



## 3RD WORLD WATER FORUM HIGHLIGHTS: FRIDAY, 21 MARCH 2003

On Friday, participants to the 3rd World Water Forum met in Kyoto and Shiga in the final sessions of the Forum. In Kyoto, sessions on Water, Education and Capacity Building, Financing Water Infrastructure, and Dams and Sustainable Development closed, as did sessions in Shiga on Integrated Water Resources Management (IWRM) and Basin Management and Water for Peace. The Ministers' Meeting on "Water, Food and Agriculture" was held in Shiga, adopting a Ministerial Recommendation on Water, Food and Agriculture. The Children's World Water Forum continued, and the Water Development Partners Panel took place. The Regional Day was Europe.

In the afternoon, Forum participants met with Ministers in Kyoto in a Dialogue to discuss water and poverty and post-forum implementation actions.

### **INTEGRATED WATER RESOURCES MANAGEMENT AND BASIN MANAGEMENT**

**STRATEGIES AND ACTIONS TO IMPLEMENT THE WORLD LAKE VISION:** Dongil Seo, Chungnam National University, chaired this session, organized by the International Lake Environment Committee (ILEC), UNEP International Environmental Technology Centre (UNEP-IETC) and Shiga Prefecture. Sven Erik Jørgensen (ILEC) said successful lake management requires a wide spectrum of pollution abatement tools, and sound and comprehensive planning. Calixto Cataquiz, Laguna Lake Development Authority, underscored meaningful stakeholder participation and partnerships with local governments. Joan Skinner Alvarado, Lake Atitlán Sustainable Management Authority, outlined key management strategies, including waste management control, renewal of wastewater treatment infrastructure, reforestation, and full public participation encouraged by an environmental awareness campaign. Jon MacDonagh-Dumler, Great Lakes Commission, stressed the complexity of controlling non-point source pollution from brownfield industrial sites and agricultural land. He identified the need for an institutional shift from jurisdiction planning to basin planning.

Masahisa Nakamura, ILEC, introduced a GEF project that entails a comprehensive review of 27 lakes around the world to improve understanding, and enhance global capacity for sustainable lake management. Harvey Shear, Environment Canada, explained how using ecosystem health indicators can provide a consistent framework for incorporating monitoring data into management plans. Maciej Zalewski, International Centre of Ecology of the Polish Academy of Sciences, noted the importance of hydrological and biotic ecosystem properties for sustainable

management. William Branch, US Army Corps of Engineers, highlighted cooperation between Canada and the US in the management of the Columbia River. Karen Jenderedjian, Armenian Ministry of Nature Protection, said the sound management of Lake Sevan depends on environmental information.

**Discussion:** Chris Magadza, ILEC, chaired the morning discussion. Skinner Alvarado said institutional structures should reflect the specific social, economic and environmental circumstances around lakes, while MacDonagh-Dumler said existing institutions should evolve to incorporate the broader scope of IWRM. One participant suggested this begin with institutional integration. In the afternoon, Chair Walter Rast, ILEC, highlighted the need for focused monitoring to provide information necessary for decision-making. Richard Robarts, UNEP, stated that monitoring can be cost effective and should be tailored to the lake system. Lisa Borre, LakeNet, stressed the importance of involving women in all levels of lake management, including in government, financial organizations and community groups. Aitken Clark, Living Lakes, emphasized the need for concrete guidance on identifying stakeholders and achieving participation. Vicente Santiago-Fandiño, UNEP, stressed the need for political will.

**INTEGRATED CATCHMENT MANAGEMENT:** Philippe Pypaert, UNESCO, chaired this session, organized by UNEP-IETC and UNESCO International Hydrological Programme. Luis Chicharo, University of Algarve, outlined the application of ecohydrology to the management of coastal areas. Rocío Córdoba, IUCN, advocated using a holistic approach that incorporates socioeconomic factors into technology assessments. Maciej Zalewski outlined the potential efficiency increases that could be achieved by integrating ecological and hydrological knowledge of the basin into decision-making. Vicente Santiago-Fandiño provided examples of phytotechnology, including wetland construction for sewage treatment and phytoremediation, the removal of toxins from contaminated soil. Marcelo Gaviño Novillo, UNESCO, stressed the need for horizontal, rather than sectoral institutional organization, and said that cooperation between practitioners, the public, politicians and professionals is key to IWRM. Christopher Magadza questioned the relevance of technologies developed in benign social circumstances to large socially, politically and economically heterogeneous river basins in Africa. Eric Wolanski, Australian Institute of Marine Science, outlined the value of salt marsh rehabilitation in reducing sediment flow to coastal areas.

