PARTNERSHIP INITIATIVES INFORMATION SHEET

Name of the Partnership/Initiative
A CGIAR Challenge Program: **'Water and Food'**

Expected date of initiation: 2003
Expected date of completion: 2008 (1st phase)

Partners Involved:

Intergovernmental organizations:
Future Harvest Centers of the CGIAR (Consultative Group on International Agricultural Research), in particular:

IWMI	-	International Water Management Institute
IRRI	-	International Rice Research Institute
IFPRI	-	International Food Policy Research Institute
CIAT	-	Centro Internacional de Agricultura Tropical
ICLARM	-	The World Fish Center

Major groups:
National Agricultural Research Extension Systems (NARES), in particular:

YRCC	-	Yellow River Conservancy Commission
ICAR	-	Indian Council of Agricultural Research
NWRC	-	National Water Research Center
ARC	-	Agricultural Research Council
AREEO	-	Agricultural Research, Education and Extension
EMBRAPA	-	Brazilian Agricultural Research Corp

Advanced Research Institutes in developed countries, in particular:

UC Davis	-	University of California, Davis
JIRCAS	-	Japan International Research Center for Agricultural Sciences
IRD	-	Institut de Recherche pour le Développement
CSIRO	-	Commonwealth Scientific and Industrial Research Organization

NGO's, in particular:

CARE	-	Cooperative for Assistance and Relief Everywhere
SEI	-	Stockholm Environment Institute
WRI	-	World Resources Institute

Leading Partner:
Name of the contact person/focal point: Dr Frank R. Rijsberman, Director General
Address: IWMI, PO Box 2075, Colombo, Sri Lanka, www.iwmi.org
Phone: (94) 1 787-404
Fax: (94) 1 786854
E-mail: f.rijsberman@cgiar.org

Main objectives of the Partnership/Initiative
Please provide a brief description:

The CGIAR System is itself a non-negotiated partnership formed by aprox 60 countries, international

organizations and private foundations. In addition to providing general funds and very specific funds for research directed to food security, poverty eradication and protection of the environment, with an emphasis on the rural areas in developing countries, the members of the CGIAR want to support targeted large participatory research initiatives: **Challenge Programs**. Challenge programs focus research, knowledge development and capacity building on major challenges to sustainable agriculture, with a clear emphasis on developing countries or countries in transition.

' Water and Food':

Development objective
To increase the productivity of water for food and livelihoods, in a manner that is environmentally sustainable and socially acceptable.
Intermediate objective
To maintain the level of global diversions of water to agriculture at the level of the year 2000, while increasing food production, to achieve internationally adopted targets for decreasing malnourishment and rural poverty by the year 2015, particularly in rural and peri-urban areas in river basins with low average incomes and high physical, economic or environmental water scarcity or water stress, with a specific focus on low-income groups within these areas.
The **immediate objectives** of the CP Water and Food:

1. *Food security* for all at household level.
2. *Poverty alleviation*, through increased sustainable livelihoods in rural and peri-urban areas.
3. *Improved health*, through better nutrition, lower agriculture-related pollution and reduced water-related diseases.
4. *Environmental security* through improved water quality as well as the maintenance of water related ecosystem services, including biodiversity.

These form the four key dimensions in which progress towards the overall goal is measured.
The work will be carried out in 5 **interrelated thematic work programmes**:
Theme 1—Crop Water Productivity Improvement
Theme 2—Multiple Use of Upper Catchments
Theme 3—Aquatic Ecosystems and Fisheries
Theme 4—Integrated Basin Water Management Systems
Theme 5—The Global and National Food and Water System

Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration:

This partnership will contribute to both the realization of Agenda 21 and the MDG's. More specifically to the objectives as set out in chapters 12(Desertification & drought), 14 (SARD) and 18 (Fresh water) of Agenda 21, and to MDG 1 (Poverty) and 7 (Environment).

Expected results:

Please provide a brief description:

Expected outputs from **Theme 1—Crop Water Productivity Improvement** will include: (1) Varieties with superior abiotic stress tolerance and improved water productivity; (2) Technologies that enhance farmers' livelihood and water productivity at field level; (3) Interventions that enhance water productivity at agro-ecological system level; (4) Tools and methodologies to assess the impact of interventions on crop performance, water productivity, water balance components, soil and water quality; (5) Institutional arrangements that encourage farmers to adopt water productivity enhancing technologies.

Expected outputs from **Theme 2 —Multiple Use of Upper Catchments** will include: (1) Better understanding of interactions between water and poverty in livelihoods of residents of upper catchments. (2) Validated methods to assess the impact of better water management in upper catchments on poverty alleviation. (3) Inventory of effective land and water use technologies (best practices, identification of gaps, and possible key research questions) (4) Decision support tools to enable users to identify the likely consequences of land use change on water availability and quality and to diagnose specific land management problems. (5) Guidelines for adaptive, participatory planning and decision-making processes among stakeholders. (6) Institutional and organizational options for management of upper catchments. (7) Policy instruments encouraging protection of upper catchments.

