation and crop growth were monitored together with the farmers and final yields were determined. Field days were organized over the growing season and at the end of the season with all farming community observing the fields.

Impacts of the activity

The initiative was aimed at increasing farmers' wheat production and water use efficiency and reduces the overuse of ground water.
The impact of supplemental irrigation on rainfed wheat production in Syria was substantial over the last 10 years. However, the highest impact was when supplemental irrigation was accompanied by improved variety and fertility. And impact study conduced later indicated that wheat productivity under SI increased at the national level from about 1.5 ton/ha to about 4 t/ha) with net farmer revenues due to SI of 2.5 t/h. The total wheat production in Syria was doubled in the last 10 years from about 2.0 to over 4.0 million tons. About a quarter of this increase is attributed to a supplemental irrigation package.

The impact on water savings was also important. Yields of fully irrigated wheat and SI rainfed wheat are similar (around 4 t/ha). However, the amount of water used by SI is 1/3 that used in full irrigation of non rainfed wheat. Water productivity averaged 1-1.5kg/m3 in SI where it is less than 0.5 kg/m3 in fully irrigated areas. Allocation of water resources to SI is increasing in Syria which impacts positively the sustainability of water resources in the country. Supplemental irrigation improved farmers' income as farm production was substantially increased with moderate increase in production costs. Farming families practicing SI on a medium size farms of 5 hectares gained due to increased yield about 2500, and 1600 US$ per year in gross and net income respectively.

Contact

Name	Theib Oweis
Organization	International Center for Agricultural Research in Dry Areas (ICARDA)
E-mail	t.oweis@cgiar.org

Example of a local action implemented at the basin level corresponding to framework theme "Risk Management"

ID	LA0471	Region / Country	Europe / Czech Republic
Name of the Local Action	Groundwater for Emergency Situation (GWES) with Respect to the Catastrophic Flood on the Labe (Elbe) River in the Czech Republic in August 2002		

Description of the Local Action	Impacts of the Activity
Floods in the Czech Republic in 1997, 1998 and 2002 resulted in a collapse of water supply systems and stimulated a project to find substituties for damaged water resources. In the valley of the Labe (Elbe) River in its lower reaches in North Bohemia, hydrogeological and isotope-hydrology data of the artesian aquifers in the Cretaceous basin were evaluated. The methodology consisted in using groundwater dating for determining the vulnerability of aquifers. The stakeholders were involved in that they made possible the sampling of groundwater at their wells and provided drilling logs; some samples were collected during pumping tests after the drilling operations were finished. The evaluation of analyses made so far should serve as a base for future continuous chemical and isotope monitoring of the deep artesian aquifers in North Bohemia. Areas with resistant groundwater resources will be delineated. The results gained so far will be evaluated for the purpose of the Ministry of Environment and Ministry of Agriculture to propose additional wells for emergency water supply systems. The results of the project initiated the GWES project, which was proposed to UNESCO and was adopted.	In the Labe valley, artesian water is the main water resource of local industries. It is resistant to floods. The development of thermal water brought a significant sociological benefit to the local population as it is used in several swimming pools. Thermal water is used for heat production in residential quarters and industry. This decreased substantially the air pollution. The isotope groundwater dating brought a new insight into the regional groundwater regimen in the aquifers of the Cretaceous system in Northern Bohemia. The results were published in University press. Isotope groundwater dating was a subject of research projects of the Charles University and was done in the radiocarbon dating laboratory, which was established for this purpose. The project provided the isotope techniques as a new methodology for investigating safe resistant groundwater resources for supplying drinking water to substitute damaged water-supply systems. It showed how to approach the investigation of resistant groundwater, which should be kept for emergency situations aside from regular water development. The results will be published. The methodology should be extended to different geological environments, climatic zones and other disastrous events such as landslides, earthquakes, hurricanes and man-induced emergency situations.

Contact	
Name	Jan Ilar
Organization	Faculty of Science, Charles University, Prague
E-mail	silar@natur.cuni.cz

CONAGUA

Ministerial Conference

148 governmental delegations from around the world came together during the Ministerial Conference to listen to the results of the Forum and its preparatory process, debate on the key issues facing the water community, and commit to adopting priority strategies in their own national plans.

The preparatory process of the Ministerial segment was led by the Mexican Ministry of Foreign Affairs, through the General Direction of Global Issues, with the participation of the Mexican Ministry of the Environment and Natural Resources (SEMARNAT).

The format and the theme of the Ministerial Conference and its various components (plenary session and roundtables) were defined through a wide consultation process, taking into account the decisions adopted in April 2005 during the United Nations' Commission on Sustainable Development as regards water and sanitation, as well as the preparatory process of the 4th World Water Forum.

The Ministry of Foreign Affairs took part in several regional preparatory meetings for the Forum, with the aim of linking the analysis of the problems and solutions related to water and sanitation, both regionally and locally, in the five geographical regions of the world, with the theme that was to be tackled at the Ministerial Conference.

Jose Luis Luege, Minister for the Environment and Natural Resources of Mexico

Ministerial dialogue "Financing Local Water-Related Projects"

During January and February 2006, several consultation meetings were held in Geneva, Switzerland, the purpose of which was to carry out an open invitation to the member countries and observers in the United Nations to take part in the 4th World Water Forum, and to work out the draft Ministerial Declaration, that was to be adopted by the Ministerial Conference of the Forum, on March 22, 2006.

Structure of the Ministerial Conference

The main objective of the Ministerial Conference held on March 21-22, 2006 was to set itself up as a mechanism for discussion open to the participation of the various stakeholders involved in the water sector and to those attending the 4th World Water Forum to share knowledge, highlight and improve the participation of local stakeholders in the solution of water-related problems, taking as a reference the policies and actions adopted by governments within the framework of the United Nations system. For this purpose, eight roundtables were organized to cover the six following topics:

1. Financing local water and sanitation initiatives.
2. Capacity building for effective water management and basic sanitation, at the local level.
3. Decentralization processes, governance, institutions, and the enhancement of all stakeholders' participation, in particularly local actors, including women and young people.
4. Water efficiency and transfer of water-related technologies.
5. Development and strengthening of national water monitoring mechanisms and targeting.
6. Water and the Environment.

During the Ministerial Conference, 148 government delegations headed by 80 Ministers and 30 Vice Ministers for the Environment and/or responsible for water-related issues were registered, as well as 1,460 government representatives. The Conference was also attended by various officials of international organizations.

Welcoming Session for Ministers

On March 21, the Minister for the Environment and Natural Resources of Mexico, Jose Luis Luege, opened the Ministerial Conference. In his opening speech he stressed the commitment to provide safe and clean water to the population, and to associate access to water with improvement of quality of living and health. He underlined the need for greater capacity and certainty for access to financing and investment. He also highlighted the important role played by forests and other ecosystems as "water factories" and emphasized the importance of recognizing the major environmental benefits provided by these ecosystems and of the need to protect them.

During his presentation, Loïc Fauchon, President of the World Water Council, highlighted the fact that all stakeholders involved in water management were gathered in Mexico and he acknowledged the opportunity offered by the Ministerial Conference for Ministers and representatives to interact with all other stakeholders

Sessions were organized according to the following Agenda:

March 21		March 22	
09:45 to 10:30	Greeting session for Ministers	08:30 to 11:00	Ministerial Roundtables 1. Financing local water and sanitation initiatives. 2. Capacity building for effective water management and basic sanitation, at the local level. 3. Decentralization processes, governance, institutions, and the enhancement of all stakeholders' participation, in particularly local actors, including women and young people. 4. Water efficiency and transfer of water-related technologies. 5. Development and strengthening of national water monitoring mechanisms and targeting. 6. Water and the Environment.
10:30 to 12:20	Ministerial dialogue "Financing local water-related projects"	11:00 to 11:30	Presentation by the UN Department of Economic and Social Affairs of the Database UN Commission on Sustainable Development's "Water Actions and Networking Database" (UN WAND)
12:20 to 12:30	"A Call for Action" by representatives of the 2nd Children's World Water Forum	11:30 to 11:45	World Water Day (UNESCO)
12:30 to 14:30	Working Lunch of Ministers with legisla torsparliamentarians and local authorities	12:00 to 13:40	Closing Session of the 4th World Water Forum and of the Ministerial Conference • Report of Ministerial Roundtables • Adoption of the Ministerial Declaration • Closing statements

to listen and analyze the various proposals delivered. He indicated that as a result of the worldwide water crisis it is necessary to strengthen mobilization and for the population to become aware of situations such as deforestation, water and soil pollution, drought, natural disasters and improper water management. He finally mentioned that the right to water is an inherent feature of human dignity and announced that the World Water Council had just published a document about this topic.

The late Ryutaro Hashimoto, Chairman of the United Nations Secretary General's Advisory Board on Water and Sanitation

On the other hand, Fauchon disclosed the initiative known as "Water for Schools" aimed at providing access to water to one thousand schools belonging to ten countries with the hope of this effort becoming multiplied so that over the course of the years not a single school in the world will remain without water. He further mentioned the creation of schools to train high-level technicians and stressed the importance of promoting transfer of knowledge, the adaptation of technologies to local conditions and the strengthening and developing of capacity building initiatives in all countries.

Discussion among Ministers on the Subject of "Financing for Local Water-Related Projects"

The session started with a presentation made by the late Ryutaro Hashimoto, Chairman of the United Nations Secretary General's Advisory Board on Water and Sanitation, dealing with the topic of "Financing of Local Water-Related Projects" centered around actions proposed by the Compendium of Actions known as "Your Action, Our Action" which includes a plan to develop six areas, namely:

- Financing
- Sanitation
- Water operators
- Monitoring
- Integrated Water Resources Management
- Water and Natural Disasters

He mentioned that this Compendium contains actions to be tackled by key stakeholders to eliminate obstacles and bottlenecks so that the goals and objectives for development agreed with international agencies, such as the Millennium Development Goals, are clearly achieved as a result of the work jointly performed by all stakeholders.

He pointed out that two focal areas are in demand for immediate attention: a readjustment of the financial framework related to water services, and capacity building to achieve substantial progress in water and sanitation issues.

Along these lines, he commented that national governments have the imperious responsibility of satisfying the needs of their countries as regards water supply and sanitation by allowing local utilities to position themselves in the condition of serving users and the public as a whole. He added that the international community should by itself provide incentives and support for these changes to be achieved in a consistent and coherent manner.

Representatives from Luxembourg

He further discussed that the problem is not the lack of available financial resources but instead the following question should be posed: Why do these resources not get through to the water and sanitation sector? He indicated that improvement of services and the expansion of the financial resources should be delivered simultaneously so that additional funds are attracted.

He exposed the need to improve the dialogue between financial and government institutions and other interested parties, particularly along three lines of action: sustained programs to develop governance capabilities and transparency in water management issues; programs to expand knowledge and awareness among utilities as regards new sources of financing; and, donors who contribute with their financing to water issues in the areas of capacity building.

Representatives from Ethiopia

He underlined the need to implement specific actions among which special mention should be made of the following: support to improve capacity building in countries so as to attract financing toward the water sector by regional financial institutions; strengthening the relationship with local authorities to provide assistance and training at local levels (regulations, standards, required norms) so as to improve their capacity to attract resources; improvement of the managerial capacity of water utilities and seeking cooperation and partnerships among water utilities.
Hashimoto made a proposal to promote 2008 as the World Sanitation Year aimed at fostering new proposals and programs in this area.

Finally, he commented that proposals to strengthen the Integrated Water Resources Management and the development of reports on progress made for its implementation, including updates of countries about progress achieved in such implementation and in plans to improve water efficiency, will be analyzed during the 16th Session of the United Nations' Commission on Sustainable Development scheduled for 2008, and that the information gathered on local projects and on lessons learned will be incorporated into the database created by the United Nations under the name of WAND.

Closed Ministerial Discussion

Upon completion of Hashimoto's presentation, the Chair invited all Ministers and Heads of Delegation to start a dialogue about this important issue. During the session, the participation and the proposals delivered clearly evidenced the challenges derived from this topic as well as the importance assigned by governments to water issues and to the need to increase the financial resources for the purpose of achieving the Millennium Development Goals and other goals and targets agreed upon within Agenda 21, the Rio Declaration and the Johannesburg Implementation Plan, as well as the implementation of the policies agreed within the framework of the Commission on Sustainable Development (CSD) in water and sanitation issues.

The Ministers acknowledged the importance of the link between water and other issues such as human health and social development of communities and that, when dealing with local actions, it is also required to take into account the specific needs of the localities.

It was mentioned that in order to achieve the objectives set at the international level it becomes necessary to promote new mechanisms for financing such as the promotion of micro-credits and of micro-financing at the local level, equitable tariff systems for water services, public-private partnership mechanisms to improve services and coverage, solidarity cooperation projects, local water management committees , co-financing schemes, more flexible credit schemes from international and regional financing institutions, and the review of criteria applied by international financial agencies, among others.

Meeting of Ministerial Representatives

Some Ministers proposed the possibility of creating an international fund incorporating water utilities.

The Ministers expressed that it is indispensable to rely on governance and to implement various reforms, including those of a legal nature, for an efficient water operation; to strengthen decentralization efforts and local structures; to promote capacity building at the local level; and to guarantee the participation of all stakeholders involved. Mention was made of the willingness to increase resources assigned to cooperation, mainly supported by local projects. In this sense, it was indicated that transparency in the application of these resources and on account rendering should be guaranteed, as well as the participation of all stakeholders involved.

Some Heads of Delegation discussed that access to water should be acknowledged as a human right, therefore promoting greater resources dedicated to guaranteeing access to water to the most destitute sectors of the population.

A proposal was made to initiate a communication process for launching a cultural network about water, as a natural resource that should be exploited in a sustainable manner while protecting ecosystems.

The Ministers and the Heads of Delegation highlighted some important aspects to support sustainable water management, among them:

- Reforestation of hydrographic basins
- Promotion of the rational use of water
- Protection and restoring of wetlands
- Management of jointly shared basins

Ministers and Heads of Delegation considered that the meeting could help resolve problems related to water resources and they mentioned that, in their respective countries, policies have been implemented for water management based on integration to seek the incorporation of all processes involved in the hydrological cycle and identifying three major areas: the environment, welfare and social stability. Special mention was made that cooperation and good will are indispensable to guarantee good quality water to future generations so as to satisfy their needs and to improve their quality of life.

Other Ministers and Heads of Delegation referred to the importance of regional cooperation to achieve an integral use of water.

Furthermore, they discussed the importance of adopting institutional and regulatory measures to improve water management. Special mention was made of the need for water conservation and of careful planning when assigning water allowances within the context of hydrographic basins, by assuming water as the focus for development as part of an integral and sustainable scheme.

General view of a Ministerial Session

"A Call for Action" Made by Representatives Convened at the 2nd World Water Forum for Children

In parallel to the 4th World Water Forum, more than 110 children aged from 11 to 15 years, from 29 countries, participated in the 2nd Children's World Water Forum during which their local actions were shared to help resolve water-related problems. Participants in the Children's Forum prepared a "Call for Action" that was delivered by ten children born in Canada, Spain, Ethiopia, Indonesia, Japan, Kenya, México, Nigeria and Tajikistan before Ministers and Heads of Delegation in the course of the Ministerial Conference. The Mexican Minister for the Environment and Natural Resources, Jose Luis Luege, received the document on behalf of the Ministerial Conference.

In this document, the 2nd Children's World Water Forum asks Ministers to consider the right to a sustainable supply of safe water and to basic sanitation services; to be taken into account in decision making, to guarantee access to water resources to all persons; the use of simple and direct language when writing plans and strategies; and a sustainable management of resources, particularly water, to be reflected in legislation and in educational programs for the population at large.

Working Lunch of Ministers with Legislators and Local Authorities

Paco Moncayo, Mayor of Quito and Co-Chair of United Cities and Local Governments (UCLG), delivered a document issued by local authorities from the point of view of ancestral civilizations concerning traditional water management. He requested the inclusion of the contents of the Declaration of Mayors and Local Authorities on Water on the Occasion of the 4th World Water Forum in the proceedings of the Forum.

This document contains important issues such as: the importance of achieving the Millennium Development Goals so that all sectors have better living conditions by 2015; the fundamental role played by local authorities in managing and organizing public services and sanitation; the need to deal with water management from a holistic point of view with the participation of all sectors and with actions taken at all government levels.

Participation of children in the Ministerial Conference

Among the commitments made in the document, the following should be mentioned: the realization of all efforts necessary to achieve the goals set for 2015 so that all communities have access to water, which can be regarded as a right for human beings since their lives depend on it; awareness-raising campaigns among communities stressing its importance; exchange of experiences among communities; and, participation with national governments to develop the capacity of technicians and managers, including the corresponding legislation. As regards access to water and to sanitation services, they also require a sustainable and equitable integrated management; the acknowledgement of their role and support for decentralization and de-concentration; expansion of national budgets to supply and finance local projects; and, international cooperation with local governments to build technical, human and financial capabilities.

Walter Schmidt, a legislator from Switzerland, mentioned that water may become a critical problem; therefore, we should all work together to acknowledge the problem and to seek a solution to it; and stressed the fact that each individual should take a resolution if progress is to be made. He highlighted that committed efforts should be made to safeguard water for all citizens. He added that the council of Europe is willing to contribute to the solution of the problem by seeking institutional development and decentralization; he finally mentioned that the proposal for the right to water is currently being analyzed.

Jacques Josellyn, Local Authority (France) commented that local authorities responsible for land planning

should have a vision covering all productive activities related to civil society. He suggested the need to rely on the efficiency of the national government to protect the local balance, and to have available actions to follow for the purpose of decentralization. He mentioned the need to have "Informed States" with transparency in their procedures and financial mechanisms. On the other hand, he stressed the importance for governments within the international framework to exert the necessary pressure for priority on water and sanitation to achieve a preferential status for international cooperation, as well as to link together all stakeholders involved in the solutions so as to guarantee access to water after realizing that we all live together in the same planet and that there is no other planet available.

In the presentation made by the representative of the Parlatino of Panama, he asserted that a World Encounter of Legislators was being held for the first time in the framework of a World Water Forum and that the common denominator was that water should be accessible to all social classes, particularly to the most impoverished ones. He explained that we are presently confronted with challenges related to management, administration, safekeeping and rational use of water resources that demand actions to be taken at all levels.

While vindicating that water is by no means an element of conflict, legislators committed to promoting a legal framework to respond suitably to the perspectives inherent to each country, to foster and realize public participation, and to contribute with proposals of public policies and international regulations. When discussing the document, he stressed that water is not a merchandise for sale but it is rather a social, environmental and economic asset; that there is a need to join local forces to confront a global challenge; that the basic right of all human beings to have access to water should be realized; that a partnership of legislative commissions addressing water issues should be constituted; and that a coordinated effort should exist among various government levels (executive-legislative).

Ministerial Roundtable

Ministerial Roundtables

One of the main objectives of the Ministerial Conference was to establish a dialogue between Ministers and Heads of Delegation with various stakeholders, on the subject of practical actions taken for water supply and sanitation on a local scale. For this purpose, roundtables were organized considering the topics covered during the 13th Session of the Commission on Sustainable Development (CSD-13) along with the crosscutting perspectives of the Forum; government authorities were invited to indicate their preference in the topic to be discussed. The Ministers or Heads of Delegation met with local authorities, legislators, officials of international agencies, representatives of the interest groups, corporations, academic institutions and non-governmental organizations during the course of eight roundtables.

The agenda covered by the roundtables included the presentation of the thematic document by a Beacon in each of the six topics discussed; these documents had been previously distributed among the Ministers or Heads of Delegation for them to prepare, if so desired, a brief contribution on the topic. These presentations were followed by an exchange of points of view among participants prior to the delivery of the main conclusions.

Topics covered during the roundtables and their respective Beacons are listed as follows:

Table 1: Financing Local Water and Sanitation Initiatives Beacon: Alan Hall, Global Water Partnership (GWP)		
Jamaica	Donald Buchanan	Minister of Water and Housing
USA	Paula Dobriansky	Under Secretary od State Democracy and Global Affairs

Conclusions:

1. Despite the increase in awareness achieved over the last 5 years, financing for all kinds for water-related issues is disappointing. This roundtable takes note of the Camdessus Panel and the Gurria Task Force, and urges the Gurria Task Force to continue with its work and to include financing water for agricultural uses.
2. The roundtable recognizes the need for financing from all origins and the use of crossed and targeted subsidies (for example energy for water) that benefit those with low incomes.
3. It also recognizes that partnerships between various stakeholders are necessary, to ensure the sustainability of water resources. These partnerships should create linkages and avoid social disparities, bring together political and technical entities, and reinforce local capacity and empowerment.
4. This roundtable recognizes that water has a price and tariffs should ensure financial sustainability, allowing transparency and targeted subsidies.
5. Inappropriate fiscal policies and tax schemes should be avoided. Specific solutions should be developed rather than making copies or blueprints. Tariffs should contemplate the environmental costs.
6. It is necessary to decentralize water supply services, but this is not the panacea. To resolve the problem, a mixture of models is required for the various specific situations. Decentralization should mobilize financial resources of all types with more flexible financial terms.
7. Service operation should be free from political influence. Governments should establish a stable policy that protects the environment for all stakeholders as well as improving governance, which includes transparency and definition of responsibilities.
8. Mechanisms should be found to promote micro-enterprises and to award micro-credits, including to groups of women.
9. The government should act as a regulatory body and promote an enabling environment, which includes public opinion in decision making.
10. Improving the usefulness of credits and avoiding political interference in such a way that a stable demand is ensured, and more financial resources are attracted.
11. Governability of systems should be improved, anti-corruption measures should be taken and civil society should be involved in the preparation of projects.
12. A variety of innovative mechanisms should be used to improve the financial services available to water services, and there should not be complete reliance on governments or on funds from donors. For example, loan guarantees to mobilize local capital and avoid risks on foreign funds.

Roundtable 1: Financing Local Water and Sanitation Initiatives

Table 1A: Financing Local Water and Sanitation Initiatives Presenter: Paul van Hofwegen, World Water Council		
Portugal	Francisco Nunes Correira	Minister for the Environment, Land Regulation and Regional Development

Conclusions:

1. Cost recovery is essential for the sustainability of service provision and water distribution. Awareness must be developed and information provided outside of the water sector in such a way that a culture of paying for water is created. A balance should be found between the potential income and the cost of service provision and distribution. These costs should

be minimized through an appropriate selection of technology and making the best possible use of local resources.

2. Create access to water and sanitation that low-income populations can pay for with the necessary crossed subsidies. The cost of water services should not go beyond 3 or 3.5% of the income per household. Solidarity between cities, regions and states is necessary, in particular for the poorest districts and municipalities.
3. Partnerships between local and national governments should be promoted. National governments should establish legal frameworks in which authorities may be delegated to the local governments and access awarded to local financial markets, as well as capacity building opportunities.
4. Regional Development Banks that offer technical support packages are recommended for the development of these partnerships and the improvement of local capacities. These partnerships should include the users, service providers, financial experts and should include balanced gender perspectives.
5. There was general support for the recommendations of the UN Secretary General's Advisory Board on Water and Sanitation.
6. It is vital to invest in the development of low-cost technology and its dissemination to reduce the cost of services, in particular water provision and sanitation services. Sustainable services require investment in the protection of water sources and the prevention of their pollution. Special attention should be paid to protection to avoid the infiltration of pollutants in groundwater.

Ministerial Delegations Roundtable

Roundtable 2: Capacity Building for Effective Water Management and basic sanitation, at the local level

Table 2:
Capacity Building for Effective Water Management and Basic Sanitation, at the Local Level
Beacon: Richard Meganck, UNESCO-IHE

Cuba	Jorge Luis Aspiolea	Minister and Chairman of the National Water Resources Institute
Philippines	Angelo T. Reyes	Minister for the Environment and Natural Resources

Conclusions:

1. The achievement of the Millennium Development Goals is strongly linked to the availability of local and national capacities.
2. Many countries agreed that the search for solutions to problems related to water supply and sanitation is the responsibility of all levels of government and civil society.
3. Even when the importance of the role of women in water management and decision-making is widely recognized, due attention has not been awarded to it. Gender focus is particularly relevant for capacity development programs in the water sector, distribution, sanitation and risk management. Capacity development policies should therefore take account of this focus.
4. The majority of countries are of the opinion that investment in capacity development is reflected in long-term results, so it is essential to increase capacity development, which will result in the implementation of actions at the local level.

Table 3 and 3A:
Decentralization Processes, Governance, Institutions and the Enhancement of all Stakeholders Participation, in Particular Local Actors, Including Women and Young People
Beacon: Jose Esteban Castro, University of Newcastle upon Tyne
Presenter: Maria Luisa Torregrosa, Latin-American Faculty for Social Sciences

Kenya	John Mutua	Minister of Water and Irrigation
Pakistan	Liaquat Ali Jatoi	Minister of Water and Energy
Costa Rica	Carlos Manuel Rodriguez-Echandi	Minister of the Environment and Energy
Angola	Jose M. Botelho de Vasconcelos	Minister of Energy and Water

Conclusions:

1. The representatives of the governmental and intergovernmental delegations of the various countries who made comments, determined the progress of the various governments as regards governance, decentralization and democratization of political systems to include a better and more efficient participation of all civil society stakeholders on the theme of IWRM. In this sense, structural and legal transformations are making progress with varying degrees of success in these countries. This transformation is going ahead gradually, where political processes that seek this political reorientation of water may be observed. Many of these processes are subject to legal transformations that incorporate these new concepts and values that will eventually generate the conditions of a democratic dialogue for the consensus of all the different stakeholders in society.
2. The representatives of the governmental and intergovernmental delegations presented their water policies as regards IWRM at the basin level; governability through decentralization with appropriate organizational structures at the local level; democratization of management processes; the integration of science and technology with water stakeholders (with special emphasis on the participation of women); implementation of an appropriate framework as regards environmental legislation; appropriately determining financial needs and their assessment; the orientation of the issues mentioned as a means of poverty reduction, which will contribute to raising the standard of living of the countries, etc.
3. The Organization of American States commented that the member countries approved 4 basic principles for the sustainable management of water resources:
   a. Access to information as a principle;
   b. Transparency in operations as a decisive factor;
   c. Equality of opportunities for organizations and the participation of society, focused on poverty reduction, the participation of women and indigenous rights: and
   d. Responsibility as a principle for decision makers.
4. United Cities and Local Governments expressed their interest in favoring decentralization by setting up active subsidiarity, based on a tight collaboration with government, recognizing the role of local governments in the protection and appropriate management of water and the organization of efficient and transparent public drinking water and sanitation services, and guaranteeing the systematic participation of local governments in strategic decisions as regards water management and, in particular the Millennium Development Goals.

Esteban Castro, Thematic Beacon

5. Some Non-Governmental Organizations mentioned:
   - Stockholm International Water Institute: Emphasized the importance of international cooperation for water-resources project preparation, and offered to draw up the corresponding document.
   - Parliamentarian from France: Proposed to draw up an initiative to guarantee water services and give responsibility to the regions for the prioritization and financing of projects.

- WfWfW / Netherlands Women's Council: women's organizations should be included in social mechanisms and the democratization of participation for integrated management as an instrument to guarantee the success and the replication of projects.
- Freshwater Action Network: Mentioned that the success of local actions through decentralization should be carried out with the principles of public participation, thus including society in decision making.

Table 4:
Water Efficiency and Transfer of Water-Related Technologies
Beacon: Alvaro Aldama, Mexican Institute of Water Technology

Singapore	Yong Soon Tan	Permanent Secretary of the Ministry of the Environment
South Africa	Buyelwa Patience Sonjica	Minister of Water Resources and Forestry

Conclusions:

1. National Water Plans and IWRM schemes should include concepts such as the increase in water efficiency for all uses, as well as the application of appropriate technologies, such as for example, rainwater harvesting.
2. The crucial value of hydrological and water quality data should be recognized. Similarly, appropriate financial schemes should be available for the collection of data and processing of information for developing countries and international institutions.
3. Capacity development is an essential component for the transfer of successful technology. The "technology push" approach has proved to be ineffective. Local solutions should be implemented and traditional experiences should be taken into account and means of improving them found.
4. The increase in water productivity for agricultural use should focus on agricultural diversification as well as interdisciplinary research on plant physiology and the increase in water efficiency.
5. Successful local experiences should be replicated and given greater relevance.
6. The role of local authorities in IWRM should be recognized.
7. Cooperation of neighboring states in collecting data should be promoted.
8. Collaboration between universities and research centers in developed countries and those in developing countries should be promoted in subjects of research on water. Information exchange should also be promoted.
9. It is of vital importance to recognize the energy efficiency of water desalinization technologies for countries lacking water resources and for small island states.

Roundtable 4: Water Efficiency and Technology Transfer

Table 5: Development and Strengthening of National Water Monitoring Mechanisms and Targeting
Beacon: Gordon Young, World Water Assessment Programa

Ecuador	Hector Antonio Velez-Andrade	Minister of Urban Development and Housing
France	Nelly Olin	Minister of Ecology and Sustainable Development

Conclusions:

1. General agreement that it is essential to monitor water resources as well as quality and access to services.
2. General agreement that monitoring needs to be implemented nationally, taking into account the local context.
3. Various countries have set up or are implementing monitoring frameworks.

4. Monitoring includes three complementary components: targets to achieve the Millennium Development Goals, measures and reports.
5. To make monitoring effective, transparency in processes is required.
6. The implementation of monitoring requires capacity development, frameworks to report data, appropriate indicators, planning and financing as well as international cooperation.
7. It is critical that local authorities be in charge of the implementation, for the purpose of data reliability; at the national level, a general framework should be developed, that includes coordination mechanisms.

Roundtable 5: Development and Strengthening of National Water Monitoring Mechanisms and Targeting

Table 6: Water and the Environment Beacon: United Nations Environment Program (UNEP) Presenter: Tim Kasten, UNEP		
Mexico	Jose Luis Luege	Minister of the Environment and Natural Resources
Switzerland	Bruno Oberle	Head of the Federal Department for the Environment

Conclusions:

1. Political will is essential to achieve IWRM that includes an ecosystem approach.
2. Leadership is as important as financing.
3. Promote governance and transparency in water management.
4. Consider the impact of climate change, including the decrease in volumes of water used for hydroelectric power generation.
5. The human being, as a part of the ecosystem, is at the centre of efforts towards IWRM, as a stakeholder in its protection but also in its degradation.
6. Sanitation is necessary for the health of ecosystems and human beings, as well as to provide dignity. A valid option is ecological sanitation.

Added Value of the Ecosystem Approach:

- Ecosystems provide several environmental services that ensure water quality and quantity.
- Additionally, they mitigate the impact of extreme hydrometeorological phenomena.
- It is necessary:
  - To create a legal framework that includes an ecosystem approach.
  - To include the ecosystem approach in regional, national and local development plans.
  - To increase investment in the protection and restoration of ecosystems, since this will result in added benefits for the fight against poverty.
  - To maintain and restore forests, jungles, grounds and wetlands because they are part of the water cycle.

7. Develop payment programs for environmental services and other instruments to put back into ecosystems the value of environmental services.
8. Create regional and international initiatives for IWRM.
9. Carry out regional agreements for the management of water quality, in favor of the health of human beings and ecosystems.

Roundtable 6: Water and the Environment

10. Make use of the knowledge that has been accumulated in different experiences around the world.
11. Promote synergy between various international environmental conventions, among them those for biological diversity and chemistry.
12. Involve the private sector to ensure continuity in long-term projects, independently from changing governments.
13. Include local communities in water management, taking into account traditional and local knowledge
    - Take into account traditional and local knowledge to design water management
    - Promote local strengthening through:
      - Defining property rights, especially for women who are in charge of natural resources.
      - Creating capacities in local communities, including for the sustainable development of forests.
      - Promoting the transfer of technology.
      - Promoting local financing.
      - Developing legislation that takes human beings into account.
      - Promoting dialogue on successful experiences;
      - Involving communities and organized civil society in the planning and management of water resources, including the restoration of ecosystems.
      - Including women in IWRM.

Presentation of the UN Water Actions and Networking Database by the UN Department of Economic and Social Affairs

Within the framework of the Forum, the UN Water Actions and Networking Database (WAND) was launched, constituting an important electronic tool to disseminate information on the implementation of improved practices for water management and sanitation; it is based on information collected during the 2003-2005 Cycle of the Commission on Sustainable Development (CSD), the Portfolio of Water Actions, resulting from the Ministerial Conference of the 3rd World Water Forum, and the database containing more than 1,600 local actions identified by the 4th World Water Forum.

The presentation was delivered by Manuel Dengo, Chief of Water Natural Resources & Small Island Developing States Branch, Division for Sustainable Development. At the beginning of his participation he mentioned that the implementation of the global agenda on water and sanitation, that includes multiple dimensions of sustainable development and that has been converted into specific global objectives, demands a voluntary follow-up process that could be applied at various levels: global, regional, national and also local.

Manuel Dengo, UN-DESA

He recalled that during the 13th Session of the Commission on Sustainable Development (CSD), held in April 2005 in New York, it was agreed to request from the Secretariat of the Commission the periodic updating of policy options and practical actions referred to in the Summary of the Chair about interactive debates that took place during the preliminary inter-governmental meeting, so that it could become a continuously evolving document, as well as to develop web based instruments to expedite the dissemination of information on the implementation of recommended practices. This effort was to be identified as WAND (Water Action and Networking Database)

Functions covered by the CSD-WAND database will include: Analysis and References; Support for a more Comprehensive Knowledge; Support for Diagnosis; and Exchange of Information. He emphasized that this is the first stage of a large project that fills an important gap for voluntary follow-up of policy implementation

that provides, at the same time, access to information on actions and practices that could otherwise remain unknown, but when disclosed could be beneficial to other parties involved.

Report on Ministerial Roundtables during the Closing Ceremony

The Chair of the Conference acknowledged the active and valuable participation of all delegates in the eight roundtables and he pointed out that in each of them an open discussion had taken place on actions required to achieve the objectives and goals set for water-related issues. Finally, he requested from the co-chairs of each table to deliver the main conclusions derived from them.