**Discussion:** Richard Robarts chaired the discussion. Acknowledging limitations to ecohydrology and phytotechnologies, panelists recommended that such technologies be integrated with conventional ones.

**WRAP-UP PLENARY:** The wrap-up plenary of this theme was chaired by Torkil Jønych-Clausen, GWP, and began with a report from the three sub-themes of IWRM and Basin Management. Jens Fugl, GWP, reported on sessions that discussed IWRM and basin management and recommended the following: recognizing ecosystem services and understanding ecosystem functions; using multi-sector analysis in planning; considering the impacts of floods; addressing effective governance and conflict management; developing mechanisms for stakeholder participation and increasing community contributions; and capacity building and knowledge transfer. Denis Fourmeau, International Network of Basin Organizations, presented on elements of sustainable river basin management, including: recognition of water as a common good; inter-sectoral management; basin-level management systems; clear legal frameworks; multi-level participation; information distribution; monitoring systems; financial systems based on contributions from consumers and polluters; and formalized international cooperation for transboundary river basin management.

Masahisa Nakamura, ILEC and Lake Biwa Research Institute, presented recommendations on lake basin management, emphasizing that they should be adapted to local circumstances. The recommendations include: enhancing monitoring; improving scientific understanding; involving communities in policy reform and institutional building; using local institutions as a hub for implementation; sharing costs; strengthening local human resources; using tools and indicators; and applying new approaches for biodiversity assessment. He stated that participants had agreed on the need to build partnerships, share experiences and follow the principles of the World Lake Vision. Jønych-Clausen presented the draft theme statement which recommends IWRM at the basin level with consideration for ecosystems and environment, equity and economy.

Participants commented on the statement, highlighting the inward-looking nature of the water community and suggesting the need for ecosystem restoration and research into governance mechanisms. Participants then adopted the draft. Hans Christian Schmidt, Danish Minister for the Environment, formally received the draft and praised the work of participants in this session. He recognized the key message to Ministers, *inter alia*, specific recommendations on how to develop IWRM and water efficiency plans in all countries. Toshinori Ogata, Governor of Shiga Prefecture, closed the session by highlighting the significance of the recommendations to the Lake Biwa basin.

## **WATER FOR PEACE**

**FROM POTENTIAL CONFLICT TO COOPERATION POTENTIAL: WATER FOR PEACE:** This session was convened by UNESCO and Green Cross International and chaired by Victor Pochat, UNESCO International Hydrological Programme. David Grey, World Bank, noted that river basin States must identify appropriate levels of cooperation. Marc Baltes, Organization for Security and Cooperation in Europe (OSCE), outlined OSCE's activities in alleviating water-related conflicts. Prince Jean Nassau of Luxembourg spoke on incentives for business cooperation.

Peter Gleick, Pacific Institute for Studies in Development, Environment, and Security, noted how efficient water use and allocation can reduce tension and facilitate cooperation between States. Kamel Mahadin, former Jordanian Minister of Water and Irrigation, outlined the water resources conflict between Jordan and Israel in the Jordan River Basin.

Houria Tazi Sadeq, UNESCO, examined how international law can contribute to water management cooperation. Alfred Duda, GEF, announced that the GEF will disperse US\$400 million for projects fostering cooperation on transboundary water issues in developing countries. Fekri Hassan, University College London, spoke on ethical and cultural incentives for water cooperation. John Metzger, Water Utilization Program, outlined the cooperation incentives used by the Mekong River Commission, and Natalia Alexeeva, Peipsi Centre for Transboundary Cooperation, reviewed transboundary cooperation in the management of Lake Peipsi.

**WRAP-UP PLENARY:** This session was chaired by William Cosgrove, WWC. Koïchiro Matsuura, UNESCO, said preventing water conflicts is central to peace and noted the need to manage shared river basins equitably. He stressed that effective resource sharing between States with divergent interests is based on learning, cooperation, tolerance and mutual respect. Matsuura announced that UNESCO, with the Permanent Court of Arbitration (PCA), and others, is in the process of establishing a Water Cooperation Facility. He explained that the Facility will aim to: anticipate, prevent and resolve international water-related conflicts; improve water governance; promote awareness on water-related issues; and create a network of international legal experts willing to provide relevant support and advice.

