



Dialogue

ON WATER, FOOD AND ENVIRONMENT

Summary Report Planning and Design Meeting

COLOMBO, DECEMBER 2000



ICID-CIID

IUCN
The World Conservation Union

IWMI
International
Water Management
Institute



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Summary and conclusions

The challenge for the 21st Century:



Water security for sustainable food production and rural livelihoods....

...while preserving the quality and biodiversity in natural resources.

Achieving water security for the sustainable production of food and rural livelihoods while maintaining or improving the quality and biodiversity of the natural resources and ecosystems is one of the key challenges of the early 21st century. In the face of increasing competition over scarce water resources the traditional, sectoral approach to development and management of water resources for all uses independently is failing. There are widely diverging—and mutually exclusive—views on the desirable path to achieve water security within the agriculture and environment communities and in government, academia and the private sector. Given that irrigated agriculture is the dominant user of water withdrawn from nature for human purposes, the future expansion or contraction of irrigated agriculture is at the heart of the debate. At stake are the size and nature of investments that are necessary to grow food for a growing population, provide sustainable livelihoods for the rural poor and maintain the quality and integrity of the environment.

The eight co-sponsoring organisations and over 130 participants in the Colombo Dialogue meeting concluded that there is an urgent need for more interaction between the agriculture and environment sectors to evolve a shared vision on development and management of water resources. There are currently many planned and ongoing activities at global to local scales in the fields of water, agriculture and environment. The essence of the new activity would build on existing actions, provide a coherent framework for synthesis and interaction and provide loose coordination on a voluntary, non-directive basis.

To this end a Dialogue on Water, Food and Environment is proposed to be carried out with the following three main components

1. A true **dialogue process** among the stakeholders, at global, national and local levels, that is open, clear, transparent and inclusive. The heart of the dialogue would be formed by a large number of national level dialogues or roundtables. At global level these would come together for an annual dialogue in a Forum in which a large number of stakeholders are represented. At local level the key challenge is to involve the real

The December 2000
'Colombo Dialogue'
planning and design meeting:

The 8 co-sponsoring agencies
and over 130 participants from
around the world.

water users, the man or woman at the pump. It is recognized that the dialogue is a political process.

2. An enhanced **knowledge base** to feed the dialogue and establish credible and authoritative knowledge accepted by both agricultural and environmental constituencies. The knowledge base would focus both on food security and on environmental security and both on impacts of past development as well as on evaluation of options for future development. It would consist of a set of thematic studies, jointly allowing a comprehensive assessment.
3. A network of local and basin level **action projects** focused on development, testing and implementing innovative approaches that enhance sustainable water security for agriculture and the environment. This would essentially be a platform for information exchange—leading to identification of “best practices”. The local and basin level activities would be independent but contribute to the knowledge base and dialogue process.

The Dialogue deals with water management for agriculture in general, i.e. including irrigated and rainfed agriculture, and large scale as well as small and micro-scale farming. Agriculture will be broadly defined, including food and cash crops, aquaculture, livestock and agro-forestry. Food security will be interpreted at various levels, ranging from regional and national scale food-self sufficiency to household level food and livelihood security. Environmental issues will include water quality as well as aquatic and land-based ecosystems, and will look at biodiversity for its own sake as well as goods and services provided by nature, including capture fisheries.

While the Dialogue is proposed to focus on water for agriculture and environment, there are several important cross-cutting issues, of which the most important are poverty and health.

The Dialogue process is foreseen as a decentralized, multi-year process, with milestones at the 3rd and 4th World Water Fora in Kyoto and Montreal. The 8 co-sponsors that formed the organising committee for the Colombo Dialogue meeting have committed to the development of a full-scale proposal for the Dialogue by April 2001 and hope to launch the Dialogue at the August 2001 Stockholm Water Symposium. The group of co-sponsors recognise that the success of the Dialogue will require a substantial enlargement of the constituency in a consultative and participatory process. They have formed a temporary Working Group, with participation of the secretariats of the 2nd and 3rd WWF, as an interim arrangement to take the initiative forward.