Closing Ceremony: Video Message from President Jacques Chirac, France

Adoption of the Ministerial Declaration

Fernando Tudela, Under Secretary of Planning and Environmental Policies of Mexico, referred to the process followed to negotiate the Ministerial Declaration that promoted the participation of the largest possible number of countries. He mentioned that for the sake of a consensus to approve the Declaration, a balance of interests among all countries had been sought.

He further indicated that the draft Declaration reaffirmed the critical importance posed by water in all aspects involved in sustainable development policies, including poverty reduction, and stressed the need to include water and sanitation as top priorities in national development processes, the commitment to reach the global objectives agreed on Integrated Water Resources Management, policy procedures and practical actions to facilitate the implementation of water and sanitation related issues, and the importance of promoting the involvement of relevant stakeholders (women and young people) in planning and management of water services.

He mentioned that the Declaration itself acknowledged the importance of the contributions to the 4th World Water Forum and of its regional preparatory process for capacity building at all levels, the relevant role played by local authorities and legislators to expand access to water and sanitation services, and the contribution of the Forum itself to follow-up actions on water and sanitation issued during the forthcoming 16th Session of the Commission on Sustainable Development to be held in 2008, that indeed would play a major role to follow up the decisions made during the 13th Period of Sessions of said Commission.

He also commented that the Declaration evidenced the importance of capacity building, the promotion of an exchange of the best practices and of lessons learned on international issues related to topics such as access to safe potable water and to basic sanitation services.

After this explanation, the Conference Chair disclosed before the plenary meeting the draft of the Ministerial Declaration that was unanimously adopted.

Declarations and Participations of Delegations Attending the Ministerial Conference but Subsequent to the Adoption of the Ministerial Declaration

Abel Mamani, Water Minister of Bolivia, delivered before the plenary meeting the contents of a document called "Complementary Declaration within the Framework of the 4th World Water Forum", that was signed by the Ministers of Bolivia, Cuba, Uruguay and Venezuela. In this document, the signing governments established that access to water with quality, quantity and equity is a fundamental human right and that States should implement it in their respective countries; they also manifested that efforts will continue to recognize this right and to put it into effect on a multi-lateral basis. The Declaration referred to before was also an expression of concern because of the negative effects that international instruments are likely

to impose such as for instance through trade agreements; furthermore, the sovereign right of each country to regulate water-related uses and services was reaffirmed; he made a call to fulfill commitments aiming to guarantee access to water and sanitation services and demanded the inclusion of the World Water Forum within the framework of a multi-lateral system.

Uruguay seconded Bolivia to endorse such a document by declaring before the audience that its country had incorporated into its Constitution that water is a natural resource fundamental for human beings and that access to potable water and sanitation constitute basic human rights. In addition, it clarified that the document had a complementary nature that by no means changes its support and appreciation to the Ministerial Declaration adopted by Conference members.

Abel Mamani, Water Minister of Bolivia and Cristobal Jaime

Werner Wutscher, Vice Minister for Agriculture, Environment and Water of Austria, as a representative of the European Union, made a declaration containing issues that from the perspective of the European Union merited global attention, namely:

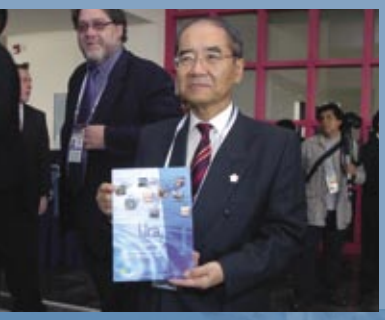
- That water is a primary need for human beings and that the provision of water and sanitation can be regarded as basic social services, and it was emphasized that public authorities should take suitable measures to guarantee effective access and availability of this supply.

- That full commitment is required to adopt the decisions issued during the 13th Session of the Commission on Sustainable Development so as to maintain the sustainable character of ecosystems necessary to provide essential resources and services for the benefit of human beings and of economic activities.
- That all aspects inherent to sustainable development should be considered during planning and management of hydroelectric projects pursuant to international standards.

Israel acknowledged the importance of new technologies to remove salt from brackish water and from sea water as well as to reuse wastewater for the purpose of achieving a sustainable management of arid and semi-arid zones.

Jorge Mendez, General Manager of the National Aqueducts and Sewage Service (SANAA) of Honduras, addressed the importance of studying the possibility of water to be declared internationally as a fundamental human right so as to save lives in the world, because millions of persons die in the planet due to lack of potable water; this could contribute to improving health conditions throughout the world.

The Chair, Jose Luis Luege, adjourned the works of the Ministerial Conference of the 4th World Water Forum and thanked all Ministers, Heads of Delegation and participants from various agencies of the United Nations system, international financial organisations, inter-government multi-lateral organizations and interest groups, as well as the work teams from the National Water Commission, the Ministry for the Environment and Natural Resources and the Ministry of Foreign Affairs of Mexico, for their invaluable participation and collaboration that indeed contributed to the success of the 4th World Water Forum.



High-Level Debates

The political process of the 4th World Water Forum introduced a new approach: the Ministerial Conference was complemented by two international encounters, one of Local Governments and one of Parliamentarians, and a general dialogue between these three groups was also organized. In addition, two high-level gatherings were organized during the Forum, one for empowerment and democratization and the other for finance, the latter being a continuation of the Camdessus panel initiated during the 3rd World Water Forum.

The overarching theme of the 4th World Water Forum was "Local Actions for a Global Challenge", thus emphasizing the importance of the role that local governments play in water management. In this sense, during the Forum, an International Encounter of Local Governments on Water took place, in which the association "United Cities and Local Governments" (UCLG) played a fundamental role. More than 160 Mayors and representatives of local governments from the various regions of the world took part. A group of representatives from the Encounter also dialogued with Ministers at the Ministerial Conference, carried out as part of the Forum.

In addition, bearing in mind that improved water management often requires amendments to existing legislations, during the Forum a World Encounter of Water Parliamentarians was held, organized by the Water Resources Commission of the Mexican Chamber of Deputies, with the support of the Parliamentary Confederation of the Americas. More than 200 legislators from 28 countries took part in the event and, similarly to local governments, a group of parliamentarians dialogued with the Ministers present at the Ministerial Conference.

Furthermore, in line with the overarching theme of the Forum, the Secretariat of the 4th World Water Forum and other organizations sponsored the Empowerment and Democratization Project, chaired by Julia Carabias, the former Mexican Environment Minister. This initiative sought to stimulate dialogue in support of processes to confer a central role to the performance of local, political and civil society institutions, for the sustainable development and management of water resources.

The theme of financing, one of the crosscutting perspectives of the Forum, is considered essential to the success in reaching the Millennium Development Goals. To address this issue, the Secretariat of the 4th World Water Forum, the World Water Council and the Global Water Partnership decided to sponsor a high level Task Force on Financing Water for All, chaired by Angel Gurria, Secretary General of the OECD and former Mexican Minister of Foreign Affairs and of Finance, to find ways to enhance access to finance for local governments, to follow up on the outcomes of its predecessor, the World Panel on Financing Water Infrastructure (known as the "Camdessus Panel"), and to analyze financing water for agriculture.

Angel Gurria, Chair of the Task Force on Financing Water for All

Participation of Local Authorities

In Mexico, more than 160 Mayors and representatives of local governments came together from all over the world. The delegation from UCLG was headed by Paco Moncayo, Mayor of Quito and Co-President of the aforementioned organization.

The presence of local governments in Mexico had a tremendous impact. More than 100 Ministers and representatives of national governments present in Mexico recognized in their declaration (point 9): *"...the important role that parliamentarians and local authorities are playing in various countries to increase sustainable access to water and sanitation services as well as to support integrated water resource management."*

Presentation of the "Declaration of Mayors and Local Authorities on Water"

In general, the Forum acted as a reminder that water management is first and foremost a local affair, and as a result, it is necessary to strengthen the capacities of local governments, which should be free to choose between the various management models.

The presence of local governments in Mexico was articulated around four key moments:

1) The International Encounter of Local Governments on Water on March 20, was organized by UCLG, the Government of Mexico City, the Government of the State of Mexico and the Mexican Municipality Association, with the support of the World Water Council. The debates centered on the notion of the right to water, decentralization and financing water at the local level. This Encounter continued into March 21, with the Assembly of Local Governments, during which the "Declaration of Mayors and Local Authorities on Water" was adopted, a text which had been approved by UCLG's Executive Bureau on February 9, 2006, in Washington.

2) The High-Level Dialogue with Ministers, Local Authorities and Parliamentarians was carried out in two parts: a working lunch on March 21 and eight ministerial roundtables, also open to other stakeholders (international organizations, the private sector, civil society, etc.). On these two occasions, UCLG Co-President Paco Moncayo, accompanied by Charles Josselin, President of United Cities France, and by a delegation of 18 local officials representing the various regional sections of UCLG, made a presentation of the vision of local governments and the main conclusions of the Local Governments' Declaration on Water.

3) The organization of five topic sessions, each attended by between 150 and 200 participants. The themes debated were, inter alia: solidarity financing mechanisms, cross-boundary management of catchment areas, water governance and sanitation at the local level, in Africa in particular, and good water governance in mega cities. These sessions were organized in collaboration with the members of the Water and Sanitation Commission of UCLG (State of Mexico, the City of Montreal and the City of Paris), together with the various sections and members of UCLG (UCLG Africa, Metropolis and the Association of Mayors of Large Cities of France).

4) In the Forum's closing ceremony, the President of UCLG's Water and Sanitation Commission, Enrique Peña, Governor of the State of Mexico, presented in front of 1,500 people the "Declaration of Mayors and Local Authorities on Water". The main points of his speech were as follows:

- Recognizing the fundamental role of local governments in the protection, sustainable management, and the organization of equitable and transparent public services for drinking water and sanitation management.
- Favoring declaration and decentralization, founded on a tight collaboration between all levels of government.

- Also ensuring the systematic and real involvement of local governments in strategic decision-making as regards water management nationally and internationally.

- Supporting this cooperation between cities as well as the implementation of institutional strengthening programs aimed at local governments and local water supply and sanitation services, as well as favoring the development of solidarity financing mechanisms between local governments.

The Final Ministerial Declaration, adopted at the Forum by 148 Ministers and State representatives, thanked the local governments and parliamentarians for their preparation, as well as their opinions and positions expressed through the joint working session, and took note of their declarations, "included as annexes to this [Ministerial] Declaration" (point 10).

Furthermore, the report of the Task Force on Financing Water for All, currently chaired by Angel Gurria, the former Mexican Minister and current Secretary General of the OECD, which replaced the group formerly led by Michel Camdessus, asked States to recognize that "water management is first and foremost a local affair and that it is necessary to develop policies to strengthen the management capacity and the human and financial resources of local governments" (please refer to "Enhancing Access to Finance for Local Governments, Financing Water for Agriculture").

The international press also highlighted the participation of local governments and has underscored that the hopes are, from now on, based on the decentralization of management to address the "governance crisis" identified by the United Nations.

World Encounter of Water Parliamentarians

The parliamentarians of Mexico, as representatives of the people, promoted the carrying out of the World Encounter of Water Parliamentarians, which was held from March 19 to 21, 2006, in the framework of the 4th World Water Forum. The Parliamentarians Encounter, organized by the Water Resources Commission of the Chamber of Deputies in Mexico, with the support of the Parliamentary Confederation of the Americas, was attended by over 200 parliamentarians from 28 countries.
The dialogue of the parliamentarians in charge of the parliamentary activity regarding water had the following objectives:

Ulises Adame de Leon, President of the Water Resources Commission, House of Representatives, Mexico

- To raise awareness and facilitate the participation and dialogue between parliamentarians with the aim of influencing the elaboration of policies that establish a legal and normative framework for an efficient and sustainable water management, that ensures a better standard of living for the inhabitants of the world, and a more responsible social participation towards water users,
- To identify opportunities for action by parliaments and congresses for the drawing up of local policies that attend to world water problems with a long-term sustainable vision; and
- To draw up a joint Declaration.

The main themes of analysis and debate of the Encounter, inaugurated on March 19 by parliamentary representative Ulises Adame de Leon, President of the Water Resources Commission of the Chamber of Deputies of Mexico, were: Water for Growth and Development and Institutional Development and Political Processes.

The keynotes speeches presented were: *Climate Change and Responsible Water Management,* by Fernando Tudela; Water *Quality and Treatment Plants,* by Manuela Bolívar; *Water Distribution Agreements,* by Fernando Gonzalez, *and The Legal Framework and Regulation*

of Water Services, by Eduardo Viesca de la Garza. In each case, the presentations were enhanced by the contributions and comments of the parliamentarians present.

During the course of the Encounter, Loïc Fauchon, President of the World Water Council, mentioned that water resources require a legal framework to protect, value, treat, distribute and sanitize them, and added that, as regards water, the regulatory role of the State is needed, and the parliamentarians are those who trace the route to guarantee sustainable and coherent hydrological policies.

As regards the efforts to raise the right to water to the level of Constitutions, parliamentary representative Ulises Adame de Leon commented that this initiative is being pushed, provided it is accompanied by the appropriate legal framework to back it up.

Following the conferences and debate sessions, the work on drawing up the Declaration began with the participation of parliamentarians from Parlatino; the Panama National Assembly; the Parliamentary Association of the European Council; the French Parliament; the Andean Parliament; the Cuban National Assembly of Popular Power, as well as from Argentina, Aruba, Belgium, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, Greece, Guatemala, Paraguay, Spain, Switzerland, United Kingdom, Uruguay, Venezuela and Mexico; as well as with representatives of the United States, South Africa, Thailand and Uganda.

Once the terms and commitments of the Declaration were approved, it was read out and the International Encounter of Parliamentarians was declared closed, by Jose Luis Luege, Mexican Minister of the Environment and Natural Resources.

On March 21, a working lunch was organized in which Ministers, Parliamentarians and Local Authorities took part. In this lunch, one representative of each of these groups read the conclusions and declarations reached over the previous few days.

Empowerment and Democratization Project

The objective of the Empowerment and Democratization Project was (a) to bring to the Forum some interesting examples of local actions on the topic of empowerment and democratization, (b) to present some lessons learnt, (c) to engage in multi-stakeholder dialogue on ways to advance empowerment and democratization processes, and (d) to produce some key policy messages. For the project a small multi-disciplinary group of experts from different organizations was put together, including CapNet (Netherlands); the Development Planning Unit (United Kingdom); the International Institute for Environment and Development (United Kingdom); the International Union for the Conservation of Nature (IUCN); Oxford University (United Kingdom); the Stockholm International Water Institute (Sweden) and Water Aid (United Kingdom); the World Water Council (WWC) plus some independent consultants.

Julia Carabias, Chair of the Empowerment and Democratization Project

The members of this group contributed to (a) defining the project's main theoretical orientation, (b) the selection of the empowerment and democratization local actions to be included in the project, (c) the moderation of the local workshops that took part during the Forum and (d) in the elaboration and the presentation of findings to the multi-stakeholder panel. The project was chaired by Julia Carabias, former Mexican Minister of the Environment and one of UNEP's seven 'Champions of the Earth' for 2005; the workshops were coordinated by Adriana Allen from the Development Plannig Unit and project steering by

the 4th World Water Forum Secretariat. The project could not have been possible if not were by their participation and that of the local actors, who not only contributed with excellent summaries of case studies to be included in the Empowerment and Democratization Brief, but who shared their first-hand knowledge and experience on what it means to struggle for entitlements and resource endowments to participate meaningfully in the water policy process and positively alter the livelihoods of their respective communities.

The main assumption behind the project was that the empowerment of local actors –especially of local organizations– and the democratization of local water polities are of critical importance for the achievement of the water-related MDGs and more generally for a sustainable and equitable water resources management and development. The baseline consensus is that the empowerment of local actors and the deepening of democratization processes not only results in more effective problem-solving and sounder substantive developmental and environmental outcomes, but also reinforces the reproduction of positive social values –like cooperation, trust, solidarity and social capital– and the upholding of important normative political commitments –like popular sovereignty, political equality, accountability and distributive fairness– which contemporary democratic societies stand for. Advocates of empowerment and democratization processes consider that both processes help to address structural inequalities in water policy processes; hence, having progressive and warranted redistributive implications. Indeed water resources management and development can be a vehicle for economic growth, as well as social equity and social cohesion.

In order to help organize the debate and the work during the Forum, some key questions were set out at the beginning to be addressed by participants:

- What does empowerment and democratization mean for the water policy sector and how can these processes be pursued and achieved under real circumstances?
- What is the relationship between empowerment and democratization processes? Are these complementary and politically warranted processes?
- How can we proceed in strengthening their transformative capacity, deal with structural inequalities and overcome social and environmental injustice? How can we avoid the co-option and instrumental use of these processes?
- What are the factors that threaten and support the viability and sustainability of these processes? What factors affect the potential for scaling-up and institutionalizing empowerment and democratization processes?
- How can governments and External Support Agencies (ESAs) help to consolidate and expand the transformative capacity of local actions?

Based on the presentation of local actions on empowerment and democratization from around the world (included in the Empowerment and Democratization Brief) and the debate that took part during the preparatory meeting, the workshops and the multi-stakeholder panel, some lessons learnt were identified:

- Building on existing processes. Empowerment and democratization processes do not operate in a vacuum; they need to be built upon existing forms of collective organization. Transformative social action is embedded in history and is contingent on the existing dynamic constellation and balance of socio-political forces that either support or hinder progressive social action. This constellation evolves and changes over time and so the outcome of such transformative social action is difficult to predict in advance.

- Thinking beyond the water box. Gains of empowerment and democratization processes go well beyond initial objectives related to water policy making. Empowerment and democratization are essentially political processes that deal with both the satisfaction of basic and axiological needs. As such, the empowerment and democratization initiatives reviewed show innovative paths for structural transformation that strengthen the individual and collective agency of grassroots actors, and confront with ingenuity the structural roots of inequality based on class, gender, ethnicity and other sources of environmental and social injustice.

- Empowerment and democratization processes lead to the generation of new and multiple socio-political and technical capacities at an individual level, but also for the political system as a whole. The empowerment of local actors for example implies developing some capacities to engage in the policy process such as information and knowledge production, participatory mapping, monitoring and assessment, claim-making and lobbying, consensus-building and negotiation, organizational management, budgeting, networking and participatory planning, amongst others. At a system level, empowerment and democratization can contribute to the formation of social capital –trust, cooperation, solidarity, etc–, the support of social learning processes and institutional development, the bringing about of changes in the political culture towards a more collaborative, participatory and hydrosolidary political culture and more generally to improvements in the political system's capacity to deal with complex water challenges.

- Empowerment and democratization are about building co-responsibility. Empowerment and democratization are not about simply reinforcing the capacity of grassroots actors to demand action from the state or to substitute state intervention with community action, it is about building co-responsibility. The role of the state in empowerment and democratization processes is not only about setting up of institutions or processes for public participation, but to actually support local organizations to engage meaningfully in the policy processes at the same time as to remain vigilant that such institutions and processes are not captured by political and economic elites, contribute towards social cohesion and perform efficiently and effectively according to policy challenges. There is a difference between tokenistic and participatory rhetoric and authentic multi-stakeholder governance.

- Empowerment and democratization deliver change through maturation and mistakes. Both processes demand time, a vision of communities as active agents of their own development. Four areas for the maturation were identified, each presenting different challenges: grounding and sustaining change, scaling up, institutionalization of empowerment and democratization, and advocacy and networking. Dealing with water problems is a complex problem and local action usually "muddles through". People should expect difficulties and some mistakes.

The debate during the preparatory meetings workshops and the multi-stakeholder panel also contributed to the development of some key messages:

- More empowerment to local organizations under robust democratic frameworks. A more empowered participation of local organizations is needed to steadfastly pursue the MDGs and the implementation of IWRM plans. The empowerment of local organizations implies channelling power to them, granting them the necessary entitlements and endowments to influence the policy process. The democratization of local contexts and of local organizations should be considered an integral part of empowerment processes.

Empowerment and Democratization Session

- Partnerships (and other forms of organizational innovation) should be considered important sources of empowerment and drivers of change. Local organizations in partnership with local and central government, non-governmental organizations, universities and research centers and other external support agencies are an important source of empowerment. These forms of collaborative partnerships should be recognized by policy makers and donors as an important driver of policy innovation and positive socio-environmental change.

- There is a need to better understand local social and institutional dynamics. To be effective and long lasting, empowerment and democratization processes need to be 'grounded' at the local level. This requires a detailed understanding of the local social dynamic and also a sensitive approach to different roots of social exclusion, political inequality and polarisation based on gender, ethnic, religious, age and class factors.

- Confronting social and environmental injustice. Improved access to water and sanitation and control over water for productive and reproductive purposes need to be recognized as significant mechanisms to fight poverty and inequality.

- Demand-driven versus supply-driven processes. Empowerment is not an exogenous driven process implanted upon local communities, but requires 'enabling environments' for people to empower themselves. Governments and ESAs can and should play a supportive role, providing an enabling environment for empowerment and democratization, but they need to be aware that both processes require much more complex and substantive interventions than the ones currently advocated and applied in terms of standard participatory approaches.

- Filling in the gap or building co-responsiblity? Governments need to move beyond instrumental participation. There is currently too much emphasis among ESAs and national governments on instrumental participation, in other words on filling in the gap left by the public and formal private sector by utilizing the resources of local communities (e.g. savings, time and labour).

- There is a need to build sustained and targeted support for local organizations. Social and institutional transformations are complex and slow processes, they require time and different forms of support to be sustained and scaled up. Efforts to promote and enhance empowerment and democratization processes need to be targeted not only at local communities and grassroots actors but also to other agents (e.g. local governments and local water providers).

- Creating an enabling, but also durable environment. Careful consideration is required in order to sustain the gains obtained through empowerment and democratization processes. Project or process support from ESAs should consider 'life beyond the specific interventions'. A durable and enabling environment requires broader institutional change.

- Linking social and institutional change. Empowerment and democratization processes need to be articulated to poverty reduction strategies, land reform policies, the right to information, participatory budgeting and similar institutional policies at the national and international level.

- Procedural vs substantive democratization. Procedural innovations (such as some forms of stakeholder governance, representation quotas, roundtables, etc) are not enough. Substantive institutional changes are needed to modify contextual conditions that hinder the empowerment of local actors and the democratization of water polities.

- Empowerment and democratization are two sides of the same coin that can reinforce each other but need to be pursued vis-á-vis.

The Empowerment and Democratization Project contributed in generating a very rich and lively debate. During the Multi-stakeholder Panel, the panellists reminded us that all social action and change require tremendous effort and commitment from local organizations and their leaders. Also a "global and institutional perspective" was kept at the centre, urging the international community and national governments to support both processes at a global scale by helping

to build enabling environments, develop a better understanding of both processes, support knowledge transfer capacity-building, and institutional reform and most importantly with harnessing financial support for local organizations to engage in empowerment and democratization processes. Since the beginning of the project, it was the sincere aspiration for empowerment and democratization processes to gain good recognition at the Forum from all stakeholders –including national governments and external support institutions– and that some sort of follow-up mechanism could be devised to support empowerment and democratization processes around the world. It is worth mentioning that some member organizations that took part in the Empowerment and Democratization Project are looking at this possibility.

Task Force on Financing Water for All

In March 2003, the World Panel on Financing Water Infrastructure produced a report, "Financing Water for All" (FWA), which made a large number of recommendations aimed at increasing the amount of finance going into the international water sector. Since the launch of the report, considerable activity has been taken by many organizations to follow up the report's recommendations. In particular, the G8 Heads of State in Evian, France, highlighted several of the recommendations and requested the World Bank to co-ordinate action with the regional development banks. It therefore became obvious that further work was needed to look in more detail at the special issues concerning financing water for agriculture, and local governments and financing water services, as recommended in the first FWA report.

After analyzing these needs, the World Water Council, the Secretariat of the 4th World Water Forum and the Global Water Partnership, decided to jointly sponsor a Task Force composed of high-level personalities to consider solutions to the future global financial needs of the water sector. The Task Force is chaired by Angel Gurria, Secretary General of the OECD, and was established to provide recommendations on innovative financing mechanisms and to make concrete proposals for immediate action that enhance the access of local governments to financial resources for investments in water services and agricultural water management. Civil society organizations, representatives of local governments, International Financing Institutions, local banks, water service providers and user organizations joined this Task Force or its deliberations as partners in this work.

The Task Force has given special attention to the financing needs of local governments, especially as they are increasingly being faced with impacts that

Task Force on Financing Water for All Session

accompany decentralization; and the financing of necessary investments in agricultural water management to enhance efficiency and productivity of the sector that uses the most water.

The Task Force is at the beginning of its work. The report presented at the Forum reflects the issues and potential solutions to the problems faced today. Many of the reported innovations on financing mechanisms still need to be further tested. The Task Force will continue to provide the platform to address these issues or direct questions.

Findings of the Task Force Regarding Access to Finance for Local Governments

The Task Force found that the prevailing paradigm, evidenced in the Camdessus Panel Report, has focused too narrowly on how to create a greater supply of water financing without addressing the demand for it. The Task Force calls for a sharper focus on under-considered, yet fundamental, issues from the demand-side that are affecting financing levels: tariff structures, regulation, local capacity and access to various finance options for local governments and service providers.

The report presented by the Task Force stresses that it is necessary for National Governments to develop policies to address these issues, while recognizing that water is a local affair and that its sustainable management requires the empowerment of local governments and the development of their fiscal, management and human resource capacity. Given the contextual nature of water issues there is no silver bullet or one-size-fits-all solution.

The following is a list of key findings and recommendations:

Provision of water services is primarily a local affair.

The importance of rural and urban local governments is growing because of decentralization policies in many countries. Water is a local affair because, in most cases, local governments have the responsibility to provide their citizens with adequate water services, namely, water supply, sanitation, sewage, waste water treatment, drainage, etc. They need the fiscal, human and institutional capacity to manage existing water services in a sustainable way and to extend services to the un-served and the poor. It is local action that enables the mobilization of local social and financial capital and that can call upon solidarity mechanisms in society: an essential element for development of their financial capacity.

Customers and taxpayers mainly finance water services

Financing new investments is only possible if repayment of the finance necessary for these investments is assured. Revenues from rural and urban service provision come almost entirely from the contributions of users and the public budget. It is this repayment capacity that determines the financial health of the service providers and their access to finance for new investments. The focus on enhancing access to finance issues should, therefore, be on this capacity of local governments and local operators to provide services and recover the associated costs both in urban and rural areas. A transparent and accountable relationship with the customers is prerequisite.

Fair tariffs combined with targeted subsidies are needed to connect the unserved, especially the poor

In poor areas, as elsewhere, the cost of service provision needs to be balanced by the potential for revenues (user fees and taxpayer contributions). Acceptable, fair and pro-poor tariff structures are important to sustain the existing services and to obtain additional financing to extend services to the unserved, especially the poor. Solidarity among customers, cities, and countries is necessary to provide the poorest with affordable access to basic services. Technology selection and service levels need to be adjusted to this potential and agreed upon among customers, service providers and local governments in association with tariff and subsidy structures.

Building local capacity is necessary to develop financial flows.

Lack of local capacity is one of the main obstacles in financial flows. Capable and accountable institutions, well-informed citizens and clear development strategies are essential elements to move forward. To access financing, the capacity to structure projects and to manage investments in a sustainable way is crucial. Central governments should empower, facilitate and strengthen the capacity of local stakeholders in development, structuring, implementing, and managing local projects and services to enable effective local financing. All governments must examine and take steps to increase the flow of budgeted allocations for water, focusing in particular on blockages in the flow of funds to local entities responsible for extending water services.

Projects should be structured through dedicated partnerships, matching demand and supply.

The involvement of all stakeholders is necessary for the development and establishment of sustainable and affordable services. Establishing dedicated partnerships in which all parties cooperate (local and national governments, users, public and private operators, local and international financiers) is essential for matching better demand with supply of services and their financing. These partnerships will create feasible financing and repayment mechanisms and exploit local financing options that are often overlooked. Since the broad range of stakeholders will demand transparent and accountable management processes, the risk and the cost of financing can be reduced. This will enhance service delivery, the willingness of users to pay and the creditworthiness of local governments. Such partnerships will enable a higher quality preparation, structuring and implementation process of investment projects. Bilaterals and IFIs should include the establishment and strengthening of such partnerships as part of their assistance to countries in the process of project preparation.

National and local action plans are needed to increase the levels of investment.

The Task Force recommends national and local governments to develop action plans to facilitate an increase in the levels of investments in water at municipal and district levels. Needs are to be identified and quantitative and qualitative targets need to be set on water services and associated financial expenditure and cost recovery (fees and subsidies) through national-local dialogue. An umbrella action plan needs to be adopted at a national level. The Task Force believes that without such plans and their determined implementation the efficient management of the world's most crucial natural resource, and its benefits for the poor, will remain mere rhetoric.

Findings of the Task Force Regarding Financing Water for Agriculture.

The Task Force found that the future state of water management for agriculture will be determined by a growing scarcity of water, competition for its use and growing concerns about its environmental impact. For these reasons and due to the disappointing performance, ODA to the sector has dropped sharply. However, agriculture is the most important user of water and much investment is needed to make the sector more water productive. The next generation of investments will therefore be different from the last in type, scale, sponsors, and modes of finance.

The Task Force recognized the complexity of the issues around financing water for agriculture and the need for further study, consultation and analysis. At this interim stage, the findings of the working group resulted in the formulation of three main questions around this issue to be developed in the next stage of the work of the Task Force:

- What are the needs for financing water management infrastructure for agriculture? Should it be on efficiency improvement, expansion

of irrigated agriculture and/or technology development? And whose needs are they, as they vary from small-scale subsistence agriculture to large-scale international commercial enterprises?

- Who should pay for these investments? Within the distorted agricultural market, the separation between public and private interests has become very vague. Where does the public responsibility end and where does the private responsibility start?
- What mechanisms are most appropriate? The wide variety of functions of water in agriculture and the large spectrum of size of operations, which all need to be properly funded, demands a mix of instruments that need to be consistent and complementary.

Water institutions will need to make a strong effort for capacity development, including participation, empowerment, technical assistance and organizational development. The re-education and training of staff is an important part of this. Staff exchanges, benchmarking, "South-South" cooperation, twinning, and other kinds of technical assistance all have a potential role to play.

The trend to give Water User Associations more delegated responsibilities needs to be accompanied by sufficient delegation of powers ("voice and choice") to enable them to function effectively in this new environment.

Future spending by national governments should be more functional in order to support necessary reforms. Departments should examine the reasons for any underspending that occurs and take action to remove administrative blockages.

External aid will continue to be needed in this sector, though on a more selective basis than in the past. Donors should be more receptive to new roles for aid, with the keynotes being facilitation, leverage and capacity building.

Water charges to users are a grossly under-tapped source of finance with great potential, and the only sustainable source of finance for recurrent operations. However, service agencies will need to be more customer-oriented and provide a better service if this potential is to be realized. Further study is desirable of cases where irrigation tariff reform has been successfully introduced, and their lessons for implementation.

Governments, donors, and IFIs, with the support of international networks and other stakeholders, should develop appropriate fora involving local financial service providers to identify ways of promoting micro-finance in water for agriculture. Governments should also review the impact of existing credit and capital market controls on the potential development of a micro-finance market for this purpose.

The full Task Force report can be downloaded on www.financingwaterforall.org

Arab region

RIGHT

Involvement of Civil Society and Other Groups in the Forum

The World Water Forum has been established as an open, multi-stakeholder and multi-discipline platform for cross-sector debate, aimed at concrete outcomes for the future of water management in the world. The success of the Forum very much depends on the effectiveness of the measures to truly involve all stakeholders in these debates. This is the unique element that makes the Forum stand out from other conferences.

Aware of this need, the Forum Secretariat strived to make sure that the Forum, the overarching theme of which was Local Actions for a Global Challenge, actively involved non-governmental representatives at all levels, in designing and participating in the event. Indeed, the specific efforts made by the Forum Secretariat to include various stakeholders in the Forum opened up many avenues of specific participation, a number of which were innovations in the World Water Forum series.

General view of the Water Fair

In this way, NGOs as a whole, and specific groups of children, young people, women and indigenous peoples were involved like never before in both the preparatory process and the Forum. Each of these groups had specific preparatory meetings prior to the Forum, and, during the event, organized caucuses, Fora or

Opening of World Water Expo: Alejandro Encinas, Loïc Fauchon, President Fox and Cristobal Jaime

gatherings, which helped to focus their participation. Some examples include the 2nd Children's World Water Forum, the Women's Caucus meetings, and the parallel Indigenous Peoples' Forum. Just as important as these meetings between members of these interest groups, were the topic sessions and declarations, which allowed them to share their positions and views with other stakeholder groups.

The Water Fair and the World Water Expo were further means for stakeholder groups to present their activities to Forum participants. The Water Fair allowed a number of non-commercial organizations, countries, the United Nations system, and many more besides, to strengthen their networks and the knowledge of their water-related work with various stakeholders, and the World Water Expo performed a similar function for mainly commercial enterprises and utilities, many of whom were sharing their technologies.

Furthermore, the 4th World Water Forum innovated in creating the Water Learning Center, referred to as TheInstitute@WWF4, which allowed a unique opportunity for Forum participants to learn about practical water management techniques, in addition

to the thematic debates. The intention was for Forum participants to truly go back from the week in Mexico with enhanced knowledge of the nature of world water problems, and tools to face up to these challenges.

As part of its cultural program, this Forum also featured the 1st International Water and Film Event, a celebration of the many links between water and what is often referred to as the seventh art, aiming to raise awareness of water problems through often striking visual means. Other components of the week-long cultural program included artistic representations from Mexico, and of the regions of the world, in addition to parallel events outside the Forum venue.

Making the most of the presence of a cross-section of the world water community at the Forum, many organizations also chose to organize special events, any type of closed gathering for particular organizations, companies, or individuals. With all of these activities going on during the week, the 4th World Water Forum was truly an event that facilitated debates both among different groups and between them, the results of which will be felt for years to come.