Tjaco van den Hout, PCA, said the Water Cooperation Facility will address problems arising from water disputes. He noted legal gaps and uncertainties in freshwater management and highlighted the role of lawyers in encouraging the rule of law and facilitating negotiations on the equitable use of shared water resources. He stressed that the PCA will seek to ensure the Facility's effectiveness by providing the requisite legal expertise. Koen Roest, Alterra Green World Research, demonstrated a computer game aimed at enhancing water management skills.

Cosgrove presented the theme statement, which recommends: giving stakeholders the opportunity to participate fully in decision-making and implementation; promoting international law in resolving transboundary water conflicts; providing greater financial assistance for addressing water-related problems in developing countries; and establishing a water mediation facility to assist in managing transboundary water and related disputes.

Ismail Serageldin, Library of Alexandria, said the time has come to "wage peace." He noted that transboundary water management can foster peaceful relations between States and noted the need to seek participatory, socially-responsible and environmentally-friendly solutions. He called for an International Framework Convention on Water and stressed the need for funding and actions to implement agreed measures. He emphasized that MDGs can be both reached and exceeded.

## **DAMS AND SUSTAINABLE DEVELOPMENT**

**STORING WATER FOR SUSTAINABLE DEVELOPMENT:** This session was organized by the WWC Taskforce on Dams and chaired by André Bergeret, International Commission on Large Dams (ICOLD).

Luis Berga, ICOLD, demonstrated the correlation between dam indicators, such as the storage volume of reservoirs *per capita* and various macroeconomic indicators. He highlighted the economic benefits that dams bring to Spain, including irrigation, hydropower and flood control, and said environmental impact assessments ensure the participation of all stakeholders.

Cassio Viotti, ICOLD, discussed the role of dams and development in Latin America. Noting that Brazil has poor quality coal and little oil, he said hydropower is necessary for industrialization. Highlighting Latin America's sizable hydropower potential, he stated that increasing energy consumption will boost development in the region.

Yogendra Prasad, National Hydroelectric Power Corporation (NHPC), provided an overview of NHPC hydropower projects in India, highlighting environmental practices and benefits for local communities, including improved health care, education, and industrial development.

Doan Altinbilek, WWC, underscored the role of dams in Turkey's development, highlighting benefits for the economy. He noted that resettlement presents an inherent challenge. Abdou Sebgo, Burkina Faso National Committee on Large Dams, stressed that improved water resource management is critical for promoting development and improving the quality of life in Burkina Faso. He noted that dam development has led to significant advances in irrigation, resulting in increased agricultural production and crop diversification.

**Discussion:** Participants discussed the value of small dams for meeting the needs of the rural poor. One participant noted that the correlation between dams and macroeconomic indicators is less apparent for developing countries.

**WRAP-UP PLENARY:** This session was chaired by Mahmoud Abu-Zeid, WWC. Jagath Manatunge, Tokyo University, presented findings of the session on dam development and human and environmental resettlement in monsoon Asia. He underscored the importance of empowering local communities and the need for transparency and democracy in all stages of resettlement programmes. Regarding the outcome of the session on promoting dialogue for improved decision-making, Jeremy Bird, UNEP Dams and Development Project, highlighted general agreement on the need for dialogue based on the values and strategic priorities of the World Commission on Dams (WCD) report.

Shuichi Ikebuchi, Kyoto University, said participants in the session on reservoirs for river basin management emphasized the need for a quantitative evaluation of both direct and indirect impacts of reservoir development. On the role of large dams in water resource management, Shripad Dharmadhikary, Manthan Adhyayan Kendra, noted that dam benefits are sometimes exaggerated and human rights violations occur. Speaking on the role of water harvesting in sustainable water management, he stressed that rainwater harvesting can rejuvenate a community.

Ute Collier, WWF, provided an overview of the session on financial institutions, highlighting the need for investment in both large and small dams, and for conducting needs and options assessments. André Bergeret, ICOLD, presented findings from the session on storing water for sustainable development. He noted that dams play a major role in social and economic development around the world.