1. Introduction

Following the World Water Vision and Framework for Action process, that ended with the 2nd World Water Forum in March 2000 in The Hague, many felt that there had been insufficient interaction between agricultural and the environmental communities. In fact, these two sectoral visions show widely diverging views on the need to develop additional water resources for agriculture and the benefits and costs that such development would have. The difference between credible high and low estimates of the water required for agriculture in 2025 is in the order of 600 cubic kilometers—more than is estimated to be required for all domestic uses. Many feel that resolving the differences between these views is one of the key challenges facing society at the beginning of the 21st century. While the water crisis of the late 20th century was defined by the lack of access to water for domestic purposes, the water crisis of the coming decades will be one of increased competition for water among uses within river basins.

The Global Water Partnership organised a first meeting of about 20 people to discuss the need for action following the 2nd World Water Forum on 14 August 2000. It was concluded that while there are many planned and ongoing initiatives, these would benefit from some form of loose coordination. To explore the form and nature such an effort could take, the International Water Management Institute initiated and hosted the Colombo Dialogue meeting from 13–16 December 2000.

2. Meeting organisers and participants

The meeting was co-sponsored and organised by 8 organisations¹ and financially supported by the Secretariats of the 2nd and 3rd World Water Fora.

Over 130 people participated in the Dialogue meeting (see list of participants), representing mostly: government agencies, international organisations, research institutes and non-governmental organisations. Farmers, or farmer organisations were not represented, nor was the private sector (other than through several small scale irrigation NGOs and consultants). Slightly more than half the participants came from the South, with the majority coming from Asia, a smaller group from Africa and several from Latin America. About 30% of the participants were women.

¹The co-sponsors are: The Food and Agriculture Organisation of the United Nations (FAO), the Global Water Partnership (GWP), the International Commission on Irrigation and Drainage (ICID), the World Conservation Union (IUCN), The International Water Management Institute (IWMI), the United Nations Environment Programme (UNEP), the World Health Organisation (WHO) and the World Water Council (WWC).



Colombo Dialogue conclusions:

"There is an urgent need for more interaction between the agriculture and environment sectors to have a shared vision on the development and management of water and natural resources."





The three main disciplinary groups were engineers, biologists and social scientists (including economists), in roughly 40–30–30% proportions.

The meeting recognised that while there was already a great diversity of opinions and backgrounds represented in the meeting, for the Dialogue to be successful will require broadening the partners involved.

3. Organisation and programme of the meeting

The meeting consisted for more than half the time of open, workshop type consultations with a minimum of presentations (see attached programme). During the first morning key activities were presented that have a bearing on the Dialogue, particularly the sector Visions on Water for Food and Rural Development and on Water and Nature, as well as the recently completed process of the World Commission on Dams.

During the afternoon of Day 1 (December 13) six groups considered the key issues or conflicts between agriculture and environment and the desirability, nature and scope of activities aimed at overcoming the current differences between the sectors. The work of the Groups was reported back in plenary in the morning of Day 2. It was concluded that the large majority of the participants agreed that there is an urgent need to bring the current parallel thinking along 2 tracks into closer contact. Both the gradual recognition of the need for integrated water resources management, as well as the pressure through increasing water scarcity, floods, droughts and falling aquifer levels, have led to a situation where many actors recognise the need for dialogue.

The remainder of the morning of Day 2, cross-cutting issues were presented in their possible relation to the Dialogue, i.e. poverty and gender, health, trade in food and food security, water scarcity as a techno-political process. In addition, the long-term water use and development perspectives were presented from an agriculture (FAO and ICID) as well as nature (WWF) point of view.

In the afternoon of the second day, and after plenary feedback again on the third day, six working groups discussed the design and planning of key elements of the dialogue. These were:

- Participatory processes and poverty
- Dialogue as a techno-political process
- Options for Action
- Knowledge Base / Assessment
- Analysis & Modelling
- Communication

This goal: a true dialogue
process among stakeholders.

Creating more knowledge
through research.

Action projects, through a
network at the local level.



In a last plenary meeting on Day 3, the working group results were presented and discussed and proposals from the group of co-sponsors were tabled on the follow-up process. The results of the working group and plenary discussions are used to write this summary report. The Dialogue Working Group will prepare a full Dialogue proposal that will also be sent for comments to all Colombo Dialogue meeting participants and will be discussed at a planned (open) meeting of the Working Group in March in Rome at FAO.