Non-Governmental Organizations

As a result of significant efforts made by the Forum Secretariat to create an all-inclusive space at the Forum, over 1,000 Non-Governmental Organizations (NGOs) took part in the 4th World Water Forum,

Danielle Mitterrand and Abel Mamani at a press conference

represented by 1,718 individuals from 111 countries, constituting almost a tenth of all participants at the Forum. Furthermore, these organizations convened or co-convened 81 out of 206 topic sessions, almost 40% of the total, and also presented a third of all of the local actions at the Forum.

NGOs Activities

Although due to their very nature, NGOs do not speak with a single voice, working relations were established with a number of NGOs who aimed to employ their networks to involve others in the preparatory efforts. For example, the Water Advisory Council of Mexico was responsible for the organization of three local workshops, which took place in South, Central and North America, with the objective of preparing local NGO positions and selecting local actions from the region. These workshops were held in November 2005, in Buenos Aires, San Salvador and Mexico City, and around 120 civil society groups took part, bringing positions closer together and clarifying common goals.

The Freshwater Action Network (FAN) also played an important role in supporting the participation of non-governmental organizations in the Forum, for example by organizing the NGO stand as part of the Water Fair, which gave the platform for 25 NGOs to present their work. FAN also supported the Forum Secretariat by selecting some worthy NGOs from its worldwide network for financing to attend the Forum, provided by the Forum Secretariat.

Furthermore, the Forum Secretariat provided a space for the Citizen's Water House, an all-inclusive space for frank

and respectful debate between all water stakeholders, in particular civil society groups. The Citizen's Water House aimed to contribute to the atmosphere of cordiality and openness that reigned in the Forum, and had a full week-long program of activities, as well as playing host to a series of more informal get-togethers. It was coordinated by the International Secretariat for Water, which had already fulfilled this role at the 2nd and 3rd World Water Fora, as well as the World Summit on Sustainable Development in Johannesburg in 2002.

Citizens House

Despite the significant efforts made to include civil society groups in the Forum, it is worth noting that a number of parallel events took place in Mexico City during the week of the Forum, such as the International Forum in Defense of Water, the Latin American Water Tribunal, and many more besides. These events gave a further voice to NGOs concerned about present and future water resources management, echoing the concerns voiced during the Forum itself. Indeed, there was a significant crossover and complementarity between the two events, with a number of the participants at the alternative events also taking part in the 4th World Water Forum. Furthermore, the alternative events in many ways served the same purpose, namely awareness-raising about the growing water crisis.

From the various NGO sessions held, press conferences, alternative events, and all other means of expression employed by civil society organizations during the Forum, the following may be seen as the main concerns expressed by civil society groups:

- Water in all its forms is a communal property and access to water is a fundamental human right
- The management of water resources must remain in the public sector, with fair social and communitarian participation, without being used to make profit
- Ecosystems must be managed sustainably and the water cycle preserved by means of land management and the conservation of the environment
- Safe sources of water supply must be provided and protected by laws adapted to rural and indigenous communities
- Gender perspectives must be integrated into all subjects related to water.

Children

The activities for children at the Forum were organized under the umbrella of the 2nd Children's World Water Forum, coordinated by the United Nations Children's Fund (UNICEF), Project WET International (Water Education for Teachers), the Mexican Institute of Water Technology (IMTA) and the Japan Water Forum (JWF). The Children's Forum brought together more than 100 children, aged between 11 and 15, from 29 countries from all over the world.
As part of the Children's Forum, five days of intense and fun work were organized, through which children

Children's Forum

and adults exchanged and analyzed experiences on 55 local actions by children from around the world, with the aim of selecting the five best, which were then presented at an Intergenerational Dialogue with Water Ministers, a topic-session (FT5.27) jointly convened by UNICEF, the JWF and IMTA. The actions selected were:

1. Kenya: Charllotte Akoth Ouma and Priscila Wanjiru Karanja
   Local Action: Water, Sanitation and Hygiene Program in Schools
2. People's Democratic Republic of Laos: Happy Sisomphone and Phonepasit Silivong
   Local Action: Lao Youth Radio Programme
3. Mexico: Daniel Omar Vega Gonzalez and Amanda Tanairi Diazbarriga Maciel/Local Action: Campaign of Awareness on the Use and Conservation of Water
4. Japan: Hiroki Sato and Nozomi Onodera
   Local Action: Preservation of the Shinoro-Fukui Wetland in Japan
5. United States of America: Smitha Ramakrishna
   Local Action: Arizona Water Activists Caring for the Environment

Young Participants from Laos

The debate on the children's local actions also allowed them to produce a Call for Action, which was presented to the 148 delegations participating in the Ministerial Conference. Nine children, from Canada, Ethiopia, Indonesia, Japan, Kenya, Mexico, Nigeria and Tajikistan, presented this Call for Action, received by Jose Luis Luege, Mexican Minister of the Environment and Natural Resources (SEMARNAT) and Chair of the Ministerial Conference. The call was reaffirmed by the children during the Forum's closing ceremony, and ended with a strong message to participating Ministers: "We, the children of the world, are ready to work with you. Are you ready to work with us?"

As part of the Children's Forum, the children also participated in 12 workshops and educational activities related to water planning and quality, environmental awareness, the hydrologic cycle, Integrated Water Resources Management, risk management, climate change and cultural aspects. These activities were organized by IMTA, Project WET International Foundation, UNICEF, UNESCO, UNEP, the Ara River Basin Network (Japan), the JWF and Enviroscape.

Participating children also contributed to the production of the "Water of the World" news, which included reports on the water situation in various regions of Mexico, interviews with personalities from the water sector, news of the activities developed in the Forum and notes about children from countries including Egypt, France, India, United Kingdom, Togo, Trinidad and Tobago, and Tunisia. This news report was produced by IMTA, with the support of the Commission of Water and Environment of Morelos State, the Institute of Basic Education of the Morelos State, the Federal SEMARNAT Delegation in Morelos, the National Water Commission, Edusat and the Mexican Channel Eleven.

Children's mural

As part of the Children's Forum, the participating organizations also organized the Global Water Education Village within the venue of the Forum, which received around 3,500 visits during the week of the Forum, from children and adults alike. In this space, practical activities and demonstrations of programs and water-related educational materials used in various countries were carried out, besides the programs of UNESCO in Latin America and the Caribbean. More than 800 children from private and public schools of Mexico City, as well as groups of scouts and participants at the 2nd Children's World Water Forum were among those who visited the Village and the Water School over the course of the five days in which it was open, where they played and learned about water, through the activities developed in this space.

In the session FT4.28 "Water Education for Children and Young People", convened by Project WET International Foundation, UNESCO and IMTA, participants highlighted that there are many ways to transmit knowledge to people and to involve children, communities and parents in a water culture. This session allowed formal and non-formal educators to find out about a variety of educational programs, with emphasis on water, that have been applied successfully in different countries. Furthermore, it promoted the exchange of ideas to face the important task of educating teachers, children and young people about these matters, and emphasized the importance of all those involved in the water sector playing a role in water education.

Youth

Recognizing the importance of the participation of young people in the Forum, the Forum Secretariat designated the Mexican Youth Institute (IMJ) as being in charge of designing and coordinating a holistic program for youth activities prior to and during the Forum, in the form of the 4th Youth World Water Forum. This Forum was held throughout the week of the 4th World Water Forum, and brought together more than 100 young people from 21 countries.

The coordination of the event was facilitated through prior contacts with the organizers of the previous Youth World Water Fora, namely the THIMUN Youth Network (TYN), Young Water Action Team (YWAT) and Tokyo Mizu Youth (ToMY), as well as with a number of international and domestic organizations with an interest in the theme, who together contributed to preparing the youth participation in the Forum. The Forum Secretariat supported the Mexican Youth Institute in this endeavor, awarding 100 grants for young people to attend the Forum, among other initiatives.

Organizers of the 4th Youth World Water Forum

As a part of the 4th World Water Forum's thematic forum, a number of representatives of the Youth Forum took part in topic sessions as youth panelists, to present the position of the youth caucus. Subsequently, as part of the activities of the Youth Forum, these youth panelists wrote up a daily report of the topic sessions to which they were assigned, highlighting the main points of relevance and debates of interest, and reported these each day to the plenary youth discussions.

The activities and debates on these priorities throughout the week gave rise to a Youth Declaration, in which the participating young people presented their position on each of the Forum's five framework themes. The Declaration also highlighted the value of education as a tool for development, particularly in terms of capacity building for young people and the dissemination of the knowledge they acquire in their communities. The Declaration also underscored the role of water as a universal and unalienable human right, which should be written into the constitutions of the countries of the world. It was read out during the closing ceremony of the Forum, in front of the Ministers and other world leaders present.

Working Sessions of the Youth Forum

In addition to the debates among young people on their priorities as regards water management, two topic sessions were convened to share young people's views with other participants, namely "Young People in the Water Crisis and the Challenges to Face" (FT1.19) and "Empowerment of Young People for Water Management and the Strengthening of the Appropriate Use of Water" (FT1.29), both convened by the Mexican Youth Institute with various youth partners from around the world. These sessions aimed to present the valuable role that young people can play in contributing to the solutions of water issues around the world, and showed that young people are effectively the next generation of water managers, and they should be duly educated and empowered to fully assume this responsibility. These issues were summed up by the inspiring quote from Mahatma Gandhi, which appears at the end of the Youth Declaration, be the change you want to see in the world.

Women

Women and men often have different roles, needs and perspectives as regards projects to extend water supply or sanitation. Understanding these differences and making sure that both women and men are full and equal partners in water management is therefore pivotal to success. Aware of this situation, the Forum Secretariat fully supported the creation and operation of the Women's Coalition, an ad-hoc gathering of 36 prominent international women representing women's environmental groups and networks from around the world, which was created specifically for the purpose of the Forum.

The Women's Coalition was created in order to ensure that women's participation and gender perspectives were integrated into the 4th World Water Forum's preparatory process and the event itself. This was the first time that such a large group of gender-sensitive organizations had come together and had been so active at a World Water Forum, to ensure that the gender perspective was accorded the importance it deserves in the water and sanitation debate. The Forum was thus responding to the outcomes of a long line of major water conferences, notably the recommendation of the UN International Conference on Water and the Environment in Dublin in 1992, which had recommended that women be included at all levels of decision-making and implementation as regards water issues.

Women activists at the Forum

Among other tasks, the Women's Coalition organized a Women's Stand at the Forum, convened four topic sessions and co-convened others, presented a series of local actions, brought the participating women's groups together every day during the Forum for the Women's Caucus, and produced a Women's Caucus Declaration.

The titles of the sessions convened by the Women's Coalition reveal a great deal about the main concerns of the Women's Coalition as regards water management. They dealt with "Gender Mainstreaming and Water for Growth and Development: Diversity

as an Agent of Change" (FT1.17), "Bottom-Up Meets Top-Down: Learning Lessons from Latin America and Africa" (FT2.34), "Access to Safe Water and Ecological Sanitation for Rural Areas, Good Practices in Latin America and Eastern Europe from a Gender Perspective" (FT3.07), and "Managing Safe Drinking Water in Areas of Armed Conflict and Ecological Disaster from a Gender Perspective" (FT5.17).

Among other issues, in their Declaration, the Women's Caucus called for gender equity, the empowerment of women, and the recognition by water institutions of women's "role and rights in the protection and management of water", so as to avoid the perpetuation of the "feminization of poverty", as well as more general concerns, such as the protection of ecosystems and the enforcement of "polluter pays principles".

Indigenous Peoples

Through the Mexican National Commission for the Development of Indigenous Peoples (CDI), a significant indigenous participation in the Forum was made possible. Through the CDI, contact was made with a diverse number of indigenous groups, based on which three specific topic sessions were organized, focusing on indigenous positions as regards water management, and bringing together indigenous organizations from a number of countries. Furthermore, an indigenous declaration was debated and signed during a parallel Forum organized by representatives of 13 different indigenous organizations.

Topic Session: Indigenous Towns and Water

The Forum Secretariat also facilitated the arrival in Mexico City of a group of representatives of the Hopi tribe, from the state of Northern Arizona, USA, who ran from their home community to Mexico City to coincide their arrival with the start of the Forum, 2,000 miles away, carrying samples of water from all over the world. These runners came bearing the fundamental message that water is alive and a sacred gift from the Creator, a precious right of all living things, and should always be treated with respect by all peoples of the earth, and not as a commodity.

Rigoberta Menchu, interviewed at the Forum

The three indigenous topic sessions were titled "Is Water Alive? Indigenous Understandings of Water" (FT1.15), "Successful Indigenous Approaches to Integrated Water Resource Management and Achieving the Millennium Development Goals" (FT1.33) and "Indigenous Towns and Water" (FT1.35). All three of these sessions were organized under framework theme 1, Water for Growth and Development, presenting indigenous knowledge and experience as serious options for development. Furthermore, the titles of these sessions perhaps show some of the priority concerns for indigenous peoples as regards water issues.

The Indigenous Declaration underlined the belief that indigenous peoples are guardians of water for future generations, and that the struggle for control of water is intimately linked to the struggle for recognition and their right to self-determination. It demanded that indigenous peoples be fully involved in water projects in their territories, as a major stakeholder with important traditional knowledge to be shared. Additionally, the Declaration called on "all Indigenous Peoples to organize and form committees for the defense of water".

Water Fair

In this space within the Forum, governments, organizations, academic and research institutions, both Mexican and non-Mexican, exhibited the actions that they carry out around the world to contribute to the sustainable use of water and knowledge sharing, spreading educational and research programs, as well as showing aspects related to tourism and the culture

of the participating countries and regions.
The non-commercial aspect was the distinguishing feature of the Fair, in which it is worth mentioning the presence of the Mexican Pavilion, stands of the organizers of the 4th World Water Forum, of international financial institutions, of the United Nations system, of NGOs and civil society groups, as well as international prizes, academic and research institutions, the Global Water Education Village, the 1st International Water and Film Encounter, and the Citizen's Water House.

In a surface area of 2,500 m^2, 123 organizations from 21 countries presented stands, with a daily average of 3,000 visitors.

The Citizen's Water House was a space for gatherings, cultural expressions and debates around the theme of water in the world, in which the workshops on Empowerment and Democratization stand out. A remarkable proximity between the exhibitor and participants gave rise to an atmosphere of trust and warmth in which to take the floor and express ideas, thus achieving the objective of this meeting point.

The Global Water Education Village was a space dedicated to children, in which educational water programs were presented, and the successful actions of children from more than 20 countries were shared, with an average of 800 children visiting daily.

World Water Expo

The World Water Expo was an open space in which various suppliers and buyers of technological, environmental and research innovations in water supply were brought together, thus creating an unparalleled opportunity for the Forum to promote technology which might contribute to the solution of the growing water crisis. It also facilitated knowledge sharing among Forum participants on these new technologies, further contributing to enhancing the Forum experience.

The World Water Expo was organized in an area of 12,000 m^2 in the Banamex Center, the official venue of the Forum, which allowed 340 companies to present more than one thousand products, systems and services.

Of the companies presenting their activities and services, 47% of them were from Mexico, and 53% were from 25 other countries. Furthermore, ten countries took this opportunity to present their expertise through official country pavilions, namely France, Germany, Israel, Italy, Japan, Korea, the Netherlands, Portugal, Spain and Switzerland.

World Water Expo

Water Learning Center

In parallel to the 4th World Water Forum, the Water Learning Center, known as TheInstitute@WWF4, gave Forum participants the chance to increase their skills and knowledge of water management techniques, through specific courses organized throughout the week. By proposing practical "how-to" training courses, it focused on building the capacity of policy makers, water practitioners and users, governments, the private sector and civil society, to design and implement sustainable development, thereby contributing to the achievement of the Millennium Development Goals.

The Water Learning Center was coordinated by the Smithsonian Institute, the United Nations Development Programme (UNDP), the Mexican Center for Capacity Building in Water and Sanitation (CEMCAS), the U.S. Army Corps of Engineers (USACE), and the Secretariat of the 4th World Water Forum. These organizations, together with those proposing the courses, worked together to make a coherent program of learning activities throughout the week, in support of the thematic debates at the Forum. A total of 46 courses were given during the week.

As part of the Water Learning Center, a course was given by the Mexican Center for Capacity Building in Water and Sanitation (CEMCAS) on "Performance Indicators at the First Level of Decision-Making in Drinking Water Management Systems", a class given mainly for Latin American water managers and leaders.

The "Water Message Game", organized by UNESCO and UNESCO-IHE, thematically dealt with conflict prevention and cooperation in international water courses. The game, presented at the Water Learning Center, allowed participants to experience the effects of competitive behavior on reaching cooperative agreements. It demonstrated the crucial importance of trust in negotiations, and allowed some quantification of the cost of distrust, showing the ease with which trust can be broken and the difficulty in turning that around. In this course, the lessons learned were applied to two groups, created to share a water body such as a lake or aquifer, with both aiming to increase economic development through water.

Working Session at the Learning Center

1st International Water and Film Event

For the first time in a World Water Forum, the international community was invited to take part in a Film Event, the main theme of which was water.

With the aim of raising awareness among a public to which they do not normally have access, professional and amateur film makers from all around the world took to the their cameras to generate testimonies and show us what otherwise would not have been

possible to discover chapters of hope, of protest, of alternatives, seen from the reality of 47 countries: Argentina, Armenia, Belgium, Bolivia, Brazil, Bulgaria, Canada, Chile, Colombia, Costa Rica, Czech Republic, Ecuador, Egypt, El Salvador, France, Germany, Ghana, Honduras, India, Indonesia, Iran, Ireland, Italy, Japan, Kenya, Laos, Lebanon, Madagascar, Mali, Morocco, Mexico, Nepal, the Netherlands, Norway, Pakistan, Paraguay, Peru, Slovakia, Spain, Switzerland, Tanzania, Turkey, United Kingdom, United States of America, Uruguay, Uzbekistan and Venezuela.

Film Event Jury

The central theme of the Encounter was "Towards a New Water Culture", which applied both to the exhibition categories – full-length fiction films and documentaries – and those competing – video spots and awareness-raising shorts. Of the 300 films received, 195 were selected to be presented during the Forum. It should be mentioned that 80% of the material received came from civil society organizations, whose voices constituted an essential component of the 4th World Water Forum.

The jury was made up of personalities from the world of cinema, as well as experts from water-related disciplines, from various parts of the globe. The Prizes awarded in the various categories were:

In the video spots categories, first place was awarded to "Careful with water" from the Mexican Ruben Silva Ruiz; there was a tie for second place: "Not even a glass" by Anel Garduño Gonzalez, and "8 seconds" by Ivanov Marmolejo, both of them Mexicans; and two third places: "Be aware", directed by Carlos Alberto Andino, Angel David Maldonado and Jose Antonio Lopez from Honduras, and "Water" by the Colombian Juan Pablo Toloza.

Raymond Jost and Salvador Aguirre, organizers of the Water and Film Event

In the category for awareness-raising shorts, there were two winners, "Water, the mirror of the Andean world" by the Frenchman Luc Bazin, and "The Stave-weir of Lucerne" by Nora de Baan; second place went to "Water First" by Amy Hart from the United States; and third place went to "Public Bath", by the Japanese director Mina Yonezawa.

The organizers of the Event – the Secretariat of the 4th World Water Forum, the World Water Council, the International Secretariat for Water, the French Water Academy, the United Nations Development Programme (UNDP), the United Nations Organizations for Education, Science and Culture (UNESCO), the Mexican National Council for Culture and the Arts (CONACULTA) and the National Cineteca – agreed that audio-visual information stays more readily in people's minds, complementing social learning aspects, which is why they proposed that future editions of the Event should include a special category dedicated to children and young people, in which they can take part as film-makers or as members of the jury.

Cultural Program

The week of the 4th World Water Forum was accompanied by a series of artistic and cultural activities, which contributed to creating a festive and pleasant spirit around this event. The components that made up the artistic and cultural program of the Forum consisted of:

Artistic presentations of Mexico, coordinated by the Mexican National Council of Culture and the Arts (CONACULTA)

Folkloric Ballet of Amalia Hernandez

With the aim of showing to the world the great diversity of cultural expressions that exist in the different regions of Mexico, a cultural program was prepared in coordination with the Mexican National Council of Culture and the Arts (CONACULTA), to allow participants to get to know Mexico through its music, its dance, and its plastic arts and crafts. This part of the program was made up of:

Grupo Tambuco

- The Folkloric Ballet of Amalia Hernandez which presented a varied show of regional dances during the opening ceremony.
- The Tambuco National Dance and Music Group Theater which closed the day on the first working day with its music and dance show.
- Tania Libertad, considered by many as the best singer in the country, who added some spice to the second working day.
- The Government of the State of Veracruz, the University of Veracruz, and UN-HABITAT which sponsored the artistic number on the third day of work, presenting the Veracruz Symphonic Orchestra.
- The Folkloric Music which was present on the fourth working day, with the peculiar music of the Guelaguetza Festival, an event sponsored by the Government of the State of Oaxaca.
- For the end of the closing ceremony, the Mexican tenor Fernando de la Mora was presented, accompanied by Mariachi Vargas de Tecalitlan.
- During the lunch breaks, musical presentations were made that brightened up the venue's dining hall.
- In coordination with the Water Advisory Council of Mexico, which brings together businessmen, academics, opinion leaders and leaders of society, a photography exhibition was set up in the corridor of the Palacios Floor of the Banamex Center.

Artistic Presentations of the Regions of the World

Some countries, embassies and regions of the world presented artistic numbers, representative of their culture.

- Japan organized the "Japan Night" in its pavilion in the Expo, in which it showed various aspects of its culture, such as food, music, handicrafts, etc.
- The Africa region characterized its participation in the Fair by the atmosphere on its stand of rhythms and dances from the region.
- Egypt presented a show "The Egyptian Water Droplets", performed by Egyptian children.

- In Chapultepec Lake, the Netherlands presented the Lunatics (Lunagua Island), a futuristic open-air water show.

Festival and Exhibitions

- The Government of the Federal District of Mexico carried out the Tlalocan Festival, through which the capital was doted with a festive atmosphere, offering several activities such as roundtables, concerts and exhibitions.
- The University of the Claustro de Sor Juana organized a wide range of different activities, such as photographic and sculptural exhibitions, video shows, etc.

Expo Matíz Azul

Special Events

In addition to the main components and activities of the Forum, it was considered important to propose spaces for companies, organizations or individuals, interested in presenting a conference, social event or artistic or cultural program, to be able to do so through a scheme referred to as Special Events, during lunch hours and after each day's topic sessions.

The Special Events consisted of private meetings for the members of each interested organization or company, which made it possible for themes, positions, products and services to be freely presented, with the aim of harnessing the agreements and synergies of their conveners, on the occasion of the Forum. The demand for spaces to organize Special Events was in fact much greater than the space available, which is why priority was given to those countries and organizations that had booked their spaces in advance.

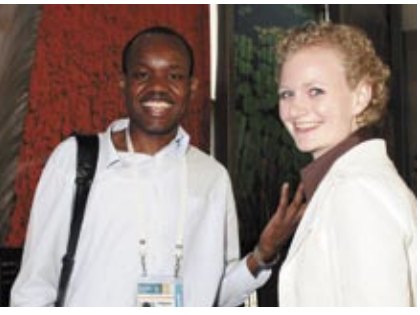
28 Special Events were organized in total from March 17 to 21, 10 of which were from Mexico, 3 from the United States of America, 2 from the Netherlands, 2 from Spain and 2 from international organizations, whereas organizations from Argentina, Belgium, Canada, Denmark, Egypt, Kenya, Switzerland, United Kingdom and Tajikistan also convened one Special Event each. Among these events, 22 of them were conferences, 5 were social events, and one was an artistic presentation.

Dr. Masaru Emoto gave a conference on "the Hidden Messages in Water", the theme of his book that has sold more than a million copies worldwide and has been translated into 36 languages. It demonstrated the Doctor's revealing research on the vibrations received by water that are reflected when photographing the water crystals.

For more information, please consult www.hado.net

During the Forum, a special session was held on the Euphrates-Tigris Initiative (ETIC), which brought together the Ministerial Delegations from Iraq, Syria and Turkey, to discuss the delicate issue of these shared water resources. The fact that these participants were present at the Forum bears testament to the neutral platform provided by the Forum for an open discussion on the resolution of water-related issues, and the format of the invitation-only special session greatly contributed to creating an atmosphere of mutual trust between participants.

For more information,
please consult www.eticorg.net



H2O
H2O
H2O

Partners for Water

Preparatory Process of the Forum

The 4th World Water Forum was the culmination of more than 2 years of intense activities by multiple stakeholders around the globe. Never before had an international water event involved so many stakeholders in preparing the debates on key issues during its preparatory process.

In this way, the Forum was much more than an event; it was the culmination of a period of consistent work and, as such, an important step forward in the water debate. The whole process started on September 29, 2003, when Mexico's candidature for the World Water Forum was accepted by the World Water Council's (WWC) Board of Governors, thus setting the basis for the Forum Secretariat in Mexico, hosted by the National Water Commission of Mexico, and the WWC to jointly prepare the event. This close and constant cooperation between the two co-organizers was pivotal to the success of the event, as was Mexico's commitment at the highest level and its proposal for the Forum to focus on local actions, with the overarching theme of "Local Actions for a Global Challenge".

The preparation of the Forum was largely a decentralized process which had a thematic basis, took in the five regions of the world, and aimed to involve civil society groups in defining the content to be discussed during the event. Each of these processes was coordinated by various groups from around the world, in coordination with the Forum Secretariat, which set the guidelines upon which this process took place, thus allowing the debates to be prepared by the water community itself, in a bottom-up approach.

National Steering Committee Meeting, November 2004

Timeline of the 4th World Water Forum		
2003		Milestones of the preparatory process
Sep	29	Selection of Mexico as the host country of the 4th World Water Forum
	16	Setting up of the Secretariat of the 4th World Water Forum
Dec	8	Creation of the National Steering Committee of the 4th World Water Forum
2004		
Mar	22-23	Formal launching of the Forum in Mexico City: selection of the framework themes and crosscutting perspectives
Apr	14-30	Presentation of the Ministerial and thematic processes of the 4th World Water Forum at the U.N. Commission on Sustainable Development, CSD-12, New York, USA
Aug	16-20	Presentation of the First Announcement during the 2004 World Water Week in Stockholm, Sweden
Oct	28	Regional Process: first meeting of the Americas region, Mexico City, Mexico
Nov	17-18	Meeting to establish guidelines for the Beacons, Mexico City, Mexico
2005		
Feb	2	Regional Process: first meeting of the European region, Paris, France
	23	Regional Process: meeting of the Americas region, Mexico City, Mexico
	24-25	1st Workshop for Beacons: presentation of the Baseline Documents, Mexico City, Mexico.
Apr	11-22	Presentation of the Ministerial and thematic processes of the 4th World Water Forum at the U.N. Commission on Sustainable Development, CSD-13, New York, USA
	18	Regional Process: meeting of the Americas region, New York, USA
May	24-25	Opening of the registration of Local Actions during the meeting of the Global Water Partnership (GWP), Antigua, Guatemala
Jun	19-20	Regional Process: first meeting of the Middle East and North Africa region, Cairo, Egypt
	22-24	Journalists Training Workshop on wter topics. Ciudad Valles, San Luis Potosi, Mexico
	25	Regional Process: first meeting of the Africa region, Addis Abeba, Ethiopia.
	28	Regional Process: meeting of the Americas region, Tabasco, Mexico
	28-Jul	2nd Workshop for Beacons and Regional Committees: Opening of registration for topic-session proposals, Villahermosa, Tabasco, Mexico
Jul	27	Regional Process: meeting of the Americas region, Washington, D.C., USA
Aug	21-27	Presentation of the Second Announcement during the 2005 World Water Week in Stockholm, Sweden Regional Process: meeting of the European region Meeting with Beacons and Regional Committees
Sep	3	Regional Process: meeting of the Sub-Region of South-East Asia, Asia-Pacific region, Bali, Indonesia
	4-11	Journalists Training Workshop on water topics.
	10-18	Beijing, Shanghai and Chengdu, China, during the 19th Congress of the International Commission on Irrigation and Drainage (ICID), China
	22	Regional Process: events referred to as "Towards the World Water Forum", in each of the 31 States of the Mexican Republic, as well as in the Federal District, Mexico

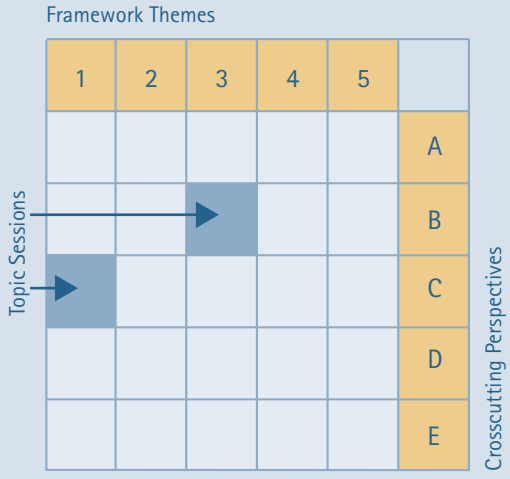
	23-30	Regional Process: meeting of the Pacific Sub-Region, Asia-Pacific region, Apia, Samoa
	28-29	Regional Process: meeting of the Africa region, Tunis, Tunisia
	30	Closing of the registration of topic session proposals
Oct	13	Regional Process: meeting of the Southern Asia Sub-Region, Asia-Pacific region, Colombo, Sri Lanka
	19	Regional Process: meeting of the European region, Strasbourg, France
	21	Regional Process: meeting of the North-East Asia region, Asia-Pacific region, Zhengzhou, China
	24	Regional Process: meeting of the Asia-Pacific region, Tokyo, Japan
	28	Meeting with Embassies and Consulates in Mexico to present the Forum, Mexico City, Mexico
	31-2	Regional Process: meeting of the Central Asia Sub-Region, Asia-Pacific region, Almaty, Kazakhstan
	31-02	Preliminary selection of topic sessions, presentation of local actions from Mexico and preparatory meeting for the Children's Forum, during the 3rd Water Encounter in Monterrey 2005: Towards the 4th World Water Forum, Monterrey, Nuevo Leon, Mexico
Nov	2	3rd Workshop for Beacons and Regional Committees, Monterrey, Nuevo Leon, Mexico
	9-14	Presentation of the 4th World Water Forum during the 5th Interamerican Dialogue on Water Management, organized by the OAS, UNESCO, IWRN, Montego Bay, Jamaica
	15	Closing of the registration of Local Actions
	18-19	Regional Process: meeting with Civil Society Organizations in South America, Buenos Aires, Argentina
	22-25	Presentation of the 4th World Water Forum during the 22nd IWRA World Water Congress, New Delhi, India
	23	Presentation of the 4th World Water Forum in South America during the La Plata Dialogues, Foz de Iguazu, Brazil.
	25-26	Regional Process: meeting with Civil Society Organizations in Central America, San Salvador, El Salvador
	29-30	Regional Process: meeting with Civil Society Organizations in Northern America, Mexico City, Mexico
Dec	7-9	Regional Process: meeting of the Africa region, Windhoek, Namibia
	8-9	Journalists Training Workshop on water topics, Buenos Aires, Argentina
	13-15	Regional Process: meeting of the Middle East and North Africa region, Cairo, Egypt
2006		
Jan	20	Meeting with Heads of Communication of the State Ministries and Mexican governmental dependencies to coordinate the national media activity, Mexico City, Mexico
	26-27	Meeting of the session conveners, Mexico City, Mexico
Feb	7	Meeting with Embassies and Consulates in Mexico to coordinate the logistics of the Ministerial component, Mexico City, Mexico
	13-14	Journalists Training Workshop on water topics, San Salvador, El Salvador
Mar	16-22	4th World Water Forum

Thematic Preparatory Process

Thematic Framework

The first 12 months of activity concentrated on setting the bases and creating the networks and structures necessary for the successful preparation of the Forum. A Kick-Off Meeting took place in March 2004, attended by over 350 participants from all over the world, who, among other tasks, defined the priority issues on which the 4th World Water Forum would focus. This left the Forum with a thematic matrix of five framework themes (FTs), essentially the five main concerns for the world water community, and five crosscutting perspectives (CCPs), namely the barriers and the constraints to achieving success on these five themes (see figure 1). This Thematic Matrix provided a reference to guide the activities of the water community throughout the Forum's preparatory process.

Figure 1 Thematic Matrix



Framework Themes

1. Water for Growth and Development
2. Implementing Integrated Water Resources Management
3. Water Supply and Sanitation for All
4. Water Management for Food and the Environment
5. Risk Management

Crosscutting Perspectives

A. New Models for Financing Local Water Initiatives
B. Institutional Development and Political Processes
C. Capacity Development and Social Learning
D. Application of Science, Technology and Knowledge
E. Targeting, Monitoring and Implementation Assessment

The organization of the 4th World Water Forum was, as much as possible, a decentralized process, with the organizers relying on an inner circle of organizations related to the themes, regions, and interest groups. Related to the themes and perspectives, the aim was to allow for multistakeholder debate to take place prior to the event, and for this purpose, contact was made with a number of key worldwide organizations, experts in each of the fields defined above, and in most cases already undertaking work on these themes as part of their core activities. These organizations or consortia of organizations were to be subsequently referred to as the *Beacons*. Their tasks during the preparatory process included:

- Preparing a baseline document on the theme or perspective, to guide the preparatory process
- Collaborating with the other groups involved in the preparation of the Forum, namely the Regional Committees and Interest Groups, to seek synergy and potential crossover of concepts
- Promoting the Forum in general and their theme or perspective in particular, through own their consultations and meetings
- Contributing to the selection of topic sessions at the Forum, based on the many proposals made;
- Preparing a thematic document for the Forum, taking account of the input received throughout the preparatory process;
- Taking part in the synthesis process, to allow a greater understanding on the theme or perspective.

