SUMMARY OF THE INTERNATIONAL CONFERENCE ON FRESHWATER: 3-7 DECEMBER 2001

The International Conference on Freshwater took place from 3-7 December 2001 at the International Congress Center Bundehaus in Bonn, Germany, with 118 governments, 47 intergovernmental organizations and 73 representatives of major groups in attendance.

The Conference was convened as a preparatory step on freshwater issues for the upcoming World Summit on Sustainable Development (WSSD). Delegates met in Plenary and Working Group sessions to consider issues of water access, scarcity, pollution and natural disasters, as well as financing and capacity building. A closed-door ministerial session considered the equitable and sustainable use of water resources and the mobilization of financial resources for infrastructure investment.

The Conference considered the Recommendations for Action (RFA) that will be presented to the WSSD and its preparatory process. The other conference outputs are the ‘Bonn Keys’ – a one-page summary of the RFA, the Working Group Reports, Conference Report and Ministerial Declaration, as well as the Conference Issue Paper and Thematic Background Papers, which were prepared prior to the Conference.

BRIEF HISTORY

The International Conference on Freshwater is held ten years after the International Conference on Water and the Environment held in Dublin, which provided input in freshwater issues for the 1992 United Nations Conference on Environment and Development (UNCED). One of products of UNCED was Agenda 21, a 300-page plan for achieving sustainable development in the 21st Century. Created in December 1992 to ensure effective follow-up on UNCED, the Commission on Sustainable Development (CSD) held its five-year review in June 1997.

During the sixth session of the Commission (CSD-6) held from 20 April - 1 May 1998, Chapter 18 of Agenda 21, a 300-page plan for achieving sustainable development in the 21st Century. Created in December 1992 to ensure effective follow-up on UNCED, the Commission on Sustainable Development (CSD) held its five-year review in June 1997.

During this five-day Conference entitled “Water – A Key to Sustainable Development,” both Government and representatives of Farmer organizations, Business and Industry, Local Authorities, Workers and Trade Unions, and NGOs participated in Plenary sessions followed by Multi-Stakeholder Dialogues (MSDs) and parallel Working Group meetings. The MSDs addressed the themes of Equitable Access and Sustainable Supply of Water for the Poor, Strategies for Sustainable and Equitable Management of Water Resources, and Integrating Gender Perspectives, while the parallel Working Groups considered the crosscutting issues of: Governance, Integrated Management and New Partnerships; Mobilizing Financial Resources; and Capacity Development and Technology Transfer. Each crosscutting issue had sub-themes providing the basis for discussion. A closed, half-day ministerial session was held for ministers present at the Conference to consider equitable and sustainable use of water resources and mobilizing financial resources for infrastructure. The outputs from these sessions were integrated into the draft Recommendations for Action (RFA), which had been prepared prior to the Conference. The revised RFA was considered during one Plenary session, before being finalized.

This report is organized on the basis of the Conference themes and crosscutting issues.

OPENING SESSION

Jürgen Trittin, Germany’s Federal Minister for the Environment, Nature Conservation and Nuclear Safety, and Uschi Eid, Germany’s Parliamentary State Secretary, Ministry for Economic Cooperation and Development, opened the International Conference on Freshwater on Monday, 3 December.

In his opening speech, Trittin, who with Eid served as Co-Chairs, urged delegates to take action, voicing support for a “global pact” for sustainable development. He emphasized the need for partnership with industry, stated that inadequate water quality or quantity creates refugees and conflict, and called for the implementation of the Kyoto Protocol.
Co-Chair Eid, called for practical tools for implementation of past international agreements, emphasizing that 1.2 billion people lack access to safe water, while 2.5 billion lack decent sanitation. She underscored the needs of women and children, calling access to water a fundamental human right. She concluded by bridging the concepts of peace and sustainable development, noting that the terrorist attacks affect security and prosperity.

Pia Heckes, Deputy Mayor of the City of Bonn, welcomed delegates to the City of Bonn, highlighting the city’s important role in the international community.

In his keynote address, Nitin Desai, UN Under-Secretary-General and Secretary-General of the Johannesburg Summit described water as a “strategic resource,” highlighted the importance of the Johannesburg Summit, and stressed the need to connect issues of resource management and poverty. He expressed hope for political will, practical steps, and partnerships urging, *inter alia*, the Johannesburg Summit to emulate several elements of the Freshwater Conference, including scientific and professional inputs, integrating social, economic, and environmental dimensions and utilizing an open and transparent process to achieve the conference goals. He underscored the links between the Johannesburg Summit, the Fourth World Trade Organization Ministerial Conference in Doha, and the International Conference on Financing for Development scheduled to be held in Monterrey, referring to the three conferences as a test of multilateralism.

Klaus Töpfer, UN Environment Programme (UNEP) Executive Director, highlighted the importance of water in all sectors of social and economic development, poverty eradication, and cultural diversity, noting the relationship between water and energy issues. He urged “global cooperation,” and called for the Johannesburg Summit to be a “summit of implementation not of declaration.”

Maria Mutagamba, Uganda’s Minister of State for Water, stated that this Conference should chart the way forward, calling for a critical review of public funding and assessment of market distortions. She emphasized the role of women and the need for regional cooperation to achieve access to safe water and sanitation.

**MULTI-STAKEHOLDER DIALOGUES**

Two Multi-Stakeholder Dialogues (MSDs) were held on Monday afternoon, 3 December on equitable access and sustainable supply of water for the poor, and on Tuesday morning, 4 December, on strategies for sustainable and equitable management of water resources. The sessions were co-chaired by Trittin and Eid (Germany), and facilitated by David Hales, Center for Sustainment Sciences and Technologies. These dialogues sought to initiate discussion and enrich conference outputs, by raising issues and suggesting directions and actions, and their conclusions subsequently prepared and distributed.

**EQUITABLE ACCESS AND SUSTAINABLE SUPPLY OF WATER FOR THE POOR:** Participants heard presentations on the themes of partnering with the private sector and its alternatives, making decisions participatory, and preventing corruption.

In the opening presentations, a representative of Business and Industry stressed: creating an enabling environment, fostering partnerships, and valuing water. Calling for water access to combat poverty, a representative of Farmers urged local entrepreneurship, empowerment of women, investment in infrastructure and appropriate technology; and capacity building. A representative of Workers and Trade Unions claimed that public-private partnerships do not reflect the needs of poor people, and urged investment in public systems. The NGO representative stressed *inter alia* prioritising small-scale, community-led projects, pricing water without seeking full-cost recovery, and following the guidelines of the World Commission on Dams.