4. The need for a Dialogue

At a global level, the need for a Dialogue of Water for Food and Environmental Security follows most directly from—depending on one's perspective:

1. the slowdown in investment funding available internationally for water resources development, e.g. from the World Bank; or
2. the continued high priority that key national governments give to major water resources development projects in China, the Mekong Basin etc.

The appropriate nature and content of such a dialogue depends strongly on the region and current level of development of the water resources. Four typical situations are, for instance:

1. Areas where major developments of irrigated agriculture have already occurred and most resources have been developed (basins have closed). Here the main priority now is how to maintain sustainability (in the face of increasing salinity or sharply falling groundwater tables) and increase water productivity in agriculture as other sectors (domestic and industry) demand an increasing share of the resource at the expense of agriculture. This situation is typical in (large parts of) Central Asia, Pakistan, Western India, Northern China and Mexico.
2. Areas where major infrastructure has been developed and relatively large volumes of water are withdrawn for human use, but productivity and basin efficiency is low. There is scope for "water savings" by increasing water use efficiency. This is the case in Sri Lanka, parts of Indonesia and Southern China, for instance.
3. Areas where there are considerable water resources not yet developed, where there are high values associated with the "undeveloped" resources, e.g. in terms of fisheries and biodiversity, and where there are conflicting views on how those resources should or should not be developed. This situation is typical for the Mekong Basin, Central Africa and parts of Latin America.

Irrigated agriculture is...



...the primary user of water drawn for human use.

Its future expansion or contraction lies at the heart of the debate.



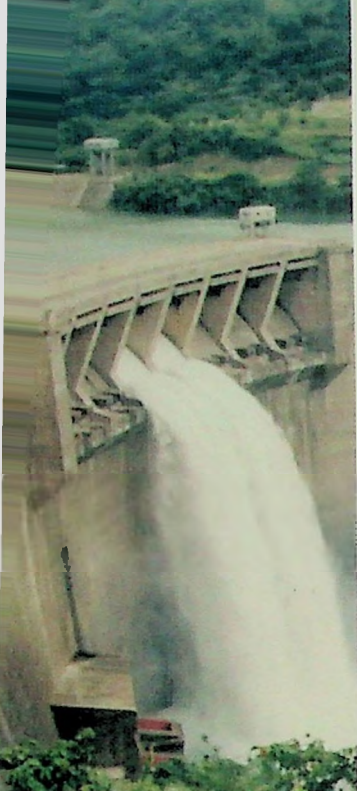
4. Areas where there are large numbers of poor people with restricted access to land and water resources that place high pressure on agriculturally marginal, but environmentally valuable resources such as sloping lands, marshes and wetlands. Considerable parts of Sub-Saharan Africa and South-Asia are in this situation.

It is clear that the dialogue process, knowledge base and action projects need to reflect these regional, national and local differences. Nonetheless, there are generic lessons to be learned, experiences to be shared. Also—as a large part of the change required will involve changing attitudes and values through increased public awareness—there is a value in a larger, more visible, more public exercise than any number of small-scale, local projects could achieve individually.

The World Water Vision, Framework for Action and World Water Forum process started a process of consultation involving larger numbers of non-water insiders than before. It helped put water on the agenda and make water no longer simply the business of the water experts. This process can be continued, learning from earlier experience, and focused on specific critical issues. For the process to be successful it will need to reach out to larger and larger groups of stakeholders—bottom up, as well as reach out to the national governments that are in most places concerned, key actors.

The discussions at the Colombo Dialogue meeting pointed to the following key issues that need consideration in the design of the Dialogue:

1. **Defining Food Security and defining Environmental Security carefully at different scales.** Food security can be defined very differently, ranging from a cereals-based national food self-sufficiency focus to a household based definition that includes livelihood and health aspects. Environmental Security also needs to be defined, there are many aspects involved (e.g. ecosystem services, ecosystem maintenance, nature conservation, biodiversity) that need to be operationalised in the Dialogue.
2. **Assessment of (minimum) water requirements—allocation of water to various uses.** Not enough is known about how much and when ecosystems need water. To some extent this goes for other uses too. Assessing requirements better will be a basis for allocation of water over users/uses.
3. **Scales of actions.** Actions need to be taken at national and sub-national (river basin, community) level. The Dialogue needs to look at laying out options for actions (and trade-offs) at levels where such actions can have direct impact (not stay at level of global recommendations of principles). It needs to look at who benefits and who pays.



