

ID	Name of Institution	Name of contact individual	Area(s) of expertise	Email address	Country location
1	Independent (until recently Wageningen UR)	Ir. Bernita Z. Doornbos	Irrigation, Andes (Ecuador/Peru), Sprinkler technology, water management, water rights, water use efficiency, crop production	bernitadoornbos@gmail.com	Ecuador
2	International Center for Tropical Agriculture (CIAT) - Rural Innovation Institute	Vicente Zapata	Knowledge Management Methodologies	v.zapata@cgiar.org	Colombia
3	The Australian National University (ANU)	Dr. Kuntala Lahiri-Dutt	South Asia, water management at the community level, gender, Damodar Valley, Bengal	kuntala.lahiri-dutt@anu.edu.au	Australia
4	Independent Consultant	Pranab Ranjan Choudhury	Poverty-water interfaces, Institutional and policy analysis, NRM action research, Watershed Development, Research coordination with multi-disciplinary and multi-locational teams, Analysis and documentation, project management tasks	prchoudhury@rediffmail.com; choudhury@sancharnet.in	India
5	Central University of Technology, Free State	Yali Edessa Woyessa, Ph.D.	Agricultural water management, Conservation tillage, Agricultural watershed management	ywoyessa@cut.ac.za	South Africa
6	Centro Andino para la Gestión y Uso del Agua (Centro A.G.U.A., www.centroagua.org), Agriculture Faculty, Universidad Mayor de San Simón (UMSS), Cochabamba, Bolivia.	Alfredo Durán Núñez del Prado General Co-ordinator	Negotiated approaches and tools for watershed management and water management (www.negowat.org, www.bothends.org), Irrigated agriculture, farming system analysis, and livelihood strategies (current PhD research from Iván del Callejo), Irrigation management: water rights, water distribution, O&M, social organization, Indigenous rights and legislation, Irrigation technology, Water availability, water access and multiple water use (current PhD research from Alfredo Durán), Water governance (current PhD research from Rocío Bustamante)	centroagua@centroagua.org, alfduran@centroagua.org	Cochabamba, Bolivia
7	WaterWatch	Sander Zwart	Regional mapping of crop water productivity using remote sensing technology and the SEBAL algorithm, basin wide analysis (broad experience in projects in the Indus basin, Nile basin and the Yellow river basin), inter-basin comparison of yields, water use and crop water productivity, relations between irrigation application, crop production, evaporation depletion and water productivity,	s.zwart@waterwatch.nl	The Netherlands

			<p>web-mapping of produced outputs (includes online publishing in Google Earth) Relevant publications include:</p> <p>Zwart, S.J. and W.G.M. Bastiaanssen. 2004. Review of measured crop water productivity values for irrigated wheat, rice, cotton and maize. <i>Agricultural Water Management</i>, vol. 69(2), p. 115-133.</p> <p>Zwart, S.J., W.G.M. Bastiaanssen, J. Garatuze-Payan and C.J. Watts. 2006. SEBAL for detecting spatial variation of water productivity for wheat in various irrigation systems with emphasis on the Yaqui Valley, Mexico. <i>International conference on Earth Observation for Vegetation Monitoring and Water Management</i>, Naples, Italy, 10-11 November 2005.</p>		
8	EARS	Andries Rosema	<p>Energy and Water Balance Monitoring System: Operational, near real time, distributed data of temperature, global and net radiation, actual and potential evapotranspiration , precipitation (as well as snowpack and snow melt) at 5 km and daily resolution. Satellite hydrology: Effective precipitation data fields from meteo satellites. Water balance calculations and rainfall-runoff simulation. Agricultural drought monitoring and crop yield forecasting: Radiation and actual evapotranspiration data fields from meteo satellites. Drought monitoring and yield assessment</p>	andries.rosema@ears.nl	Kanaalweg 1, 2628 EB DELFT, Netherlands
9	<p>Environmental Protection and Development Initiative (EPDI); University of Calabar; Children, Youth, Sport and Environment Unit Division of Communication and Public Informations ; United Nation Environment Programme (UNEP)</p>	Daniel A. Edoho	Environmental Protection and Resource Management EPM.	epdi02@yahoo.com	Nigeria
10	Freshwater Fisheries Research Center, Chinese Academy of	Prof Min Kuanhong	Senior specialist in integrated fish farming, Rural Extensionist (specialized in farmers' participatory technology development)	minkh@ffrc.cn	China