To reach these objectives, these beacons were asked to consult and consider the opinions of as many different stakeholders as possible, and for each theme and perspective, a consortium of organizations was therefore

put together. Thus a balanced and holistic position was expected in these documents. Furthermore, each team was supported by a Mexican organization, to provide a local point of contact and support for the Forum Secretariat, which in turn provided guidance on the work program to be followed by the Beacons.

FT1: Water for Growth and Development

The important task of leading the process on the first framework theme was entrusted to the World Bank, with the support of the Colegio de Mexico, the World Water Council, and the National Water Commission of Mexico (CONAGUA). This theme aimed to show the importance that according greater priority to water can have on the development of a nation, and argued that infrastructure alone will not solve water problems, but must be accompanied by stronger institutions and human capacities.

FT2: Implementing Integrated Water Resources Management

Framework theme two was coordinated by the Global Water Partnership (GWP), for their worldwide leadership on this theme and past experience as the focal point at the 3rd World Water Forum. GWP received support in this endeavor from the United Nations' Department of Economic and Social Affairs (UNDESA) and the CONAGUA. The theme aimed to highlight the necessity for the use of water resources to be managed holistically rather than competitively between various sectors.

Beacons and Regional Representatives Meeting, Stockholm, 2005

FT3: Water Supply and Sanitation for All

The Beacons for framework theme three were the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF) and the United Nations Human Settlements Program (UN-Habitat), for the lead role each of these organizations played in the Secretariat of the UN Millennium Project Task Force on Water and Sanitation. They were supported in this task by the CONAGUA. The aim of this theme was to show the many ingenuous ways being employed to overcome the barriers inherent to providing basic water and sanitation services to the growing population of planet Earth.

FT4: Water Management for Food and the Environment

The International Water Management Institute (IWMI) took the lead Beacon role in theme four, backed up by the Food and Agriculture Organization of the United Nations (FAO), the International Commission on Irrigation and Drainage (ICID), and the CONAGUA. The theme highlighted the need to increase agricultural efficiency to meet growing food requirements, while avoiding the excessive withdrawal of water resources from aquifers and ecosystems, thus protecting natural environments.

FT5: Risk Management

Framework theme five was a highly collaborative effort between the World Meteorological Organization (WMO), the Cooperative Program on Water and Climate (CPWC), the Japan Water Forum (JWF) and UNDESA, with the active support of the CONAGUA. The frequency of water-related disasters is on the increase, and this theme advocated for preventive measures and preparedness to be adopted rather than reaction following such natural catastrophes.

CCPA: New Models for Financing Local Water Initiatives

The coordination of crosscutting perspective A was taken on by the Global Water Partnership (GWP) and the World Water Council (WWC), for their key role in support of the former Camdessus Panel on Financing Water for All and its follow-up, the Gurria Task Force on the same

topic. The perspective showed how the lack of available funding for investment can be a significant barrier to the implementation and upscaling of successful local initiatives.

CCPB: Institutional Development and Political Processes

The Beacons for crosscutting perspective B were the School of Geography, Politics, and Sociology of the University of Newcastle upon Tyne, UK, the Development Planning Unit of the University College London (UCL), the Latin American Faculty for Social Sciences (FLACSO), and the CONAGUA. It was shown through this perspective that stronger institutions are fundamental for the successful decentralization of water management to the lowest appropriate level.

CCPC: Capacity Development and Social Learning

Crosscutting perspective C was led by a consortium including the United Nations Institute for Water Education (UNESCO-IHE), CapNet, IRC – the International Water and Sanitation Centre, the World Water Council, Streams of Knowledge, the Cooperation Program on Water and Climate and the Water Advisory Council of Mexico, these organizations coordinating their efforts in a cooperative spirit. Developing the capacity of local actors is essential for the success of decentralization processes, and this perspective aimed to illustrate the importance of accompanying enhanced infrastructure with social aspects as a step towards sustainable management of services.

CCPD: Application of Science, Technology and Knowledge

Crosscutting perspective D was jointly coordinated by the Mexican Institute for Water Technology (IMTA) and the International Water Association (IWA), each of them bringing their own perspective and expertise to the debate. The necessity of applying appropriate technologies for the problem at hand was exemplified by this perspective, and increasing access to this technology can increase the possibilities of local actors to face their local water issues.

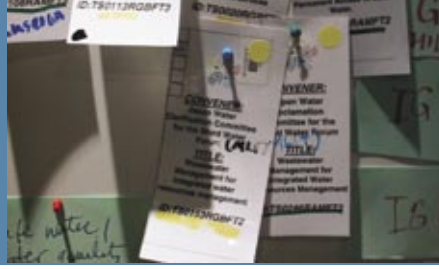
CCPE: Targeting, Monitoring and Implementation Assessment

Finally, crosscutting perspective E was headed by the UN World Water Assessment Program (WWAP), with the support of the World Water Council, for the worldwide leadership and knowledge of both organizations on this subject. This crosscutting perspective showed how setting targets for governments, both national and local, can help to motivate their efforts to achieve global goals, as can the setting up of systems to monitor and assess their progress towards these goals.

A first draft of the baseline documents, produced by these Beacons was presented in February 2005, at the first formal Beacons Workshop, held in Mexico City. This meeting therefore marked the start of the debate on the key issues of the Forum, and the opening up of this debate to the wider water community. Following the workshop, the baseline documents were made available through the Forum website, promoted through a number of preparatory meetings, as well as supported by the Beacons themselves, who opened them up for comments from interested stakeholders. The idea of this consultation was to make sure that the "global challenges" represented in the baseline documents were not theoretical positions but were truly representative of "local actions" taking place around the world.

Thematic Beacons and Regional Representatives Meeting, Mexico City, 2005

Many means were employed to receive this feedback on the baseline documents, and each Beacon went about its work in a different way. A good number of virtual



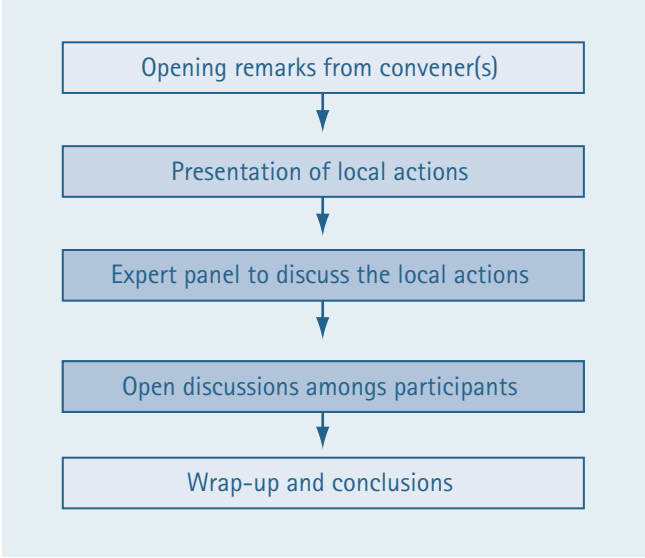
workshops, local workshops, and regional meetings and consultations were organized, either by the Beacons themselves or by other interested parties, to discuss the concepts put forward through the documents. A rich level of interest and participation was noted in the themes of the Forum, and the water community was allowed like never before to provide substantive input to the bases of discussion at the Forum. Furthermore, three coordinating workshops were held between the Forum Secretariat, the WWC and the Beacons, in February, June and November 2005, during which this decentralization of the thematic preparation was discussed in a frank and open environment.

The baseline documents were also promoted as a means of identifying the key issues or subtopics related to each theme, which might eventually be dealt with at the Forum by topic sessions, as part of the Thematic Forum. To achieve this goal, an open "expression of interest" in convening topic sessions through the Forum website was announced in June 2005, at the second Beacons workshop, held in Villahermosa, Tabasco, whereas the process to register local actions had already began in May 2005. Through the Beacons, Regional Committees and both the Forum Secretariat's and the World Water Council's own contacts, these announcements were spread around the world, and received an unprecedented reply. By the close of the registration process for local actions, over 1,500 valid examples of local water management had been received, whereas more than 600 proposals for topic sessions had been made, from more than 300 organizations. Both the local actions and topic session proposals were made available for consultation on the Forum website, thus providing a showcase on the global scale for examples of local water management, and an excellent networking opportunity for like-minded individuals and organizations.

Topic Sessions at the Forum

The structure of the topic sessions was designed to truly focus on the implementation of local action. Although a number of variations were to be noted, in particular the idea of joining a series of sessions on the same topic into a "mega-session", with common conclusions. The standard format is shown below.

Basic Structure of a Topic Session



Presentation of local actions - the convener selected a number of local actions from the database of local actions, registered throughout the preparatory process. These local actions were presented by the actors involved in their implementation, to share the lessons learnt. The presentation of local actions was the basis for the discussions in the topic-sessions.

Comments by a multi-stakeholder expert panel - a panel of experts, preferably from varying sectoral and geographical backgrounds, analyzed the local actions presented and commented on converging trends as regards the factors behind their success or failure.

Open discussion among participants and conclusions - participants at the sessions were invited to ask questions and debate the main ideas, with the aim of leading the session towards recommendations for strengthening local actions in the topic discussed.

Whereas in previous World Water Fora, anybody proposing a session was able to convene one, at the 4th Forum, due to the huge and unprecedented interest in convening sessions, it would have been impossible to provide time and space to each interested organization. Furthermore, this would not have allowed the Forum to comply with its initial desire to provide more focus on certain key issues and on action implementation.

3rd Workshop for Beacons and Regional Comittes, Monterrey, Nuevo Leon, Mexico

As a result of the richness of the session proposals, a selection process for the final topic sessions was undertaken by the Forum Secretariat and the World Water Council, with the support of the Beacons, Regional Committees and Interest Groups. As much as possible, proposals dealing with the same sub topic were encouraged to be grouped together or merged into a single session, even though in some cases this brought together contrasting positions within the same session. One excellent example of this was the merging of various proposals on the subject of large infrastructure, in session FT1.25, which brought together organizations as diverse as the United Nations Environment Program (UNEP), International Commission on Large Dams (ICOLD), World Wildlife Fund (WWF), U.S. Army Corps of Engineers (USACE) and International Rivers Network (IRN), within the same session. This particular process helped to avoid polarization in sessions, and ensured that balanced viewpoints were presented and discussed within each session.

Furthermore, proposals whose focus was too technical or too focused on abstract concepts were oriented to other components of the Forum, such as the Learning Centre, or were proposed as side-events. Some session proposals were better suited as local actions, to be potentially presented within other sessions. However, despite the best efforts of all involved, some session proposals just simply could not be fitted into the Forum program. This process took a great step towards finalization at the third workshop for Beacons, Regional Committees and Interest Groups, held in Monterrey, Mexico, in October/November 2005. In total, almost 400 of the 600 initial proposals registered were combined into 206 topic sessions finally presented at the Forum, which provided a great networking opportunity for organizations. The Monterrey meeting aimed to make sure that all major sub topics were dealt with by sessions, and to provide coherence and balance both within each of the five themes and between them.

Another significant means of bringing organizations together through the organization of the Forum was the inclusion of local actions as a mandatory element of each topic session. Session conveners were invited to select, from the database of over 1,600 registered local actions, between two and four actions that they would like to have presented during their session. In many cases, conveners made contact with interesting examples that were previously unknown to them, creating an unparalleled networking opportunity. Completely aside from the conclusions of the topic sessions and other processes, this was without doubt one of the greatest achievements of the Forum. Finally, 546 local actions were presented during the Forum.

Conveners Meeting 2006, Mexico City

The database of local actions registered for the Forum has been passed onto the United Nations system, for a new initiative known as the Water Action Network Database (WAND), thus providing a further showcase for these local actions, and an even stronger link between the Forum and the United Nations system.

Regional Preparatory Process

In parallel to the thematic process, the Forum took in a regional process to bring the water priorities of each of the regions of the world to the attention of the global community. For this purpose, the world was divided into five regions, namely:

- The Americas
- Asia-Pacific
- Africa
- Europe
- Middle East and North Africa

In each region, efforts were made to select a Regional Coordinator, backed up by a formal Regional Committee, bringing together a cross-section of the key players within the region. The Regional Coordinators served as catalysts for the participation of the forum in the regions, and although each had its own particularities, each of them performed, among others, the following functions:

- They selected the key themes and priorities for the region, on which their work would be based
- They produced a regional document, presenting the main water-related concerns and solutions adopted within the region. The regional documents were considered in the preparation of the Ministerial Declaration, and were both annexed and referred to in the Ministerial Declaration
- They promoted the identification and registration of local actions for the Forum
- They promoted the registration of topic-session proposals from the regions, and supported the Forum Secretariat in selecting a certain number of these proposals as sessions at the Forum
- They organized a space representing the region within the Water Fair

To reach these objectives, each region organized its work with a different structure and schedule, supported in their endeavors by constant communication with a dedicated team within the Forum Secretariat. A first step was made at the Kick-Off Meeting in March 2004, in which participants were divided into tables according to their region of origin, to discuss the possible process to set up a regional coordination and the key actors that should be involved. This set the bases for the efforts over the following months to formally establish the working bodies.

The effort to bring together the key actors in each of the five regions of the world was unique in the history of the World Water Forum, and was one of the key results of the Forum. It is to be expected that this union will bear fruit in the coming years, leading to closer cooperation within the regions, and in two cases even to a formal structure being set up to continue this collaboration, which was the case for the Asia-Pacific Water Forum and the European Water Partnership, the creation of which was announced during the Forum.

Participation of the 4th World Water Forum in the AfDB Water Week, Tunis 2004

During the Forum, the regional documents were presented during a plenary session, each on a different day of the Forum, with a high-level panel of speakers selected by the region to discuss regional priorities. These documents were distributed to all Forum participants, ensuring wide distribution of the work carried out by the Regional Committees.

The following are the main characteristics of the process in each of the regions and the main strategies for action.

The Americas

The Americas region was the first to become active in preparation of the Forum, in October 2004, through the creation of a multistakeholder Operative Committee, composed of nine key institutions in the region, and a Consultative Network of 63 different organizations. The presidency of the Operative Committee was on a rotational basis, between the Organization of American States (OAS), Interamerican Development Bank (IADB),

World Bank (WB) and Global Water Partnership Central America (GWP). The process covered the whole of the Americas continent, North, Central and South America.

To achieve the challenges faced by the water sector in the Americas, it is necessary to define mechanisms that tackle existing inequalities and guarantee a sustainable economic growth in the region as a whole, considering the economic, social and environmental goals of each country.

Several countries in the region have initiated the transfer of functions to the local level with varying results, and to strengthen this process, the necessary technical and economic resources should be assigned. This situation is particularly relevant if it is considered that the infrastructure is obsolete and needs to be renewed.

As regards the institutional and legal framework for water management, the countries should continue to work on the setting up of the reforms to allow an ordered and efficient management of water. On this subject, it will be necessary to consolidate the social participation schemes in the conceptualization and setting up of programs and actions in which society has not traditionally been involved.

Asia-Pacific

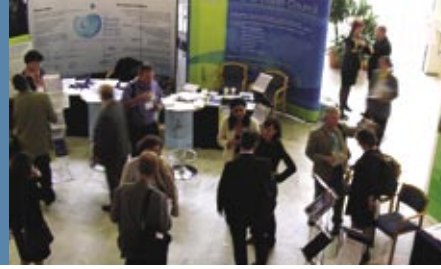
The Asia-Pacific region formally began its work in May 2005, and was coordinated as a whole by the Japan Water Forum. It was formed through five Sub-Regional Committees, namely Northeast Asia, Southeast Asia, South Asia, Central Asia, and Oceania and Pacific, each of which had its own Sub-Regional Coordinator. The Japan Water Forum appointed liaison officers for each Sub-Regional Committee, to ensure the coordination with the five sub-regions. Each sub-region produced its own input to the overall regional process, which therefore attempted to present common conclusions for the regions, produced at a regional synthesis meeting in October 2005.

Sub-Regional leaders for Asia-Pacific , Tokyo, 2005

In order to attend to the common problems and challenges present in the Asia-Pacific region, it has been proposed that for each monetary unit assigned to the construction of water and sanitation works, an additional 70% be assigned to the appropriate operation and maintenance of this infrastructure, including the development of the capacity and technical skills of those who will be in charge of these activities.

In another order of ideas, to drastically reduce the vulnerability of the population to natural water-related disasters, one focus that has been proposed is for resources to be assigned to preventive actions (early-

Asia-Pacific Regional Session, during the Forum Week, 2006



Middle East and North Africa Regional Session, during the Forum Week, 2006

warning systems, greater knowledge of the phenomena and evacuation plans), which would reduce to a great extent the investments currently assigned to restoration activities.

As regards the preservation and better use of water, without doubt a fundamental activity is to reduce the volume used in agriculture, a value which in some countries reached up to 95%.

Africa

The African process was formalized, in June 2005, through a tight coordination between the African Ministers Council on Water (AMCOW) and the African Development Bank (AfDB). An Executive Committee was put together, chaired by AMCOW's own Executive Committee, in addition to a Technical Committee, co-chaired by both a representative of AMCOW's Technical Advisory Committee and a representative of the AfDB. This ensured a close collaboration in shaping Africa's input to the Forum, as well as the involvement of Ministers from the region from the very beginning.

It is important to mention that only 3.8% of water resources in Africa have been developed, and are applied for three basic uses: agriculture, water supply and industry. The challenge consists of obtaining the necessary funds for the construction of infrastructure to provide sufficient water, sanitation, irrigation and electric energy, as well as to develop institutions and human resources that guarantee their appropriate operation.

It should be commented that water can make the key difference in the development of Africa if it is correctly managed and is used efficiently, for which it is necessary to make a joint effort between the public and private sectors. By means of clear politics and strategies, as well as real commitments for their application, water can help to eradicate poverty, reduce water-borne illnesses and contribute to sustainable development.

Middle East and North Africa

The process in the Middle East and North Africa (MENA) region, which formally commenced at a consultative workshop held in Cairo, Egypt in June 2005, was coordinated by the Arab Water Council, supported in this role by the World Bank MENA region and the Islamic Development Bank, bringing together, among others, 18 countries of the 22 Arab States, and in total 63 key organizations, both international and from the region itself.

Due to the scarcity of water resources in the region, non-conventional sources of water supply have been widely adopted in the form of desalinating plants for saline and brackish water, reuse programs of sewage and of agriculture drainage water. In this context, fossil groundwater has also been widely used.

Various countries have already initiated national programs to improve the efficiency of irrigation, minimize the losses through piping, and to achieve the participative management of water, the protection and improvement of water quality, management of droughts, groundwater management policies, and sewage reuse plans.

As regards financial schemes, long-term partnerships have been developed for water supply between various

WWC Board of Governors Meeting, Morocco 2005

international companies and water authorities through BOT projects (Build Operate and Transfer), and in some cases, cost recovery has been initiated for irrigation, drainage and new agrarian developments. The main investments have been aimed at the water and sanitation sub-sector, with varying results, since there are countries with coverage superior to 90% and others with less than 60%.

As regards governance, the creation of conflict resolution mechanisms has been proposed, as has the development of the capacities of water management institutions and the achievement or a greater decentralization or responsibilities and participation of the multiple stakeholders involved in water issues.

Europe

The input from Europe was a product of the leadership of the Netherlands Water Partnership, which chaired both a multistakeholder Operative Committee, comprised of 11 key partners from different sectors and from all over the continent, and a Consultative Network of 25 organizations. Both of these were formally established in August 2005, although work on preparing regional priorities had already begun in February of that year. It is worth noting that the efforts in the region will be ongoing, through the creation of a European Water Partnership.

An essential aspect for the development of Europe as regards water has been the European Water Framework Directive (EFWD), which has allowed common objectives to be established for water policies in all of the member states of the European Union, and has helped to capitalize its experiences. The Directive allows the management of water across borders, and compels all Member States to reach the objective of the "good status" of its water bodies before 2015.

The recent and disastrous floods in Europe, as well as the expected increase in the frequency and severity of these events, motivated the European Commission to propose in 2004 the development and setting up of a program of action for the prevention, protection and mitigation of floods, coordinated between the Member States. In the same way, the European Flood Alert System is being developed to issue early warnings, with between three and ten days forewarning.

"Hydrosolidarity" mechanisms, which are based on the belief that those with greater possibilities have the responsibility of helping their fellows, involve all stakeholders in society, including governments, local authorities, civil society groups, private companies and multilateral institutions. Europe has established that it can provide this help, even going beyond the geographical limits of the continent, mainly to nations in Africa.

As regards flood control, efforts should continue for the setting-up of early warning systems, the construction of infrastructure for supervision, the establishment of flood zones, and the development of capacity, skills and knowledge sharing in the region.

As may be noticed, the various regions of the world proposed a series of relevant strategies and concepts related to water, with the aim of achieving an appropriate management and preservation. Within these concepts, the following general trends may be observed:

- All human beings have the right to drinking water and appropriate sanitation services.
- Water has an environmental and economic cost that must be recognized.

- The level of development and economic conditions in some countries are at a level which makes it essential to introduce the principle of hydrosolidarity, meaning to support these countries technically and economically for them to move ahead. This type of assistance implies providing them with the necessary knowledge and resources for them to develop by themselves the actions that will allow them to use water resources sustainably, recognizing gender equality.

- Water must be included in governments' national agendas and development plans and the importance of its appropriate use and preservation must be re-assessed.
- It is fundamental that countries have water laws, as well as single institutions in charge of the administration and preservation of water resources.

- It is important that the consensual plans that are established in each basin to achieve an appropriate use and preservation of water resources be obligatory by law, which will allow an optimization of investments and continuity to planned programs and actions.

- For populations to be able to get involved in water-related subjects, they should be provided with clear, to the point and transparent information.

- Solutions accepted by the users of a basin require wide consensus in which ethnical, social, economic and environmental aspects should be considered, which will further contribute to developing the concept of the common good, essential to guaranteeing the sound management of water and the preservation of basins.

- In parallel to the construction of hydraulic works, the necessary resources should be assigned to guaranteeing their adequate operation and maintenance, including the development of the capacity and technical skills of those who will be in charge of these activities.

- The results obtained allow the conclusion to be drawn that there is no single scheme for the administration of services, since the convenience of water and sanitation organizations being public, private or mixed institutions depends on each particular case, and is a decision that depends upon local governments.

- Greater resources should be assigned to the modernization of irrigation, a very important aspect considering the limited availability of water in various areas, and the need to increase food production to meet the requirements of an ever-growing population.

- Since the available volume of water in some countries is not sufficient to cover their requirements for food production, these countries should be particularly careful with the food products that they produce, with the aim of favoring balanced trade and preservation of their water resources.

- Climate change in the world represents a new challenge, since the temperature has changed on our planet, giving rise to increasingly severe and frequent hurricanes and droughts. Preventive and mitigation actions should be carried out to allow these natural phenomena to be confronted more effectively, including the creation of flood zones.

- Technology should be shared at the international level and adapted to the context of each locality. Technology with a practical focus is always welcome.

- With a world population that requires increasing goods and services, many traditional industrial processes are no longer viable, and the situation in the future may be even worse in various areas, unless our patterns of consumption and conservation of water and other natural resources are modified.

- Based on the aforementioned, it is important to underline the need to develop clear rules for the management, use and preservation of water in basins that are shared by two or more countries, which should be translated into formal agreements. In this context, it is essential that the necessary technical and economic resources be assigned to ensure the application of these agreements.

As has been previously commented, these concepts are part of the documents written by each of the five regions in which the world was divided for the purpose of the organization of the Forum. These documents are an important source of knowledge and have become a reference as regards aspects associated with water in our planet.

Involvement of Civil Society and Interest Groups in the Preparatory Process

From the outset, the Forum set out to be an open and inclusive space for all, for exchange of ideas, collaboration and debate, across sectors and geographical regions, in which the participation of civil society groups was essential for the whole range of positions to be presented and discussed. Around the world, a number of civil society groups are involved in excellent local actions to bring water to the neediest, and the Forum was designed as a platform for all and sanitation to present and share these activities with the international community. The 4th World Water Forum thus involved civil society groups like never before in both the preparatory process and the Forum itself. To this end, the United Nations system of Major Groups was taken as a basis for the work that was undertaken with five civil society groups, referred to as Interest Groups, namely:

- Young people
- Children
- Women
- Indigenous peoples;
- NGOs

For this task, a specific organization or consortium of organizations was identified as the coordinator for each of the groups, and contact was established with them to jointly work out a coherent work plan towards the Forum. Each group was active in various ways, with the objective not for the Interest Group Coordinators to speak on behalf of the whole group involved, but to provide an open and inclusive space for the interaction with other groups in the Forum, and to contribute to the preparation of a common position beforehand.
Each of the groups was supported by a Civil Society Liaison Office, set up within the Forum Secretariat, with a dedicated team aiming to open up avenues of participation to NGOs. This liaison office facilitated the task for the Interest Groups by providing support in terms of logistics, information and coordination. Among other initiatives, the liaison office also facilitated a 50% discount in Forum registration fees for all NGOs and students, and provided an NGO space, free of charge, within the Water Fair.

As part of the efforts to include the participation of civil society groups in the Forum program, a number of topic sessions were reserved for each of the interest groups, and they were encouraged to present local actions or act as panellists in other sessions. In total, 1,010 civil society organizations took part in the Forum, represented by 1,718 individuals, from 111 countries. In addition, NGOs as a whole, including gender groups, young people and children, indigenous peoples, etc, were present as conveners in 81 of the 206 topic sessions, and presented 33% of all local actions at the Forum.

Despite the significant efforts made by the Forum Secretariat to include civil society in the Forum proper, it is worth noting that a number of parallel events were organized in Mexico City to coincide with the week of the Forum. Rather than looking at this as a hindrance, the objectives of the alternative events were in many ways complementary to the Forum itself, and raised the awareness and level of concern about water resources management.

Virtual Water Forum

The Virtual Water Forum was an important means of participation in the 4th World Water Forum, allowing as it did interested water stakeholders from all over the world to give their opinions and input so as to shape the thematic contents of the Forum. In total, 67 virtual workshops were organized with conveners from 16 different countries, and 1,824 registered participants, communicating in either English or Spanish.

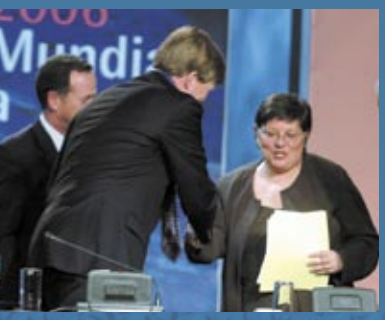
The Virtual Forum was an Internet-based tool, on the 4th Forum website, allowing anyone with an interest in sharing their knowledge and views on water-related issues to virtually meet and discuss with other stakeholders from all over the world. It contributed to creating synergy between participants and thus preparing many of the debates at the

Forum itself, in many cases bringing respective positions closer together in advance of the event.

Workshops were convened by a moderator, who could either issue invitations to key individuals and colleagues, and/or receive spontaneous requests from the public to join in the debates. The moderator was in charge of accepting participants for his or her workshop, of motivating discussions, of keeping to the time schedule, and of producing concrete outcomes from the debates, as an input to the Forum. These outcomes were then placed on the forum website for consultation by the water community, Beacons, Regional Committees, and other key partners were encouraged to take them on board in preparation of their respective documents.

Some of the Beacons used the platform of the Virtual Forum to open up their baseline documents for consultation, as was the case for the Beacons for the Risk Management theme. The vital input received from the 161 participants in this workshop allowed the Beacons to incorporate new ideas for the final version of the document, presented and discussed at the Forum. Indeed, this was the virtual workshop which produced the greatest level of participation.

In total, of the 67 workshops, 29 were convened by Mexican organizations or individuals, and 15 were from India, making these two countries by far the two most active in the Virtual Forum. Indeed, 62% of workshops were convened by organizations from within the American continent, while surprisingly, none of the conveners were from the Middle East. As regards the Framework Themes under which the workshops were convened, there was a fairly even spread between themes 1, 2, and 3 (27%, 22% and 30% respectively), whereas significantly less workshops dealt with themes 4 and 5 (15% and 6% respectively).



4TH WORLD WATER FO
WE CAN MAKE WATER A MORE REL
CE FOR SUSTAINABLE DEVELOPM

GERMAN PAVILION

Communication Program for the 4th World Water Forum

Communication had a fundamental role to play in the 4th World Water Forum as a strategic tool to provide relevant information on water and the challenges related to it, both present and future; to publicize the progress towards the Forum, its components and the preparatory process. Furthermore, to bring the various stakeholders involved closer together, to work towards a single objective: making the Forum a platform for multistakeholder dialogue aimed at promoting actions and policies for sustainable water management.

The organization of the 4th World Water Forum implied significant challenges. First of all, throught the very nature of water as a vital resource for the survival and the social and economic development of humankind, and furthermore throught the endless number of stakeholders involved in its care and preservation, from children, young people and women to the public and private sectors, in addition to farmers and non-governmental organizations.

Secondly, for its international character, implying the need to generate a climate of expectation and interest around the 4th World Water Forum on all the continents of the world, and more incisively in Mexico, as well as promoting the participation of various stakeholders from all the regions to enrich the preparatory process and the thematic content of the Forum with their proposals, positions and experiences.

Based on these principles, the Forum communication team implemented a holistic communication strategy, which included three stages of development. The first had the aim of informing the different target audiences about the Forum and the vital importance of water, and placing the question of water on the agenda of national and international public opinion.

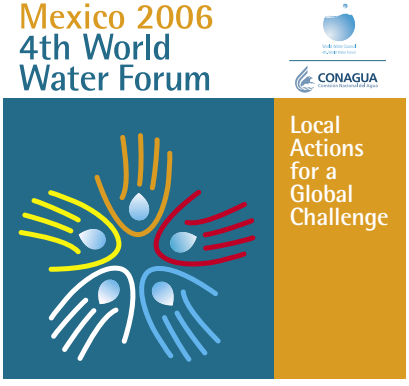
The second phase, echoing the overarching theme of the Forum, "Local Actions for a Global Challenge", aimed to create awareness about the importance of carrying out personal, regional, local, national and global actions as part of the search for solutions to water-related problems, as well as promoting participation in the 4th World Water Forum, as an opportunity to actively contribute along these lines.

The objective of the third step was to disseminate, on a daily basis, both nationally and internationally, the most relevant aspects of the 4th World Water Forum during the week in which it was held, from March 16 to 22, 2006, and to raise interest in the event among the accredited media.

The communication efforts were aimed at various publics: decision-makers working with water, experts from the water sector, the media and the public-at-large.

Graphic Identity of the 4th World Water Forum

After defining the overarching theme of the 4th World Water Forum, Local Actions for a Global Challenge, a graphical identity was created to communicate this slogan creatively; to provide the 4th Forum with its own image, in continuity with the previous Fora, with the inclusion of the logo of the World Water Council, and to identify Mexico as the host country of this Forum and a country committed to sustainable water management.



According to the aforementioned, the hand was chosen as the main element, since on its own it is a universal symbol for action and integration, and together, it evokes cooperation and teamwork.

The logo of the 4th World Water Forum consists of five hands, of different colors, which represent people of different races and from all five continents, who have different experiences faced with water problems. Their union calls for the need to strengthen efforts in all the regions of the world and to face up to the shared challenge.

The drop of water in the palm of each hand represents the local actions that should be taken to protect and ensure a sustainable use of water resources. The elements selected allude to the common commitment to ensuring access to every human being to this vital resource and the viability of future generations.

The Website of the 4th World Water Forum

The website of the 4th World Water Forum was a center piece of the communication on the Forum, since it allowed the international water community to be kept informed in a timely manner on the progress in the preparatory process; the work of the thematic and regional teams; evaluation documents, as well as the forms of participation in the Forum, some of them through the website itself, which made the participation of all interested parties possible, irrespective of their geographical situation.

The Virtual Press Room of the 4th World Water Forum

The website was also the platform for the creation of a Virtual Press Room, a space aiming to tighten the links with national and international media, raise their awareness about the great challenges faced by humankind as regards water issues and inform them about the objectives of the Forum, and the main activities taking place prior to, during and following the Forum.

This Virtual Press Room on the website – which included sections such as press releases, a media newsletter, interesting information, official Forum publications, press kits, a translation guide, speeches, information about the International Press Center, biographies and the 4th World Water Forum in the press – constituted a fundamental element of strategic publicity to position this platform.

The website also allowed the dissemination of some other communication materials, such as the Forum's monthly electronic newsletter, the daily report during the week of the Forum, the request form for use of the graphical identity, and links to sponsors and donors. It also included the Forum's Publicity Campaign through the availability of radio and television adverts, and a few samples of coverage in the printed press.

The Newsletter of the 4th World Water Forum

From the beginning of the preparatory process, the Secretariat of the 4th World Water Forum published bilingual a electronic newsletter in both English and Spanish on the main themes of relevance to water, the main discussions about this resource internationally, and the progress towards the Forum.

This newsletter included articles from various personalities from Mexico and the rest of the world and was distributed monthly or bi-monthly to the Forum Secretariat's specialized database and various international networks of the water community.

Daily Report during the 4th World Water Forum

From March 16 to 22, the International Institute for Sustainable Development (IISD), a specialized organization in providing independent information services, developed a daily newsletter about the activities of the Forum, as well as a final synthesis on the most relevant aspects of the 4th World Water Forum, the Ministerial Conference and the opening and closing ceremonies.

The six daily reports were distributed to participants at the Forum and the electronic version reached around 45,000 readers around the world, through the Water-L electronic mailing list, the publication of the reports on-line through the Forum's website and on a web page created especially for this purpose www.iisd.ca/ymb/worldwater4.

IISD created a digital photo library of the 4th Forum, which is available free of charge on the same web page.

The Media and the 4th World Water Forum

The media strategy aimed to achieve a media penetration in water issues to generate a great impact in public opinion, in society at large and in decision-makers working with water, as well as to create a climate of expectation on the 4th World Water Forum as a space for discussion to solve water problems.

This strategy was directed at both news agencies, the written press, electronic media (television, radio and Internet websites), as well as alternative media, and was carried out in the five regions into which the world was divided for the purpose of the Forum: Africa, the Americas, Asia-Pacific, Europe and the Middle East and North Africa.