At stake are the size and nature of investments needed to grow food...

...provide sustainable livelihoods for the rural poor...

...and maintain the quality of the environment.



Participatory analysis as a techno-political process. Recognition of the fact that implementing actions will be a (techno-)political process. Recognise that all actors operate within their own "paradigm". Institutional barriers need to be analysed. Participation and consultation are key. Identification of stakeholders requires care—the rights and risks approach of WCD may help. Communication and dissemination is crucial.

Defining "irrigation": The Dialogue needs to consider all water management for agriculture. That involves a continuum of approaches: large-scale irrigation, groundwater irrigation, micro-scale irrigation, rainwater harvesting, traditional water management technologies, and rainfed agriculture. It includes food and non-food agriculture and irrigation as an enterprise as well as social irrigation.

5. Proposed structure for the Dialogue

In the Dialogue the process will have to ensure broad acceptance of the results. In designing the process important lessons can be learned from the process put in place by the World Commission on Dams. Important criteria in designing the process are that it is:

- open, clear, transparent and inclusive;
- involving a broad constituency and explicitly reaching out to the "real" water users at micro-level, often poor people that do not have access to the communication channels that participatory processes often rely on;
- non-directive and based on voluntary collaboration;
- based on putting together existing initiatives where possible.

It is proposed to organise the Dialogue as a decentralised, bottom-up programme of activities. What some people refer to as a light and flexible, new-age organisation. It will not have a cumbersome bureaucratic, top-down approval processes, because it will be based on largely voluntary cooperation of existing and new, independent, "self-governing" initiatives. In practical terms it means that a large central budget is not foreseen, but that individual activities are funded directly by interested donors and sponsors. Somewhat similar to the World Water Vision exercise, where a very light central structure helped raising funds, but the funds were largely directly disbursed to implementing agencies responsible for carrying out the components.

The Dialogue will partly bring together—and provide loose coordination for—a series of activities that will (or might) be carried out independently as well.

The Dialogue process, knowledge base and action projects will reflect regional, national and local differences.

But there are also valuable generic lessons to be learned, and experiences to be shared.



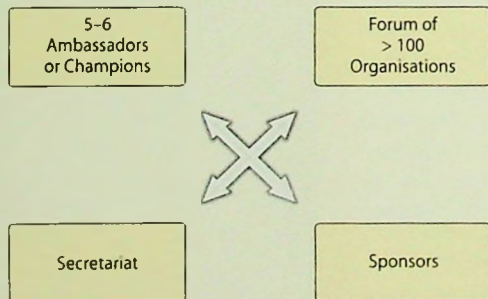


The context is water management for agriculture in general—ranging from irrigated and rainfed agriculture, to large scale, small and micro-scale farming.

- a shared overall conceptual framework and timeline, which leads to more sharing of knowledge and interaction;
- increased interaction with a larger number of stakeholders than individual projects could organise;
- important milestones at which shared work can be presented, particularly the 3rd and 4th World Water Forum events—and the Rio plus ten meeting and preparatory process;
- increased awareness raising and dissemination of the results through a larger, combined communication programme that will generate more media attention than through individual projects;
- improved fund-raising for the programme as a whole;
- increased impact through large scale activity, better able to provide credibility through shared approach and coordinated results.

In designing and putting together a Knowledge Base—the experience gained by the WCD process and also by the Intergovernmental Panel on Climate Change (IPCC) could be used to advantage. Important criteria for design of the knowledge base will be that it needs to be accepted by both agricultural and environmental interests, i.e. credible and authoritative, this will require an open process with sufficient peer review.