	Fishery Scinces, Wuxi, China				
11	Freshwater Fisheries Research Center of Chinese Academy of Fishery Sciences	ZHU Jian	aquaculture, fish-agriculture integration	zhuj@ffrc.cn	China
12	Delft University of Technology, Department Water Management	Nick van de Giesen	Water Resources Management Remote Sensing Modeling hydrological processes	n.c.vandegiesen@tudelft.nl	The Netherlands
13	Clinton Davidson Concepts	Clinton I. Ezekwe	Poverty analysis; analysis of agricultural water productivity; analysis of water availability and access; intervention analysis	cdconcepts_ng@yahoo.com	Nigeria
14	Institute for Fisheries Management and Coastal Community Development	Alyne E. Delaney, PhD	Natural resource management; socioeconomic research and institutional analysis; expert in explaining importance of aquatic resources for subsistence and alleviating poverty	ad@ifm.dk	ad@ifm.dk
15	IWMI (at present) Independent after 30 June 2006	Douglas J. Merrey	Management of interdisciplinary projects, and institutional analysis	d.merrey@cgiar.org	South Africa
16	National Engineering Services Pakistan (Pvt) Ltd	Mohammad Riaz	On farm water Management & Participatory Irrigation Management	chriaz51@yahoo.com	Pakistan
17	ChangeMaker Society for Social and Economic Development	Syed Tamjidur Rahman, CEO	Sustainable human, social and economic development through the promotion of Enterprise Development, Good Governance, Gender Mainstreaming, ICT, Survey and Research, and Capacity Development of Local Partners in the spheres of Agriculture, Environment, Water and Sanitation, Governance, Peace and Security, Economy and Information	info@chnagemeke r-bd.org	Bangladesh
18	ARC Seibersdorf research GmbH	DI Monika Schönerkle, MSc, Business Area Water	The Business Area Water has many years of experience in the exploration and management of water resources, and on selected water purification and wastewater treatment issues. Our principal activities focus on ensuring a sufficient water supply, the guarantee of high water quality, as well as sustainable usage of drinking water. The Business Unit Water offers a broad variety of specific services, which range from field work to interdisciplinary water management concepts. We have carried out a large number of national and international projects (EU, Vietnam, India,	Monika.schoenerklee@arcs.ac.at	Austria

			Thailand, Ethiopia etc.).		
19	Rajiv Gandhi University, Itanagar-791112, Arunachal Pradesh, India	Dr.D.N.Das, Reader in Zoology, Aquaculture Unit, Rajiv Gandhi University, Itanagar-791112, India Fax:+91-360-2277317	Rice fish farming, Aquatic ecology, Fish biology	Dndas321@rediffmail.com	Brahmaputra basin (North eastern states)
20	TNS India	Dr. U V Somayajulu	Monitoring & Evaluation studies, Base Line Survey, Feasibility and Planning study on Water Resource Development and Management	sru.india@tns-global.com; somayajulu.uv@tns-global.com	India
21	International Water Management Institute (IWMI)	Yasir A. Mohamed	Hydrology and water resources	y.mohamed@cgiar.org	
22	Zabol University	Majid Ajorlo	Range management	ajorlo_m54@yahoo.com	Iran
23	Soroti Rural Development Agency (SORUDA)	Mr. Peter Ochepe Peter Ekiru	Poverty analysis studies, analysis of water availability and access, analysis of agricultural water productivity and institutional analysis, natural resource management	sorudaorg@yahoo.com; peterochepe@yahoo.com	Soroti, Eastern Uganda
24	Agricultural Research Cooperation, Sudan	Osman Abdel Rahman Alfadni	Land and Water management, Water Harvesting	alfadniosman@yahoo.com	Nile Basin (Sudan)
25	Inter-American Institute for Cooperation on Agriculture (IICA)	Gertjan B. Beekman	Water Resources Planning and Development; Hydrology, Irrigation, Environmental Impact Assessment and Evaluation, Desertification Control and Management	gertjan.beekman@iica.int; gbbeekman@yahoo.com	Brazil
26	Kenya Agricultural Research Institute	Dr. Miriam Gaceri Kinyua	Plant breeding, biotech	mgkinyua@africaonline.co.ke	Kenya
27	Institute for Sustainable Agriculture(IAS), National Research Council(CSIC)	Dr. Pablo J. Zarco-Tejada	Dr. Zarco-Tejada is the Director of the "Laboratory for Research Methods in Quantitative Remote Sensing (QUANTA)". Pablo J. Zarco-Tejada obtained an Agricultural Engineering Degree at the Faculty of Agricultural Engineering and Forestry, University of Córdoba (Spain), a Masters Degree in Remote Sensing from University of	pzarco@ias.csic.es	Spain