Discussing whether dam construction is necessary, Kawai Yosinari, NGO Association for Public Works Review, called for the preservation of livelihoods and ecosystems and stressed the need to evaluate alternative options using scientific criteria. Asit Biswas, Third World Center for Water Management, said participants in the session on the Southeast Anatolian Regional Development Project, stressed that water resource development has brought economic development and employment to the region.

Klaus Töpfer, UNEP, emphasized that the WCD report provides a valuable basis for discussion. Mahmoud Abu-Zeid, WWC, read the draft theme statement and several participants expressed disappointment that it omits reference to the WCD report.

### OTHER ISSUES

#### WORLD PANEL ON FINANCING WATER INFRASTRUCTURE:

This session, organized by the WWC and the Forum Secretariat, was chaired by Margaret Catley-Carlson, GWP. She introduced the report of the World Panel on Financing Water Infrastructure (WPFWI) entitled "Financing Water for All." Panel Chair Michel Camdessus underscored the Panel's primary objective of addressing the mobilization of financial resources to achieve the water and sanitation MDGs, and said that "the dream of water for all is within reach." He provided an overview of the Report's 85 proposals on action to be taken by governments, donors, regions, civil society, the private sector, development banks, and small-scale providers.

Tadao Chino, Asian Development Bank (ADB), said while tariff reform is difficult, it must be undertaken to ensure sustainable cost recovery and include lifeline tariffs for the poor. Agnes van Ardenne-van der Hoeven, Dutch Minister for Development Cooperation, said the Report lacked concrete, action-oriented recommendations. She stressed the need for policy changes regarding land and land reform and said that irrigation and drainage, and budgeting for ecosystem management had not been addressed by the Panel. She called for a new "global deal" to achieve "more crop per drop," urged OECD countries to meet the agreed international ODA target, and emphasized that it is the responsibility of governments to safeguard water access and quality. Recognizing the benefits and problems associated with PPPs, she announced that the Netherlands was prepared to bring all actors together for a worldwide dialogue on improving PPPs.

Ronnie Kasrils, South African Minister of Water Affairs and Forestry, welcomed recommendations for household sanitation, operation and maintenance, free basic services and targeted subsidies, and effective governance in the water sector. He noted the significance of the Report's recommendation to double ODA for the water sector as a first step in increasing financial flows. He said that the private sector alone is not the "panacea and the magic bullet," and that the "acid test" for PPPs is the provision of affordable and quality services for the poor. Recognizing the importance of large dams in Africa, he welcomed the recognition of the need to finance large projects and called for the application of the WCD's recommendations. He said that the WPFWI did not have enough gender and civil society representation and lacked a thorough consultative process. He identified gaps in financing IWRM, irrigation and agriculture, and hydropower.

Ravi Narayanan, WaterAid, said that technology choices must be based on, and respond to, local needs. Peter Weike, World Bank, stressed the need to find ways to serve the poor in an affordable manner.

**Discussion:** Several participants opposed the Report's focus on the role of the private sector, privatization and its emphasis on "profit over people." Others addressed concerns relating to implementing the recommendations of the WCD and the lack of recommendations focusing on private sector regulation and governance. Another participant called for governments to address inequities in the global trade system, and exclude water services from the General Agreement on Trade in Services. In closing, Chair Catley-

Carlson said that the Report does not set out a consensus on financing, but establishes a roadmap of elements that need to be discussed.

### **MINISTERS' MEETING ON "WATER, FOOD AND AGRICULTURE"**

This meeting was convened by the Japanese Ministry of Agriculture, Forestry and Fisheries and FAO, and chaired by Tadamori Oshima, Japanese Minister of Agriculture, Forestry and Fisheries. Opening the session, he recalled UN Secretary-General Kofi Annan's appeal for a "blue revolution" that would garner "more crop per drop" to feed the world's undernourished population. Noting that current efforts will not achieve the World Food Summit target of halving the proportion of hungry people by 2015, Jacques Diouf, FAO Director-General, stressed the role of irrigation in meeting crop production goals, and urged greater investment in small-scale irrigation projects and rural development.

Chair Oshima presented and delegates adopted the Ministerial Recommendation on Water for Food and Agriculture by acclamation. The Recommendation identifies food security and poverty alleviation, sustainable water use, and partnerships as three key challenges for the agriculture sector. It outlines several actions including to: modernize and improve agricultural water use; increase water productivity; promote better governance; consider environmental aspects; undertake research development; and foster international cooperation and partnerships.