In Mexico, as the host country, the theme of water was incorporated into the national agenda as one of the priority issues to reach the target audiences: the public sector nationally, Through out the country, water utilities, the private sector, interest groups, and especially, citizens at large, as a means of pushing for a new culture of water care.

IISD Daily Report

Both nationally and internationally, the media strategy was based on the establishment and strengthening of a tight relationship, through the awareness of media

representatives as regards water issues; the generation of specialized information in attractive formats; the timely publication of information and the coordination of interviews with spokespeople of the Forum Secretariat or personalities taking part in the regional or thematic preparatory process. Furthermore, the communication efforts in international events during the preparatory process made it possible for each region to publicize its own challenges.

As a result of these efforts, almost 7,000 articles in the media in various languages were written. It is worth mentioning the publication of articles in some of the most important worldwide media, such as the New York Times, BBC News and BBC World, as well as the coverage carried out by press agencies with worldwide networks, such as EFE, AFP, DPA and KYODO.

International Events of the Preparatory Process in the Communication Strategy

In 2005, the Regional Committees carried out meetings with the aim of preparing the regional documents and defining their forms of participation in the 4th World Water Forum. Activities were developed in eight of the most important regional events, with the aim of positioning the theme of water and the 4th Forum:

1. "Regional Workshop Water for Life and Development", held in the framework of the 10th meeting of the Global Water Partnership's (GWP) Consulting Partners (May 24 to 25, 2005) in Antigua, Guatemala.
2. "1st Latin American Municipal Water Forum" (June 22 to 24, 2005) in Ciudad Valles, Mexico.
3. "5th Interamerican Dialogue on Water Management" (October 9 to 14, 2005) in Montego Bay, Jamaica.

4. "European Water Solidarity Week" (October 19, 2005) in Strasbourg, France.
5. "Asia-Pacific Regional Synthesis Meeting" (October 24, 2005) in Tokyo, Japan;
6. "Latin American and Caribbean Forum on Water and Human Settlements" (November 8 to 10, 2005) in Mexico City.
7. "African Regional Meeting of the Executive Committee for the 4th World Water Forum" (November 22 to 25, 2005) in Windhoek, Namibia.
8. "2nd Consultative Workshop of the Arab States in preparation of the 4th World Water Forum" (December 13 to 15, 2005) in Cairo, Egypt.

Heidi Storsberg, Aly Shady, Taeko Yokota and Torkil Jønch-Clausen, New Delhi, India, November 2005

Furthermore, communication activities were carried out in eleven renowned international water events, in which the Secretariat of the 4th World Water Forum also took part:

1. "Celebration of World Water Day 2004" (March, 2004), in which the preparatory work of the Forum was officially launched in Mexico City.
2. "World Water Week in Stockholm" (August, 2004) in Stockholm, Sweden.
3. "13th Session of the Commission on Sustainable Development (CSD-13)" (April, 2005) in New York, United States of America.
4. "International Water Conference" (June, 2005) in Villahermosa, Mexico.
5. "Workshop on Challenges and Perspectives of Water in Megacities" (July, 2005) in Mexico City.
6. "World Water Week in Stockholm" (August, 2005) in Stockholm, Sweden.
7. "19th International Congress of the International Commission on Irrigation and Drainage (ICID)" (September, 2005) in Beijing, China.
8. "12th World Water Congress of the International Water Resources Association (IWRA)" (November, 2005) in New Delhi, India.
9. "3rd Water Encounter in Monterrey 2005: Towards the 4th World Water Forum" (October, 2005) in Monterrey, Mexico.
10. "La Plata Dialogues" (November, 2005) in Foz de Iguazú, Brazil.
11. "Preparatory Meeting for Conveners of the 4th World Water Forum" (January, 2006) in Mexico City, Mexico.

The work of the communication team in each of these events required an analysis of the main water problems in the region, with the aim of generating information of interest for the media that would have an impact in the regional and local public opinion.

The media activities in the five regions allowed stories on water and the 4th World Water Forum to be generated in renowned media in each region; to create personalized networks and synergies to capitalize on the positive dissemination of the 4th Forum; create awareness among the target audiences on water problems in their localities; transcend intercultural communication barriers to distribute messages from Mexico, as the host country, and to foster participation in the 4th World Water Forum.

With the aim of publicizing the Forum on all continents, adverts were released in renowned media circuits such as Newsweek and OECD Observer, and public service announcements on the 4th World Water Forum were broadcast to the public on television channels such as CNN International, CNN in Spanish, Euronews, Channel News Asia and TV5. The broadcasting of these messages worldwide was very effective in positioning the 4th World Water Forum in public opinion and in promoting participation.

Local Actions in the Communication Strategy

The organizers of the 4th World Water Forum, convinced that water-related problems have a greater impact at the local level, decided to promote local actions as a means of solving global water challenges. In reply to this, the dissemination of some local actions from Mexico and the rest of the world, which were representative of the local capacity to generate concrete results was promoted.

In this way, a selection of local actions was made in each continent so as to facilitate the understanding of the contents and messages of the 4th World Water Forum; they showed the social and cultural context of water manifestations, and allowed real experiences of people in their daily struggle with water to be shared.

In the case of Mexico, local actions that allowed the strong commitment of our country for a sustainable water management were selected to be transmitted, since water is considered as a strategic resource of national security.

The diffusion of these actions allowed the media to obtain relevant and timely information, which raised the awareness of the target audiences about the importance of their participation in the care and preservation of the most vital resource for the survival of humankind. Furthermore, it gave the local actors and regional coordinators a platform to present their experiences and lessons learnt to international public opinion.

Generation of Specialized Information for the Media

The communication team of the 4th World Water Forum generated specialized information for the media in various formats, with the aim of informing them in a timely manner of the progress towards the Forum, as well as providing them with additional data that might be used for them as supporting material for their articles, in an easily-understandable language, given the specialized nature of the contents of the Forum.

100 press releases were developed prior to, during and following the Forum, in Spanish and English. Some of these press releases were translated into a number of other languages for them to have a greater penetration in a particular region.

The press releases produced prior to the Forum presented the details of the main events of the regional and thematic process and the progress of the Forum and its components. Those produced during the week of the Forum gave detailed information on the events during the Forum's opening, closing, the main topic sessions and keynotes and regional speeches.

Among these press releases, those on the five themes that defined the thematic framework of the Forum, namely

Water for Growth and Development, Implementing Integrated Water Resources Management, Water Supply and Sanitation for All, Water Management for Food and the Environment, and Risk Management, are worth mentioning, since they communicated synthetically and in an easily-understandable form the main issues raised by the Beacons in the documents created to guide the discussions during the week of the Forum.

Similarly, press releases were produced to present the challenges, positions and future perspectives presented in the regional documents by the coordinators of each region, namely Africa, the Americas, Asia-Pacific, Europe and the Middle East and North Africa. These special press releases were drawn up in consultation with the Regional Committees and Beacons.

Combined with this, the information team developed and designed fact sheets to facilitate the work of the media, by providing information in a clear and concise form. These sheets may be divided into four categories:

1. Those which offered information related to the Forum (what it is, background information and what were the framework themes and crosscutting perspectives that defined the thematic framework).
2. Those that provided hard data on water in the world, either by region or by theme.
3. Data on local actions from Mexico and other nations.
4. Those that presented in synthetic form the various components of the Forum, such as: the 1st International Water and Film Event, the 2nd Children's World Water Forum and the Learning Center.

Similarly, the Forum Roundup for the Media newsletter (ForuMedia) was also created, which was published on a monthly or bi-monthly basin in the months prior to the Forum. The objective of this newsletter was to maintain a constant flow of information to the media containing the most outstanding news of the Forum, and it was distributed to a list of more than 4,900 journalists from around the world.

Water Media Program for Journalists from Developing Countries

The Water Media Program for Journalists from Developing Countries of the 4th World Water Forum, which was carried out jointly with the World Water Council and the Inter-American Development Bank, consisted of a Training Program and a Journalist Contest, in order to ensure their participation in the Forum.

Aware of the enormous impact of the media in the interest shown by society in general for subjects of great relevance such as water, the Training Program aimed to create awareness among journalists as regards the management of the environment, in particular water resources, in order to provide them with the appropriate tools and knowledge for the development of their articles.

Three workshops were organized in Latin America (Mexico, Argentina and El Salvador) in which journalists from all over the region took part. Furthermore, three workshops were held in Asia during the preparatory process, in which journalists from this continent took part.

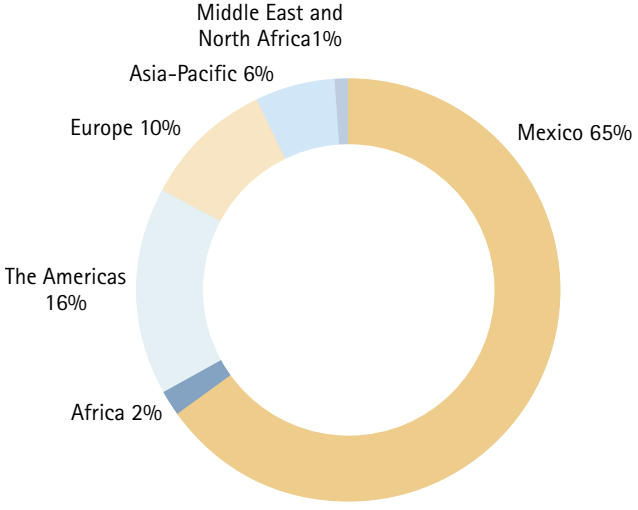
The enthusiastic response of journalists to the Training Program shows their interest in opportunities for capacity development on the enormous variety of themes related to water and on specific focuses to adapt these to their respective countries and media.

As a follow-up to the contest developed at the 3rd World Water Forum, the Water Media Program for Journalists from Developing Countries issued an invitation to award 35 trips to take part in the 4th World Water Forum, with all expenses paid, to those journalists who presented the best stories related to the overarching theme of the Forum "Local Actions for a Global Challenge".

The selection of the winners was carried out according to criteria such as the precision, initiative, originality, clarity of interpretation and value to promote a better understanding of themes related to water resources, as well as a greater awareness of water challenges faced at the local level.

The International Press Center and the Relationship with the Media During the Week of the 4th World Water Forum

1,619 journalists, photographers and cameramen were accredited to take part in the 4th World Water Forum, from the printed and electronic press, radio, television and news agencies. Of the latter, 73% corresponded to members of the media with offices in Mexico, meaning local media or international correspondents based in the host country.



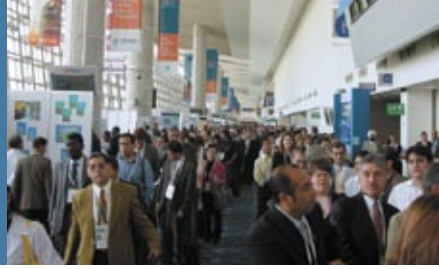
The region most represented was the Americas, followed by Europe and Asia - Pacific. As regards countries, the most present by number of journalists were Mexico, United States, Spain, France, Japan and Great Britain.

Media Session

With the finality of attending to the greatest number of journalists possible, an International Press Center was established, measuring 800 m², with three rooms for press conferences; two rooms for journalist training workshops, the objective of which was to support the Water Media Program for Journalists from Developing Countries; 250 computers connected to the Internet and specialized services such as webcasting and satellite uplink, as well as work and rest areas.

The International Press Center included a Media Attention Module, in which the activities of each day were communicated to the journalists, and various information requests were replied to in English, French, German, and Spanish. Additionally, in this Module, the material that was distributed to the media present at the 4th Forum was prepared and managed, such as press releases and invitations to press conferences, and a guidebook for journalists.

For an efficient distribution of information, bookcases were placed inside the International Press Center, in which more than 250 different informative materials were distributed. Furthermore, press kits were put together, including the Regional and Thematic Documents, a specific information manual for the press, as well as a booklet with national and international local actions. This information, available in Spanish and English, was distributed during accreditation and subsequently through the Media Attention Module.



Special Topic Sessions related to the Media

Within the official program of the Thematic Forum, were convined of two topic-sessions related to the media was promoted: "The Mass Media: Key Elements for a Conscience and Social Participation in the Resolution of Water Problems" and "The Mass Media as a Detonator of a Water Culture", in which renowned personalities from the world of art, communication and opinion leaders took part.

These sessions promoted dialogue on the crucial role of the media as creators of public opinion in favor of the sustainable use of water.

Media Coverage

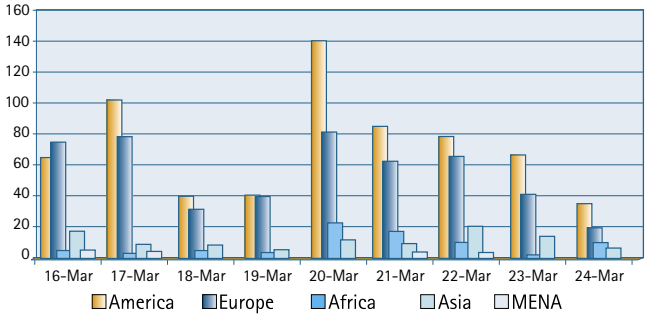
The coverage of the 4th World Water Forum, in its preparatory process, during and following the event, was wide and positive internationally. The main themes dealt with in these journalistic notes, articles and reports were water problems globally and locally, as well as general information on the Forum.

From 2004 through May 2006, around 7,595 articles were published in national and international media. Around 5,196 were published by Mexican media and around 2,369 were non-Mexican. Latin America was the region in which most coverage was registered, since from November 2005 to March 2006, 50% of the information was published there.

Faced with the search for information from the media, the coverage increased significantly as the week of the 4th World Water Forum drew closer. In March 2006, the greatest level of media coverage was reached with more than 3,700 notes in Mexican media and around 1,530 notes from the international press.

During the week of the Forum, the coverage in Mexico was extensive, with more than 2,300 notes. The media in Mexico focused their articles on local challenges and the participation of President Vicente Fox and other governmental officials. Furthermore, they presented the demonstrations against the Forum in the host capital.

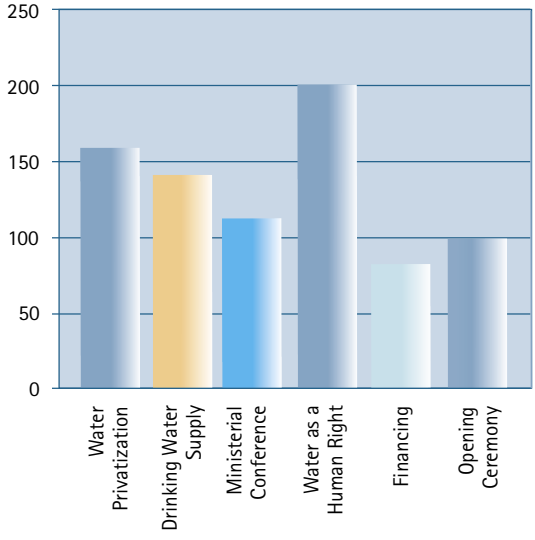
International Media Coverage During the Week of the 4th World Water Forum



The international Media registered more than 1,200 news and articles from March 16 to 24. The regions which produced the greatest level of coverage during the week of the Forum were: the Americas, with approximately 50% of the coverage, Europe with almost 37%, and Asia - Pacific with around 7%.

The most recurring themes in the international media were the participation of civil society organizations in the Forum, the theme of water as a human right, the debate on water privatization, as well as regional problems in the Americas, Europe and Africa. Some of the most quoted participating personalities were the President of the World Water Council, Loïc Fauchon; Abel Mamani, the Bolivian Water Minister; Cristina Narbona, the Spanish Minister of the Environment; HRH Prince Naruhito of Japan, and HRH Prince Willeam-Alexander of

Themes Most Communicated



the Netherlands. Additionally, some Media gave the floor to those who opposed the Forum or expressed critical opinions of it latter.

In conclusion, during the week of the 4th World Water Forum, the press paid attention to the controversial themes, as well as the information and hard data distributed on water related problems in the world. As regards the Forum, the media highlighted its importance as an opportunity to reflect on and generate knowledge on the theme of water resources.

NB: The monitoring of international media was selective and is representative of the notes that appeared in the main media and international press agencies.

Marketing and Publishing

The Marketing and Publishing Communication Program of the 4th World Water Forum sought to make the theme of water a cause for opinion leaders and the media, as well as generating a climate of expectation prior to the event and an important impact in the key publics during the week of the Forum.

Through this program, non-Mexican and Mexican stakeholders alike were invited to take part in the preparatory process and the Forum itself, 120 different events were attended to draw attention to the Forum, promotional material and articles were distributed and partnerships were established with various institutions in Mexico and the rest of the world for the publicizing of the event.

Furthermore, special projects were carried out to position the Forum, such as the Forum Insignia, the 9th International Poster Festival and the creation of a Commemorative Lottery Ticket.

Insignia of the 4thh World Water Forum "Water for Life"

With the aim of evoking the fragility of water, a crystal drop pendant was designed as a symbol of the 4th World Water Forum and distributed freely to opinion leaders, national and international media, participants at the Forum and the public-at-large, especially children, young people and women.

The "Water for Life" insignia, as a creative and easily-understandable element, served as a call to awareness to make a better use of water and to promote a new culture that values its vital importance for humankind.

Prior to and during the 4th World Water Forum, 134,004 medallions were distributed, which were individually packaged with a card insisting on the need for water about the care and preservation.

9th International Poster Festival in Mexico: "Reflections of Water"

In partnership with the 9th International Poster Festival in Mexico (BICM in Spanish), a graphic design exhibition that is carried out every two years and travels around various countries of the world to show the quality and creativity of its posters, was organized as a special collection under the theme "Reflections of Water".

25 designers of worldwide renown (six Mexicans and 19 non-Mexicans) were invited to this collection, which was presented in the venue of the 4th World Water Forum and on bus stops in Mexico City.

Commemorative Lottery Ticket for the 4th World Water Forum

Through a partnership between the 4th World Water Forum and the National Lottery, two lottery tickets referring to the Forum were issued and put on sale, which included a message about the event and World Water Day.

Lottery Tickett, 2006

Commemorative Phone Card on the 4th World Water Forum

With the aim of reinforcing the communication on the 4th World Water Forum, two types of phone cards were designed and commercialized, thus constituting a means of great penetration of the message, owing to the accessibility of the cost.

Publicity and Public Service Announcements

The 4th World Water Forum's publicity campaign, initiated in 2004, had several objectives that responded to different moments, and was carried out both nationally and internationally, in the regions of the Americas, Asia and Europe, through public service announcements.

In Mexico, efforts were first made to announce to the population that this country would be the host to a hugely important international event worldwide, through the publicity campaign "Water for Development". Subsequently, under the slogan *"our commitment is to make water reach everyone's mouth before it's too late"*, the publicity messages focused on positioning the 4th World Water Forum as a platform for dialogue to provide solutions to water problems.

Finally, after the holding of the Forum, society-at-large was informed about the results and commitments reached during the Forum, to implement actions aiming to preserve water resources; as well as exhorting the public to carry out personal actions in favor of water.

It is important to note that worldwide Public Service Announcements (PSAs) were broadcast on the television channels CNN International and CNN in Spanish, Euronews, Channel News Asia and TV5, in February and March 2006.

With the aim of bringing together efforts to reach all publics and make the most of this historic opportunity as the host country of the Forum, agreements were reached with the Communication Council, a civil society organization founded by the private sector, and that has distinguished itself through campaigns of national interest, aimed at positively influencing the mindsets and habits of Mexican society. This linkage reinforced the potential of the messages of the Forum and allowed greater penetration among the population to be achieved, through magazines, newspapers, cinema, radio, television, bus stops, mobile publicity, Lottery ticket and newspaper stands, keystones at subways, shows, stands in malls and postcards, among others. The result of this collaboration with the Communication Council offered a multiplying effect in the media mentioned.

International Television Broadcast of the 4th World Water Forum

In an additional effort to extend the coverage of the Forum and its results, an international broadcast was carried out through a closed television circuit and an international signal through Intelsat satellite 805, which covers the regions of the Americas, Europe and Asia, and which in turn allowed the signal to be broadcast to domestic satellites on the African continent.

In this way, around 500 million people had the chance to follow the activities of the official program of the 4th World Water Forum, among which the opening and closing ceremony, topic sessions, keynotes and regional speeches, the World Water Expo and Water Fair, the cultural events, the Encounter "Children, Water and Education", the "Youth World Water Forum" and other parallel events are worth mentioning.

Similarly, messages from Water Ministers from various countries were broadcast, which allowed the various positions of governments on the global challenge of this resource to be known. To achieve this goal, a daily program, outlines of events, biographies of participants and videos on water issues were drawn up, among other activities.

Through this effort, a total of 559 hours of the Forum were broadcast.

Photographic and Video Archives of the 4th World Water Forum

With the aim of recording the most relevant elements of the official program of the 4th World Water Forum and its parallel events, it was considered essential to put together both photographic and video archives, to serve as documentary and informative material for all those interested in the theme of water.

The recording of images of the Forum was carried out from March 10-22. In total, 10 hours were filmed and 7,500 photos were taken.

The video archive consists of a master of images, and one video per segment, with a total length of 28 minutes, and a special edition of 7 minutes with the event's most representative moments. These videos are part of the video library of the National Water Commission of Mexico.

Communication as a catalyst for the Achievements of the 4th World Water Forum

The communication efforts carried out by the Forum Secretariat, characterized by the implementation of the communication strategy; the regulation of the frequency of communication; the permanent focus of the extensive target audiences; the creation of networks with journalists and the media, as well as the designing of information tools, favored the active participation of more than 27,510 people and 1,619 journalists in the 4th World Water Forum.

Furthermore, the publicity and media relations programs made it possible to reach 1,161 million people who constituted the television audience of the main channels internationally, as well as generating 7,595 news stories related to the Forum and water (figures, page 212).

Communication was a driving element that allowed the 4th World Water Forum to position itself as a propitious space to discuss water-related issues and solutions to the great challenges, and favored the participation of multiple stakeholders of the water community and other spheres of human activity.

Similarly, the implementation of a holistic communication program supported the work carried out by the previous Fora in awareness-raising among non-specialized publics on the theme of the vital nature of water.

In Mexico, the dissemination of the 4th World Water Forum allowed awareness to be created amongst the media on the importance of water, and inserted it in the agenda of the media, politics and public opinion.

The advertisements, the intensification of the theme of water in the news, the growing publication of messages related to the Forum and the marketing activities aiming to include the population-at-large, especially young people and children, allowed a *momentum* to be created towards the holding of the 4th World Water Forum in Mexico.

The main aim of the communication program was to position the 4th Forum with the national and international public, which was achieved to a great extent through:

- Setting up a communication strategy that brought together all efforts, achieving cohesion and congruence in the messages and the images of the Forum towards the outside world.
- The result of an important supporting network of the Mexican government through the Office of the President of Mexico and the Mexican Ministries of Foreign Affairs and the Environment and Natural Resources, in particular.
- The outstanding participation of the stakeholders involved in the preparatory process, mainly the Beacons, the Regional Committees, the Secretariat of the 4th World Water Forum, the World Water Council and the international organizations that supported this endeavor.

The communication program benefited the Mexican nation by generating a call for awareness for the care and preservation of water, and also driving a citizen's movement in favor of water resources.

As regards the actions aiming to attend to the national and international publics, the communication team maintained a clear commitment to help the Forum Secretariat and the world water community in the positioning of water issues in the debate within the media, and to achieve its inclusion in the humanitarian agenda of the nations that took part in the Forum.

TV Master

Figures	
Website of the 4th World Water Forum	
Visits	Approx. 230,000
Newsletter of the 4th World Water Forum	
Number of editions	18
Number of people in the distribution list	More than 10,000
Daily reports during the 4th World Water Forum	
Daily reports during the week of the Forum	6 as well as 1 synthesis
Copies of the IISD newsletter distributed daily on site	1,200
Outreach of the electronic distribution by number of readers	45,000
Specialized information for the media	
Press releases issued	100
Number of editions of the ForuMedia	10
Distribution list for press releases and ForuMedia to journalists around the world	4,995
Data sheets developed	79
Relationship with the media	
Total number of interviews between international and Mexican media and spokespeople of the Forum	435
Press conferences held	133
During the week of the Forum	
Journalists accredited	1,619
Media accredited	508
Press conferences managed during the week of the Forum	117
Interviews coordinated between the media and spokespeople of the Forum during the week of the Forum	109
Coverage in the media	
Approximate publication of notes from 2004 to May 2006	7,595
Marketing Program	
Promotional articles distributed	367,651
"Water for Life" insignia distributed	134,004
Commemorative telephone cards issued	5,000,000
Participation with the mobile stand in worldwide events	120
Production of videos on the Forum	3[1]
Video and Photo Reporting on the Forum	Video – 10 hours, photos - 7, 500
International Television Broadcast (March 16-22, 2006)	559 filming hours
Media impacts	
Media impacts in international television for publicity activities and media relations	1,161 million television viewers[2]
Television shorts (official time in Mexico)	45,360[3]
Radio shorts (official time in Mexico)	554,400
Impact in alternative media	5,158,916[4]

1 Introductory Video to the 4th World Water Forum (8 minutes, in English and Spanish); Opening Video of the 4th World Water Forum (4 minutes, in English and Spanish); Video Water Poem (to music).
2 The captive audiences reported by BBC World, BBC News, Channel News Asia, CNN International, CNN in Spanish, Euronews and TV5 were counted.
3 From February 2004 to May 2006.
4 Radio shorts in supermarkets, press insertions, shows, bus stops, stands in malls, keystones in Mexico, etc.

Next Steps

The World Water Fora are milestones in a continuous process aiming to increase awareness of water problems and promote dialogue among all stakeholders. Each Forum has been unique with its own characteristics and components, which have evolved since the 1st World Water Forum in 1997.

The 4th World Water Forum mobilized a great variety of stakeholders from various parts of the world around water issues. This great mobilization was achieved through a decentralized preparatory process, based, on one hand, on the work of the Regional Committees, which were created in the five regions into which the world was divided, and on the other hand, by the Beacons, who gave life to the Forum's framework themes and crosscutting perspectives. In addition, the interest group coordinators orchestrated the participation of the various civil society groups.

The Forum's preparatory process also included the efforts of the national governments of a large number of countries, who together drafted the Ministerial Declaration. For the first time, a specific encounter of parliamentarians and another, of local governments were held on the occasion of the Forum. In this way, the interaction between the three levels of political decision-making was achieved, which resulted in the strengthening of proposals through various institutional channels.

The limited number of topic sessions during the Forum gave rise to a joint effort from sometimes very diverse organizations on specific themes. Synergies were created in a process that might otherwise have been characterized by the polarization of each session convener's positions.

Hence, a permanent dialogue was created between the various stakeholders involved in water management, which culminated during the Forum itself. A dialogue that does not come to an end with the 4th World Water Forum, but which must continue through the preparatory process of the 5th Forum, and further beyond.

Creation of the Mexican Water Forum Alliance

The National Water Commission, the National Association of Water and Sanitation Utilities, and the Water Advisory Council, all from Mexico, have expressed their interest in creating an association to follow up on the work of the 4th World Water Forum.

The Mexican Water Forum Alliance (MWFA) will thus shortly be created with the aim of providing continuity to the efforts made for the organization of the 4th World Water Forum, as well as to follow up on the synergy and agreements reached at the Forum. Similarly, the MWFA will facilitate the participation of Mexico and several organizations from the Americas in the 5th World Water Forum.

Continuity of other Initiatives

Among the initiatives from the 4th World Water Forum that were proposed to continue, the following stand out:

A group of organizations that are part of the Empowerment and Democratization Project are working on a proposal to follow up on some of the recommendations derived from the workshops and from the Empowerment and Democratization Project.

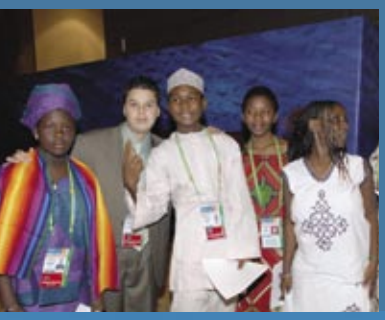
The database of local actions collected during the Forum's preparatory process has been totally updated, analyzed, and made available to the public with the aim of sharing the experiences of the local community on water issues with different stakeholders from all over the world. A meeting has been planned with the United Nations Department of Economic and Social Affairs (UNDESA) to make better use of the results, and to see how this initiative can be followed up on.

The 4th World Water Forum continued with many of the components used in previous World Water Fora, such as

the World Water Expo, Ministerial Conference, Virtual Water Forum, but also innovated in a number of ways, including its extensive multi-stakeholder preparatory process, and the involvement of different stakeholder groups in both this process and the Forum itself. Thus the involvement of Parliamentarians and Local Authorities in the Forum was formalized and institutionalized, and NGOs as a whole, and interest groups of children, women, young people and indigenous peoples in particular, were given a much greater presence and importance. It is to be hoped that some of the components employed at the 4th World Water Forum may serve as a model for the following Fora.

Two of the regions involved in the regional preparation of the Forum, Europe and Asia-Pacific, have already formalized the working relationship brought together for this purpose through the creation of a permanent body, which will aim to continue the efforts of representing the region's position on water issues. Similarly, it has been planned to work in the Americas region to promote the creation of a Forum for the Americas, which might allow some progress in the solution of the region's problems.

Furthermore, work is also ongoing on the dissemination of the results obtained at the Forum, both with the national and international community. In addition to this Final Report of the Forum, a Synthesis Document has been prepared, which centers on formulating conclusions on the substantive questions and the progress reached at the Forum in the various themes tackled. The conclusions from the Synthesis Document will be an important source of input to the 5th World Water Forum, to be held in Istanbul, Turkey, in March 2009. Through the Mexican Water Forum Alliance, the various Mexican organizations that took part in the organization of the 4th World Water Forum will also prepare their participation for the 5th Forum.



reto globa

Additional Information

Ministerial Declaration

We, the Ministers assembled in Mexico City on the occasion of the 4th World Water Forum, Local Actions for a Global Challenge on March 21 and 22, 2006

1. Reaffirm the critical importance of water, in particular freshwater, for all aspects on sustainable development, including poverty and hunger eradication, water-related disaster reduction, health, agricultural and rural development, hydropower, food security, gender equality as well as the achievement of environmental sustainability and protection. We underline the need to include water and sanitation as priorities in national processes, in particular national sustainable development and poverty reduction strategies.

2. Reaffirm our commitment to achieve the internationally agreed goals on Integrated Water Resources Management (IWRM), access to safe drinking water and basic sanitation, agreed upon in Agenda 21, the Millennium Declaration and the Johannesburg Plan of Implementation (JPOI). We reiterate the continued and urgent need to achieve these goals and to keep track of progress towards their implementation, including the goal to reduce by half, by the year 2015, the proportion of people unable to reach or afford safe drinking water.

3. Reaffirm, in particular, our commitment to the decisions adopted by the 13th Session of the United Nations Commission on Sustainable Development (CSD-13), in April 2005, on policy options and practical measures to expedite implementation in water, sanitation and human settlements. We note with interest the importance of enhancing the sustainability of ecosystems and acknowledge the implementation and importance in some regions of innovative practices such as rain water management and the development of hydropower projects. Further reaffirm the importance of the involvement of relevant stakeholders, particularly women and youth, in the planning and management of water services and, as appropriate, decision-making processes.

4. Take note of the Ministerial Declaration of the 3rd World Water Forum and recognize the work done within the UN System in support of member States, in order to reach the aforementioned goals. In this regard, we support the coordinating role of UN Water and highlight the need to strengthen its work within its mandate among the relevant UN organizations, funds and programs. We appreciate the inputs from the UN Secretary General's Advisory Board on Water and Sanitation to reinforce ongoing implementation efforts towards reaching water and sanitation targets. We express our continued support to initiatives like the Water for Life Decade and our interest in the United Nations Secretary General's WEHAB Initiative.

5. Recognize the contributions of the 4th Forum and its preparatory regional process to building capacity at international, regional and national levels and promoting the exchange of best practices and lessons learned on international water and sanitation issues.

6. Acknowledge the input of the Forum for the follow up segment on water and sanitation of the 16th Session of the CSD, to be held in 2008 which will play an important role to monitor and follow-up decisions on water and sanitation and their inter-linkages taken at CSD-13, and as an example of coordinated participation and involvement of governments at all levels, civil society, intergovernmental organizations, non-governmental organizations, private sector, scientific institutions, partnerships, and international financial institutions regarding water issues and other relevant stakeholders.

7. Reaffirm also the decision of the 13th Session of the Commission of Sustainable Development regarding, inter alia:

   a) that a substantial increase of resources from all sources, including domestic resources, official development assistance and other resources, will be required if developing countries are to achieve the internationally agreed development goals and targets, including those contained in the Millennium Declaration and the JPOI, and
   b) that Governments have the primary role in promoting improved access to safe drinking water, basic sanitation, sustainable and secure tenure, and adequate shelter, through improved governance at all levels and appropriate enabling environments and regulatory frameworks, adopting a pro-poor approach and with the active involvement of all stakeholders.

8. Recognize the importance of domestic and international policies that foster and assist building capacities and cooperation at all levels to mitigate water-related disasters including prevention, preparedness, risk assessment, community awareness, resilience and response.

9. Recognize the important role that parliamentarians and local authorities are playing in various countries to increase sustainable access to water and sanitation services as well as to support integrated water resources management. An efficient collaboration with and between these actors is a key factor to meet our water related challenges and goals.

10. Note with appreciation the work of stakeholders at the regional preparatory process towards the 4th Forum as well as during the Forum itself, and take note of the documental output of the said regional preparatory stakeholder process, included as annex to this declaration. As appropriate, this output can be used as source of information for our tasks. We also thank participating parliamentarians and local authorities for their valuable views and opinions expressed during our joint working session at the 4th World Water Forum, and take note of their statements included as annex to this Declaration.