			<p>Dundee (Scotland, UK), and a Ph.D. in Earth and Space Science at York University, in Toronto (Canada). His main interests are related to applications of remote sensing for vegetation stress monitoring, water stress detection with thermal imagery, and precision agriculture. He was a Postdoctoral Researcher and Lecturer in remote sensing at the University of California, Davis (UCD) in USA, working with multi and hyperspectral airborne and satellite (Hyperion) data for vegetation water content estimation using leaf and canopy models. He is currently at the Institute for Sustainable Agriculture, National Research Council (IAS-CSIC, Spain), where he works with Hyperion, AVIRIS, CASI, HyMAP, ROSIS, and MERIS sensors over forest and agricultural canopies for pigment, nitrogen, water content and LAI estimation. His main interests are related to the applications of remote sensing for vegetation condition and stress detection. Dr. Zarco-Tejada is principal investigator and participates in EU, ESA and Spanish-funded projects on hyperspectral remote sensing. He is author of 25 refereed papers published in international journals, and reviewer of Remote Sensing of Environment (RSE), IEEE Transactions on Geoscience and Remote Sensing (TGARS), Journal of Geophysical Research (JGR), and Journal of Environmental Quality (JEQ). He is member of the Editorial Advisory Board for the European Journal of Agronomy. He was the recipient of three awards for his Masters and PhD theses in hyperspectral remote sensing both in United Kingdom and Canada.</p>		
28	Internationaal Center for Tropical Agriculture (CIAT)	Glenn Hyman	Poverty Mapping	g.hyman@cgiar.org	Colombia
29	Rivers Institute at Hanover College	Dennis Wichelns	<p>Our specialists have on-the-ground experience in the Nile, Yellow, and Mekong river basins. We offer expertise in economics, policy analysis, agriculture, irrigation, salinity, drainage, agricultural water management, biology, aquatic wildlife, Geographic Information Science (GIS) analysis, geology, water supply and demand, water quality, water conservation, nonpoint source pollution, best management practices, water</p>	wichelns@hanover.edu	United States

			technology, water education, sociology, anthropology, and culture. In addition, we offer library services, documentation, and report writing.		
30	Nepal Development Research Institute	Laxmi Prasad Devkota	Hydrological analysis: Temporal and spatial variability of water availability for water use as well as water control, infrastructure development like dam/bridge construction Groundwater analysis: Assessment, development and management Sediment transport analysis: hydrological (catchment level) and hydraulic (river) aspects Demand analysis for different water use Water related hazard analysis Optimal allocation of water for various uses: domestic and industrial uses, irrigation and other uses Watershed management Researches on water related aspects Application of following modelling software: Hydrological Models: MIKE SHE, NAM, HEC_RAS, Groundwater Models: MODFLOW, GMS Hydraulic Models: MIKE11, MOUSE Model developed: Optimizations Models (What's Best- An add in of Excel Spreadsheet), Model Development (sediment transport, integrated hydrologic model in Visual Basic) Hydrological use of statistical package: MATHMATICA	lpdevkota@ndri.org.np	Nepal
31	facilitation.de & Hohenheim University	Thomas Becker	Participatory research, project management, (process) facilitation, intercultural competence & trainings for the aforementioned skills (incl. training of trainers)	thomas.becker@facilitation.de or thbecker@uni-hohenheim.de	Germany
32	Department of Geography and Environmental Science, University of Zimbabwe	Never Mujere (Mr)	Statistical applications in water resources research , CROPWAT modelling	mujere@arts.uz.ac.zw	Zimbabwe
33	Kenya Agricultural Research Institute, Lake victoria Environmental management Project	Stephen Mailu	Baseline household surveys, Poverty analysis, Agricultural economics, Environmental Economics, policy analysis, agriculture, Environmental Management, Management Information Systems MIS, GIS, M&E, Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Aquatic weed management	skmailu@lvemp.or.ke (alternative sshierom@hotmail.com)	Kenya (East Africa)
34	Independent	Dr. Zaigham	Estimation of water availability, demand and actual	zaihabib@yahoo.c	Pakistan