In subsequent discussion, participants touched on the roles of donors and States, issues of transboundary watercourses, the displacement of people by large hydro-modifications, and the benefits of private sector financing and knowledge. Sweden proposed targeting official development assistance (ODA) for water, with others urged targeting ODA for capacity building to level the playing field for negotiations between industry, communities, and local governments. The Gender and Water Alliance called for training for women and allocating some ODA to gender initiatives. The Business and Industry representative called for transparent regulatory frameworks, codes of conduct, locally-appropriate models, and knowledge transfer. Some expressed doubt in private partnerships, urging wider participation in decision making, reduced donor pressure, and greater investment in public utilities. Noting the problem of corruption in large projects, some urged greater cooperation between agencies and governments, and greater accountability and transparency. Others called for criminalization of bribery, and proposed developed and developing country government responsibilities in this regard.

**STRATEGIES FOR SUSTAINABLE AND EQUITABLE MANAGEMENT OF WATER RESOURCES:** In their opening presentations, a representative of Business and Industry urged treating water as an economic good, calling for measurable targets to attract finance, technology and knowledge sharing, and urging governments to ensure affordable water for the poor. Speaking on behalf of Farmers, one representative recommended clear water codes, and their involvement in infrastructure maintenance. Supporting biotechnology, he urged citizen-driven research and called for disaster insurance. A representative of Local Authorities illustrated the role of localities in effective water management through optimization of municipal operations, fostering community dialogue, and initiating catchment planning at different scales. A representative of NGOs stressed prioritization of small-scale, community-led projects, and underscored the need to separate private sector involvement from international funding conditionalities and to exclude water from international trade negotiations. The Workers and Trade Unions representative described water as a natural monopoly distorted by privatization, and urged regulating international financial institutions (IFIs), proposing mobilization of additional financing for water infrastructure from IFIs and union pension funds.

In the ensuing discussion, many participants emphasized the need for capacity building, participatory decision making, incorporating local knowledge, and creating enabling environments. Integrated Water Resource Management (IWRM) was extensively discussed, as was the issue of water management for the farming
sector, which uses a large portion of water resources. Distinctions between water pricing and sale were made, with Iraq regarding water sale as unacceptable. Several delegates called for appropriate water pricing. France, Namibia, and the African Development Bank recommended state-managed commercialization of water provision and management. Business and Industry proposed a multi-stakeholder review of water service provision models, and suggested that governments raise ODA and build capacity among governments and regulators. Denmark recommended a framework, similar to the Århus Convention, to enhance public participation in water issues, while Yemen suggested allowing states that depend on multilateral financing to establish their own conditionalities.

**Final Text:** The Chair’s summary of the MSD notes that the Dialogues sought to cultivate diverse viewpoints, allowing all stakeholders to participate fully. Issues raised include corruption, partnerships, privatization of water, mobilization of financial resources, the importance of local government, and the disconnection between the rhetoric of conference declarations and the reality of actions that have followed. It states that achieving the Millennium Summit goal “to halve, by 2015, the proportion of people living unable to afford safe drinking water,” will require that for next 14 years, we provide access to safe and affordable water for 300,000 additional people each day. Achieving a similar target for sanitation would require providing 390,000 additional people each day with sanitation services over the same time period.

The Summary suggests that partnerships should include: multi-stakeholder participation in watershed management groups; support for underrepresented groups to ensure their meaningful participation; decentralized decision making at the local level; full public access to information, knowledge sharing and transparency; capacity building; and clear legal and regulatory frameworks.

It notes that delegates emphasized the need to eliminate corruption, considering it one of the most destructive influences to equitable access to water and that eliminating corruption would require: political will and action from governments; capacity building; strengthened accountability, transparency, and strong enforcement of legislation and implementation of codes of conduct. They highlighted the need for mobilizing financial resources, reiterating the goal of achieving the 0.7 percent GNP for ODA. On the question of water privatization, it notes that concern was raised over: private ownership of water resources; diversion of water from rural farmers; lack of recognition for the private sector’s contribution to meeting the needs of the poor; and disempowerment of local governments due to IFI and donor conditionalities. It notes widespread appreciation for the German government’s support for ensuring stakeholder participation.

**MINISTERIAL SESSION**

On Tuesday, 4 December, the ministers in attendance, representing 46 countries, assembled in a half-day closed-door session to consider equitable and sustainable use of water resources and mobilizing financial resources or infrastructure. In the afternoon, Habibollah Bitaraf, Iran’s Minister of Energy, presented the Ministerial Declaration and noted consensus on the Recommendations for Action.

**Declaration:** The Declaration has four sections and fourteen clauses. It begins with an introduction of the purpose of the Declaration, and describes current challenges, past commitments and proposed action-oriented measures for increasing water security and achieving sustainable management of water resources.

The Declaration states that protection of the world’s freshwater resources is a key challenge facing governments, with combating poverty being the main challenge to achieving sustainable development. Recognizing that 1.2 billion people live in poverty without access to safe drinking water and that 2.5 billion have no access to proper sanitation, the Declaration emphasizes that the Johannesburg Summit must include decisive action on water issues. Reiterating relevant international targets and commitments, the Declaration suggests concrete actions to address: governance; the role of the international community; capacity building and technology transfer; gender issues; the funding gap; and next steps. Noting that privately managed delivery should not imply ownership, the Declaration urges the private sector to join with government and civil society to provide water and sanitation to those without these services. It calls upon the international community to strengthen its commitment and effort to manage water and share benefit, calling for strengthened coordination and coherence of activities within the UN, and for countries to seek to achieve the ODA target of “0.7 percent of GDP.”

The Declaration suggests that: resources should be made available to assist developing countries to mitigate natural disasters; women have an equal voice; and information exchange and capacity building programmes help to ensure the effective use of human, financial and technical resources for water management. Finally, it urges the WSSD to take into account the outcome of the Conference.

**INTEGRATING GENDER PERSPECTIVES**

On Thursday morning, 6 December, delegates met in Plenary to consider the theme, Integrating Gender Perspectives: Realizing New Options for Improved Water Management. Co-Chair Bärbel Dieckmann, Mayor of Bonn, with Co-Chairs Diane Quarless (Jamaica) and Jon Lane (UK) and Facilitator Jennifer Francis, Gender and Water Alliance, opened the Plenary on gender issues. Participants also heard the report of an informal working group on Gender that worked throughout the Conference to prepare recommendations.

In her keynote address, Barbara Schreiner (South Africa) suggested that addressing gender inequity requires measures to redress historical imbalances in decision making and access and urged mainstreaming gender in development. She called for secure rights and entitlements, non-discriminatory conflict resolution, clear indicators and targets, and programmes of action. Delegates emphasized that women “bear the load of water,” and recommended their empowerment through education and organization. They proposed national policies, programs that promote equity, and decentralized decision making and recommended gathering gender-specific data, using existing legal instruments, as well as seeking gender balance in World Water Forum delegations and water service provision contracts. Some delegates called for governments to reassess policies for: incorporation of gender perspectives in ecosystem management; equitable sharing of benefits and risks; and reduction of time spent by women collecting water.
Delegates analyzed the gender impacts of technologies and policies, and the inequities in representation in decision making and land tenure. They urged: building women’s agricultural, scientific, professional and financial capacity; integrating water issues into the UN Convention on the Elimination of Discrimination Against Women; and reporting on the progress made to the WSSD and Third World Water Forum in 2003.