In considering the above, and taking into account that there recently have been two world commissions in the water field, the co-sponsors propose the following governance structure for the Dialogue (see Figure 1). A single apex body to which the authority to decide where funds will go (a rather top-down management approach) is not proposed. It is proposed that proposals for funding components are considered directly by donors or sponsors—apart from a limited amount of core funds for a secretariat and some central activities. Hereafter the four key elements in the proposed structure are discussed in some more detail.



1. **Ambassadors.** In speaking for the Dialogue and subsequently getting the results back to a larger audience it is proposed to appoint a small group of very high caliber Ambassadors, or champions, for the Dialogue. This small group of five or six individuals should have a high level of name recognition, global level authority and stature, represent different regions and different types of stakeholders (government, academia, NGO's private sector). These individuals would

not personally be responsible for the Dialogue results (as in the case of a World Commission) but they would be regularly informed, share the goals and objectives, and be able to speak on behalf of the assembled stakeholders to other influential individuals as well as the media.

2. **Forum.** It is proposed to broaden the current group of co-sponsors to become a large and representative group of organisations (possibly between 100 and 200) that would meet annually and form the global level of the Dialogue process. The Forum would provide the legitimacy to the Dialogue. It would provide an opportunity for dialogue among key stakeholders at global level and discuss and comment on key Dialogue outcomes—and publish products under a shared “logo or label”, once approved through some formal process (to be designed). It would not be responsible for these results, or have to approve activities, or disburse funds. In between Forum meetings a Bureau could be established. For establishment of a peer-review process over the Knowledge Base a Scientific and Technical Advisory Committee (STAC) could be appointed.

3. **Secretariat.** The Ambassadors, Forum (and its Bureau and STAC) would be supported by a small secretariat. Since many of the key elements of the Dialogue will be independently managed (and in part consist of existing projects and programmes), the role of the secretariat will be limited; it will not “run” the Dialogue, but be involved in “loose coordination”, synthesis and public awareness / media activities. It could help raise funds (prepare the package of activities and organise donor support meetings), but donors or sponsors are expected to pick up individual components and fund these directly.

4. **Sponsors.** The Dialogue cannot be, or seem to be, influenced by any particular point of view, be it from agriculture, environment, health or large players such as the World Bank. It is therefore important to have a broad set of donors or sponsors, that agree to provide funds without “strings”, i.e., private sector support could only be accepted under careful guidelines (but would be welcome within those).

The Dialogue approach:

- Open, transparent and inclusive
- Explicitly reaching out to the “real” water users at micro-level,
- Non-directive and based on voluntary collaboration;
- Striving to build on existing initiatives where possible.





6. Principal components

The three key proposed components in the Dialogue are shown in Figure 2.

6.1 Dialogue process

It is recognised that actions that have the potential to affect the development and use of water resources will largely have to be taken at the national or local level. The Dialogue among stakeholders is therefore proposed to be mainly conducted at the national level, through a large number of essentially independent, but coordinated national dialogue activities (with inputs from the knowledge base and vice versa). Such national level

dialogues or roundtables appear feasible and could—in every country where there is interest—be led by groups such as the ICID, IUCN national committees, wherever these exist, with others, to provide a balanced and consistent approach throughout.

An important role for the national level activities will be to communicate and translate the knowledge base so that it is relevant and understandable at various levels and to various constituencies. These

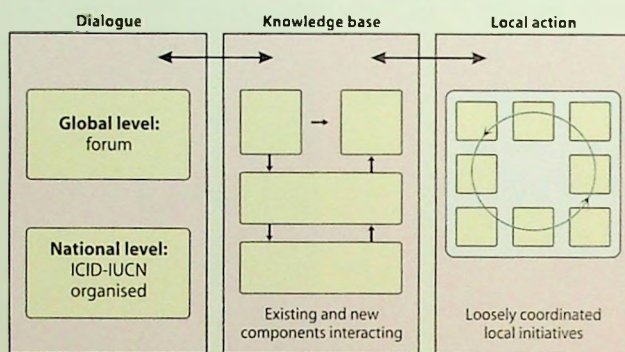


Figure 2. Three Principal Dialogue Components

include: governments, NGOs, experts in irrigation and ecology, ordinary citizens' groups, women, the poor and disadvantaged, and others. The level of understanding, awareness and interest of each of these groups is different. To communicate effectively with them requires the preparation of materials derived from the same knowledge base—and interacting with them—in a “language” that they can understand and respond to.