11. Welcome the launch at the 4th Forum, of the CSD Water Action and Networking Database (CSD WAND), as a means of implementing the decision from CSD-13 to develop "web-based tools to disseminate information on implementation and best practices" on water and sanitation. The CSD-WAND will serve as a platform for exchanging information and best practices, lessons learned and relevant international agreements and policy recommendations. We note that the CSD WAND has been built upon information collected during the 2003-2005 CSD Cycle, in the Portfolio of Water Actions – as an output of the Ministerial Conference of the 3rd World Water Forum--, and in the database of local actions of the 4th Forum.

12. Encourage all stakeholders, including national and international agencies, and other international and regional fora, such as World Water Week in Stockholm and the water weeks of the regional development banks, to contribute to and exchange information through the WAND.

13. Thank the Government of Mexico and the World Water Council for the organization of the 4th Forum and for their determination to promote better water management through dynamic local actions for a global change.

Complementary Ministerial Declaration

Proposed and signed by Bolivia, Cuba, Uruguay and Venezuela

The Ministers or their representatives herein signing at the 4th World Water Forum, declare before the participants of this Forum, the international community and the people of the world, the following:

Access to water with quality, quantity and equity, constitutes a fundamental human right. The States, with the participation of the communities, shall make efforts at all levels to guarantee this right to their citizens, within their respective countries. Thus, we agree to continue making all efforts within the Commission on Sustainable Development of the United Nations and other international fora according to their mandates, to recognize and make this right effective.

We declare our profound concern regarding the possible negative impacts that international instruments - such as the free trade and investment agreements - can have on water resources, and reaffirm the sovereign right of every country to regulate water and all its uses and services.

We exhort the international community and multilateral entities to comply with the commitments repeatedly made to support efforts of countries to guarantee access to water and sewage treatment.

We call on all States to develop the World Water Forum in the framework of the international multilateral system, based on the principles of full participation and inclusion.

Local Governments' Declaration On Water

1. We, Mayors and local elected representatives from around the world, gathered together on the occasion of the 4th World Water Forum in Mexico on 16-22 March 2006, mindful of the responsibilities and powers of local authorities in relation to drinking water and sanitation, recall the following principles[1]:

1.1. Freshwater is a scarce and endangered resource that is essential to life, development and the environment, and is a common good belonging to the whole of humankind;

1.2. All human beings have the right to water in the quantity and the quality required to meet their essential needs, as well as to sanitation, a key factor in human health and the preservation of ecosystems;

1.3. Each individual's right to water, and their usage of it, should be exercised with respect for the needs of present and future generations;

1.4. Women play a pivotal role in development, and particularly in the supply, management and conservation of water.

and we note that:

1.5. The quantity and quality of water have declined significantly due to individual and collective behavior that is detrimental to the sustainable management of this natural resource;

1.6. One in four people do not have access to water in sufficient quantity or of an adequate quality, and one in two do not have an adequate sanitation system. Water-borne diseases are the greatest cause of infant mortality around the world;

1.7. Increases in urbanization, unhealthy living environments and desertification, and more frequent droughts, floods and cyclones due to climate change, have an impact on the quantity and quality of water resources.

2. We, Mayors and local elected representatives, recognize that:

2.1. The United Nation's Millennium Development Goals (MDGs), which propose to reduce by half the proportion of people without sustainable access to safe drinking water by 2015, are of direct concern to all local governments;

2.2. Local authorities play a fundamental role in the management of water resources and in the organization of public water and sanitation services. Their role should be recognised and strengthened. Local authorities should be able to freely choose between various management models;

2.3. The equitable management of water resources requires an integrated approach and shared responsibilities between the different levels of governance, and should be founded on the principle of territorial management based on water basins;

[1] As mentioned in previous documents : the International Covenant on Economic, Social and Cultural Rights (1966) and the UN General Comment No. 15 (2002); the Convention on the Elimination of all Forms of Discrimination against Women (1980), the Convention on the Rights of the Child (1989), the European Charter of the Council of Europe (1968) and its revised version, the European Charter on Water Resources of the Council of Europe (2001); the United Nations Conference on the Human Environment (Stockholm, 1972), the Final Declaration of the Conference in Mar de Plata (1977); Global Consultation on Safe Water and Sanitation for the 1990s (New Delhi 10 - 14 September 1990), the International Conference on Water and the Environment (Dublin, 1992), the Rio Declaration on the Environment and Development and Agenda 21 (1992); the United Nations Millennium Declaration (2000); the Ministerial Declaration from the 2nd World Water Forum, The Hague (2000); the Local Government Water Code (the Lisbon Principles, 2000); the Bonn Ministerial Declaration and Recommendations for Action (International Fresh Water Conference, Bonn 2001); the resolution of the United Nations General Assembly declaring 2003 the International Year of Freshwater (2002); the Johannesburg Declaration on Sustainable Development, the Charter on Essential Services, and the Local Government Declaration to the World Summit on Sustainable Development (2002); the Local Government Declaration for the 3rd World Water Forum (Kyoto, 2003); the Istanbul Metropolis' Declaration on Water (September 2003); the Final Declaration of the Congress of United Cities and Local Governments (Paris, May 2004); Local Authority Priority Actions, presented to the 13th session of the United Nations Commission on Sustainable Development (New York, April 2005); the Ciudad Valles Declaration by local authorities in Latin America on water management (Mexico, June 2005); the Declaration of European Local and Regional Authorities on Water of the Council of European Municipalities and Regions (Vienna, December 2005).

2.4. The utilization and management of water should be participative and involve users, planners and decision-makers at all levels, local leaders to ensure the close link with the citizen, and actors at each level.

3. We, Mayors and local elected representatives, undertake to make every effort to:

3.1. Implement policies to achieve the Millennium Development Goal to reduce by half the proportion of people without sustainable access to safe drinking water by 2015;

3.2. Manage water and sanitation services in our areas, and within the remit of our powers, in such a way as to facilitate universal access to water and sanitation in sufficient quantity, quality and continuity, and at an affordable and equitable price;

3.3. Manage water resources in a planned, sustainable and integrated manner in order to prevent water pollution;

3.4. Implement campaigns to raise awareness among citizens and users of local and global issues relating to water management, and promote proactive citizen involvement in defining water policies at the local level in a democratic and inclusive manner;

3.5. Promote co-operation between local authorities and networks of towns and cities, with the support of the world organization United Cities and Local Governments, as well as national governments, international organizations, NGOs, professional associations, trade unions and the private sector, and put our technical skills and financial resources towards providing access to safe drinking water and sanitation for all and respect for water by everyone;

3.6. Raise, where possible, financial resources including from water charges, to fund decentralized cooperation activities that are equitable, transparent, long-lasting, in order to reduce urban poverty and the exclusion of rural areas;

3.7. Improve and foster exchanges related to data gathering, skills acquisition, technology, methods and tools for proper water management, and support in particular the efforts made by international bodies to establish a system to measure the progress made in achieving the Millennium Development Goals.

4. We, Mayors and local elected representatives, call on national governments, regional and international organizations and the United Nations to:

4.1. Recognize the fundamental role played by local authorities in the protection and sustainable management of water, and in the organization of equitable and transparent public drinking water and sanitation services;

4.2. Encourage decentralization and devolution, and actively implement subsidiarity, to ensure service delivery close to the citizen based on close cooperation between all levels of government;

4.3. Increase financing for local water and sanitation infrastructure to address the needs of poor populations that do not have access to water and sanitation;

4.4. Ensure the systematic and real involvement of local authorities in strategic decisions regarding the management of water and their role in achieving the Millennium Development Goals;

4.5. Contribute to local government capacity building to improve effective water supply and sanitation services;

4.6. Support international co-operation between local authorities to build their technical, human and financial capacity, in particular in developing countries, and to foster the exchange of experience and best practice;

4.7. Ensure the integrated, sustainable and equitable management of cross-border water resources, in partnership with local governments;

4.8. Allow the local and regional authorities that wish to do so to allocate part of the revenues raised from users of water and sanitation services to undertake co-operation projects with partners in developing countries;

4.9. Speed up the implementation of commitments made on access to water and sanitation and the fight against poverty, and increase the level of national and international public aid for development in order to achieve the objectives set out in the Johannesburg Plan of Action and the Millennium Development Goals;

4.10. Maintain key ecological balances, notably through the specific commitments made by States on the implementation of the Convention on Climate Change.

World Encounter of Water Parliamentarians, Mexico Declaration

As parliamentarians who have come together at the World Encounter of Water Parliamentarians within the framework of the 4th World Water Forum, on the 18 to 21 of March, 2006 in Mexico City, and as popular representatives sensitive to social demands and to the challenges relating to the provision, management, protection and financing of water systems, as well as to the sustainability of water resources, we recognize that we face important challenges in terms of water policies and actions. These challenges require local, national, regional and international action.

We are worried by the existence of hundreds of millions of people who do not have access to a sufficient quality and quantity of water needed for their development. We also vindicate the fact that water cannot be an element of conflict.

We, as parliamentarians, commit to propelling a legal framework from our sphere of activity that responds adequately to the policies and perspectives posed by each country, that promotes and recognizes the participation of citizens, and that contributes with proposals of public policies and legal norms within the international arena.

Within the framework of the 4th World Water Forum, we, as members of parliament and senators, have recognized the vital importance of the planet's water. With this in mind, we declare the following:

1. Water is neither a commodity nor a renewable resource. Water has a social, environmental and economic worth; it is an essential resource and property of the public domain.

2. We seek to make sure that actions carried out locally by every one of us, are joined for the shaping of an international commitment that will recognize access to water as an essential right of all human beings, irrespective of their place of birth or the country in which they live.

3. We invite developed countries to support poorer countries in providing safe drinking water to marginalized communities through cooperation and solidarity programs.

4. We consider that all water and sanitation provision programs should promote gender and ethnic equality.

5. We commit to transferring the initiative to our own parliaments, of creating a coalition of water-related legislative commission members belonging to different national parliaments. This coalition will work, among other tasks, on identifying the eventual needs of enriching water-related international law, on following-up the commitments established on the subject, as well as on finding more concrete proposals that have no objective other than that of resolving this sensitive aspect of the problem.

6. We recognize the existence of proposals coming from various discussion areas of international law and from documents presented at this international legislative encounter, that will need to be further analyzed and discussed via a second world meeting of water parliamentarians.

2nd Children's World Water Forum Call for Action

We, the 110 children of the 2nd Children's World Water Forum, representing 29 countries, reaffirm the Children's Water Manifesto drafted by 109 children in Kyoto, Japan, in 2003. United, we call for action to support the participation of children in water, environment, sanitation and hygiene education, to meet the Millennium Development Goals. Sadly, the 2003 Children's Water Manifesto has seen little concrete follow up. Now, three years later, we renew our call to the adult world to involve children in local actions to overcome the critical global challenge facing our water and sanitation environment.

Today UNICEF says there are 400 million children worldwide without enough safe drinking water to live. This is wrong. This is killing our future. We call on you to act.

We ask all adult decision makers to:

- Fulfill the human right to sustainable, safe drinking water supplies and basic sanitation, through the provision of child-friendly facilities in all schools and communities, taking into account the needs of girls, very young children and children with disabilities.
- Encourage children to participate in water supply and sanitation programmes, give scholarships and project grants to those who are most active.
- Create a children's parliament in every country, which includes a committee on water, environment, sanitation and hygiene issues. Take these parliaments seriously in decision-making processes.
- Support networks of children at all levels, to exchange ideas and support one another in their local actions.
- Visit our communities, observe our local actions and respond to our requests for support face to face.
- Value us as partners and promote our actions through national radio and television programmes.
- Use direct language in plans and strategies, addressing what children need and want.
- Enforce laws to stop deforestation, because without trees the groundwater disappears and the soil destabilizes. For one tree cut we ask you to plant two more.
- Help us teach all children (without discrimination by age, race, gender, religion or economic status) how to make contaminated water fit for drinking and how to properly dispose of waste in emergency situations.
- Not allow water to become what oil is today: scarce and expensive. Big water (and other) companies should invest ten cents of every dollar of their profits to guarantee safe water for children wherever they are.
- Support peer-led water education, have clubs organized in our schools and communities.
- Guarantee an equal playing field for poor people and polluters.
- Fine those who dump human faeces into our water. Use money from the fines to build water treatment plants.
- Apply common sense in governance. Make rules that can be implemented. Enforce and implement laws for those who contaminate our waters so that there are consequences to be faced.
- Consider the cost of medical treatment and school days missed of children who fall sick because of polluted drinking water and lack of hygiene and sanitation.
- Make it possible for communities and children to participate in the management of the water supply and sanitation facilities to ensure that there is ownership of the facilities.
- Do not allow water to be privatized. Ensure that water is a resource available for all people.
- Do not divert rivers because this creates serious ecological damage to the watershed areas.
- Hold primary polluters responsible for poor water quality in developing countries.
- Ensure the participation of children in national agendas for poverty reduction, sustainable safe drinking water supply and basic sanitation, education and gender equality.

We, the children of the world, are ready to work with you. Are you ready to work with us?

4th Youth World Water Forum Final Statement

Introduction

This declaration reflects the opinions of the young people participating in the 2006 4th Youth World Water Forum, Mexico City.

In 2000, the youth was designated as a stakeholder in all water related issues. Since then, young people have taken an active role, continually reinforcing the significance of their involvement. The youth plays a critical role in ensuring that water resources will still be available to future generations. In order to achieve this, systems of education must promote adequate water conservation.

Water for Growth and Development

Development cannot be understood purely in economical terms. It is important to ensure that the actions made towards sustainable development prioritise the needs of communities above economic growth.

Education and youth empowerment works to create more democratic processes inside international bodies, governments, industries, and civil society, thus guaranteeing the development of communities without exhausting water, an important resource. Education is a fundamental tool in development, particularly in capacity building, science and technology, and the consequent distribution of this knowledge to communities.

Every time a culture is organized around water, the culture will develop, not just in relation to water, but also in other areas such as participation and democracy. The youth desires to be the force impelling society to participate in water issues and the link between government policies and the needs of the community. It is necessary to guarantee the participation of youth at all levels through legal instruments in order to make this process of participation official.

Implementing Integrated Water Resources Management

The youth believes that mankind must be the steward of water in all ways. Furthermore, four major aspects should be addressed within this issue: water quality, water quantity, access to water and water security.

The only sustainable and efficient way to address the issues is through IWRM . Since IWRM is a democratic communication process, it searches for a consensus. Governments must link their actions to populations, allowing them to manage water.

Education is the foundation of water management. Empowerment, the competency of water management and efficient access to transparent information are the three pillars of a cooperative, responsible and solidarity-based civilian management. The decisions should be made with respect to the needs expressed by the communities.

Governments must take concrete actions to supplement IWRM with adequate financial and technical support, setting exchange mechanisms and negotiating openly with communities. All governments should establish indicators, corresponding to local values, to evaluate IWRM. These governments must also define professional standards to ensure that the water managers can competently make decisions for sustainable water use.

The youth have played an important role in involving stakeholders, but should play a bigger role by taking action, especially in their communities. Schools must provide an integrated education, teaching different perspectives regarding water management.

Water Supply and Sanitation for All

Water is a universal and unalienable human right that must be incorporated into the constitution of each country. This water should be clean, readily available, from a secure source and sufficient for the population's needs; sanitation must be guaranteed. However, currently 20% of the world's population has no access to water and 50% do not have adequate sanitation, provoking water-related illnesses.

The creation of water and sanitation services entails structural, social, environmental and technological costs. Access to water and sanitation must be guaranteed for the poor. International cooperation is necessary to help finance local action for water and sanitation supply in Least Economically Developed Countries.

Community social participation is vital to decide which party assumes the costs of water supply and to regulate this supplier, which requires transparency and accountability. Education is needed to inform the participating communities about sanitation, water conservation and technology, thus developing capacities while creating a water culture. There should be a balance between the financial, technological and educational factors of water supply.

Water Management for Food and the Environment

Many difficulties exist relating to the division of water between agriculture and the environment. Irrigated agriculture uses 70% of available freshwater; ecosystems suffer when irrigation practices are inefficient and when potential environmental degradation is not considered. In addition to water shortages, short sighted agricultural practices lead to water pollution from agrochemicals and biological waste.

Educating young people in sustainable agricultural practices is of utmost importance to solving the above problems. Fortunately, technological advancements have been made reducing the amounts of water needed to produce agricultural products. As a result, more water remains available to maintain ecosystems.

To secure the continuation of such advancements, it is vital to invest in young people's education, capacity building and gaining practical experience, especially at the local level. Traditional and cultural practices should also be taken into account. Training the youth to introduce changes on a local level allows communities to become aware of existing problems.

In addition, young people are able to take the lead in exchanging information and knowledge, learning from each other's practices and experiences. The youth caucus has created and is still creating networks for such exchanges of information. Therefore, the youth plays a key role in improving local practices, as well as solving problems on a regional, national and global level.

Young people should thus be incorporated in present projects, after receiving the education that enables them to do so. This will assure continuity and sustainability for the future.

The role of industries should be taken into consideration in future discussions of this theme, as industrial practices contribute to water resource depletion.

Risk Management

Risk Management is a critical tool for the decision making process. The potential consequences of risk are fundamentally significant to societies becoming more aware of sustainability, hence the need to pay immediate attention to risk management.

Globally, climate change and sea level rises have already warned that neglecting risk management would have a direct negative impact on people's daily lives. Focusing on the local level, an increasing number of people are suffering from flood and drought caused by a lack of risk management. Additionally, on a specific level, risk management is an efficient way to control oil spills from shipwrecks. There is no doubt that risk management must be expanded immediately.

It would be wise for the future generation to possess a complete view of risk management from social, economic and environmental perspectives. Holistic education programs are needed to achieve this.
Due to the complexities of risk management, some special educational activities like field surveys and environmental experiments need to be given to young people. Additionally, everybody should clearly understand what they should do in case of emergencies. It is a responsibility for local governments to inform citizens on this issue.

Further Recommendations

Improvements need to be made in the structure and organization of the Youth World Water Forum. In order to share a common ground with the World Water Forum, the youth forum should work on similar themes with youth-specific focuses. Furthermore, there should be more interaction between the fora, beginning with the preparatory process, while setting up action-oriented agendas for the YWWF. The importance of the continuity of the forums needs to be emphasised, allowing the use of past experiences to form future plans. The ideas listed above should be put into action by a network of young people.

"Be the change you want to see in the world."
–Mahatma Gandhi

Tlatokan Atlahuak Declaration
Declaration of the Indigenous Peoples' Parallel Forum of the 4th World Water Forum

1. We, representatives of Indigenous Peoples and organizations of Mexico, the Americas and other continents of the world participating in the Indigenous Forum parallel to the 4th World Water Forum, declare our solidarity with the Indigenous Peoples of Mexico and their struggle for their ancestral territories and natural resources of which water is a primordial element. For all Indigenous Peoples of the world, water is the source of material, cultural and spiritual life.

2. We, international representatives, appreciate the welcome that has been extended to us by the Indigenous Peoples of Mexico. We especially appreciate the opening ceremony of our forum, conducted by the traditional governor of the Yaqui tribe and our Mazahuas relatives.

3. We reaffirm the Indigenous Peoples Kyoto Water Declaration of the 3rd World Water Forum of Kyoto, Japan of March 2003. It recognizes our relation with our Mother Earth and our responsibility to future generations. We raise our voices in solidarity and proclaim the responsibility to protect and defend water. We have been placed upon this earth, each in our own traditional sacred land and territory to care for all of creation and water.

4. We reaffirm the same Declaration to honor and respect water as a sacred being that sustains all life. Our traditional knowledge, laws and forms of life teach us to be responsible and caring for this sacred gift that connects all life.

5. We reaffirm that the relationship we have with our lands, territories and water, constitute the physical, cultural and spiritual basis of our existence. The relationship with our Mother Earth obligates us to conserve our fresh water and seas for the survival of present and future generations. We assume our roles as guardians, with rights and responsibilities that defend and guarantee the protection, availability and purity of water. We unite to respect and implement our traditional knowledge and laws, and to exercise our right of self-determination to preserve water and life.

6. The situation of the Indigenous Peoples of Mexico makes it even clearer that the struggle for our water is tied fundamentally with our struggle for our right of self-determination. This is the case of our Yaqui relatives, the Otomi, Ñahñahu, Matlazinca, Mazahua, Tlahuica and Nahuas of the Alto Rio Lerma; of our relatives of Xochipas, of Xochimilco of Tecamac, of Xoxocotla Morelos; and as with our relatives of the Sierra de Manantlan and Ayotitlan in Jalisco; and other Indigenous Peoples of the world.

7. Mexico and countries that are accomplices of the multinational corporations, violate with impunity the human rights and fundamental freedoms that they themselves have consecrated in the Covenants, Conventions and Declarations of the United Nations and the Organization of American States.

8. We assert our right of development determined by our own laws and traditional authorities, consistent with our values and worldview.

9. Our lands, territories and natural resources, particularly our water (rivers, springs, wells, lakes, groundwater) continue to be stolen or ruined with extreme pollution. The water multinationals, with the support of the international finance agencies like the World Bank and the Interamerican Development Bank are accomplices in the privatization of our territories and our water. This creates a scarcity of water raising its economic value and furthering the view of water as an object of commerce.

10. We reject the neoliberal model of life that views water as merchandise, not as a public good, or a fundamental human right. Agencies such as the World Trade Organization promote privatization projects of our vital liquid. This destroys flora and fauna and consequently creates sicknesses like cancer, even among youth, as well as the disappearance of our cultures.

11. As Indigenous Peoples, we assert in all the national and international laws, the right of self determination

and the recognition of our territories. We assert our autonomy in the use and enjoyment of our natural resources such as water, as a human right. We demand this recognition for our own customs and laws and oral traditions.

12. We demand from the national authorities and multilateral institutions such as the United Nations, the Organization of American States, and the governmental participants of the 4th World Water Forum, the full participation of Indigenous Peoples in any project or action of water management and development in our territories. We demand the guarantee of the right of free, prior and informed consent as is established by international law.

13. We declare our solidarity with the struggle of the Indigenous Peoples of Mexico and other parts of the world who have come to this Forum to condemn authorities that don't resolve conflict nor guarantee the supply of water, but repress those who struggle to defend water; including energy and mining companies that consume and poison our Mother Earth and water and poisoning all Life.

14. We recognize the work of the communities that promote their own peoples. We recognize communities, organizations, universities and committed academicians who protect, defend and recuperate water as a right of all beings.

15. We call upon all Indigenous Peoples to organize and form committees for the defense of water and that it be a basis of all of our struggles to obtain the full recognition and absolute enjoyment of our territories and natural resources.

16. We demand that the Mexican government and its States immediately incorporate mechanisms for recognition of the rights of its Indigenous Peoples in water and public policy as affirmed by international treaties and agreements.

17. We denounce the structure of the World Water Forum for being financially prohibitive, which excludes the very Indigenous Peoples who are impacted. We denounce the format of the World Water Forum for denying the legitimacy of the indigenous world and spiritual vision of the sacredness of water.

Women's Caucus Declaration

"The [United Nations General] Assembly also stressed the need to involve women in all water-related development efforts. In many cultures, including indigenous societies, women are the guardians of water. They are the ones who often spend long, arduous hours searching for and carrying water. They need to be able to participate more meaningfully in decision-making on how water is used and managed, so that their countries can make full use of their knowledge, skills and contributions." *UN Secretary-General Message on World Water Day, March 22, 2006.*

Key Issues

Throughout history, women have been the stewards of the global commons: water, land, air, biodiversity, indigenous and traditional knowledge and institutions. Women protect, conserve and enhance the water resources and access within and across the contexts of household, community, culture and subsistence livelihood generation.

For some 30 years, international and UN global conferences have repeatedly recognized that effective sustainable water resources management depends on engaging women at all levels of decision-making and implementation, including:

- Convention on the Elimination of All Forms of Discrimination Against Women—CEDAW (1979): "To enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply…" (Art. 14, h).
- Dublin Resolution of the Water for Life Decade (1992): "Women play a central role in the provision, management and safeguarding of water and sanitation and must be involved in all water-related development efforts."
- Johannesburg Plan of Implementation (2002): "Mobilize international and domestic financial resources at all levels…for water and sanitation infrastructure and services development, ensuring that such infrastructure and services meet the needs of the poor, and are gender sensitive" (24a).
- 13th Session of the UN Commission on Sustainable Development Outcome Document (2005): "Involving all stakeholders, including women, youth and local communities, in integrated planning and management of land and water resources" (para d, xi).

Further, the United Nations General Comment 15 to the Covenant on Economic, Social and Cultural Rights states: "The human right to water is indispensable for leading a life in human dignity. It is a prerequisite for the realization of other human rights" (2002).

However, women have often been denied their human right to water and are continually excluded from key decision-making roles, which have led to environmental destruction, deterioration of human health, and the feminization of poverty. Women recognize that the human right to water explicitly ensures that water is safe and acceptable, physically accessible, affordable, and in sufficient and adequate quantity.

Recommendations for Action

- The human right to water must be implemented and enforced by all stakeholders at all levels.
- Governments must immediately implement their international commitments to women's rights and gender equity in relation to water and sanitation.
- Water services must not be included in World Trade Organization or other trade agreements, or through loan-conditionality programs by the World Bank, International Monetary Fund and regional development banks.
- Governments must officially recognize purposeful contamination of water and exclusion of access to safe water is a crime against humanity.
- Governments must enforce "Polluter Pays Principles" as instituted in the Rio Declaration, whether due to neglect or mismanagement, as well as implement policies that ensure preventative protection of water sources.
- Governments must recognize sanitation as an integral part of the human right to water.

- All stakeholders must recognize that women's empowerment is essential to poverty eradication and environmental regeneration. Women, therefore, must be leaders in the development, implementation, and monitoring of viable initiatives and solutions.

- Institutions dealing with water must acknowledge and respect women's central role and rights in the protection and management of water; therefore, these institutions must develop and implement the appropriate gender equity policies with full participation and representation of women.

- Policies must include a natural ecosystems approach to water management and infrastructure design.

- Local governments, utilities and the public sector must use participatory, gender–balanced and gender-sensitive working methods in developing sustainable, equitable and affordable water and sanitation systems, and water treatment infrastructure. Women must be key actors in the decision-making and development, implementation and monitoring of these systems.

- Gender, age, race, ethnicity, and economic status must be incorporated in response and mitigation strategies and policies concerning the impacts of anthropogenic and naturallyoccurring environmental disasters, and climate change.

- Governing bodies must acknowledge that successful implementation of WSSD and MDGs will require the development of cross-cutting, gender-sensitive indicators and capacity-building programs.

- Gender Responsive Budgeting Initiatives (GRBI) must be used in Integrated Water Resources Management (IWRM) by all stakeholders to ensure their commitments on gender equality and equity, poverty eradication and sustainable development are met with the necessary resources.

- Funds and other resources must be allocated to civil society organizations, particularly women, recognizing that women are full partners, not a recipient target group, for water and sanitation initiatives.

- Governments must urgently implement their commitment to water and land rights, to ensure women's access to land and land tenure, water, credit and other financial services, technical inputs, training and markets.

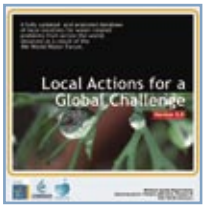
Publications Released on the Occasion of the 4th World Water Forum

On the occasion of the 4th World Water Forum, many reports and publications were issued. The following is a selective list of some of the main ones:

The ten Thematic Documents, presenting the state of affairs in each of the five major challenges faced by the water sector, namely the five framework themes, and each of the main barriers encountered to making progress on these challenges, namely the five crosscutting perspectives. Each of these documents was produced as a result of the Forum's thematic preparatory process by a consortium of key organizations related to the theme or perspective.

The five Regional Documents, for Africa, the Americas, Asia-Pacific, Europe and the Middle East and North Africa, presenting the main concerns as regards water issues in each of these regions of the world, and the many innovative solutions encountered by local actors in the regions. These documents were produced by Regional Committees as a result of the Forum's regional multi-stakeholder preparatory process.

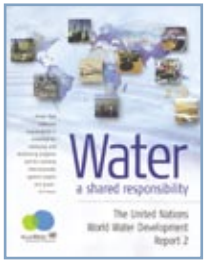
The Water Local Action Compendium (WALAC 2.0). During the preparatory process of the 4th World Water Forum, more than 1,600 local actions from 119 countries were submitted through the website of the Forum. About 525 of these local actions were presented in topic-sessions, through the Kyoto World Water Grand Prize and posters at the Forum. Version 2.0 of the electronic compendium of local actions, enclosed with this publication, allows the search of actions through different criteria.



The UN Water Actions and Networking Database (WAND). This new database and information-sharing tool contains information compiled during the 2003-2005 CSD Water and Sanitation Cycle, from the Portfolio of Water Actions from the 3rd World Water Forum, and the WALAC. The

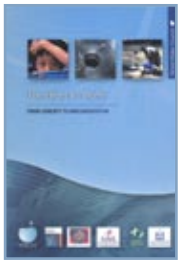
database is intended to disseminate information on implementation and best practices, so as to support international efforts to meet water and sanitation goals.

The second edition of the United Nations World Water Development Report: Water, a Shared Responsibility. Published by the World Water Assessment Programme (WWAP), an inter-agency mechanism established to coordinate the activities of all United Nations agencies and entities working in areas related to water resources. It is the most comprehensive assessment on worldwide freshwater availability undertaken to date, and focuses on the importance of good governance to manage global water resources and combat poverty.

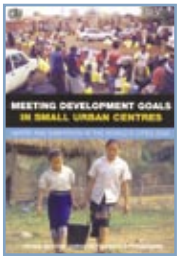


The First Report of the Task Force on Financing Water for All: Enhancing Access to Finance for Local Governments, Financing Water for Agriculture. The report is the result of the debates and exchanges of the Task Force members under the chairmanship of Angel Gurria, Secretary General of the OECD and former Mexican Minister of Foreign Affairs and Finances. The Task Force was created by the World Water Council, the Global Water Partnership and the Secretariat of the 4th World Water Forum to further the work initiated by the 2003 World Panel on Financing Water Infrastructure chaired by Michel Camdessus.

The Right to Water: From Concept to Implementation. This document was prepared by the World Water Council with the support of a panel of experts and in partnership with ALMAE (the Maghreb-Machrak Alliance for Water), the French Academy of Water, Green Cross International and the International Secretariat for Water. The report explains the scope of the Right to Water and shows how it has been implemented in various countries.



Water and Sanitation in the World's Cities: Meeting Development Goals in Small Urban Centres. This is the second UN-HABITAT global report on Water and Sanitation in the World's Cities. This publication looks at small urban centres which tend to be overlooked, however they are the first tier markets and service providers for rural enterprise and development. The report draws attention to the importance of addressing water and sanitation needs in rapidly growing small urban settlements to achieve the MDGs



The United Nations Secretary General's Advisory Board on Water and Sanitation presented a new compendium of actions: "Your Action, Our Action" the purpose of which is to achieve progress in six vital areas for the resource: Water Operators Partnerships, Financing, Sanitation, Monitoring and Reporting, Integrated Water Resources Management and Water and Disasters. The Advisory Board will focus its efforts on implementation and follow-up. "Your Action" refers to key stakeholders, some already identified. "Our Action" refers to the individual and collective work of members of the Advisory Board with stakeholders to eliminate the bottlenecks and achieve internationally agreed-on goals.