**WORLD WATER DEVELOPMENT REPORT:**

On Tuesday afternoon, 4 December, Gordon Young, Coordinator of the World Water Assessment Programme (WWAP), presented the World Water Development Report, which will be released at the Third World Water Forum in 2003, as well as a policy paper providing case studies and examining policy progress since Rio. The World Water Development Report is published triennially by the WWAP, a collective effort of 23 UN agencies and conventions.

**WORKING GROUPS**

Three parallel thematic Working Groups met on Tuesday afternoon, 4 December, and all day Wednesday, 5 December. Each Group considered a number of sub-themes providing the opportunity to review and propose additional actions for the RFA, which was circulated prior to the Conference. Reports from each Working Group were presented to Plenary on Thursday morning, 6 December. These outcomes of the Working Groups will be issued as Working Group Reports, while those not reflected therein will be incorporated into the Conference Report.

**GOVERNANCE, INTEGRATED MANAGEMENT AND NEW PARTNERSHIPS:** This Working Group was co-chaired by Wu Jisong (China) and Rogatien Biaou (Benin), facilitated by Josefin Maetsu (Spain), with Aizaz Chaudhry (Pakistan) as Rapporteur. The Group considered four sub-themes, namely, protection of water resources and ecosystems, infrastructure for the poor, allocation of water, and transboundary waters.

**Protection of Water Resources:** A keynote presentation by Ger Bergkamp, IUCN, on IUCN’s Vision for Water and Nature, and a case study by Friedrich Barth, European Commission (EC), on the EC’s Water Framework Directive, introduced this subject. Bergkamp outlined the trends in issues of freshwater use such as rising insecurity, competing demands, and growing integration of resource management across sectors. He recommended minimum flows for ecosystems, economic evaluation of resources, partnerships and transparency. Drawing from the EC’s experience in managing international watercourses, Barth presented principles that could be used by other countries, inter alia, appropriate incentives, transparency, public participation, and capacity building for administrations.

Discussion centered on ethics and issues relating to the effective protection of water resources. The ethical issues raised include corruption, transparency and participatory decision making. The issues raised in discussions on enhancing water protection include technology options for farming, law enforcement, transboundary impacts of hydro-modifications such as impacts of dams, links between globalization and privatization, and water pricing on the basis of either costs or benefits.

**Infrastructure for the Poor:** This topic was introduced through two presentations by Gourisankar Ghosh, Water Supply and Sanitation Collaborative Council, who spoke on the link between infrastructure development and poverty alleviation, and by Kalyan Ray, UNCHS/Habitat, who examined the challenge of providing infrastructure for the urban poor. Introductory case studies were also presented by: Mukami Kariuki, World Bank, on the role of small scale service providers in urban Africa; Oswald Chanda, Water Supply and Sanitation Council (Zambia), on the experience with water reforms in Zambia; and by Dennis Mwanza, Water Utility Partnership, on water and sanitation reform.

The discussion centered on proposals by UK/Sweden, issues of privatization, and the possibility of crafting universally applicable recommendations for action. The UK/Sweden proposals called for: a halving by 2015 of both the number of people without access to sanitation, and the number of river basins without management strategies; preparation of national water resource plans by 2007; and a review of the priority given to water sanitation by national and international programmes.

Regarding the UK/Sweden proposals, concerns were regarding included the difficulty of meeting these targets, their value in fostering governance and partnerships, and the challenge of developing and applying monitoring and assessment systems. Regarding privatization, delegates highlighted differences between privatization and private sector involvement, consequences of donor conditionalities, constraints in interfacing between stakeholders, and urged consideration of the capabilities of the private sector in developing countries.

**Allocation of Water:** Introducing the subject, Frank Rijsberman, International Water Management Institute, discussed balancing water uses between those of food and nature. He stressed the need to develop national cross-sectoral and basin-level cross-sectoral dialogues that are informed by knowledge and local action. Peter Gleick, Pacific Institute, emphasized prioritizing basic and ecosystem needs, treating water as more than an economic good, reorienting water policy from supply to demand, reducing risk from water-related conflicts and collecting and disseminating data.

Issues raised concerned, inter alia, whether the poor are both willing and able to pay for water, the complexities in valuing water, the relevance of trade regimes to water, the risks in water privatization, the costs of non-provision of clean water and the non-recognition of successful public sector stories. Suggesting the need to advance beyond “stalemate” in the privatization debate, some participants called for an assessment of the private sector’s performance and public-private partnerships in the water sector before the WSSD.

**Transboundary Waters:** In the keynote presentation, David Grey, World Bank, emphasized the values of inclusiveness, subsidiarity, shared vision, fairness, equal importance of process and product, and instruments to support the process. Drawing from a case study of the Southern African Development Community (SADC) where 60 percent of the rivers are shared, Thomas Chiramba, underscored water as a critical tool for regional integration.
In the ensuing discussion, delegates noted the importance of transparency, international cooperation, knowledge transfer, and pollution prevention in the management of transboundary waters. Delegates also discussed the feasibility of the UK/Sweden proposal to halve the number of river basins without management plans by 2015.

**Report of the Working Group:** Rapporteur Aizaz Chaudhry presented the Report, in which he highlighted the challenges and recommendations of the Group on each of the topics.

**MOBILISING FINANCING RESOURCES:** The Working Group on Mobilizing Financial Resources discussed strengthening domestic public funding capabilities, attracting investment, sustaining operations and investment, and the role of development assistance. Chaired by Jacobus Richelle, Director General Development for the European Commission, and by Zaal Lomtadze, Georgia’s Deputy Minister of Environmental and Natural Resources Protection, and facilitated by Jon Lane, (UK), with Jennifer Moore (Canada) as Rapporteur. Participants heard presentations and case studies, followed by discussion in each of the sub-theme sessions.

**Strengthening Domestic Public Funding Capabilities:** David Ssebabi, Utility Reform Unit, Uganda, described Uganda’s experience with privatization. He stated that in countries with low incomes, finances for water management must come primarily from governments. Subsidies, restructuring and commercialization, strengthening financial management, enhancing local regulatory capacities, and preventing resource wastage are essential.

Meera Mehta, World Bank, presented case studies on rural water supply and sanitation in Uganda and India that compared options for financing mechanisms, structuring decentralization, and identified emerging priorities. Informed choices for the rural sector, community-based management, and cost recovery were presented as key to rural water supply.

During subsequent discussion, delegates focused on strengthening public finances, allocating investment between competing needs, and attracting private investment. Delegates recommended reporting the work of this group to the International Conference on Financing for Development (FfD) in March 2002.