Several countries, including Burkina Faso and China, stressed the need to ensure food security and self-sufficiency. Morocco called for increased access to agricultural markets, and the People's Democratic Republic of Lao and others, stressed the need to increase water productivity. Turkey underscored the role of dams in meeting water demands and the potential for cooperative water projects to promote peace. "Water wealthy" countries, such as Cambodia and Malaysia, noted seasonal variations in water availability, and stressed the need to control water supply and store water for the dry season. India and Pakistan noted the effects of climate change on water availability and outlined short and long-term national strategies to address the problem.

Many countries, including Chile, Egypt, Indonesia, Iran, Myanmar, Sudan and Thailand, reported on irrigation and rural development programmes and policies, highlighting the training of farmers, prevention of pollution, IWRM and participatory approaches. Vietnam spoke on its national dialogues on water, and the Governor of Shiga provided an overview of irrigation initiatives in the Shiga Prefecture and preservation projects of Lake Biwa. Nepal stressed the importance of education on sustainable water management, and Poland highlighted an academic programme linking agrology with water protection. Japan and the Republic of Korea highlighted the multifunctional roles of paddy cultivation. The Netherlands stated that integrated river basin management is an important water policy tool for tackling allocation problems. Greece stressed the importance of appropriate technology transfer and capacity building for international development partners. South Africa emphasized the need for farmers to take more responsibility for protecting natural resources. Senegal, Syria and others called for partnerships addressing small-scale irrigation and rain-harvesting programmes. Highlighting water wars, Bolivia invited cooperation from its neighbors to help solve its water problems. Colombia noted the

destructive effects of illicit crop cultivation on water resources, and called for international support to stem the demand for illicit drugs.

ADB highlighted its Water for All policy. In addition to science and technology, the Consultative Group on International Agricultural Research stressed the role of innovative approaches and cooperation in achieving sustainable agriculture. The International Commission on Irrigation and Dams invited organizers to establish a task force to build on the knowledge and experiences garnered from the Forum. The International Federation of Agricultural Producers said it did not support total privatization of water access, and called on financial institutions to support sustainable water management programmes. The World Bank stressed the importance of institutional change, fair trade policies, investment in physical infrastructure, research, and capacity building in ensuring food security and poverty reduction.

Delegates thanked the organizers for convening a meeting for Agriculture Ministers at the Forum.

### **DIALOGUE BETWEEN PARTICIPANTS AND MINISTERS**

The Dialogue between Forum participants and Ministers provided an opportunity for a "large-scale and direct" discussion. It was introduced by a keynote speech by Koki Chuma, Japanese Vice-Minister of Land, Infrastructure and Transport, and facilitated by Jerome Delli Priscoli, US Army Corps of Engineers. In the first Dialogue, approximately 300 Forum participants, Ministers and senior officials discussed challenges related to water and poverty, including to: overcome gender inequality; develop good water governance and legal frameworks; attract investment; empower local authority; and promote community participation in water management. Several participants noted that the draft Ministerial Declaration does not acknowledge the human right to water and reflects the ideas generated in the Forum poorly.

The second Dialogue session, attended by another group of participants, discussed important actions that should be taken after the Forum's conclusion, including: ensuring that the next forum is more participatory; implementing the recommendations of the WCD; acknowledging the human right to water in an international agreement; creating a global fund for water and sanitation; mobilizing the media to inform people about the MDGs; developing a UN convention on water and poverty; disseminating the results of the Forum; and implementing the Forum's outcomes through country-level plans.

The final report will contain a consolidated list of ideas generated during the Dialogue and prioritized by the participants in post-Dialogue receptions.

## **THINGS TO LOOK FOR TODAY**

### **MINISTERIAL CONFERENCE OPENING PLENARY:**

The Ministerial Conference opens today in the Main Hall in Kyoto at 9:30 am.

### **MINISTERIAL CONFERENCE SUB-GROUP MEETINGS:**

At noon, the five subgroup meetings will begin, addressing: safe drinking water and sanitation; water for food and rural development; water pollution prevention and ecosystem conservation; disaster mitigation and risk management; and water resources management and benefit sharing.

**FORUM SPECIAL PROGRAMMES:** The World Water Assessment Programme will be presented today, beginning at 10:30 am.