Participating Delegations in the Ministerial Conference

	Delegation	Head of Delegation Title
1	Afghanistan	Mohammad Sharif Sharif Vice Minister of Agriculture
2	Albania	Lufter Xhuveli Minister of the Environment, Water and Forests
3	Algeria	Abdelmalek Sellal Minister of Water Resources
4	Angola	Fernando Da Piedade Dias Dos Santos Prime Minister
5	Antigua And Barbuda	John W. Ashe Permanent Representative of Antigua and Barbuda to the United Nations, Ministerial Representative for Sustainable Development
6	Argentina	Atilio Armando Savino Vice Minister of the Environment and Sustainable Development, Ministry of Health and the Environment
7	Armenia	Hakob Matilián Vice Minister of the Protection of Nature
8	Australia	Ross Dalton Director General, Department of Agriculture, Fisheries and Forestry Resources
9	Austria	Werner Wutscher Vice Minister of Agriculture, the Environment and Water
10	Azerbaijan	Huseyn Bagirov Minister of Ecology and Natural Resources
11	Bahrain	Abdul Majeed Ali Al-Awadhi Vice Minister of Electricity and Water
12	Bangladesh	Halfiz Uddin Ahmed Minister of Water Resources
13	Belarus	Mikhail Kalinin Director General of Central Research Institute for Integrated Water Resources Management of the Ministry of Natural Resources and Environmental Protection
14	Belgium	Benoît Lutgen Minister of the Wallon Region for Agriculture, Rural Issues, the Environment and Tourism
15	Belize	Ramón Frutos Joint Officer for Meteorology
16	Benin	Ahokpossi Ahonagla Marius Director General of Ministry of Energy and Water Resources
17	Bhutan	Lyonpo Kinzang Dorji Minister of Work and Human Settlements
18	Bolivia	Abel Mamani, Minister without portfolio Responsible for Water
19	Botswana	Tibone Charles Minister of Mines, Energy and Water
20	Brazil	Cláudio Langone, Executive Secretary of the Ministry of the Environment
21	Bulgaria	Lubka Vassileva Katchakova, Vice Minister of the Environment and Water
22	Burkina Faso	Salif Diallo Minister of Agriculture, Water Resources and Fisheries
23	Burundi	Odette Kayitesi Minister of Resources, Tourism and Environmental Promotion

24	Cambodia	Veng Sakhon Minister of Water Resources and Meteorology
25	Cameroon	Justin Ndioro Minister of Energy and Water
26	Canada	Rona Ambrose Minister of the Environment
27	Cape Verde	Antonio Pedro Borges President of the National Water Institute of the Ministry of Agriculture and Fisheries
28	Chad	Haoa Outman Minister of Water
29	Chile	Eduardo Aninat Ambassador of Chile in Mexico
30	China	Wang Shucheng Minister of Water Resources
31	Colombia	Oscar Dario Amaya Navas Vice Minister of the Environment, Housing and Development
32	Congo	Bruno Jean Richard Ioua Minister of the Energy and Hydraulics
33	Costa Rica	Carlos Manuel Rodríguez Minister of the Environment and Energy
34	Côte D'Ivoire	Jacques Andoh Alle Minister of the Environment, Water and Forests
35	Croatia	Petar Obankovi Minister of Agriculture, Forestry and Water Management
36	Cuba	Jorge Luis Aspiolea Roig Minister-President of National Water Resources Institute
37	Cyprus	Antonis Grivas Ambassador of Cyprus in Mexico
38	Czech Republic	Líbor Ambrozek Minister of the Environment
39	Denmark	Ole E. Moesby Vice Minister of Multilateral Cooperation for Development
40	Djibouti	Gamal Din Houssein Ali Director ad interim of Water, Ministry of Agriculture Livestock and the Sea
41	Dominican Republic	Maximiliano Puig Secretary of State for the Environment and Natural Resources
42	East Timor	Estanislau da Silva Minister of Agriculture, Forestry Resources and Fisheries
43	Ecuador	Hector Antonio Vélez Andrade Minister of Urban Development and Housing
44	Egypt	Mahmoud Abou Zeid Minister of Water Resources and Irrigation of the Arab Republic of Egypt and President of the Arab Water Council
45	El Salvador	Hugo Barrera Minister of the Environment
46	Estonia	Annika Velthut Secretary General, Ministry of the Environment
47	Ethiopia	Asfaw Digamo Minister of Water Resources
48	Finland	Juha Korkeaoja Minister of Agriculture and Forestry Issues
49	Former Yugoslav Republic of Macedonia	Sadula Duraki Minister of Agriculture, Forestry and Water Supply

50	France	Nelly Olin Minister of Ecology and Sustainable Development
51	Gambia	Pateh Jallow Secretary General of Fisheries and Water Resources
52	Georgia	Sopiko Akhobadze Vice Minister of Environmental Protection and Natural Resources
53	Germany	Eberhard Koelsch Ambassador of Germany in Mexico
54	Ghana	Hackman Owusu-Agyemang Minister of Water Resources, Work and Habitat
55	Greece	Ioannis Sibetheros Special Secretary General and Head of Central Water Agency for the Environment, Urban Planning and Public Works
56	Guatemala	Juan Mario Dary Fuentes Minister of the Environment and Natural Resources
57	Guinea-Bissau	Arístides Ocante Da Silva Minister of Natural Resources
58	Guyana	Sheik Baksh Minister of Housing and Water
59	Haiti	Idalbert Pierre-Jean Ambassador of Haiti in Mexico
60	Holy See (Vatican City)	Frank J. Dewane Vice Minister of Pontifical Council for Justice and Peace
61	Honduras	Jorge Mendez General Manager of Aqueducts and Sewer Systems National Service
62	Hungary	Andras Gombos Parliamentary State Secretary, Ministry of the Environment and Water
63	India	Sra. Sushma Singh Joint Secretary of Ministry of Water Resources
64	Indonesia	Siswoko Vice Minister of Water Resources, Ministry of Public Works
65	Iran	Rasoul Zargarpour Vice Minister of Energy and Water Issues and Director General of Water Management Company of Iran (EMRAI)
66	Iraq	Abdul Latif Gamal Rachid Minister of Water Resources
67	Ireland	Bartholomew O´Keeffe Minister of the Environment, Heritage and Local Government
68	Israel	Simon Tal Water Commissioner of Israel
69	Italy	Guido Scalici Coordinator of the Environment, Ministry of Foreign Affairs
70	Jamaica	Donald Buchanan Minister of Water and Housing
71	Japan	Yasuyuki Eda Vice Minister of the Environment
	Japan	Tetsuma Essaki Vice Minister of Land, Infrastructure and Transport
72	Jordan	Khaled Irani Minister of the Environment
73	Kazakhstan	Anatoiy Ryabtsev President of the Committee of Environmental Protection
74	Kenya	John Mutua Katuku Minister of Water and Irrigation
75	Korea, Republic of (South)	Yongduk Kim Vice Minister for Construction and Transportation

76	Kuwait	Saud Abdulaziz Alzaid Vice Minister of Public Works
77	Latvia	Rajmonds Vejonis Minister of the Environment
78	Lebanon	Fady Komair Director General of Water and Electric Resources, Ministry of Energy and Water
79	Lesotho	Mamphono Khaketla Minister of Natural Resources
80	Libya	Abdulmajid Almabrok Algaoud Secretary General of the Great Man Made River Project Authority
81	Lithuania	Aleksandras Spruogis Under Secretary of the Environment
82	Luxembourg	Jean Marie Halsdorf Minister of Internal Affairs and Planning
83	Madagascar	Alfred Rambeloson Permanent Representative of Madagascar to the Office of the United Nations in Geneva
84	Malawi	Mohamed Abdul Minister of Irrigation and Water Development
85	Malaysia	Khalid Azmi Minister of Natural Resources and the Environment
86	Maldives	Ahmed Abdullah Minister of the Environment, Energy and Water
87	Mali	Hamed Diane Semega Minister of Mines, Water Resources and Energy
88	Mauritania	Ely Ould Ahmedou Minister of Water Resources
89	Mauritius	Abu Twalib Kasenally Minister of Public Works
90	Mexico	Jose Luis Luege Minister of the Environment and Natural Resources
91	Mongolia	B. Enkhmandakh Vice Minister of Nature and the Environment
92	Morocco	Mohamed El Yazghi Minister of Land Use Planning, Water and the Environment
93	Mozambique	Felício Pedro Zacarias Minister of Public Works and Housing
94	Myanma	U Zan Win Vice-Director General of Irrigation Department, Ministry of Agriculture and Irrigation
95	Namibia	Nikey Iyambo Minister of Agriculture
96	Netherlands	Melanie Schultz Van Haegen Vice Minister of Transport, Public Works and Water Management
97	New Zealand	George Troup Ambassador of New Zealand in Mexico
98	Nicaragua	Luis Debayle Solís Executive President of Aqueducts and Sewer Systems (ENACAL) Company of Nicaragua
99	Niger	Salifou Ousseini Secretary General of the Ministry of the Environment, Water and Combatting Desertification
100	Nigeria	Engr. Ebele O. Okeke Minister of Water Resources
101	Norway	Anita Utseth Vice Minister of Petroleum and Energy
102	Oman	Abdullah bin Nasser Al-Bakri Vice Minister of Water Resources

103	Pakistan	Liaquat Ali Jatoi Minister of Water and Energy
104	Palau	Fritz Koshiba Minister of Resources and Development
105	Palestinian Authority	Walid Abed Rabboh Minister of Agriculture
106	Panama	Camilo Alleyne Minister of Health
107	Papua New Guinea	William Dumma Minister of the Environment and Conservation
108	Paraguay	Alfredo Molinas Executive Secretary of the Ministry of the Environment
109	Peru	Rudecindo Vega Carreazo Minister of Housing, Construction and Sanitation
110	Philippines	Angelo T. Reyes Minister of the Environment and Natural Resources
111	Poland	Mariusz Orion-Jedrysek Vice Minister of the Environment
112	Portugal	Francisco Nunes Correira Minister of the Environment, Territorial Planning and Regional Development
113	Qatar	Bin Hassan Aldhabit Al-Dossary Minister of Municipal Affairs and Agriculture
114	Romania	Silvian Ionescu General Commissioner, Chief of Environmental National Guard
115	Russia	Rustmen Khamitov Head of Water Resources Federal Agency of Russia
116	Saint Kitts and Nevis	Earl Martin Minister of Public Works, Utilities and Transport
117	Samoa	Moefaauo T. Titimaea General Manager of Samoa Water Authority
118	Saudi Arabia	Ali Bin Saad Al-Takhais Vice Minister of Water and Energy
119	Senegal	Issa Mbaye Samb Minister of Public Health
120	Serbia and Montenegro	Milisav Paic Ambassador of Serbia and Montenegro in Mexico
121	Singapore	Tan Yong Soon Permanent Secretary of Environment of the Ministry
122	Slovakia	Lázló Miklós Minister of the Environment
123	South Africa	Buyelwa Patience Sonjica Minister of Water Affairs and Forestry
124	Spain	Cristina Narbona Ruiz Minister of the Environment
125	Sri Lanka	A.N.R. Amaratunga Secretary, Ministry of Urban Development and Water Supply
126	Sudan	Kamal Mohamed Ali Minister of Irrigation and Water Resources
127	Sweden	Viveka Bohn Special Ambassador for Environmental Affairs of the Ministry of Sustainable Development
128	Switzerland	Remo Gautschi Deputy Director of the Swiss Agency for Development and Cooperation and Head of the Swiss Intersectorial Group of Water
129	Syria	Nader Al-Bonni Minister of Irrigation

130	Tajikistan	Abdukokhir Nazirov Minister of Land Development and Water Supply
131	Tanzania	Stephen M. Wasira Minister of Water Development
132	Thailand	Ravee Hongsaprabhas Ambassador of Thailand in Mexico
133	Togo	Kokou Solété Agbemadon Minister of Mines, Energy and Water
134	Trinidad and Tobago	Pennelope Beckles Minister of Public Services and the Environment
135	Tunisia	Mohamed Nejib Hachana Ambassador of Tunisia in Washington
136	Turkey	Hilmi Güler Minister of Energy and Natural Resources
137	Turkmenistan	Begench Nomadov Amanovich Minister of Water Resources
138	Tuvalu	Saufatu S. Sopoanga Vice-Prime Minister and Minister of Work and Energy
139	Uganda	Maria Mutagamba Minister of Water, Land and Environment and President of the African Ministerial Council on Water (AMCOW)
140	Ukraine	Babych Mykola Deputy Director of the State Committee of Water Economy
141	United Arab Emirates	Mohamed bin Dhaen Al Hamli Minister of Energy
142	United Kingdom of Great Britain	Richard Bird Director for Water, Department for Environment, Food and Rural Affairs (DEFRA)
143	United States of America	Paula Dobriansky Under Secretary of Democracy and Global Themes
144	Uruguay	Jorge Carlos Colacce Sanitation Works President of the State
145	Venezuela	Ernesto Paiva Vice Minister of Water
146	Vietnam	Nguyen Cong Thanh Vice Minister of Natural Resources and the Environment
147	Yemen	Abdulrahman Al-Eryani Minister of Water and the Environment
148	Zimbabwe	Eng M Mutezo Minister of State for Water Resources and Infrastructural Development

Session Conveners

Abbreviation / Acronym	Name
AAFC	Agriculture and Agri-Food Canada
ABA	American Bar Association
ABM	Australian Bureau of Meteorology
Académie de l'Eau	French Water Academy
ADA	Austrian Development Agency
AEDES	Specialized Association on Sustainable Development
AESN	Seine Normandy Water Agency, France
AFD	French Development Agency
AfDB	African Development Bank
AGRHYMET	Regional Center of Meteorological Applications for Development
Agua Sustentable	Sustainable Water, Bolivia
AIDIS	Inter-American Association on Sanitary and Environmental Engineering
AJCE	Association of Japanese Consulting Engineers
AMCOW	African Minister's Council on Water
AMGVF	Association of Mayors of Large Cities in France
AMH	Mexican Association of Hydraulics
AMNCA	Mexican Alliance for a New Water Culture
ANA	National Water Agency, Brazil
ANBO	African Network for Basin Organization
ANEA	National Academy of Environmental Education, Mexico
ANEAS	National Association of Water and Sanitation Utilities, Mexico
ANUR	National Association of Irrigation Users, Mexico
APFM	Associated Programme on Flood Management
Aquamaris	AquaMaris, Spain
ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
ASE	Alliance to Save Energy, United States
ASSEMAE	National Association of Municipal Sanitation Services, Brazil
AWC	Arab Water Council
AWF	African Water Facility
AWRA	American Water Resources Association
BAL-ONDEO	BAL-ONDEO, Mexico
BMA	Mexican Bar, Lawyer's School
BMZ	Federal Ministry for Economic Cooperation and Development of Germany
BothENDS	BothENDS, the Netherlands
BPD	Building Partnerships for Development Water and Sanitation
BPP	Blue Planet Project, Canada
CAEU	Council of Arab Economic Unity
CAgM	Commission for Agriculture Meteorology, the Netherlands
CAP-NET	Capacity Building for Integrated Water Resources Management
Casa y Ciudad	House and City Civil Association, Mexico
CAWST	Centre for Affordable Water and Sanitation Technology
CBE	Centre for Built Environment
CCA	Water Advisory Council, Mexico
CCHRI	Centre for Community Health Research
CDHDF	Commission of Human Rights of Mexico City
CDI	National Commission for the Development of Indigenous Peoples, Mexico
CEC	Commission for Environmental Cooperation of North America
CEDARE	Centre for Environment and Development for the Arab Region and Europe
CEMDA	Mexican Center for Environmental Law
CESPEDES	Private Sector Studies for Sustainable Development Commission
CFE	Federal Commission for Electricity, Mexico
CGIAR	Consultative Group on International Agricultural Research
CIC	Intergovernmental Coordination Committee of the La Plata Basin Countries
CICEANA	North American Environmental Center for Information and Communication
CIDECALL	International Center for Demonstration and Rainwater Catchment
CIHEAM	Mediterranean Agronomic Institute of Bari, Italy
CILSS	Permanent Inter-State Committee for Drought Control in the Sahel
CINARA	Cinara Institute, Del Valle University, Cali, Colombia
CLAEH	Latin American Center for Water Studies
CNEC	National Chamber of Consulting Firms, Mexico
COA	Americas Operative Committee
COFEPRIS	Federal Commission for the Protection Against Health Risks, Mexico
COLMEX	Colegio de Mexico
COLTLAX	Colegio de Tlaxcala, Mexico
CONAFOR	National Forestry Commission, Mexico
CONAGUA	National Water Commission, Mexico
CONDESAN	Consortion for the Sustainable Development of the Andean Ecoregion, Peru
CPWC	Cooperative Programme on Water and Climate
DH	Delft Hydraulics, the Netherlands
DHI	Danish Hydraulic Institute
DPWH	Department of Public Works and Highways, PMO Flood Control and Sabo Engineering Center, Philippines
DSI	General Directorate of State Hydraulic Works, Turkey
DWAF South Africa	Department of Water Affairs and Forestry, South Africa
EARCSA	Rainwater Catchment Systems Association
EC	European Commission
ECOA	Ecoa and Pantanal Network, Brazil
EDF	EcoLogic Development Fund
EFF	Earth Forever Foundation
EJCW	Environmental Justice Coalition for Water
ELIIW	Environmental Law Institute and IW:LEARN
EMPOWERS	Euro-Med Participatory Water Resources Scenarios (Empowers Partnership)
EMWIS	Euro-Mediterranean Information System
ENCID	Egyptian National Committee, International Commission on Irrigation and Drainage (ICID)
EPRC	Environment and Population Research Center
ESA	European Space Agency
EU DG	European Union DG Research
FA Japan	The Forestry Agency of Japan
FAN	Freshwater Action Network
FANCA	Freshwater Action Network Central America
FAO	United Nations Food and Agriculture Organization (FAO)
FCHCM	Mexico City's Historical Center Foundation
FECIC	Federation of Colleges of Civil Engineers of Mexico
FIDIC	International Federation of Consulting Engineers
FMA	Miguel Aleman Foundation, Mexico
FMCN	Mexican Fund for Nature Preservation
FMCU	United Cities, France
FNCA	Foundation for a New Water Culture, Spain
FNCCR	French Local Authorities Federation
FOEN	Federal Office for the Environment, Switzerland
FRW	Friends of the Right to Water
GCI	Green Cross International
GEF	Global Environment Facility
GEM	Marseille Water Group, France
GEMEX	Government of the State of Mexico, Ministry of Water, Public Works and Infrastructure for Development
Geojuve	Geo Youth Network, Mexico
GFO	Global Forum on Oceans, Coasts and Islands
GNF	Global Nature Fund
GTZ	German Technical Cooperation Agency
GWA	Gender and Water Alliance
GWI	Ground Water Institute, India
GWP	Global Water Partnership

Hombre Naturaleza	Hombre Naturaleza, Mexico
IADB	Interamerican Development Bank
IAH	International Association of Hydrogeologists
IAHR	International Association of Hydraulic Engineering and Research
IAHS	International Association of Hydrological Sciences
ICAM	Madrid School of Lawyers, Spain
ICARDA	International Center for Agricultural Research in Dry Areas
ICBA	International Center for Biosaline Agriculture
ICID	International Commission on Irrigation and Drainage
ICLEI	International Council for Local Environment Initiatives
ICOLD	International Commission on Large Dams
ICRC	International Committee of the Red Cross
IDE	International Development Enterprises
IDRC	International Development Research Centre
IDS	Institute of Development Studies, United Kingdom
IEN	Indigenous Environment Network, United States
IFIP	International Funders for Indigenous Peoples, United States
IFNET	International Flood Network
IFPRI	International Food Policy Research Institute
IFRC	International Federation of the Red Cross and Red Crescent Societies
IGES	Institute for Global Environmental Strategies, Japan
IGM Spain	Mining and Geological Institute of Spain
IGOS	Integrated Global Water Cycle Observations Executive Committee, United Kingdom
IGRAC	International Groundwater Resources Assessment Centre
IHAS	International Hydropower Association
IICG	International Initiative on Corruption and Governance
IJC	International Joint Commission
ILEC	International Lake Environment Committee
IMAC	Mexican Institute for Conservation for Learning
IME	Mediterranean Water Institute
IMJ	Mexican Youth Institute
IMTA	Mexican Institute for Water Technology
INAINE	Autonomous Institute for Ecological Research, Mexico
INBO	International Network of Basin Organizations
INE	National Ecology Institute, Mexico
INEGI	National Institute of Statistics, Geography and Computing, Mexico
INPIM	International Network on Participatory Irrigation Management
INWENT	Capacity Building International, Germany
INWEPF	International Network for Water and Ecosystems in Paddy Fields, Japan
IPN	National Polythechnical Institute, Mexico
IRC	International Water and Sanitation Centre
IRCSA	International Rainwater Catchment Systems Association
IRHA	International Rainwater Harvesting Alliance
IRI	International Research Institute for Climate and Society
IRL	The Earth Institute at Columbia University, United States
IRN	International Rivers Network, United States
IsDB	Islamic Development Bank
ISDR India	Institute for Sustainable Development and Research, India
ISET	Institute for Social and Environmental Transition, United States
ISW	International Secretariat for Water
ITAIPU	Itaipu Binational Hydropower Central, Brazil
ITESM	Monterrey Technological Institute of Higher Studies, Mexico
IUCN	The World Conservation Union
IVM	Institute for Environmental Studies, the Netherlands
IWA	International Water Association
IWHA	International Water History Association
IWI	Indigenous Water Initiative, United States
IWMI	International Water Management Institute
IWRA	International Water Resources Association
IWRN	Inter-American Water Resources Network
JBIC	Japan Bank for International Cooperation
JCAS	Japan Consortium for Area Studies
JICA	Japan International Cooperation Agency
JWF	Japan Water Forum
JWRCWWF	Japan Water Reclamation Committee for the World
Water	Forum
Katachel	Katachel, Afghanistan
Lake Biwa	Conference of Promotion for Lake Biwa - Yodo River
Basin	Area Renaissance, Japan
LA-WETnet	Latin American Water Education and Training Network
MAE	Ministry of Foreign Affairs, France
MAMA-86	Ukrainian National Environmental NGO
MCT Republic of Korea	Ministry of Construction and Transportation, Republic of Korea
ME Japan	Ministry of the Environment, Japan
MEDD	Ministry of Ecology and Sustainable Development -
Water	Directorate, France
Mehriban	Mehriban, Uzbekistan
Mekorot-Israel	Mekorot Water Company Ltd. Israel
METAP	The World Bank Mediterranean Environmental Technical Assistance Program
Metropolis	World Association of the Major Metropolises
MinLNV	Ministry of Agriculture, Nature and Food Quality of the Netherlands
MLIT Japan	Ministry of Land, Infrastructure and Transport, Japan
MMA-Brazil	Ministry of the Environment, Brazil
MOE Spain	Ministry of the Environment, Spain
MOET Italy	Ministry of the Environment and Territory, Italy
MOFA Italy	Ministry of Foreign Affairs, Italy
MOFA Japan	Ministry of Foreign Affairs, Japan
MONTREAL	City of Montreal, Canada
MOWE Saudi Arabia	Ministry of Water and Electricity, Saudi Arabia
MRC	Mekong River Commission
MTPWWM Netherlands	Ministry of Transport, Public Works and Water Management, the Netherlands
MVULA	Mvula Trust, South Africa
MWR China	Ministry of Water Resources, P. R. China
MWRI Egypt	Ministry of Water Resources and Irrigation, Egypt
MXCID	International Commission on Irrigation and Drainage (ICID), Mexican National Committee
NATURE	The Nature Conservancy, United States
NBI	Nile Basin Initiative
NDMC	National Drought Mitigation Center, University of Nebraska, United States
NEPAD	New Partnership for Africa's Development
NGO Forum on ADB	NGO Forum on the Asian Development Bank, Philippines
NGWA	National Groundwater Association, United States
NHI	Natural Heritage Institute, United States
NIH Japan	National Institute for the Humanities, Japan
NIPH Japan	National Institute of Public Health, Japan
NOAA	National Oceanic and Atmospheric Administration, United States
Noord-Holland	Province of Noord-Holland, the Netherlands
NoWNET	Northern Water Network
NVE	Norwegian Water Resources and Energy Directorate
NWCF	Nepal Water Conservation Foundation
NWP	Netherlands Water Partnership
NWRC Egypt	National Water Research Center, Egypt
NWS USA	National Weather Service, United States
OAS	Organization of American States
OIEau	International Office for Water
OIJ	Iberoamerican Youth Organization, Spain
ONEP	Moroccan National Water Supply Office
OQAJ	Organization Quebec-Americas for Youth
PAHO	Pan American Health Organization
PEP	The Poverty-Environment Partnership of UNDP
PIANC	International Navigation Association
PIK	Potsdam Institute for Climate Impact Research, Germany
Prodimar	Prodimar, Spain
pS-Eau	Water Solidarity Program, France

PSIRU	Public Services International Research Unit, Business School, University of Greenwich, United Kingdom
PWC	PriceWaterhouseCoopers
PWRI	Public Works Research Institute, Japan
RAC	Royal Academy of Sciences, Spain
Ramsar	Ramsar Convention
REDICA	Central American Network of Engineering Institutions
RGWB	Research Group of Water Balance and its Future Expectation on Alluvial Fan, Japan
Rijkswaterstaat	Rijkswaterstaat, the Netherlands
RU	Radboud University Nijmegen, the Netherlands
RWC	Rwanda Wildlife Clubs
SAGARPA	Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food, Mexico
Sarar	Sarar Transformation SC, Mexico
SDC	Swiss Agency for Development and Cooperation
Seawater	Seawater Foundation
SEDESOL	Ministry of Social Development, Mexico
SEI	Stockholm Environment Institute, Sweden
SEMAR	Ministry of the Navy, Mexico
SEMARNAT	Ministry of the Environment and Natural Resources, Mexico
SEP	Ministry of Public Education, Mexico
Shiga, Japan	Shiga Prefectural Government, Japan
SIAAP	Inter-Departmental Union for Sanitation of the Urban Area of Paris
SIC-ICWC	Scientific-Information Center of the Interstate Coordination Water Commission of the Central Asia, Uzbekistan
SIWI	Stockholm International Water Institute, Sweden
SPANCOLD	International Commission on Large Dams, Spanish National Committee
SS	Ministry of Health, Mexico
SSO	Sahara and Sahel Observatory
St. Gregorios	St. Gregorios College, India
STREAMS	Streams of Knowledge
SWH	Swedish Water House
SYKE	Environment Institute of Finland
Torino	Province of Torino, Italy
UACAM	Autonomous University of Campeche, Mexico
UASLP	Autonomous University of San Luis Potosi, Mexico
UCL	University College London, United Kingdom
UCLG	United Cities and Local Governments
UFRGS	Federal University of Southern Rio Grande, Brazil
UIA	Iberoamerican University, Mexico
UMB	University of Life Sciences, Norway
UN ECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNACH	Autonomous University of Chiapas, Mexico
UNAM	National Autonomous University of Mexico
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNECA	United Nations Economic Commission for Africa
UNEP	United Nations Environment Programme
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCO -IHE	United Nations Institute for Water Education
UNESCO-IHP	UNESCO International Hydrologic Programme
UN-HABITAT	United Nations Human Settlements Programme
UNICEF	United Nations Children's Fund
UNISDR	United Nations International Strategy for Disaster Reduction
Univ. Newcastle	University of Newcastle upon Tyne, United Kingdom
Univ. Osnabrueck	University of Osnabrueck, Germany
UNPFII	United Nations Permanent Forum on Indigenous Issues
UNU	United Nations University
USACE	U.S. Army Corps of Engineers
USAID	U.S. Agency for International Development
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
USSD	U.S. State Department
UVW	Association of Water Boards, the Netherlands
UWC	University of the Western Cape, South Africa
VEOLIA	Veolia Water
Wageningen	Wageningen - UR, the Netherlands
WB	World Bank
WBCSD	World Business Council for Sustainable Development
WC Israel	Water Commission of Israel
WECF	Women in Europe for a Common Future
WET	Project WET International, United States
Wetlands	Wetlands International
WHO	United Nations World Health Organization
WICO	Women International Coalition Organization
W-Metropolis	International Network Women and Local Governance - Metropolis (the World Association of Major Metropolises)
WMF	World Monuments Fund
WMO	World Meteorological Organization
WRA Jamaica	Water Resources Authority, Jamaica
WRC South Africa	Water Research Commission, South Africa
WSP	Water and Sanitation Program
WSSCC	Water Supply and Sanitation Collaborative Council
WWAP	United Nations World Water Assessment Programme
WWC	World Water Council
WWF	World Wildlife Fund
WWP	Women for Water Partnership
ZIWR	Zuckerberg Institute for Water Research, Israel
Zuid-Holland & Zeeland	Provinces of Zuid-Holland and Zeeland, the Netherlands

Kyoto World Water Grand Prize finalists

ID	Organization	Local Action	Country
LA0019	Gender and Water Alliance	Gender Perspective in Rural Drinking Water Systems in Chile	Chile
LA0057	Protection of Mexican Fauna (PROFAUNA)	A project for the catchment area of Saltillo	Mexico
LA0115	Gram Vikas	Building dignity through community managed rural water and sanitation in Orissa, India	India
LA0128	International Development Enterprises International (IDE)	Multiple water use systems by design: new low-cost tools for irrigating small plots with a limited water supply—experience from Nepal, and India	United States of America
LA0142	International Center for Agricultural Research in the Dry Areas (ICARDA)	Supplemental irrigation for improved rainfed wheat yield and water productivity in Syria	Syria
LA0145	Bharathi Integrated Rural Development Society	Andhra Pradesh Farmer Managed Groundwater Systems Project	India
LA0166	Xochitla Foundation	Xochitla: an urban green area dedicated to the integrated management of water through educational activities and water sanitation, development of an arboretum and aquatic native plant garden of the country's central plateau, which promotes its recovery	Mexico
LA0169	CIHEAM – Mediterranean Agronomic Institute of Bari	Potentials for improving on-farm water use efficiency and the use of Non-conventional Water Resources in irrigated agriculture of the Middle East and North Africa Region	Italy
LA0257	Environmental Infrastructure Trust Fund of the Istmo	Implementation of sewage treatment plants in rural and semi-urban communities with self financing and sustainable operation	Mexico
LA0284	Heart of the Earth	Sustainable Development Program of the Condiro-Canales Mountain Range, Jalisco, Mexico	Mexico
LA0329	Gana Unnayan Sangstha (GUS)	CBO turns in to development in the southwest coastal region of Bangladesh	Bangladesh
LA0356	The Bread of Life Development Foundation (BLF)	Integrating Pro-Poor Policies into PPP: Lessons from Nigeria's Water Reform Process	Nigeria
LA0385	Institute for Environmental Studies (IVM-VU)	Kenya sand dams	Netherlands
LA0392	Centre for Community Health Research, India	Efforts to formulate a Framework for the sustainable utilization of groundwater in Kerala (India)	India
LA0394	EcoSanClub	Sanitation for a rural girls school in Uganda (local action to be presented in the Topic Session ID TS0051 organized by MAMA-86 and WECF part of "Women's Coalition")	Austria
LA0483	Arab Office for Youth and Environment (AOYE)	The National Community Water Conservation Program "NCWCP"	Egypt
LA0496	Ulew Che Ja	Traditional forest and natural resource stewardship of the Maya Quiche in Totonicapán, Guatemala	Guatemala
LA0549	Indigenous Peoples Task Force	Giganawendaamin Nibi (we must all take care of the water)	United States of America
LA0550	NetWWater and WfWfW	Tsunami and sanitation in Sri Lanka – Turning tragedy into an opportunity for improving sanitation	Sri Lanka
LA0653	Uganda Water and Sanitation NGO Network (UWASNET)	UWASNET NGO Capacity Building Programme/ The role of UWASNET in building the capacity of NGOs to effectively contribute to the sector goal in Uganda	Uganda
LA0709	Maji Na Ufanisi (Water and Development)	Kiambiu Water and Environmental Sanitation – KIWESA Project	Kenya
LA0745	Water Solidarity Europe	"Rhine-Net" for enhancing good practices in public involvement	France
LA0772	Coalition of NGOs in Water and Sanitation (CONIWAS)	The Mole Conference Series: A rallying Point for Civil Society Advocacy in the Water & Sanitation Sector in Ghana	Ghana
LA0775	International Water Project (IWP)	The Kazusabori Technology Transfer and Sustainable Community Water Development	Japan
LA0786	Massachusetts Institute of Technology (MIT)	Dissemination of the Kanchan Arsenic Filter in Rural Nepal through a Local Entrepreneurs Model	United States
LA0794	Anjuman Samaji Behbood (ASB) Faisalabad	Community-involvement in provision of water and sanitation	Pakistan

Posters Presented at the Forum

ID	Organization	Local Action	Country
LA0076	Ministry of Water Resources and Irrigation	Integrated Irrigation Improvement and Management Project (IIIMP)	Egypt
LA0077	Rural Africa Water Development Project	Promoting Safe Water Supply with the Mor-Sand Filter in Nigeria	Nigeria
LA0167	Pronatura	Institutional experience in the integrated management of Coastline Basins of Chiapas	Mexico
LA0217	Seawater Foundation	Seawater to combat water epidemics caused by malnourishment in coastal desert zones, saving freshwater	United States of America
LA0235	Center of Scientific Investigation and Higher Education of Ensenada (CICESE)	Bioremediation of wastewater through built microbial rugs, environmental mitigation of the Bay of Ensenada, and water recovery, a model applicable to coastal municipalities	Mexico
LA0313	WUP-FIN Lower Mekong Modeling Project	WUP-FIN Lower Mekong Modeling Project	Laos
LA0344	Tuvalu Department of Environment	Improving Sanitation Systems to Protect Freshwater Resources in Tuvalu	Tuvalu
LA0371	Association of Irrigation Users of La Pieded	Adoption of a low-pressure irrigation system in the "La Piedad" module	Mexico
LA0388	Alliance to Save Energy	Performance Contracting Applied to Water in South Africa	United States of America
LA0442	UNESCO-IHE Institute for Water Education	Millennium Development Goals (MDG) Capacity Strengthening Project in the Middle East	Netherlands
LA0523	ABCMAC - Brazilian Rainwater Catchment and Management Association	P1MC and P1+2, two Rainwater Harvesting Programs in the Brazilian Semiarid Tropics	Brazil
LA0543	Cook Islands National Environment Service	The Cook Islands International Waters Project - Providing a model for community-based catchment management and freshwater protection in the Pacific Islands	Cook Islands
LA0795	Swiss Federal Institute for Aquatic Science and Technology / Department of Water and Sanitation in Developing Countries (EAWAG / SANDEC)	Promotion and Dissemination of Solar Water Disinfection (SODIS)	Switzerland
LA1262	Sanguare Reserve	Management of an invading species through harvesting for craft use	Colombia
LA1577	Quinaxi	Recovering of deteriorated water ecosystems	Colombia
LA0548	Chalchiutlicue Environmental Project	Chalchiutlicue Environmental Project and Celebration	United States of America
LA0636	National Ecology Institute (INE)	Use of electric tariff as an implicit price for water	Mexico
LA0711	Water Development Department	Conservation of Drinking Water by the Reuse of Treated Grey Water (for Toilet Flushing and Garden Irrigation) at the Household Level	Cyprus
LA0778	National Poytechnic Institute (IPN)	Technological innovation in the treatment of domestic wastewater in rural dwellings without drainage	Mexico
LA0818	University Of Liege (Belgium)	Local actions for a global challenge through the experiences of river contract in Belgium and in Burkina Faso (West Africa)	Belgium
LA0819	Mixed investment water companies (SEM d'EAU)	The transition from a private operator towards a local public company: local communities and customers are gaining	France
LA0820	Global Network for Environment and Economic Development Research	Cows to Kilowatts	Nigeria
LA0882	Research Institute for Humanity and Nature	Groundwater and Human Security for Well-being in Japan	Japan
LA1052	Ministry of Energy - Electricity and Water of Kuwait	MSF Distillers Lifetime "Kuwait experience"	Kuwait
LA1072	Center of Hydrographic Studies of the CEDEX, Ministry of Promotion	Incorporation of new technologies for water management in the historic irrigable zone: the Aragon canal and Catalonia	Spain
LA1089	Japan Bank for International Cooperation (JBIC)	Treated Sewage Water Irrigation Project in Tunisia (JBIC ODA funded project)	Japan
LA1100	Ministry of Rural Development of the Government of the State of Puebla	Basin Management and Food Sovereignty	Mexico
LA1110	El Carmen Mill	Basin Management and Food Sovereignty	Mexico
LA1116	The Blue Cross Cooperative	Gathering and incineration of solid waste and oil, including toxic ones, in cement ovens, to lessen the pollution of run-off and phreatic water	Mexico
LA1133	Tampere Polytechnic University of Applied Sciences	Save Water - Promote Eco-sanitation and Use of Dry Toilets	Finland