**Attracting Investment:** Opening the session, Rodney Short of Clifford Chance UK, highlighted benefits of private sector investment, including: increased affordability, quality, quantity, and environmental sustainability of water services. Regarding attracting private investment, he stressed transparent regulatory regimes, adequate tariff levels, investment convertibility, and political stability.

Steve Baseby of Thames Water UK, compared private participation in the UK and Chile water sectors, noting that the best structure depended *inter alia* on economic, historical, cultural, political and institutional factors. To meet multiple public objectives, he urged flexibility in models, a strong legal system and government capacity, a minimum local investment requirement, a river basin approach, and expert advice to governments early in the decision-making and negotiation processes.

Participants discussed the framework conditions for attracting private sector finances, including public acceptance and legal redress; adequate preparation of governments and utilities for negotiations and changing roles; conducting of full option assessments; mobilization of domestic sources of finance; and the usefulness of these reforms in enhancing the performance of public utilities. Also debated were the urban and rural poor’s willingness and capacity to pay, recovery of full cost as opposed to operation and maintenance cost, and alleviating donor and IFI conditionalities favoring privatization. Delegates identified as needs: stakeholder participation, subsidies and cross-financing for the poor, domestic partnership, and regulatory stability. Recommendations included launching a multi-stakeholder empirical assessment of these issues, sharing lessons learned, and considering downstream consequences during project development.

Participants recognized that the private sector still serves only five to six percent of urban water users despite the growing number of those connected, noting that privatization can take many forms and allows governments to channel new resources to other needs. One participant raised the potential role of community-based cooperatives for water management.

Stressing that infrastructure ownership is not a pre-requisite for private sector entry, participants urged tailoring solutions to local conditions, and proposed subsidizing rural access through urban tariffs. Some proposed establishing a framework or code of conduct to level the playing field, creating safety nets or minimum water allotments, and promoting transfer of knowledge to local and regional companies.

**Sustaining Operations and Investment:** Jon Gibbs, PricewaterhouseCoopers, described the range of options for structuring private sector participation. He stressed that tariff increase without service improvement is not politically viable, and that IFIs involvement, government preparation and targeted, time-bound subsidies are important to companies. He recommended progressing gradually from management contracts to concessions, rather than divesting heavily.

Mike Muller (South Africa), noted that with only 0.6 percent of its public budget invested in infrastructure, South Africa had halved the number of people that lacked water access in 1994. This success was based on a complex balance of cost recovery, donor assistance, private sector expertise and mobilization of domestic capital, under government management. He noted, however, that this critical level of domestic financing may be lacking in poorer countries with weaker internal capital markets.

In the ensuing discussion, participants agreed that while financial sustainability was necessary, cost recovery should not thwart the access to water and sanitation by the poor. They called for positive examples of public utility reform and urged optimizing collection of property taxes and water charges and fostering regulatory capacity to ensure that efficiency gains help the poor.

**The Role of Development Assistance:** B. N. Nawalalawa (India) urged donors to invest in infrastructure and water use efficiency, mobilize local resources and promote participatory decision-making. Palle Lindgaard-Jörgensen (Denmark) called on donors to incorporate financial planning in goal setting. Noting the lack of international agreements for water, he called for regional cooperation frameworks. John Briscoe, World Bank, highlighted how long-term financing for water infrastructure by donors, including hydro-
power and irrigation, mobilizes private capital. He further stated that private sector entry can improve regulation of water utilities, while broad investment in utility reform and resource management can improve water services for the poor.

During the discussion, participants stressed: knowledge sharing, assistance to women, strong domestic financial markets, public accountability for service quality, and the particular needs of economies in transition. They urged engaging in broader development debates, including climate change, benchmarking utility performance and addressing agricultural subsidies.

**Report of the Working Group:** Jennifer Moore (Canada) reviewed crosscutting goals, including: alleviating poverty; addressing international trade; incorporating other development issues; achieving gender balance; and preserving biodiversity. Calling for innovative approaches, she suggested: a multi-stakeholder review of private sector involvement; a network for sharing regulator experiences; a code of conduct; a fair allocation of risk between public and private sectors; and a safety net for the poor. She reported that the Group distinguished the urban from rural poor, and willingness-to-pay from affordability, and called for strengthened public regulatory and negotiating capacity, and for more transparent regulator experiences; a code of conduct; a fair allocation of risk between public and private sectors; and a safety net for the poor. She reported that the Group distinguished the urban from rural poor, and willingness-to-pay from affordability, and called for strengthened public regulatory and negotiating capacity, and for more transparent finances. They agreed that cost recovery is necessary, but should not prevent the poor from accessing water services, concluding that ODA should catalyze good governance and attract private capital.

**CAPACITY DEVELOPMENT AND TECHNOLOGY TRANSFER:** Chaired by Lars Engfeldt (Sweden) and Claudia Martinez Zuleta (Colombia), facilitated by John Soussan (UK) with Alison Drayton, UNDP, as Rapporteur, this Working Group considered: education and training; knowledge sharing; effective institutions; innovative technology for water efficiency; and coping capacity for extreme events. Each session consisted of keynote and case study presentations, followed by discussions on each theme.

**Education and Training:** Janos Bogardi, UNESCO, drew attention to a recent water education symposium in Delft and presented the overarching priorities of a vision document from the Second World Water Forum, which included raising public awareness especially in rural communities, building capacity for negotiation and conflict resolution, and exploring new media to increase accessibility of information. Bogardi concluded by calling for a new leadership with ethics, fairness, and a willingness to learn, un-learn and re-learn. Ngoni Mudege, Institute of Water and Sanitation, presented a case study on community-based rainwater harvesting in Bangladesh, concluding that interperersonal communication was the most effective means of generating awareness. He noted the gap in adaptive capacity to get from well-known problems to well-defined solutions, and stressed the need for RCs to be able to build their own capacity. Victor Kanu, The African Institute of Sataya Sai Education in Human Values, called for a human values-based approach to water education, which he described as a cost-effective and proven approach that creates a lasting impact through character development. He underscored how education should both provide information and enact behavioral transformation.

In the subsequent discussions, delegates underscored the importance of adopting the appropriate media for the message, and re-educating bureaucrats and technocrats. Also suggested were transferring knowledge through exchange programmes and virtual universities, educating women on water quality and use, and regarding youth as potential entry points for community education.

**Sharing Knowledge:** Keynote speaker Arthur Askew, WMO, stressed the importance of collecting data to obtain information, create knowledge and attain wisdom for forecasting problems, planning, and resolving conflicts. Describing water as an interdisciplinary challenge, Askew called for global cooperation in sharing wisdom, knowledge, data and resources. Walter Jülich, International Association of Waterworks of the Rhine, presented a case study on Rhine management, explaining how countries overcome the obstacles of disparate cultures, attitudes and expectations through mutual understanding, tolerance, compromise and consensus building.