To make progress towards the extremely difficult goal of direct participation of poor water users, rather than their more affluent representatives, case study activities are proposed. These case studies would explicitly focus on ways and means to get direct representation of those normally excluded: the poorest of the poor.

At global level the annual meetings of the Forum could provide a framework for reporting back from the national and local dialogues, reviewing and discussing the various other outputs, and key events for media contact and awareness raising.

6.2 Knowledge base

The Knowledge Base would serve as a key source of credible and authoritative information for the various Dialogue activities. Several key outputs could provide a global frame of reference for evaluation of past development and the generation and evaluation of options for future development and management. Key components of the Knowledge Base would be formed by ongoing activities such as FAO's Long Term Forecasting Program, the UN's World Water Assessment Programme, the CGIAR's Comprehensive Assessment of Water Management in Agriculture (SWIM2), IUCN's Freshwater programme, the Millennium Ecosystem Assessment, the CBD/Ramsar River Basin Initiative, ICID's text delivery services—and no doubt others that could come in on a voluntary basis. Development of a shared programme of work (a set of thematic studies) can be done analogous to the development of the International Geosphere-Biosphere programme (of ICSU) or the Intergovernmental Panel of Climate Change. The crux is to get a comprehensive scientific programme that is considered credible by all stakeholders. The Knowledge Base would also be the platform to synthesise and evaluate the outcomes of the large number of pilot-projects and experiments with action-oriented activities at the basin and local scale level (see 6.3).

6.3 Action projects—information exchange platform

Many organisations are currently planning or implementing water-saving projects, experimenting with innovative technologies, policies and institutions at scales ranging from household and communities up to the river basin. These range from water-saving competitions organised by a GEF project in Central Asia and ICID's WatSave work team on water saving in irrigation, to small-dam programmes of CARE, the Framework for Action Activities of the GWP and its regional and national organisations, etc. It is proposed here that a loose form of coordination, exchange of experience, synthesis into the Knowledge base, and contacts with the various forms of Dialogue, would provide added value to these various activities. The end result would be the identification of widely accepted best practices.

Action projects will include efforts such as:

- water-saving competitions organised by a GEF project in Central Asia
- ICID's WatSave work team on water saving in irrigation
- small-dam programmes of CARE
- the Framework for Action Activities of the GWP and its regional and national organisations



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7. Timeline and planning

The rough timing of the desirable development of the Dialogue is as follows (Figure 3):

- Draft summary report of Colombo meeting available in early January for comments and finalised by the end of January 2001.
- Working Group reports, background papers etc. to be "published" through a page on the web (the Dialogue pages temporarily hosted by IWMI)—not through a separate publication.
- First draft project proposal ready by late January, early February, for discussion at Working Group meeting in Rome in March 2001.
- Commitment to contribute to the Dialogue obtained from various actors in the period February–June 2001.
- Launch of Dialogue at the Stockholm Symposium in August 2001.
- First Dialogue Forum meeting in late 2001.
- Linking of contributing activities start during 2001.
- The proposed time-scale of the Dialogue process as a whole is to have an important milestone in March 2003 (at the 3rd World Water Forum, i.e. in 2 years) and an endpoint in March 2005 (at the 4th World water Forum, i.e. in 5 years).