Expected outputs from **Theme 3—Aquatic Ecosystems and Fisheries** will include: (1) Improved understanding of the factors determining access to aquatic resources by different communities and social groups and how these can be managed; (2) Guidance on the form of governance systems, policies and institutions, that foster equitable and sustainable management of aquatic ecosystems and their resources; (3) Information systems that will support the development and application of such governance systems, policies and institutions; (4) Technical capacity to develop, manage and support such governance systems, policies and institutions; (5) Assessments and valuations of the goods and services provided by aquatic ecosystems, and costs of ecosystem degradation; (6) Tools and methodologies for generating such information rapidly and in an accessible manner; (7) Improved understanding of the impacts of hydrological change on the ecological functions of different aquatic ecosystems and the different goods and services they provide; (8) Improved methodologies for assessment of environmental water requirements of different aquatic ecosystems; (9) Improved understanding of the specific freshwater requirements of coastal ecosystems; (10) Tools for assessing the water requirements of riverine fisheries; (11) Assessment of the current and potential contribution of aquatic resources to water productivity in different farming systems, notably irrigated and flood-prone systems; (12) Improved understanding of the benefits that can be obtained by integrating fish production and harvest of other aquatic animals and plants into farming systems; (13) Improved technologies for integrating aquaculture and fisheries into different farming systems.

Expected outputs from **Theme 4—Integrated Basin Water Management Systems** will include:
1) Improved understanding of issues of scale, upstream-downstream interactions and basin governance requirements documented in publications. 2) Effective technical and management strategies adapted to specific locations to improve the conjunctive management of surface water, groundwater and rainwater, as well as the rural-urban, and agriculture-ecosystem interfaces. 3) A basket of tools for addressing basin management issues. 4) Improved data and information for local and global use. 5) Capacity built to put understanding into practice and to utilize tools. 6) Capacity built to better manage basin water resources. 7) A coherent research agenda and methodological framework for use by CP partners and other researchers and practitioners.

Expected outputs from **Theme 5—The Global and National Food and Water System** will include (1) Publication of state-of-the-art research reports, journal articles, books, policy briefs, and media briefings that evaluate and explain policies, institutions, and the dynamics of change in the global and national food and water system (2) Development of databases and comprehensive methodologies, models and analytical frameworks for assessing global and national food and water systems and (3) Development of institutional capacity in NARES, NGOs, national governments (including ministries of water, agricultural, finance, and planning), and international institutions (4) Dissemination of policy and institutional knowledge through training courses, distance learning, leadership training, policy dialogues, conflict resolution and mediation techniques, and development of decision support systems(5) Establishment of a forum for cross-country learning.

Specific targets of the Partnership/Initiative and timeframe for their achievement:

The targets related to the expected results as described in the section above and the timeframe for their achievement are considered not to be fixed, but will be the result of a continuous system of evaluation and adjustment throughout the relatively short duration (5 years) of the Water & Food Challenge Program. Important to note is that targets and time frames will be evaluated and adjusted systematically at three major meetings (see monitoring arrangements).

Coordination and Implementation mechanism

Please provide a brief description of expected coordination/implementation mechanism of the Partnership/Initiative.

The CP Water and Food introduces new approaches to how agricultural research for development is organized and managed. It proposes a new quality of partnership. Eighteen partners, of which five are CGIAR centres, have agreed to use majority voting on all critical and strategic issues regarding the program. Some 75 percent of the total program funding is organized around a process for open, competitive grant financing —a formula designed to open the field to many new partners, and to allocate at least 33 percent of funding for each project to NARES.
There are clearly defined roles for each consortium member. CG centres lead thematic groups. NARES lead benchmark basin work, giving a close link to regional and locally defined priorities, to help drive implementation of research ideas which, working with partner NGOs, drive impact. ARIs ensure a strong link for this research to the global change research agenda

Arrangements for funding

Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.)

The CP Water and Food is proposing a minimum core budget of US$82 million for a first 5-year phase. The CGIAR and its partners are developing a system to make available funds for Challenge Programs like this one, which is likely to involve donor governments, financial institutions and foundations. Several potential donors have expressed preliminary interest to support Challenge Programs in general, and this one in particular. It is furthermore expected that the participation of developed country partners will be supported from non development targeted financial resources. For this Water and Food Challenge Program it is (conservatively) projected that it will attract a further US$50 million in matching funds. Other national and regional sources will provide a significant amount of funding throughout the life of the CP Water and Food. However, to realize this ambitious and relevant program, a sustained high level of funding will be required.
The size of this proposed *global* Challenge Program and the budget need to be seen in perspective with sectoral development programs in a given country that receive international support from international donors such as the World Bank. Many of these are in the order of US$10-30 million to create significant long-term change. Compared to the goal of significantly changing water management in agriculture on an international scale, an investment of several hundred million dollars is a modest, and we believe, well placed development investment.
To have a significant impact, the expected duration of the CP Water and Food will be considerably longer than the initial five-year phase. Assuming that the first five years show sufficient progress, the duration of the program should be at least 10-15 years.