**Effective Institutions:** Torkil Jonch-Clausen, GWP, described the roles of water management institutions in formulating policy, allocating water, and managing water quality. In identifying the challenges to establishing effective institutions, he highlighted the need to clarify institutional mandates, gain political acceptance, and build strong leadership. Ingvar Andersson, UNDP, presented a case study on capacity building in African institutions that advocate IWRM. He stated that management systems faced the challenges of building capacity for new roles and responsibilities, encouraging information flow, and reaching future decision makers.

In the ensuing discussions, delegates emphasized the enhancement of institutional transparency and information exchange, and that good governance, participatory processes, and a consideration of the “human-side” of institutions, exemplified by fair treatment and empowerment, were necessary for creating effective institutions.

**Innovative Technology for Water Efficiency:** Ralf Otterpohl, Institute of Municipal and Industrial Wastewater Management, demonstrated how a variety of low- to high-tech, innovative, water re-use technologies can be used to deal with sanitation. He noted that small-scale, low-tech projects often outperform large-scale wastewater treatment plants. S. Rashid, NGO Forum for Drinking Water Supply and Sanitation, presented a case study on community-based rainwater harvesting in Bangladesh, concluding that interpersonal communication was the most effective means of generating awareness.

During discussion, delegates suggested creating incentives for government–industry partnerships and promoting entrepreneurship to facilitate technology transfer. In later discussion, participants agreed that targets should consider consumption and land-use patterns, ecological processes and water-use efficiency.

**Coping Capacity for Extreme Events:** Zbigniew Kundzewicz, Potsdam Institute for Climate Impact Research, gave an update of global and regional climate variability, and illustrated potential strategies for flood protection and management. He underscored the
need to improve flood and drought forecasting through a broad range of time horizons, to enhance the ability to prepare for extreme events. In his presentation on helping water managers cope with climate variability, Roberto Lenton, Columbia University, stressed the need to consider the full spectrum of climate events, instead of merely focusing on extreme events. Lenton further recommended adopting win-win strategies, improving mechanisms for decision making under uncertainty, and building partnerships and strengthening links between water management and climate communities. Chaiyuth Sukhsri, Mekong River Commission (MRC), presented a case study on Mekong river basin management. He elaborated on the MRC’s holistic approach, which includes knowledge sharing between member countries, using structural and non-structural strategies, and coordinating national activities with those of upstream partners. MRC’s new strategies, he said, sought to improve mitigation and forecasting capability, and enhance mediation and dispute resolution capacity.

Discussions raised the issue of applying the precautionary principle to, and integrating sustainable development with, risk management. Delegates also stressed the need to protect ecosystems to prevent floods, and for governments to address risks facing informal and unplanned settlements.

**Working Group Report:** On Thursday morning, Working Group Rapporteur, Alison Drayton, UNDP, presented to Plenary a summary of the highlights and outcomes of the five Working Group sessions.

**DRAFT CONFERENCE RECOMMENDATIONS**

The third draft of the Conference Recommendations was presented to Plenary on Thursday afternoon, 6 December. The first draft of the Recommendations, which was circulated prior to the Conference, was prepared by Germany with input from the Conference’s International Steering Committee and circulated among governments and water experts before being put online for public comment. The draft was further revised twice during the Conference to reflect the input of Ministers, Working Groups and proposals of the Gender Working Group.

Session Facilitator Margaret Catley-Carlson, GWP, divided the discussion of the draft RFA into three sections including: actions in the field of governance, actions in the field of mobilizing financial resources, and actions in the field of capacity building and knowledge sharing.

Noting that the Conference had a limited mandate, delegates discussed at length the issue of sharing the benefits of water. Delegates decided to avoid reference to both “transboundary” and “international” in the section on “action in the field of governance,” stating that a geographically-based definition should be used, rather than a term with legal implications. Delegates raised concerns over the achievement of targets, including preparing water resource management plans by 2005 and improving sanitation by 2015. They also discussed the primary role of states as water providers. Delegates proposed additions relating to: minimizing flood damage; managing risks from climate change; establishing joint responsibility for dealing with corruption, including roles for IFIs and bilateral agencies; establishing codes of responsibility; and linking water and health issues. Delegates also urged deleting reference to the precautionary principle, amending it to read “commercially-viable, efficient, effective, and accountable water provisions.”

Addressing “actions in the field of mobilizing financial resources,” delegates considered investment needs for water infrastructure, debating reduction of harmful subsidies and recovery of costs through tariffs. Contention arose over implications for irrigation, and over an apparent contradiction between promotion of cost recovery and ensuring access for the poor. Some delegates called for subsidies to increase water productivity, while others urged attention to water associations in transition economies.

On conditions for attracting private sector investment, participants debated the apparent bias toward “partnerships,” while some noted that such conditions would benefit both public and private investment. Participants urged capacity building for regulators and service providers. Delegates differed over the 0.7 percent of GNP ODA target and over earmarking aid for water, but agreed on calling for an end to donor and IFI conditionalities mandating privatization. There was, however, consensus that donors should target their funds to mobilize other financial sources.

In discussing “actions in the field of capacity building and sharing knowledge,” delegates suggested including references to: traditional media, the role of the media in hygiene and sanitation and the role of Workers and Trade Unions in water education and training. Regarding research and information management, delegates added a provision for data sharing, and replaced “international targets” with the “Millennium Assessment” targets. Many delegates preferred the terms “transboundary waters” – the Agenda 21 language – to “international river basins.” Differences emerged over a proposal to move to the governance section, a provision on making water institutions more effective. Other proposed changes included incorporating ethical perspectives, and deleting references to a change of policy and law, specification of the mandate of water institutions, and the call for competitive pay. Debate surrounded the section on knowledge sharing and innovative technologies, as delegates sought clarification of the types and recipients of technologies. References to the: cooperation of donor agencies and industry, and to the dissemination of technologies based on market processes, were also removed.

Throughout the three themes, delegates debated on the appropriate allocation of roles among people and organizations. Regarding the government role, delegates disagreed on questions of sovereignty, public participation and access to information, but agreement emerged on the need for additional capacity among NGOs and communities, to carry out their roles. On the role of the private sector, discussion focused on the compatibility between profit and environmental and ethical responsibilities. Delegates noted general acceptance of these responsibilities compatible with economic viability, and urged a code-of-conduct for all stakeholders, not solely companies. On the role of the international community, participants limited recommendations to those presented in the Ministerial Declaration, which urges coordination of water issues within the UN system.
**Final Text of Recommendations for Action (RFA):** The RFA seeks to serve as the conference’s key contribution to the WSSD, providing measures to close the gap between policy and implementation.

Noting in its introduction that the challenges have been defined, targets described and principles and policies identified, the RFA proposes actions in the fields of: Governance; Mobilizing Financial Resources; and Capacity Building and Sharing Knowledge. It concludes with a section on the Roles of people and organizations.