	consultant	Habib	consumptions at the basin and sub-basin scales, using GIS, water balance, crop Et and statistical methods; Estimation and evaluation of agriculture productivity and irrigation efficiency for different water and land use systems defined by the parameters representing availability, management and quality of water; Analyzing minimum/ environmental flow, their Implementation scope with reference to existing allocation and outflow to the sea using regulation and allocation model; Hydraulic analysis of the canals and water distribution devices using steady and unsteady Hydraulic models; Implementing monitoring and evaluating tools/models for environmental issues and Integrated water Resources Management; Professional training of Decision Support systems in collaboration with researchers and managers supervising training packages for engineers and senior irrigation professionals, multi disciplinary projects having national and international staff.	om	
35	Agricultural University of Athens, Greece	Professor Constantina Safiliou-Rothschild	Status of poverty and poverty alleviation; rural and agricultural development; management of irrigation systems; water and agricultural productivity; gender issues, irrigation and poverty.	safiliou@otenet.gr	Greece
36	Asianics Agro-Dev	Dr. Pervaiz Amir or Dr Amir Muhammed	Indus Basin, water economics, irrigated and dryland agriculture, farming systems research, conservation technologies (sprinkler, water raised bed furrow), institutional analysis, large dams, poverty analysis with grass root level data collection, water modelling, water resource analysis (surface and ground water), crop research, livestock systems analysis, drinking water, intervention analysis for irrigated agriculture, political economy, recent studies include: coordination of Pakistan Water Country Assistance Strategy (for World Bank); Tarbela Dam Case Study and related aspects of Indus Basin, Agriculture analysis as part of Pakistan Water Sector Strategy (ADB); Reforms in irrigated agriculture with John Mellor and Associates. For more information see our website at www.asianics.org	P_amir03@yahoo.com	Islambad, Pakistan
37	Norwegian Institute for Water Research	Stig A . Borgvang	Integrated Water and Coastal Resources Management, Water quality modelling, Monitoring of surface waters, Diffuse losses of nutrients, Stakeholder Analysis and stakeholder participation, Conflict Analysis and conflict	Stig.Borgvang@ni va.no	Norway

			management , Land and water rights, Co-ordination of large projects, Networks in China and India		
38	Independent	Lutaaya Teddy	Agricultural engineering	kizzateddy@yahoo.com	Uganda
39	The International Water Management Institute, IWMI	Hugh Turrall	<p>Poverty Analysis - Mark Giordano, Madar Samad, Upali Amerasinghe, Alexandra Clemmett</p> <p>Statistics - Upali Amerasinghe, Anputhas,</p> <p>Mapping and geo-spatial analysis - Robert Zomer</p> <p>Livelihoods - Sylvie Morardet, Alexandra Clemmett, Nadia Manning</p> <p>Gender -Barbara Van Koppen, Deepa Joshi</p> <p>Analysis of Water Availability and Access - David Molden, Hugh Turrall, Mobin ud-Din Ahmad</p> <p>Surface Hydrology (including drought analysis) - Vladimir Smakhtin, Matthew McCartney, Anne Chaponniere, Luna Bharati, Chu Thai Hoanh, Yasir Mohamed</p> <p>Groundwater hydrology and use - Karen Villeholth, Mobin ud-Din Ahmad, Asad Qureshi</p> <p>Water Resources and modelling - Bekele Seleshi, Peter McCornick, Yasir Mohammad, Chu Thai Hoanh</p> <p>Applications of remote sensing to water balance and accounting (inc. SEBAL) - Mobin ud-Din Ahmad, Yasir Mohammad, Thulani Magakola, Nilantha Gamage.</p> <p>Land use, Remote Sensing and GIS - Prasad Thenkabail, Chandru Biradar, RS/GIS team</p> <p>Waste Water use and management - Pay Drechsel, Rob Simmonds, Liqa Raschid, Alexandra Clemmet</p> <p>Environmental Water Allocation - Vladimir Smakhtin, Rebecca Tharme, Max Finlayson, Luna Bharati</p> <p>Analysis of Agricultural Water Productivity - David Molden, Mobin ud-Din Ahmad, Hugh Turrall, Deborah Bossio</p> <p>Forest water productivity - Robert Zomer</p> <p>GIS based approaches - Thulani Magagula, Chu Thai Hoanh</p> <p>Aquaculture and capture fisheries - Sophie Nguyen Khoa</p> <p>Scaling issues in water productivity - Mobin ud-Din Ahmad, Hugh Turrall, Ilyas Masih, David Molden.</p> <p>Remote Sensing and water productivity - Mobin ud-Din Ahmad, Prasad Thenkabail, Chandru Biradar</p> <p>Institutional Analysis - Tushaar Shah, Maria Saleth, Madar Samad, Mark Giordano, Regassa Namara</p> <p>River Basin Institutions and Transboundary issues - Mark</p>	h.turrall@cgiar.org	<p>IWMI head office is in Colombo, Sri Lanka.</p> <p>Expertise for China (Yellow River) is mainly to be found in the head office.</p> <p>IWMI has regional offices in the following locations that serve the areas covered under the call for BFPs:</p> <ol style="list-style-type: none"> 1. Addis Ababa, Ethiopia (Nile) – Contact Bekele Seleshi 2. Delhi, India (Ganges) – Contact Peter McCornick 3. Lahore, Pakistan (Indus) – Contact Peter McCornick 4. Accra, Ghana (Niger) – Contact Mehmood Hassan 5. Pretoria,