Arrangements for capacity building and technology transfer

Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures. Please also provide here a brief description of expected arrangements for technology transfer (if applicable):

The CP Water and Food partnership reaches well beyond the core consortium partners to share the majority the funds (some 75%) with a much wider group of partners. A capacity building component of the program targets an additional set of river basins—especially in sub-Saharan Africa—where NARES have lower capacity and where the basins are characterized by low income and high water stress. The Niger and Zambezi are the first candidates identified for capacity building, more of these types of basins will be added later.

Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)

Please provide a brief description:

The Challenge Program builds on the existing collaboration between the CGIAR System and research organizations in developed countries and countries in transition, but differs from these in the fact that the CP is strongly focused and targeted, time bound and provide for a wider partnership.

The CP is closely linked to the work of FAO and UNEP, to the CCC and CCD and the Global Water Forum, and to GFAR at the international level, and to both national research systems and civil society initiatives at the regional level.

A special linkage exist with the **Dialogue on Water, Food and Environment.**
Ten key stakeholders in the water, agriculture and environment areas have joined hands to form a strategic alliance – known as the Dialogue on Water, Food and the Environment – to help bridge the chasm between agriculture and environmental communities over the way water should be managed and developed. These organizations range from UN agencies (FAO, UNEP, WHO) to associations of farmers (IFAP), irrigation engineers (ICID), environmental organizations (IUCN, WWF), water umbrella organizations (GWP, WWC) and water research (IWMI, representing the CGIAR). The Dialogue is organized around three main (groups of) activities:

1. cross-sectoral dialogues at national and basin levels, aimed at developing shared values related to water for food and environmental security;
2. a "knowledge-base" of credible and authoritative information – acceptable to both agricultural and environmental communities; and
3. local-action activities that aim to provide an information exchange and best-practice identification, platform, linking thousands of local, NGO and bilateral projects and activities into the formal knowledge base(s).

The goal of the Dialogue is provide a multi-stakeholder learning framework that will generate a body of knowledge to help answer the question, at river basin level, how to manage and develop water resources to achieve food security as well as environmental security (www.iwmi.org/dialogue).

Monitoring Arrangements

Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD:
(e.g. frequency/modalities of preparation of progress reports; electronic updates, news-letters, etc)

Three major Milestone Conferences are envisaged for the first phase of the Challenge Program, namely the **Baseline Conference**, to be held once the Benchmark Basins have been established and the competitive research grants awarded; the **Synthesis Conference**, midway through the first phase; and the **Targets Conference**, assessing and evaluating the impact of the Challenge Program at the end of the first phase, drawing lessons and setting out the agenda for the future.

The first milestone for the Challenge Program will be to establish and publicize the baselines: *Where are we now, at the start of the Challenge? How do key stakeholders see the Challenge? What is the situation in the*

Benchmark Basins with regard to key indicators? What are the crucial gaps in knowledge that we need to address in order to tackle the Challenge?

Midway through the first phase of the Challenge Program, the task of synthesizing the knowledge generated through the activities of the CP will be tackled. The Synthesis Reports produced will become the global touchstones, state-of-the-art documents for integrated river basin management, and improving water productivity in agriculture. The reports will be made available in print, and in user-friendly form on the Internet. All of these will be presented at the Synthesis Conference, and once again a wide range of stakeholders and sponsors will be invited, together with the CP communities of practice, and the global media. The Synthesis Conference will be held in one of the CP Benchmark Basins. Real and/or virtual tours of the basin and of the major research sites within the basin will be organized for participants.

The third milestone for the Challenge Program will be the completion of the first phase, marked by the Targets Conference in July 2008. Five years on from the Baseline Conference, this will be a high-profile media occasion, and a showcase for the achievements of the Challenge Program in the first phase. The evaluation of results of research projects, and the assessment of impacts via the basin monitoring programs will tackle the questions: Are *we meeting the Challenge? Are we moving closer to our targets? What are the constraints, and what are the valuable lessons that can be learned, as we move into the next phase of the Challenge?*

Other relevant information:

Web-site (if available): **www.cgiar.org/iwmi/challenge-program**

Name and contact information of the person filling in this table:

Name: Dr J. Coosje Hoogendoorn
Position: Chair CGIAR System Taskforce for WSSD
Address: IPGRI, Via dei Tre Denari 472a, 00057 Maccarese, Rome, Italy
Phone: +39-066118200
Fax: +39-0661979661
E-mail: c.hoogendoorn@cgiar.org