**Introduction:** The introductory section leads with a preamble, as well as a description of the purpose of the Conference, and identification of audience and key entry points. A chapeau notes that in spite of its diverse composition and controversial subject, the Conference achieved “remarkable” consensus, and that Germany will take them forward. It states that the RFA is addressed to the WSSD and Third World Water Forum. The introduction goes on to describe several water issues, *inter alia:* water as a need or right; as a tool for poverty reduction, as subject to rising demand and pollution, and as needing $10 billion annually in new investment. It concludes that water security for all is an achievable goal and places responsibility for achieving it on “all of us”.

**Actions In The Field Of Governance:**

The first section addresses:
- securing equitable access to water for all people;
- ensuring that water infrastructure and services deliver to the poor;
- promoting gender equality;
- allocating water among competing demands;
- sharing benefits from international waters;
- ensuring equitable sharing of benefits from large projects;
- improving water management through trade in goods;
- protecting water quality and ecosystems; coping with variability and climate change;
- encouraging more efficient service provision;
- managing water at the lowest appropriate level; and,
- combating corruption effectively.

The recommendations on equitable access to water call for, *inter alia:* recognition of government as the primary water provider; improved participation of people excluded from decision making; and development of national water resource management plans. The actions proposed on infrastructure include linking water and poverty policies, reviewing the priority given to water and sanitation in national and international anti-poverty programmes, and halving by 2015 the proportion of people lacking access to improved sanitation.

On gender equity, the recommendations call for non-discrimination by gender of water uses, gendered and participatory water resource management policies and systems, and gender training of water experts and policy makers.

Regarding water allocation, the RFA stresses: allocation of water to basic needs first and to other uses equitably and sustainably; efficiency in all uses; particularly in irrigation; and establishment of targets to improve equity and efficiency. On the issue of sharing benefits, the Recommendations urge the development of institutional and participatory mechanisms, regional cooperation across internal and international borders and information sharing. Regarding large projects, the RFA calls for the conduct of participatory integrated assessment of needs and options, improvement in the efficiency of existing infrastructure, fully accounting for risks, costs and benefits, and participation by affected people in decision making. Promoting participatory sharing of benefits from large projects, the RFA emphasizes integrated needs assessment, taking a precautionary approach, and minimizing potential negative environmental and social impacts.

Regarding improving water management, the RFA stresses the need for national policies to consider the impact of trade on water availability and ecosystems, and to reduce subsidies inhibiting efficient water use.

In protecting water quality and ecosystems, the RFA stresses preventing pollution, enhancing wastewater treatment, and employing a range of policy instruments.

In managing risks to cope with variability and climate change, the RFA emphasizes the need to expand the capacity for identifying trends, managing risks and adapting to hazards. Closer links between development and disaster management systems, wetland and watershed restoration, and particular consideration of poor, vulnerable populations are emphasized.

In order to encourage more efficient service provision, the RFA suggests complementing public water delivery services with other innovative services. Regulating, benchmarking and monitoring service providers, and strengthening national regulations through international networking are recommended.

On actions to manage water at the lowest appropriate level, the RFA stresses public involvement in: management and governance decisions; decentralization; and creation of viable financial support for local governments. Recommendations for combating corruption include building awareness and maximizing transparency throughout a project’s decision-making process. Accountability, enforcement of appropriate legal provisions, and access to information are also deemed critical.

**Actions in the Field of Mobilizing Financial Resources:** This section addresses: ensuring significant increase in funding levels for water; strengthening public funding capabilities; designing water tariffs to sustain operations and investment; making water attractive for private investment; and increasing development assistance to water.

To ensure significant increases in funding, the RFA urges strengthening and coordinating public funding, external assistance, and private investment. Regarding strengthening public funding capabilities, the RFA calls for macroeconomic growth based on equitable terms of trade, reduced health costs and domestic capital. It also places priority on the poor and ecosystems.

On improving economic efficiency to sustain operations and investments, the RFA notes that while financial sustainability should be the aim, cost recovery should not impede access to water supply and sanitation by the poor, but should recover costs from consumers who can afford to pay. It urges phasing out subsidies that promote inefficiency and environmental harm.

With regards to making water attractive for private investment, the document lays out framework conditions, notes that partnership does not require ownership, and urges capacity building for communities.
On increasing development assistance, the RFA urges raising the priority accorded to water, achieving the ODA target, focusing on catalyzing other finances, building capacity, and targeting the poor, especially in rural areas. It concludes that private sector participation should not be a donor conditionality.

Actions in the Field of Capacity Building and Sharing Knowledge: This section addresses: education and training on water wisdom; research and information management on problem solving; enhancing the effectiveness of water institutions more effective; and sharing knowledge and innovative technologies. On focusing education and training on water wisdom, the RFA underscores knowledge sharing, respect for diverse forms of knowledge, and enhancement of human capacities at all levels. A five-pronged approach to human resource development for water is suggested, as is the utilization of mass and traditional media to educate people on good water management, hygiene and sanitation. Emphasis is placed upon creating professional opportunities for young people.

The second section focuses on research and information management on problem solving. Global knowledge sharing, problem solving-focused research, and development of internationally-accepted indicators are considered critical.

The third section on making institutions more effective suggests shifting the focus of existing water institutions. The long-term, flexible and gradual process of capacity building and technical assistance are seen as essential to initiate institutional change for IWRM. Specific initiatives to strengthen institutions at the community level, and where necessary, changes to policies, laws and government organizations are seen as essential for empowering the poor and creating enabling environments for local institutions.

The fourth section addresses sharing knowledge and innovative technologies. Suggestions for action include making appropriate technologies available on an equitable basis to countries and regions with water-related problems. Systematic efforts to revive and learn from traditional and indigenous technologies and to tap into the available experience of all countries and sectors are suggested, with emphasis on cooperation of donor agencies and industry, and South-South technical transfer.

Roles: This section describes roles for Governments, Local Communities, Workers and Trade Unions, NGOs, the Private Sector and the International Community. In its chapeau, the RFA urges water-related organizations to allocate resources for shifting roles from isolation to partnership.

Noting the shift toward facilitation among some governments from service provision towards facilitation, the RFA urges governments to engage more actively in water policy reform, apply international principles, mobilize finances, and promote accountability and participation.

Recognizing the knowledge of local and indigenous communities, the RFA recommends enhancing their capacity, rights, and resource access. In addition to calling for the recognition of core labor standards, the RFA urges including Workers and Trade Unions in decision making.

NGOs are called upon to continue their roles in helping define policies, delivering services, representing stakeholders and the environment, ensuring accountability, bridging between government and communities, and raising awareness.

Regarding the private sector, companies are urged to contribute to governance, finance, provision and capacity building, while those engaged in water services are urged to recognize co-responsibility for the common good.

Recognizing the catalytic role of the international community and the UN in mobilizing resources, these entities are urged to strengthen their efforts, with a special call for the UN to strengthen the coordination and coherence of its water activities.