ID	Organization	Local Action	Country
LA1145	Metropolitan Autonomous University (UAM)	Innovating to strengthen tradition	Mexico
LA1177	Integrated River Basin Management Project, Associates to the Hydrographical Complex Santiago Bar – The Impossible (BASIM) and the World Conservation Union (IUCN)	Efficient use of water in productive conservatory systems for men and women, Tamasha Community, San Francisco Menendez, Ahuachapan	El Salvador
LA1380	The Barrio de la Soledad Municipality, Oaxaca	The recovery of drinking water lost by leaking.	Mexico
LA1397	Ministry of the Environment and Natural Resources	Economic Impact of Salinization of Groundwater in the productive and home activities, in the coastal zone of the low basin of the River Paz, El Salvador	El Salvador
LA1404	"Riviera Berica" Irrigation and Drainage District	Irrigation pilot project for hilly areas in the North East Italy flood-plain	Italy
LA1437	Public Utilities Board (PUB) of Singapore	Singapore's Experience in Managing the Water Resources – Water for all: Conserve, Value and Enjoy	Singapore
LA1449	National Institute for Rural Engineering (NIRE)	Assessment of the Impact of Global-Scale Change in Water Cycles on Food Production and Alternative Scenarios	Japan
LA1456	World Conservation Union (UICN)	Fish farming as a tool for the integrated management of the common land Morelos basin in Tapachula, Chiapas	Mexico
LA1461	U.S. Agency for International Development (USAID)	West Africa Water Initiative (WAWI)	United States of America
LA1462	Lake Champlain Basin Program	Building Bridges, Fording Streams, Reaching Agreement in the Lake Champlain Basin: a citizen and science-based approach to inspire watershed improvement and protection	United Sates of America
LA1475	Centre for Environment and Development for the Arab Region and Europe (CEDARE)	Pioneering Actions in Managing the Transboundary Nubian Sandstone Groundwater Aquifer	Egypt
LA1540	U.S. Geological Survey	GIS Applications for Multinational Watershed Assessment	United States
LA1643	Water Advisory Council of Mexico	Water Culture Campaign 2004-2005	Mexico
LA1654	Historic Water Archive of Mexico	Recovery of historic data on water: the case of the historic water archive in Mexico	Mexico

Organizations with Stands in the Water Fair

Mexican Pavilion

State of Aguascalientes
State of Baja California
State of Baja California Sur
State of Campeche
State of Chiapas
State of Chihuahua
State of Coahuila
State of Distrito Federal
State of Durango
State of Mexico
State of Guanajuato
State of Guerrero
State of Hidalgo
State of Jalisco
State of Michoacan
State of Morelos
State of Nayarit
State of Nuevo Leon
State of Oaxaca
State of Puebla
State of Queretaro
State of Quintana Roo
State of San Luis Potosi
State of Sinaloa
State of Tabasco
State of Tamaulipas
State of Tlaxcala
State of Veracruz
State of Yucatan
State of Zacatecas
Airports and Associated Services (ASA)
Federal Electricity Commission (CFE)
National Commission for the Development of Indigenous Peoples (CDI)
National Forestry Commission (CONAFOR)
Tourist Promotion Council
Ministry of Civil Service
Federal Institute for Access to Information (IFAI)
Institute of the National Fund for Dwellings for Workers (INFONAVIT)
Drinking Water and Sanitation Operator of Tlalnepantla Municipality
Ministry of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA)
Ministry of Social Development (SEDESOL)
Ministry of Agrarian Reform (SRA)
Ministry of Health (SS)

Organizers

National Water Commission of Mexico
World Water Council
Ministry of the Environment and Natural Resources

Agencies and governments of other countries

Government of Denmark
National Water Agency (ANA, Brazil)

Pavilions of Regions of the World

Africa
Americas
Asia-Pacific
Europe
Middle East and North of Africa

Foundations

Jal Bhagirathi Foundation
Kyoto World Water Grand Prize
Prince Sultan Bin Abdulaziz International Water Prize

International Financial Institutions

African Bank Development
World Bank
Japan Bank for International Cooperation

United Nations System

United Nations Economic Commission for Europe (UNECE)
United Nations Food and Agriculture Organization (FAO) / Portuguese Development Cooperation Institute (IPAD) / International Atomic Energy Agency (IAEA)
United Nations Environment Programme (UNEP) / UNIDO
UNESCO-IHE Institute for Water Education / International Hydrological Programme
United Nations Humans Settlements Programme (UN-HABITAT) / United Nations World Program of Action (UNWP)
United Nations' Children's Fund (UNICEF) / World Health Organization (WHO)
United Nations University (UNU)
World Meteorological Organization (WMO) / United Nations International Strategy for Disaster Reduction (ISDR)
World Water Assessment Programme (WWAP) / United Nations Department of Economic and Social Affairs (UNDESA)

NGOs and Civil Society

Mexican Alliance for a New Water Culture
Mexican National Association of Water and Sanitation Utilities
Let's Walk Together for Health and Development
Women's Coalition
Water Advisory Council of Mexico
Freshwater Action Network
Millennium Water Alliance
Mekong River Commission
Metropoli / Center of Studies for the Metropolitan Zone
Water, Environment and Society Program (PAMAS)
Sarar Transformation
World Wildlife Fund
Youth Booth

International Organizations

Building Partnerships for Development in Water and Sanitation
Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC)
Global Water System Project
Institute of Research for Development (IRD)
International Water Management Institute (IWMI)
Organization of American States (OAS)
Wetland International
Organization for Economic Co-operation and Development (OECD)
International Office for Water / International Network of Basin Organizations (INBO)
Water and Sanitation Program (WSP)
American Water Resources Association (AWRA)

Academia and Research

Centre for Development Studies, Uni. Of Bergen, Norway
Colegio de Mexico
National Autonomous University of Mexico (UNAM)
University Anahuac
Mexican Center for Water and Sanitation Training (CEMCAS)
National Polytechnic Institute (IPN)

Global Village

Association of the Friends of Patagonia
Ryan's Walls
Xochitla Foundation
Center of Education and Training for Sustainable Development
Mexican Institute of Water Technology (IMTA)
Center for Environmental Information and Communication of North America
El Manatial
Center for Environmental Awareness and Education
Ducks Unlimited
Terra Nostra
Project WET International
The Natural Conservancy
Seawater Foundation and Aquamaris
Japan Water Forum
Citizen's Water House
Cinema Room "1st International Water and Film Encounter"
Papalote Children's Museum

Organizations in the World Water Expo

ABS Group
ACS Environment
ADS Mexicana
Advanced Synoptic Technologies, Ltd.
Aeration Industries International
Aeromexico
AGA Gas
ALFA
ALFA Editors
ALFA Laval
ALIBIO
AMANCO Group
American Cast Iron Pipe
American Water Works Association (AWWA)
Amitech Mexico
ANFORA
Applied Technoevolutions
Aqwise Technologies
Arnco of Mexico
ATCO
Atlantis Water
Autodesk
Badger Meter of the Americas
Baler of Mexico
Bemari Integrated Services
Bermad of Mexico
Biwater
Blue Planet Run
BNJ Vertical Pumps
Books and Art CONACULTA
Border Environment Cooperation Commission (BECC) / North-American Development Bank (NADBANK)
Boulder Information Technologies
Bridgestone Industrial Products America
British Embassy / UKTI
Center of Normalization and Certification of Products (CNCP)
CH2M HILL
CHANITEX
CIATEC
CICASA
Cled of Mexico
COIMSA
Colombian Tectank
Comecop
Conieco
CPB
CWT-Hombre Naturaleza
DANFOSS
Delphy Pumps and Equipment
Disime
DMT USA, Inc.
DOFESA
Domos Group
Drew Industrial
Drinking Water, Sewerage and Sanitation of Tultitlan
E.J. Brooks
Earth Tech
Ecological Industrail Consortium
Ecotechnology and Environment (Ecomax Capizzi)
Eisenkraft
Electromechanics Monterrey
Elementum Aqua
Elster
Endress + Hauser
Energy Today
Environmental Technology Magazine
Environmental Teorema Magazine
Equipasa
ESAL
Eurocenter Nafin Mexico, Business Center
Excellence in Pumps and Systems
Executive World
Extrumex
Fernandez Valves
Festo Pneumatics
Florida Aquastore
Flottweg
French-Mexican Chamber of Trade and Industry
Freyssinet of Mexico
GE Water and Process Technologies
German Centrifugal Pumps
Global Environment Facility (GEF)
Global Water Partnership (GWP)
GM Industrial Group
Gonzalez Calvillo and Poch Environmental
Goulds Pumps of Mexico
Grundfos Pumps of Mexico
HACH
Helguera and Associates
Helvex
Hi-Pro Ecological
Hultec
Hydroagua
Hydro-Industrial Corporation
I.L Diagnostics
ICA Group
IDE Technologies
IEASA
IGAR Group
IGS
Imbobiliare Magazine
INDAGA
Industrial Representations and Distributions
INIMA European Environmental Services (OHL Group)
INSA
Integral Water Engineering
Integrated Environmental Solutions
INTEMA
International Articles and Parts
International Committee of the Red Cross (ICRC)
International Desalination Association (IDA)
International Development Research Center (IDRC)
International Federation of the Red Cross and Red Crescent Societies
International Hydropower Association (IHA)
IPEX of Mexico
Iran Water Resources Management Company
Islas Industries
Jose Cuervo

Kaeser Compressors
Karcher Mexico
Katadyne
Kinetico
Korea Environmental Management Corporation
Krohne
KSB of Mexico
Kurita of Mexico
Kyokuto Boeki Kaisha, LTD.
La Jornada
Laguna Tubes
Lake Streams
Lamosa Toilets
Lamotte
Latintech
Layfield Environmental Systems
Leopold Co.
Madepla
MAPA
Medina Submersible Pump
Mexican Certification
Mexican Chamber of the Construction Industry
Mexican Geological Service
Mexican Institute of Water Technology (IMTA)
Mexican Representations of Machinery and Equipment
Ministry of Water Resources of P.R. China
Modelo Group
More Instruments
Mueller Co. / U.S. Pipe
Multitubos
NABOHI
Nalco of Mexico
NARESA
National Instruments Mexico
National Statistics, Geography and Computing Institute of Mexico (INEGI)
Nestlé
Nippon Poly-Glu
North American Atlas
Norweigan Water Resources and Energy Directorate (NVE)
NRP Latin America
Odebrecht
ORMI Organization
OSE - UPA (Mobile Drinking Water Unit)
Ozone Ecological Equipments
Ozono Polaris
Packaging and Plastics of Michoacan
Peerless Pump Mexico
Perfopartes
Permastore Limited
Plan International
Plastic Plumbers of Mexico
Plexco of Mexico
PMI
Pneumatic Propulsion
Politubos of Mexico
Pollutec
Population Services International
Portaqua, LLC
Pro Agua
Proactive Environment Mexico
Proaqua Group
Processor of Ceramics of Mexico (Ecomax Capizzi)
Project WET International Foundation
Protyc
Public Utilities Board, Singapore (PUB)
Publicom
Racom Microelectronics
Rain Bird
Recome / Nicamesa
Rotary International
Rotoplas
SADMX
Sandia Labs / University of Arizona
SAP
Schlumberger Water Services
Schneider Electric of Mexico
Severn Trent Services
Siemens (Water Technologies)
SIGSA
Simapro Ecolo-Systems
SITMA
Skyjuice Foundation
Smagua
SMAT
Solar-Institute Juelich
Solutions for the Control of Resources
Soluziona of Mexico
South African Water Sector
Stockholm International Water Institute (SIWI)
Superior Tank
Swan Analutische Instrumente AG
Taylor and Francis
Tech Industrial Group
Televisa Publishing
TEM-EDIE
The Environmental and Water Resources Institute
The Nature Conservancy
TINEP
Tododren
Tubesa
U.S. Agency for International Development (USAID)
U.S. Geological Survey (USGS)
Valsi
Valtic
VAMEX Valves
Vassallo-Syroco
Vastergard Fransen
VC and S
Victoria Pumping Systems
Wagtech International Ltd.
Walingford Software Mexico
Water Ecosystems
Water Environment Federation (WEF)
Water for People
Water from the Air
Water of Mexico
Water Operator
Water Technologies
Waterhealth International
Waterless Co. / Asisi Intelligent Toilets
Wesso AG
Westfalia Separator
World Business Council for Sustainable Development (WBCSD)
World Conservation Union (IUCN)
World Ubran Forum 3
Worthington of Mexico / Ruhrpumpen
XEL-HA
Xelha Housing Group
YSI

Dutch Pavilion

- At@Work
- Cep-Net International Network for Capacity Building in IWRM
- Dutchdam, Emergency Flood Barrier
- Herder BV
- ITC The Netherlands
- NEDAP Power Supplies
- Netherlands Water Partnership (NWP)
- Norit X-Flow

- TNO Built Environment and Geosciences
- WL Delft Hydraulics

French Pavilion
- French Partnership for Mexico

German Pavilion
- German Federal Government

Israeli Pavilion
- Odis Asversa
- Netafim
- State of Israel

Italian Pavilion
- AVR - Italian Valve and Fitting Manufacturers Association
- Eurovix
- Italian Institute for Foreign Trade
- Lab Water Systems - Conacom Italy
- Maddalena SPA
- Plastitalia SPA
- SIMEM
- T.A.E. SRL Trentina Applicazioni Elettriche

Japanese Pavilion
- Ara River Upstream Work Office, Ministry of Land, Infrastructure and Transport, Japan
- Chubu Regional Bureau, Ministry of Land, Infrastructure and Transport, Japan
- Conference of Promotion for Lake Biwa-Yodo River Basin Area Renaissance
- CTI Engineering Co., Ltd.
- Institute for Global Environmental Strategies
- International Center for Water Hazard and Risk Management under the Auspices of UNESCO (ICHARM)
- International Flood Network (IFNET)
- International Network for Water and Ecosystem in Paddy Fields (INWEPF)
- Japan Bank for International Cooperation (JBIC)
- Japan International Cooperation Agency (JICA)
- Japan Water Agency
- Japan Water Forum (JWF)
- Japan Water Reclamation Committee for World Water Forum
- Johkasou System Association, Japan
- Ministry of Land, Infrastructure and Transport (MLIT) of Japan
- NEWJEC Inc.
- Nippon Koei Co., Ltd.
- Ocean Policy Research Foundation
- Pacific Consultants Co., Ltd.
- Tamura System Co.
- Toto Ltd.
- Visit Japan Campaign (VJC)

Korean Pavilion
- Korea Water Resources Corporation (K-Water)
- Korea Environmental Management Corporation
- Korean NGO Network for Water Task Force for Survival of Rivers, INCHEON
- Ministry of Construction and Transportation

Portuguese Pavilion
- Waters of Portugal
- Faculty of Engineering of the University of Porto
- HIDRONET - PT
- Water Institute
- Technical Superior Institute (IST)
- LNEC National Laboratory of Civil Engineering
- Ministry of the Environment, Spatial Planning and Regional Development (MAOTDR)
- University of Coimbra
- University of Minho
- University of Evora

Spanish Pavilion
- Aqualia Integrated Water Management (FCC Group)
- Air Water Treatment
- Spanish Association of Water Supply and Sanitation (AEAS)
- Spanish Association of Desalinization and Reuse (AEDYR)
- Spanish Association of Engineering, Consulting and Technological Services Firms TECNIBERIA / ASINCE
- Technological Association for the Water Treatment (ATTA)
- BEFESA Construction and Environmental Technology S.A.U.
- CEPEX (CEPEXSER, AIE)
- Isabel Canal II
- CMB Control
- EMASESA
- Expoagua Zaragoza 2008
- Estruagua
- Ayesa Group
- INDAR, Hydraulic Machines, S.L.
- IMEX Packaging, S.L.
- Marcor Ebro, S.A.•
- Energy Improvements
- Ministry of the Environment / ICEX
- Section of Teledetection and Sig./ Regional Development Institute / University of Castilla La Mancha
- Seopan – Association of National Construction Companies
- SICE, S.A.
- Filtration Systems and Fluid Treatment, S.A.
- Telvent

Swiss Pavilion
- Pall Water Processing

Organizations that organized Special Events during the Forum

Arab Water Council (AWC)
Colegio de Mexico, COLMEX
Euphrates-Tigris Initiative for Cooperation (ETIC)
Expo Zaragoza 2008
Federal Institute for Access to Public Information, IFAIP, Mexico
Gender and Water Alliance
Geo Secretariat
INIMA European Environmental Services, Mexico
Inter-American Association of Sanitary and Environmental Engineering (AIDIS)
International Development Research Institute (IDRC)
International Foundation for Saving the Aral Sea
International Network of Basin Organizations, INBO
Mexican Chamber of the Construction Industry
Mexican Institute for Water Technology, IMTA
Ministry of Foreign Affairs of Denmark
Ministry of the Environment of Spain
National Ecology Institute, INE, Mexico
Organization for Economic Cooperation and Development, OECD
Partnerships for Water and Sanitation
Post-Graduate College, Mexico
Project WET International Foundation
State Water Commission of Guanajuato, Mexico
United Nations Environment Programme (UNEP)
Water Advisory Council, Mexico
WaterAid

Acknowledgements

Thematic Beacons

CapNet
Colegio de Mexico
Cooperative Program on Water and Climate (CPWC)
Development Planning Unit, University College, London
Global Water Partnership (GWP)
IRC International Water and Sanitation Centre
International Commission on Irrigation and Drainage (ICID))
International Water Association (IWA)
International Water Management Institute (IWMI)
Japan Water Forum (JWF)
Mexican Institute for Water Technology (IMTA)
School of Geography, Politics, and Sociology, University of Newcastle upon Tyne
Secretariat of the UN Millennium Project Task Force on Water and Sanitation
Streams of Knowledge
UN Department of Economic and Social Affairs (UNDESA)
UNESCO-IHE Institute for Water Education
United Nations Development Program (UNDP)
United Nations Humans Settlements Programme (UN-HABITAT)
United Nations' Children's Fund (UNICEF)
United Nations' Food and Agriculture Organization (FAO)
US Army Corps of Engineers (USACE)
Water Advisory Council, Mexico
World Bank
World Meteorological Organization (WMO)
World Water Assessment Program (WWAP)
World Water Council (WWC)
World Water Assessment Program (WWAP)

Organizations Involved in the Regional Process

Advanced Research Institute in Economy and Environment, Brazil
African Development Bank (AfDB)
African Ministers Council on Water (AMCOW)
Alternatives and Civil Society Participation Processes, Mexico
AMANCO, Guatemala
Andean Community, Peru
Arab Fund for Social and Economic Development
Arab Gulf Programme for United Nations Organizations (AGFUND)
Arab Network for Environment and Development
Arab Organization for Agricultural Development (AOAD)
Arab Water Council (AWC)
Association of Basic State Sanitation Companies, Brazil
Austrian Ministry of Agriculture, Forestry, Environment and Water Management
Bushnak Group
Cairo Office of the German Technical Cooperation Agency (GTZ Cairo)
Canadian International Development Agency (CIDA)
Canadian Water Resources Association (CWRA)
Caribbean Environmental Health Institution, Guyana
Center for Environment and Development of the Arab Region and Europe (CEDARE)
Center for Environmental Law and Natural Resource, Costa Rica
Center for Environmental Legal and Social Action, Guatemala
Central American Bank for Economic Integration (CABEI)
Central American Commission for the Environment and Development, El Salvador
Central American Network of Engineering Institutions, Costa Rica
Central American Regional Network for Water and Sanitarian, Honduras
CGIAB Sustainable Water, Bolivia
CIHEAM-Bari
Complutense University, Spain
Cooperative Program on Water and Climate (CPWC)
Council of Arab Economic Unity (CAEU)
Danish Water Forum (DWF)
Darwish Consulting Engineers, Egypt
Dutch Coordination Team for the 4th World Water Forum
Ecobiosphere, Panama
Economic Commission for Latin America
Egyptian Holding Company for Water and Wastewater
Egyptian National Committee for Irrigation and Drainage (ENCID)
Engineering Institute of the National Autonomous University of Mexico
Environmental Trust Fund of the Istmo, Center for Ecological Support of the Coasts of Oaxaca, Mexico
EUREAU
European Commission (EC)
European Committee of Environmental Technology Suppliers Associations (EUCETSA)
European Investment Bank (EIB)
European Union Water Initiative Secretariat (EUWI)
Food and Agricultural Organization (FAO)
Foundation for Urban Development, Costa Rica
French Coordination Team for the 4th World Water Forum
French Water Academy
Freshwater Action Network, Central America (FANCA)
Gender and Water Alliance, Colombia, Chile and Mexico
Global Water Partnership Central and Eastern Europe (GWP CEE)
Global Water Partnership Mediterranean (GWP Med)
Global Water Partnership, Caucasus and Central Asia (GWP CACENA)
Global Water Partnership, South Asia Section (GWP SAS)
Global Water Partnership, South-East Asia Section (GWP SEA)
Global Water Partnership (GWP)
Group for Education and Sustainable Environmental Management, Panama
Health Space, Mexico
Hombre Naturaleza Foundation, Mexico
Humboldt Center, Nicaragua
Hydrosult Inc., Canada
INCAE Business School, Costa Rica
Indigenous and Peasant Council of the Agro-Forestry Community, Costa Rica
Inter-American Association of Sanitary and Environmental Engineering (AIDIS)
International Center for Agricultural Research in the Dry Areas (ICARDA)
International Center for Biosaline Agriculture (ICBD)
International Development Research Center (IDRC)
International Network for Water, Environment and Health, United Arab Emirates
International Network of Basins Organization (INBO)
International Office for Water (OIEau)
International Water Association (IWA)
International Water Resources Association (IWRA)
International Water Studies Center, Ministry of Water Resources, Iraq
Irrigation and Hydraulics Department, Faculty of Engineering, Cairo University, Egypt
Islamic Development Bank (IBD)
Japan International Cooperation Agency (JICA)
Japan Water Forum (JWF)
King Fahd University of Petroleum and Minerals, Saudi Arabia
Korea Water Forum (KWF)
Kuwait Institute for Scientific Research
Latin American Center for Water Studies, Argentina
Living Rivers Coalition, Brazil
Mexican Academy of Science
Mexican Center for Environmental Law
Mexican Foundation for Environmental Education
Mexican Fund for the Conservation of Nature
Middle East Desalination Research Center (MEDRC)
Ministry of Energy, Kuwait
Ministry of Irrigation and Water Resources, Sudan
Ministry of Irrigation, Syria
Ministry of Municipalities Affairs and Agriculture, Qatar
Ministry of National Land, Water, and Environment, Morocco
Ministry of Planning, Libya
Ministry of Regional Municipalities, Environment, and Water Resources, Sultanate of Oman
Ministry of Rural Development, Hydraulics, and Environment, Mauritania

Ministry of Water and Electricity, Saudi Arabia
Ministry of Water and Environment, Yemen
Ministry of Water and Irrigation, Jordan
Ministry of Water Resources and Irrigation, Egypt (MWRI)
Ministry of Water Resources, Algeria
Ministry of Water Resources, Libya
Monterrey Technological Institute for Higjer Studies, Mexico
National Association of Irrigation Users, Mexico
National Authority for Water, Ministry of Irrigation and Water Resources, Sudan
National Office for Water Supply, Ministry of Agriculture and Water Resources, Djibouti
National Polytechnic Institute, Mexico
National Society for Water Exploitation and Distribution, Tunisia
National University of Costa Rica, PRIGA Project
National Water Agency, Brazil
National Water Commission of Mexico (CONAGUA)
National Water Directorate, Costa Rica
National Water Research Center, Egypt
National Water Resources Institute, Cuba
Netherlands Water Partnership
Network of Water Bodies of the Federal District, Mexico
North American Center for Environmental Information and Communication, Mexico
Observatory of the Sahara and Sahel, Tunisia (OSS)
Organization of American States (OAS)
OSPESCA/PREPAC, El Salvador
Oxford University, United Kingdom
Palestinian Hydraulic Group
Palestinian Water Authority
PANTANAL Network Ecology and Action, Brazil
Promotion Group of Ecological Agriculture, Nicaragua
PRONATURA, Mexico
Qatar Public Agency for Electricity and Water
Regional Water Resources Committee, Costa Rica
SARAR Transformation, Mexico
Scientific and Technical Association for Water and the Environment (ASTEE)
Seine-Normandy Water Agency
SIECA, Guatemala
South American Technical Advisory Committee
South Pacific Applied Geoscience Commission (SOPAC)
Stockholm International Water Institute (SIWI)
Swiss Agency for Development and Cooperation (SDC)
Techno Park de the United Arab Emirates (Techno Park UAE)
The Royal Netherlands Embassy in Egypt
Tropical Agricultural Research and Higher Education Center, Costa Rica
UN Economic and Social Commission for West Asia (UN-ESCWA)
United Nations Educational, Scientific and Cultural Organization (UNESCO)
United Nations Environment Programme (UNEP)
United Nations University (UNU)
United States Agency for International Development (USAID)
University of Jordan
University of Osnabrück
US Army Corps of Engineers (USACE)
Veolia Water for Latin America
Water Advisory Council of Mexico
Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC)
Water Europe Solidarity
Water Law and Indigenous Rights, Mexico
Water Platform, Honduras
Water Resources Directorate, Ministry of Municipalities Affairs and Agriculture, Bahrain
Women for Water (WfW)
Women in Europe for a Common Future (WECF)
World Bank (WB)
World Conservation Union IUCN / Regional Office for Mesoamerica, Coordination of the Thematic Area of Wetlands, Water and Coastal Zones, Costa Rica
World Water Council (WWC)
WWF Program Mexico

Donors

State of Aguascalientes
State of Baja California
State of Chihuahua
State of Coahuila
State of Durango
State of Hidalgo
State of Jalisco
State of Michoacan
State of Morelos
State of Nuevo Leon
State of Puebla
State of Queretaro
State of Quintana Roo
State of San Luis Potosi
State of Sinaloa
State of Tabasco
State of Tamaulipas
State of Yucatan
Mexican National Association of Water and Sanitation Utilities
Mexican National Association of Soft Drink and Carbonated Water Producers
Avantel Infrastructure
Cuauhtemoc Moctezuma Brewery
Gonzalo Rio Arronte Foundation
Soriana Organization
GMD Water and Ecology
Microsoft Mexico
Ministry of the Environment of Spain
OHL Group
Coca Cola FEMSA
The Coca-Cola Company
Vitro

Sponsors

Jose Cuervo
Televisa Publishing
Modelo Group
ICA Group
Soriana Organization
AeroMexico
Xel-Ha Park A Natural Wonder
Vendor
3 Com Mexico
Telefonos of Mexico (Telmex)
National Association of Producers and Distributors of Purified Water

Special Thanks

Cinematography Training Center
Mexican National Council for Culture and the Arts (CONACULTA)
National Film Library
French Embassy in Mexico
Ministry of Foreign Affairs, Mexico
Photographer Gabriel Figueroa Flores
Ministry of Foreign Affairs, France
Japan International Cooperation Agency
Kyoto City
The Government of Morocco
Germany Technical Cooperation Agency (GTZ)

Special Broadcasting Supports

XEIPN Channel Eleven
Urban Equipment of Mexico (EUMEX)
Fashion Products (TO BE FASHION ACTION)
MVS Communications
Channel News Asia
TV5 Monde
CNN International
CNN in Spanish
EuroNews
Zimat Golin Harris
Communication Counsil
National Chamber of the Foreign Buses Transport Industry
Counsil or Tourism Promotion
The 4th World Water Forum volunteers
System of Travel Agencies TURISSSTE
Mexican President's Office
Government of the Federal District
Ministry of the Interior
Ministry of Health
Electricity Company of the Center
Electricity Company of the Center
Mexican Youth Institute (IMJ)
National Commission for the Development of Indigenous Peoples (CDI)
Mexican National Women's Institute
North American Center for Environmental Information and Communication
National Council for Culture and the Arts (CONACULTA)
State of Veracruz
State of Oaxaca

Photo Credits

© IISD/ Earth Negotiations Bulletin

© Dr. Manuel Maass, CIEco UNAM

All other photos were taken by the Forum official photographers, by members of the Secretariat of the 4th World Water Forum and CONAGUA.

International Organizing Committee

Cristobal Jaime Jaquez	Co-Chair, Director General of the National Water Commission of Mexico
Loïc Fauchon	Co-Chair, President of the World Water Council
Cesar Herrera Toledo	Secretary General of the 4th World Water Forum
Ernesto Cespedes Oropeza	Ministerial Conference Coordinator, Ministry of Foreign Affairs, Mexico
Benedito Braga	Vice President of the World Water Council
Salomon Abedrop Lopez	President of the National Association of Water and Sanitation Utilities
Ger Bergkamp	Governor of the World Water Council
Paul Reiter	Governor of the World Water Council
Jerry Delli Priscoli	Governor of the World Water Council
Daniel Zimmer	Executive Director of the World Water Council
Orlando Jaimes Martinez	Executive Secretary of the 4th World Water Forum
Ricardo Martinez Lagunes	Thematic Coordinator of the 4th World Water Forum
Roberto Olivares	Mexican Association for Clean Water and Healthy Environment
Mokhtar Bzioui	Observer, 1st World Water Forum
Thijs van Praag	Observer, 2nd World Water Forum
Hideaki Oda	Observer, 3rd World Water Forum

Management Team of the Secretariat of the 4th World Water Forum

Cesar Herrera Toledo	Secretary General
Ernesto Cespedes Oropeza	Coordinator of the Ministerial Process
Orlando Jaimes Martinez	Executive Secretary
Jose Antonio Rodriguez Tirado	Coordinator of the Regional Process
Ricardo Martinez Lagunes	Coordinator of the Thematic Area
Heidi Storsberg Montes	Coordinator of Communication
Juan Carlos Valencia Vargas	Coordinator of the Logistics Area
Roman Gomez Gonzalez De Cosio	Advisor to the Secretary General
Tomas Adolfo Lara Lopez	Coordinator of the Process Follow-up and Overview
Alejandra Ghigliazza Ramos	Coordinator of the Civil Society and Interest Group Liaison Office
Andres Govantes Guzman	Coordinator of the Administrative Area
Ismael Cabrera Rangel	Coordinator of the Computing Area
Polioptro Martinez Austria	Coordinator of the Synthesis Team

Secretariat of the 4th World Water Forum

George Alcala	Walter Astie Burgos	Jorge Aviles Chavez
Maria Isabel Badillo Ibarra	David Barocio Cruz	Alberto Barreto Arias
Lorena Butron Tellez	Monica Calva Moguel	Monica Camarena Garcia
Margarita Caminos Fernandez	Alejandro Chavez Rivero	Claudia Coria Bustos
José Maria de la Torre Wolf	Emmanuel del Río Alderete	Eduardo del Valle Córdoba
Leticia Dominguez Elizalde	Laura Luz Espinosa Gutierrez	Eduardo Espinosa Medel
Hector Fonseca Melendez	Antonio Franco Gonzalez	Estrellita Fuentes Nava
Francisco Gaitan Neme	Ana Maria Garcia Juarez	Laura Alicia Gonzalez Olvera
Guillermo Gutierrez Gomez	Isabel Clara Harland de Benito	Hugo Enrique Hernandez Perez
Colin Herron	Hector Ibarrola Reyes	Alejandro Jaimes Escobedo
Denie Joaquin Jaubert	Benjamin Jimenez Almaraz	Maria de Lourdes Juarez Marusich
Ulrike Kelm	Rafael Lopez Mota	Jorge Salome Lopez Ramírez
Marco Antonio Maldonado Arellano	Marissa Mar Pecero	Fabian Mendoza Jimenez

Jorge Luis Meza Reyna
Rina Mussali Galante
Guillaume Paquet
Enrique Popoca Valadez
Patricia Risbourg Ruiz
Edith Rosales Aragon
Julian Ruiz Martinez
Virginia Ugalde Pimienta
José Fidencio Vasquez Ramirez
Enrique Zarate Bohorquez
Maria Pia Mier Salgado
Satoshi Ojima
Graciela Paredes Garcia
Lydia Ramirez Altamirano
Maria Laura Rodriguez Lopez
Maria Teresa Rosas Jasso
Edith Rosalva Saldivar Garcia
Gilberto Valdez Rivera
Luis Vazquez Molina
Liliana Mora Gonzalez
Suraya Padua Diaz
Alejandro Pedraza Cortés
Ruben Ramirez Castro
Amanda Rodriguez Valdes
Lourdes Rosete Denis
Abigail Sanchez Carreño
Joyce Teresa Valdivinos Ortega
Norma Carolina Vazquez Tapia

Secretariat of the 4th World Water Forun

Headquarters of the World Water Council

Carine Sirou
Charles Baubion
Elisabeth Catton
Jérémie Toubkiss
Laetitia Chassefière
Michel Ducrocq
Paul Van Hofwegen
Sonia Briki
Stéphanie Porro
Zixuan Zhang
Céline Dubreuil
Danielle Gaillard-Picher
Florence Clermont
Karim Adgharouamane
Marie Borni
Papa Abdoulaye Fall
Sabrina André
Stéfanie Neno
Valérie Bistagne

World Water Council
Espace Gaymard
2-4 Place d'Arvieux
13002 Marseilles
France
Phone: + 33 4 91 99 41 00
Fax: + 33 4 91 99 41 01
email: wwc@worldwatercouncil.org
website: www.worldwatercouncil.org

Secretariat of the 4th World Water Forum
Av. Insurgentes Sur 2416
Piso 4, Ala Sur
Col. Copilco El Bajo
Del. Coyoacán
04340 México, D. F.
México
Phone: +52 (55) 51 74 44 80
Fax: +52 (55) 51 74 47 22
email: 4wwforum@cna.gob.mx
website: www.worldwaterforum4.org.mx