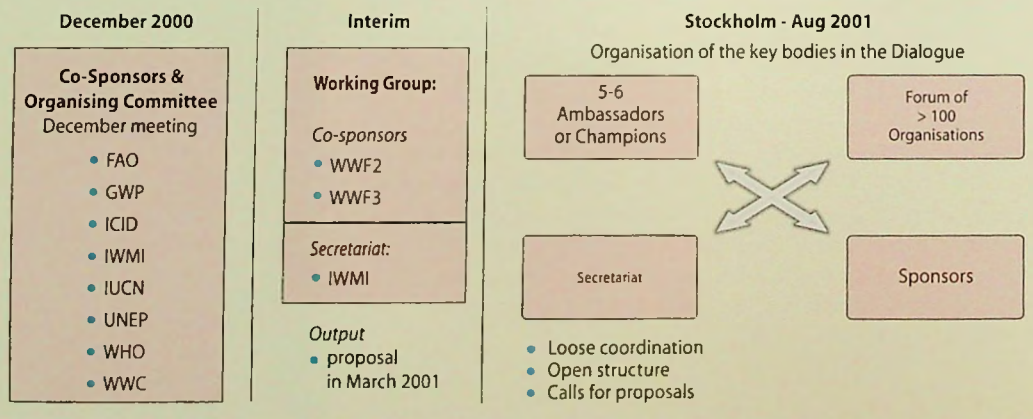


Figure 3. Timeline and planning

Round Table and Workshop Sessions

ROUND TABLE SESSIONS

13 December 2000 (Day 1)

Group	Chair	Facilitator	Rapporteur
A	Hans Wolter (FAO)	Ian Makin (IWMI)	Amreeta Regmi
B	Alan Hall (GWP)	Ger Berkamp (IUCN)	Chris Scott
C	Veerle Vandeweerd (UNEP)	Joel Scheraga (US-EPA)	Joel Scheraga
D	Hans Friederich (IUCN)	David Molden (IWMI)	Shree G. Shah
E	Bill Cosgrove (WWC)		Vasudha Pangare (Oikos)
F	Peter Furu (WHO)	Ken Strzepek (U. Colorado)	Vania da Silva Nunes
G	Ferenc Ligetvari (ICID)	Constantina Safiliou (NCSR, Greece)	Caroline Sullivan

14–15 December 2000 (Day 2 & 3)

Session	Topic	Chair	Facilitator	Rapporteur
1.	Participation of Poor/ Village Case Studies	S. Abeyratne	C. Safiliou	Ganesh Pangare
2.	Dialogue as a Political Process	P. S. Rao	G. Berkamp	Reinier A. van Hoffen
3.	Actions/Options/Tradeoffs	R. Nakamura	Ian Makin	Prem Bindraban
4.	Assessment of knowledge	Caroline Sullivan	D. Molden	Jean-Marc Faures
5.	Analysis — Global Basin	D. Gupta	K. Strzepek	Subhrendu Gangopadhyay
6.	Communication/Dissemination		J. Scheraga	Faizal Parish



List of participants

AUSTRIA

- **Guenther Fischer**—Project Leader, Land Use Change Project International Institute for Applied Systems Analysis
- **David Wiberg**—Research Scholar, Modeling Land Use and Land Cover Changes in Europe & North Africa, International Institute of Applied Science Analysis

BANGLADESH

- **Ainun Nishat**—Country Representative, World Conservation Union (IUCN)

BRAZIL

- **Vania da Silva Nunes**—International Liaison Officer/Researcher, Embrapa Pantanal

CANADA

- **William J. Cosgrove**—Governing Board Member, World Water Council, Ecoconsult Inc.

CHILE

- **Patricio Galeb Salomon**—Inversiones y Asesorías Mada Ltda.

CHINA

- **Dong Bin**—Researcher, Wuhan University
- **Liang Rui Ju**—Chair, Chinese TAC, China Institute of Water Resources & Hydro Power Research

COLOMBIA

- **Carlos Garces R.**—Centro Internacional de Mejoramiento de Maíz y Trigo

DENMARK

- **Peter Furu**—Senior Adviser, World Health Organization, Danish Bilharziasis Laboratory

EGYPT

- **Patrick Dugan**—DDG (Africa & West Asia), International Center for Living Aquatic Resources Management
- **Raouf F. Khouzam**—Resource Economist, Performance Measurement Advisor, IRIS Environmental Systems

ENGLAND

- **J.A. Allan**—GWP, The School of Oriental and African Studies, University of London
- **Alan Hall**—GWP, HR Wallingford

- **Jeremy Meigh**—Water Resources Specialist, Centre for Ecology and Hydrology

- **Susan Milner**—Environment Programme Leader, Natural Resources Institute

- **John Soussan**—Director, Centre for Water Policy & Development, School of Geography, University of Leeds