CLOSING SESSION
Session Co-Chair, Heidemarie Wieczorek-Zeul, Germany’s Federal Minister for Economic Cooperation and Development, opened the final Conference session, noting that five days of intensive work had borne fruitful results.

PRESENTATION OF THE CONFERENCE DOCUMENTS: Hans-Peter Schipulle, Deputy Director General, Germany’s Federal Ministry for Economic Cooperation, presented the Conference documents, which suggest ways to reach the Millennium Declaration targets, reduce poverty, realize sustainable development, move from strategy to action, and feed into the WSSD and its preparatory process. He said the Recommendations contain the main conclusions of the Conference, including its side events, but that they are neither negotiated nor binding. They will be presented by Germany to the second session of the WSSD Preparatory Committee in January 2002. The Ministerial Declaration, which was circulated on Tuesday, 4 December, following adoption by 46 Ministers in attendance at the Ministerial Session, provided political guidance to the Conference. The Conference Report will document all the proceedings, proposals and initiatives that were presented by the participants, including those not reflected in the RFA and Working Group Reports. He said, the Working Group Reports, which will be circulated later, contain the presentations to Plenary and were generated from one-and-a-half days of consideration of the Conference’s strategic issues of mobilizing financial resources, capacity development and technology transfer, and governance, integrated management and new partnerships. He also drew attention to the Conference Issue Paper, which focused on water crises and assessed water and sustainable development links, and was published four months prior to the Conference to set the stage for the Working Groups. The Thematic Background papers, which were also circulated before the conference describe the present situation, analyze what can be done and provide success stories and lessons learned.

Margaret Catley-Carlson, GWP, highlighted the shift from a diversity of positions to a consensus on specifics during the Conference. Presenting her summary of the Conference conclusions, entitled the ‘Bonn Keys’ – a one-page précis, she stressed that water can be managed better, that greater access to water and sanitation can be provided, and that disaster vulnerability can be reduced. She highlighted calls for: decentralized management; new partnerships;
cooperative arrangements at the water basin level; and stronger governance arrangements. Concluding, she stressed that “we can act, and must.”

DECLARATION OF AFRICAN MINISTERS RESPONSIBLE FOR WATER RESOURCES: Edward Lowassa, Tanzania’s Minister for Water and Livestock Development, presented the Declaration of African Ministers Responsible for Water Resources, which highlights Africa’s major water concerns, the challenges, the international solidarity required and action areas necessary, including institutionalizing intergovernmental policy dialogue, securing finance, building management capacity, transferring appropriate technology, enhancing governance, and strengthening the role of women. Calling for regional and global alliance for water security for all in Africa, he announced the intention to establish an African Ministerial Conference on Water with its inauguration planned for March/April 2002 in Abuja, Nigeria.

CLOSING ADDRESSES: In his closing address, Jürgen Trittin noted that efficient water management is key to fighting poverty, and called for: good governance; stakeholder participation; and attention to local situations, gender roles, land tenure, and Northern consumption patterns.

In a recorded presentation, Kader Asmal, South Africa’s Minister for Education, stressed the need for education. Calling for new political commitment, he urged international cooperation, and attention to women and marginalized groups. On increasing water-related investment, he stressed that it depended on values, and cautioned against waiting for crises to erupt. Describing dams as keystones of development and as “white elephants” that displace people, he urged replacing fundamentalism with debate and more accountable decision making, stressing that negotiated outcomes could resolve controversy. Concluding that “water is the source of life,” he urged action “next Monday morning” to target water and poverty, so that people could see the impact of the Conference.

Acknowledging the spirit of respectful dialogue, Heidemarie Wieczorek-Zeul, in her closing statement, said water is crucial for peace, human rights, and poverty alleviation, and urged donor countries to meet their commitments. She highlighted actions, including a code of conduct, a multi-stakeholder assessment of private parties, an emphasis on gender, and a prominent role for water in the WSSD agenda.

On behalf of the participants, Mike Muller (South Africa) thanked the German Government and the Conference organizers, declaring that through their efforts there were prospects of advancing towards universal water security.

Co-Chair Trittin closed the meeting at 11:28 am, following a video presentation with images of water use around the world and highlights from the Conference.

THINGS TO LOOK FOR

DIALOGUE ON WATER AND CLIMATE: This online forum begins 4 December 2001. To participate visit: http://www.waterandclimate.org.

CAIRO WATER EVENTS: Two water-related workshops will take place from 19-21 December 2001 in Cairo, Egypt. The first entitled “Water Valuing and Poverty” is a Mediterranean region-to-region dialogue from 19-20 December. The second event on “Effective Water Governance,” a workshop by the Global Water Partnership of the sub-regional working groups of North Africa and the Middle East will be held from 20-21 December. For more information, contact: MIO-ECSDE Secretariat; tel: +301-324-7490; e-mail: mio-ee-env@ath.forthnet.gr; Internet: http://www.mio-eecsde.org.

MEETING OF THE OPEN-ENDED INTERGOVERNMENTAL GROUP OF MINISTERS OR THEIR REPRESENTATIVES ON INTERNATIONAL ENVIRONMENTAL GOVERNANCE (IEG): The fifth IEG meeting will be held at the end of January 2002 in New York prior to the second Preparatory Committee (PrepCom II) for the WSSD. For more information, contact: Masa Nagai; tel: +254-2-623493; fax: +254-2-230198; e-mail: Masa.Nagai@unep.org; Internet: http://www.unep.org/IEG/.

SECOND MILLENNIUM ECOSYSTEM ASSESSMENT BOARD MEETING: This meeting will take place from 14-16 January 2002 in Kuala Lumpur, Malaysia. For more information, contact: Valerie Thompson, Interim MA Secretariat; tel: +1-202-729-7794; e-mail: info@millenniumassessment.org; Internet: http://www.millenniumassessment.org/.

FOURTH SESSION OF THE PREPARATORY COMMITTEE ON THE INTERNATIONAL CONFERENCE ON FINANCING FOR DEVELOPMENT: This meeting will convene from 14-25 January 2002, at the UN Headquarters in New York. For more information, contact: Financing for Development Coordinating Secretariat; tel: +1-212-963-2587; fax: +1-212-963-0443; e-mail: ffm@un.org; Internet: http://www.un.org/ffd.

SECOND PREPARATORY SESSION FOR THE 2002 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT (PrepCom II): This meeting will take place from 28 January – 8 February 2002 at the UN Headquarters in New York. It will review the results of national and regional preparatory processes, examine the main policy report of the Secretary-General, and convene a Multi-stakeholder Dialogue. For more information, contact: Andrey Vasilyev, DESA; tel: +1-212-963-5949; fax: +1-212-963-4260; e-mail: vasilyev@un.org; Major groups contact: Zehra Aydin-Sipos, DESA; tel: +1-212-963-8811; fax: +1-212-963-1267; e-mail: aydin@un.org; Internet: http://www.johannesburgsummit.org/.