			<p>Giordano, Meredith Giordano, Madar Samad, Doug Merrey, Amy Sullivan</p> <p>Irrigation system management - Mehmood Hassan, Doug Merrey, Madar Samad, Hugh Turrall</p> <p>Financing - Arlene Innocencio</p> <p>Intervention Analysis - Deborah Bossio, Hugh Turrall, Agronomy, soils and farm management - Andrew Noble, Deborah Bossio, Philippe Lemperiere, Hugh Turrall, Water Management - Philippe Lemperiere, Mobin ud-Din Ahmad, Hugh Turrall, Hilmy Sally, Chu Thai Hoanh, Seleshi Bekelle</p> <p>Policy development - Maria Saleth, Madar Samad, Mark Giordano, Regassa Namara</p> <p>Impact assessment - Meredith Giordano, Regassa Namara, Maria Saleth</p> <p>Development and Application of Knowledge Base - Information and Knowledge Group (Sanjini de Silva)</p> <p>Database (IDIS) - Pierre Marchand and team</p> <p>Research Priorities and innovation (Comprehensive Assessment of Water Management in Agriculture) - David Molden and team</p> <p>Environment and aquatic ecosystems - Vladimir Smakhtin, Rebecca Tharme, Max Finlayson</p>		<p>South Africa (Limpopo) – Contact Hilmy Sally</p>
40	<p>SACRED Africa (Sustainable Agriculture Center for Research Extension and Development in Africa)</p>	<p>Johnstone Odera Tungani</p>	<p>The Institution has 8 professional staff;</p> <p>1 PhD holder in Agronomy and Post harvest technology</p> <p>3 MSc degree holders in Natural Resource Management, Forestry, Soil Science, Soil Conservation and Animal Health Management</p> <p>2 BSc degree holders in Agronomy, Agriculture Extension and Extension and Agricultural Engineering</p> <p>2 Diploma holders in Ecological Agriculture and Organic Agriculture</p> <p>These have various levels of experience ranging from 2 years to 15 years both in Government, Private and Civil Society (NGOs) circles</p>	<p>sacredwest@yahoo.com</p>	<p>Kenya in East Africa. Head Office in Nairobi. Regional Office in Bungoma Town near border with Uganda</p>
41	<p>International Development Enterprises (India)</p>	<p>Amitabha Sadangi</p>	<p>Irrigation; Drip irrigation and sprinkler technology; Poverty-water interface; Agriculture water management; irrigated agriculture; farming system analysis; Livelihood strategies; Crop water productivity; Irrigation solution; Energy-water nexus analysis</p>	<p>amitabha@ide-india.org</p>	<p>India</p>
42	<p>College of Resource</p>	<p>Junlian Zhang</p>	<p>Institutional analysis; Intervention analysis; Analysis of</p>	<p>junlian88@sohu.c</p>	<p>China</p>