- **Caroline Sullivan**—Head, Water Policy & Management, Centre for Ecology & Hydrology

FRANCE

- **Subhrendu Gangopadhyay**—Division of Water Sciences, United Nations Educational, Scientific, and Cultural Organization

- **Yoshiyuki Imamura**—Consultant, World Water Assessment Programme, Division of Water Science, United Nations Educational, Scientific, and Cultural Organization

- **Banu Neupane**—Consultant, World Water Assessment Programme, United Nations Educational, Scientific, and Cultural Organization

- **Thierry Ruf**—Institute of Research for Development

- **Gordon J Young**—Coordinator, World Water Assessment Programme, Division of Water Sciences, United Nations Educational, Scientific, and Cultural Organization

GERMANY

- **Joseph Alcamo**—Director, Center for Environmental Systems Research, University of Kassel

- **Franz Heim**—Head, Water Policy & Rural Water Use Division, Food and Agriculture Development Centre (ZEL), German Foundation for International Development (DSE)

- **Thomas Maurer**—Head, Global Runoff Data Centre, Federal Institute of Hydrology

GREECE

- **Constantina Safiliou**—National Centre for Social Research

HUNGARY

- **Jozsef Gayer**—Interim CEETAC Chair, GWP, Water Resources Research Centre

- **Ferenc Ligetvari**—Minister of Environment, C/o. VITUKI

INDIA

- **Shyamala Abeyratne**—Country Director, WI India, Winrock International

- **S.V. Govardhan Das**—Consultant Hydrologist, Apwell Project (Indo-Dutch)
- **Raj Gupta**—Rice Wheat Consortium Facilitator, Regional Office, Centro Internacional de Mejoramiento de Maiz y Trigo
- **Mukesh B. Joshi**—Chief Information Officer and Unit Leader, Unit-H, Narmada Project Main Canal Design Circle No. 1, Sardar Sarovar Narmada Nigam Ltd.
- **Ganesh Pangare**—Chief Executive Officer, Indian Network on Participatory Irrigation Management
- **Vasudha Pangare**—Director, Oikos Consultants
- **Prabhakar Pathak**—Senior Scientist, Natural Resources Management Program, International Crops Research Institute for the Semi-Arid Tropics
- **P. S. Rao**—Consultant
- **M. S. Reddy**—Member, South Asian TAC, Global Water Partnership
- **Amreeta Regmi**—Consultant/Researcher, FREEDEAL
- **Amitabha Sadangi**—Dy. Country Director, International Development Enterprise
- **C. R. Shanmugham**—Program Officer, DHAN Foundation
- **Reinier A. van Hoffen**—Assistant to the Executive Secretary, Asia Pacific Association of Agricultural Research Institutions (APAARI), Food and Agriculture Organization
- **M. P. Vasimalai**—Executive Director, DHAN Foundation

INDONESIA

- **Sustriayu Nalim**—Senior Scientist, Vector and Reservoir Control Research Centre

IRAN

- **Abbas Keshavarz**—Deputy Minister for Agriculture, Agricultural Research Education and Extension Organization

ITALY

- **Jean-Marc Faures**—Water Resources Officer, Land and Water Development Division (AGL), Food and Agriculture Organization
- **Jean Payen**—Technical Advisor, PT Division, International Fund for Agricultural Development
- **Hans Wolter**—Director of AGL, Land and Water Development Division, Food and Agriculture Organization

JAPAN

- **Kenzo Hiroki**—Vice Secretary General, Finance, Planning, and General Affairs, Preparatory Secretariat of the Third World Water Forum
- **Ryota Nakamura**—Professor, Faculty of Biological Resource Sciences, Nihon University
- **Taikan Oki**—Associate Professor, Institute of Industrial Science, University of Tokyo
- **Shigemitsu Tsukamoto**—Vice Secretary General, Policy and Agriculture, Preparatory Secretariat of the Third World Water Forum
- **Junichi Yoshitani**—Chief, Urban River Research Division, Public Works Research Institute, Ministry of Construction

KENYA

- **Francis Ndegwa Gichuki**—Regional Coordinator, Soil & Water Management Prg., Department of Agricultural Engineering, University of Nairobi
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