HIGH-LEVEL ROUNDTABLE ON ENERGY: This roundtable will be held from 29-30 January 2002 in the UN headquarters in New York alongside the second WSSD preparatory meeting. Organized by the GEF, this meeting will discuss and exchange views on a background paper on sustainable energy in developing countries. For more information contact: GEF Secretariat; tel: +1-202-473-0508; fax: +1-202-522-3240 e-mail: kkumari@worldbank.org.

SECOND INTERNATIONAL CONFERENCE ON WATER QUALITY: This conference will take place from 6-8 February 2002 in New Delhi, India. For more information, contact: S.P. Kauhish; tel: +91-11-611-5984; e-mail: cbip@nda.vsnl.net.in; Internet: http://www.cbip.org.
GLOBAL MINISTERIAL ENVIRONMENTAL FORUM: The next special session of the UNEP Governing Council/Global Ministerial Environment Forum will take place from 13-15 February 2002 in Cartagena, Colombia. For more information, contact: Masa Nagai; tel: +254-2-6233493; fax: +254-2-230198; e-mail: Masa.Nagai@unep.org; Internet: http://www.unep.org/IEG/.

INTERNATIONAL CONFERENCE ON FLOOD ESTIMATION: This meeting will be held from 6-8 March 2002 in Bern, Switzerland. The conference is aimed at presenting and discussing the latest developments in the field of flood estimation for micro- and meso-scale catchments. For more information, contact: tel: +41-31-324-2748; fax: +41-31-324-7681; e-mail: floodestimation@bwg.admin.ch; Internet: http://hydrant.unibe.ch/veranstaltungen/flood/flood01.htm.

HIGH-LEVEL ROUNDTABLE ON FORESTRY: This roundtable will be held on 11 March 2002 in San José, Costa Rica, in conjunction with the second UN Forum on Forests. Organized by the GEF, the meeting will discuss the different forces acting on forests, and reaffirm the central role of sustainable forest management within the context of sustainable development. For more information, contact: Kanta Kumari, GEF Secretariat; tel: +1-202-473-0508; fax: +1-202-522-3240; e-mail: kkumari@worldbank.org.

INTERNATIONAL CONFERENCE ON FINANCING FOR DEVELOPMENT: The UN International Conference on Financing for Development will be held from 18-22 March 2002 in Monterrey, Mexico. It will bring together high-level representatives from governments, the UN, and other leading international trade, finance and development-related organizations. For more information, contact: Harris Gleckman, Financing for Development Coordinating Secretariat, UN Headquarters, New York; tel: +1-212-963-4690; e-mail: gleckman@un.org or Federica Pietracci, tel: +1-212-963-8497; e-mail: pietracci@un.org; Internet: http://www.un.org/ffd.

AFRICAN MINISTERIAL CONFERENCE ON WATER: Resolving to institutionalize ministerial level policy dialogue on water issues, African ministers have convened this event to encourage systematic intergovernmental dialogue on the water and sanitation problems facing Africa. For more information, contact: Muhammad Abubakar, Federal Ministry of Water Resources, Nigeria; tel: +234-9-234-2205; e-mail: makabubakar@hotmail.com.

THIRD PREPARATORY SESSION FOR THE 2002 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: This meeting will take place at the UN in New York from 25 March – 5 April 2002. It will aim to produce the first draft of a “review” document and elements of the Commission on Sustainable Development’s future work programme. For more information contact: Andrey Vasilyev, DESA (see above).

WORLD WATER CONGRESS 2002: This congress will take place from 7-12 April 2002 in Melbourne, Australia. It is being organized by the International Water Association and will focus on issues such as water cycle management, particularly in Southeast Asia. For more information, contact: Secretariat, Quitz Event Management; tel: +61-2-9410-1302; fax: +61-2-9410-0036; e-mail: quitz@bigpond.net.au; Internet: http://www.enviroaust.net/.

FOURTH PREPARATORY SESSION FOR THE 2002 WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: This meeting will take place from 27 May – 7 June 2002 in Indonesia. It will include Ministerial and Multi-Stakeholder Dialogue Segments, and is expected to result in elements for a concise political document to be submitted to the 2002 Summit. For more information, contact: Andrey Vasilyev, DESA (see above).

THIRD INTERNATIONAL CONFERENCE ON WATER RESOURCES AND ENVIRONMENT RESEARCH: This meeting will take place from 22-25 July 2002 in Dresden, Germany, and will be the third international conference in the series on water resources and environment research. The aim of the conference is to encourage and facilitate interdisciplinary communication among scientists, engineers and professionals working in the fields of ecological systems, sustainable management, water resource development, and conservation of natural systems. For more information, contact: Cathleen Schimmek, Conference Secretariat; tel: +49-351-463-33931; fax: +49-351-463-37162; e-mail: icwrer2002@mailbox.tu-dresden.de; Internet: http://www.tu-dresden.de/fghhihm/hydrologie.html.

STOCKHOLM WATER SYMPOSIUM: This event will take place from 12-15 August 2002 in Stockholm, Sweden. For more information, contact: tel: +46-8-522-139-61; fax: +08-56-31-10-16; e-mail: siwi@siwi.org; Internet: http://www.siwi.org/sws2002.

WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT: The World Summit on Sustainable Development will take place in Johannesburg, South Africa from 26 August - 4 September 2002. For more information, contact: Andrey Vasilyev, DESA, New York; tel: +1-212-963-5949; e-mail: vasilyev@un.org; Major groups contact: Zehra Aydin-Sipos, DESA; tel: +1-212-963-8811; e-mail: aydin@un.org; Internet: http://www.johannessburgsummit.org/.

FOURTH INTERNATIONAL SYMPOSIUM ON ARTIFICIAL RECHARGE: This symposium will be held from 22-26 September 2002 in Adelaide, Australia. For more information contact: Hartley Management Group; e-mail: isar4@hartleymgt.com.au; Internet: http://www.hartleymgt.com.au/isar4/.

INTERNATIONAL CONFERENCE ON URBAN HYDROLOGY: This conference will take place from 14-18 October 2002 in Kuala Lumpur, Malaysia. The theme for this meeting is “Induced Problems in Urban Environment Requiring Holistic Solutions for the New Millennium.” For more information, contact: Hj. Mohd. Nor Bin Hj. Mohd; tel: +603-4255-2507; fax: +603-4256-1984; e-mail: htc.moa.my/htc/icuh2002/icuh2002.html.

THIRD WORLD WATER FORUM: This forum will take place from 16-23 March 2003 in Kyoto, Japan. A Ministerial Conference will be held during the event, where Ministers will work toward framing and adopting a political declaration concerning global water problems. For more information, contact: Third World Water Forum Secretariat; tel: +81-3-5212-1645; fax: +81-3-5212-1649; e-mail: office@water-forum3.com; Internet: http://www.worldwaterforum.org.