	and Environment, China Agricultural University		Agricultural Water Productivity	om; junlian@cau.edu.c n	
43	Centre for Development and Environment (CDE)	Prof. Dr. H. Hurni	<p>Work Package 3:</p> <ul style="list-style-type: none"> o Analysis of agricultural water productivity towards poverty alleviation strategies, using the 'Sustainable Land Management' approach. According to the experiences of the CDE, this analysis is most successfully applied when addressing the social/institutional, economic, and ecological dimensions of sustainability. Thus land/water management becomes more sustainable if the development process is initiated in all related sectors and at several stakeholder levels at the same time. (For further information see the GEF operational programme on sustainable land management). o Access to and utilisation of the knowledge portal of the National Centre of Competence in Research (NCCR). The centre of excellence researches, through global partnerships, on syndromes of global change. o Review of the APSIM (Agricultural Production System Simulator) tool in the Ewaso Ngiro River Basin, Kenya. o Analysis of water availability and access in the Ewaso Ngiro basin by modelling water run-off, water abstraction and water allocation. <p>Work Package 5:</p> <ul style="list-style-type: none"> o Impact Monitoring and Assessment in a variety of projects (Songwe River Trans-Boundary Watershed Management Project, Tanzania/Malawi, Rural Development Programme Northern Mozambique) as a prerequisite for successful subsequent knowledge sharing. The 'Impact Monitoring and Assessment' tool has been developed by the CDE. It contains simple and cost-effective tools for reflection, learning, and quality control throughout a project's life cycle that help to better adapt project activities to a changing reality. The tool can be integrated into self-evaluation processes of ongoing projects. 	hans.hurni@cde.u nibe.ch udo.hoeggel@cde. unibe.ch	Switzerland

			<ul style="list-style-type: none"> ○ Using simulation games, developed by CDE, to stimulate dialogue and create awareness towards potential new interventions in a basin and to develop a common ground for discussion among stakeholders towards strategic planning. The following simulation games are currently available: <ul style="list-style-type: none"> ○ Optimising household strategies ○ Conflict mitigation in communities ○ Local natural disaster risk management ○ Application of stakeholder consultation as a tool to develop a trans-boundary watershed management plan in the Umbeluzi River basin (Southern Africa) ○ Access to and utilisation of the knowledge portal of the National Centre of Competence in Research (NCCR). The centre of excellence researches, through global partnerships, on syndromes of global change. <p><u>Work Package 6:</u></p> <ul style="list-style-type: none"> ○ Application of an innovative, process-oriented training approach (Learning for Sustainability, L4S) to foster social learning processes at all levels and with a variety of stakeholders at the interface of local and external actors. The approach has been developed by CDE and promotes a multi-level and multi-stakeholder knowledge sharing and build-up of local/regional databases. ○ Impact Monitoring and Assessment in order to evaluate likely impacts of improved water management and agricultural water productivity on poverty (see WP 5). ○ Access to and utilisation of the knowledge portal of the National Centre of Competence in Research (NCCR). The centre of excellence researches, through global partnerships, on syndromes of global change. ○ Developing GIS spatial databases and analyses (Mekong basin, Nile basin, Pangani basin) as a tool in conflict resolution, negotiation processes and policy formulation. 		
44	WOCAT (World	Dr. HP Liniger	Work Package 3:	WOCAT@giub.uni	India

	Overview of Conservation Approaches and Technologies)		<ul style="list-style-type: none"> o Documentation/Evaluation of water conserv. and harvesting technologies and approaches using the internationally recognised WOCAT methodology. o Degradation and conservation monitoring in various basins using WOCAT mapping tools. <p>Work Package 5:</p> <ul style="list-style-type: none"> o Documentation/Evaluation of interventions for effectiveness, acceptance, C/B and on / off site impacts. o Identification and sharing of experiences and knowledge on soil and water conservation and management using the WOCAT methodology in the Limpopo area and the Upper Nile basin as well as other basins. <p>Work Package 6:</p> <ul style="list-style-type: none"> o Application of WOCAT tools to document, evaluate and disseminate technical knowledge and experiences in the watersheds proposed. o Initialising knowledge sharing within a global range of WOCAT experts and practitioners. o Application of the web based WOCAT database and approach support in basin management. 	be.ch	
45	Centre for Advancement of Sustainable Agriculture (CASA)	Dr. I.P. Abrol	(a)Sustainable Agriculture, Water productivity, Conservation approaches, (b)Promoting integrated and participatory approaches, (c)Institutional analysis and innovations, (d)Knowledge sharing and creating awareness	iabrol@vsnl.com	India
46	The Institute of Environmental Management at the Copperbelt University	Julius J Kanyembo	Offer short courses,workshops and seminars on environmental issues Prepare Environmental Impact Assessment Reports for clients Undertake environmental research studies (say water analysis) and projects for external clients using current university expertise and resources.	kanyembo@cbu.ac.zm	Kitwe,Zambia
47	DHI Water and Environment	Dr. Anders Refsgaard Head of Projects Department of Hydrology, Soil and Waste	As below	anr@dhi.dk ; dhi@dhi.dk	Main office in Denmark Offices in AustraliaBulgaria, China, Czech Republic, DenmarkFrance, GermanyIndia,

					Italy, Malaysia, New Zealand, Norway, Singapore, Slovak Republic, Spain, Sweden, United Arab Emirates and USA
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Services and Products

DHI offers a broad range of consultancy services, reference material, software and hardware products and tools.

Competencies include numerical modelling, environmental laboratories and scale model test facilities, field surveys and monitoring programmes, and institutional capacity building and training.

Services are offered in the following fields:

- | | |
|---------------------------------|--|
| <i>Urban Water and Industry</i> | <ul style="list-style-type: none">• Urban Water• Wastewater and Process Technology• Environmental Risk Assessment• Health and Safety Risk Assessment• Urban Software |
| <i>Water Resources</i> | <ul style="list-style-type: none">• River and Flood Management• Hydrology, Soil and Waste• Water Resources Management• Water Resources Software |
| <i>Marine and Coastal</i> | <ul style="list-style-type: none">• Ports and Offshore Technology• Coastal and Estuarine Dynamics• Ecology and Environment• Marine Software |

DHI's consultancy services combine extensive physical/chemical and biological knowledge using the most advanced tools and technologies available. Projects have been undertaken in more than 140 countries.

DHI's has extensive experience within the fields of (reference to work packages in Methodology Guidelines):

- Analysis of Water availability and Access,
- Analyses of Agricultural Productivity,
- Institutional analysis,
- Intervention analysis,
- Development and application of the knowledge base.

Furthermore, DHI is experienced in (reference to Call for Expression of Interest from Lead Institutions):

- Project management in administration, reporting, financial control and audit,
- Communication with a wide range of participatinf institutions,
- Complete projects on time,
- Leading multidisciplinary teams,
- Team coordination,

- Communication,
- Innovation,
- Understanding the issues in the designated river basin and establish contacts with agencies in the basin.

Research & Development

Every year DHI invests a considerable part of its human resources in R&D to extend its knowledge in the various fields related to water, environment and health, and to improve its methods and software. This level of R&D enables us to continue providing our clients with the very latest know-how and the most advanced technologies. DHI co-operates with universities in Denmark and abroad.

International Collaborating Centres

DHI is designated as Collaborating Centre for the World Health Organisation, WHO, and for the United Nations Environmental Programme, UNEP, and furthermore as Advisory Centre for the Global Water Partnership.

Specific Experience from the Selected Basins

Yellow River

Wanjiazhai Yellow River Diversion Project, China (2001)

The project covers delivery of a Real Time Decision Support System for the Wanjiazhai Yellow River Diversion Project, a large-scale inter-basin water diversion project located in the northwest Shanxi Province of the People's Republic of China. The project is one of many strategic measures to alleviate water shortage problems in the area, particularly for the three cities of Taiyuan, Datong and Shuozhou.

Client: Foxboro, Australia (51246).

Yellow River Flood Management Sector Project, China (2000)

The lower Yellow River Basin has a flood vulnerable area of 120,000 km². The project reviewed and assessed the existing Flood Management Plan, made recommendations for a long term plan for 2020, prepared feasibility studies for core sub-projects, and a sector project for improved flood management.

Client: Asian Development Bank (50665).

Water Quality Management Model, Huai River Basin Pollution Control Project, China (1998-1999)

The main objective of the study was to establish and transfer a water quality management model for the Huai River Basin, which can be used during ongoing and future planning and management activities within the river basin.

Client: Huai River Basin Commission (50160).

Ganges River

Yamuna River Water Quality Modelling Study, India (2002)

The objective is to assess the impact of pollution load on water quality in the Yamuna River, India and to develop strategies for achieving desired water quality. The study includes review of data, hydrodynamic and water quality modelling as well as training and technology transfer. The model was used for application run for evaluating alternative pollution management strategies and give input to the Yamuna Action Plan.

Client: TEC Co. Ltd for JICA (51993).

Theri Reservoir, India (2001)

DHI has delivered MIKE 3 software for a reservoir study as well as assistance to CWPRS in setting up MIKE 3 HD and doing the preliminary investigation of the reservoir conditions.

Client: WAPCOS for CWPRS (51432).

Paksey Bridge Construction Project, Bangladesh (1998-1999) (French)

SWMC and DHI investigated design scour for the planned Paksey Bridge crossing Ganges. Fully dynamic design events created by scaling of an existing extreme event were applied in the analysis. The work produced design scour levels that were used in the design of the bridge.

Client: SWMC for Paksey Bridge Project (50249).

The Gorai River Restoration Project, Bangladesh (1997-2000) (French)

A 1D MIKE 11 model has been established to describe the long-term morphological changes of the entire Gorai River downstream of the offtake as well as to predict changes in flow rates during the dry and wet season. The

morphological conditions are simulated with the 2D MIKE21C model, which simulates the morphological changes 1-2 years ahead for different predefined scenarios
Client: Bangladesh Water Development Board. Donor: Worldbank (50205).

Sangu Development Project, Morphological Assessment, Bangladesh (1996-1997)

The Sangu Development Project encompasses a 47 km long 20" gas pipeline from the new Sangu Platform to shore at Chittagong, where also a shorter alternative pipeline route of 35 km was considered. DHI carried out assessment of regional long-term morphology, including coastline stability, bathymetry, seabed material and forms, river flux and climatological and environmental conditions
Client: Brown and Root Bangladesh Ltd., on behalf of Cairn PLC (5095).

The River Survey Project FAP 24, Study Component, Bangladesh (1995-1996)

Mathematical modelling was employed to support interpretation of the collected data and for further investigation of the morphological changes at the bifurcation. The curvilinear MIKE 21 C was applied. The modelling system is capable of simulating flow velocities, depths, riverbed erosion and deposition (with feedback to the hydrodynamics) as well as bank erosion rates. The characteristic seasonal changes (alternating sedimentation and erosion at the offtake) was well predicted by the model, which provided valuable insight into the morphodynamics of bifurcations.
Client: European Commission for Bangladesh Water Development Board (7015).

Nile River

Rosetta Groin Model Tests - PENDING - DM, Egypt (2004-2005)

Hydraulic model tests conducted in a 3D wave basin to validate and optimise the design of new groin structure at the Nile Delta coast at Rosetta (Rashid). The main armour layer is of Tetrapods.
Client: The Arab Contractors, Alexandria Branch for Shore Protection Authority (52980).

UNEP Collaborating Centre on Water and Environment - UCC-Water, Second Phase 2004-07, Global (2004-2007)

Support to UNEP in the implementation of the UNEP Water Policy and Strategy. The Centre supports and represents UNEP e.g. in its dialogue with the countries, implementation of studies, formulation of policies and guidelines, and the convening of workshops leading to concrete measures and actions. The UNEP-DHI Centre is located at DHI Water & Environment in Hørsholm,
Client: UNEP (United Nations Environment Programme) (52532).

Toshka Gate Optimisation, Egypt (2002-2003)

Toshka Channel System, located in the Nile Valley in upper Egypt, is used for irrigation purposes. It is regulated by the use of several pumps and gates. The purpose of the project is to optimise the operation of the pumps and gates.
Client: Aceto Industries (51757).

Scoping Study of the Needs, Options and Strategies to Develop a Decision Support System for the Nile Basin, East Africa (1999-2000)

In close cooperation with the Nile riparian countries, the Nile Secretariat and the World Bank, DHI identified the needs for developing decision support capacity within technical, capacity building, institutional and sustainability issues. DHI recommended a programme for designing, developing and implementing a Decision Support System for the Nile Basin to ensure sustainable development.
Client: World Bank for The Nile Countries (50545).

Limpopo river

Telemetry Flood Control and Integrated Management System for the Limpopo and Incomati Basins, Mozambique (2001-2003) (Spanish)

Establishment of an integrated river monitoring and management system, including flood forecasting, for the Limpopo and Incomati river basins in Mozambique, including the design and installation of an automatic hydro-meteorological monitoring system.
Client: Administração Regional das Águas do Sul (ARA-Sul) for Direção Nacional de Águas (DNA) (National Water Directorate) (51542).

48	College of Resources and Environment (CRE) of China Agricultural University (CAU)	Guitong Li	1. saving water irrigation techniques, especially in arid zone 2. effect of drought stress on plant hydro-physiology 3.saline tolerance plant introduction 4.slight salty groundwater utility in arid zone 5.city domestic waste water treatment and irrigation in vegetable production	lgtong@cau.edu.cn	China
49	CIAT (Africa)	Andrew Farrow	Poverty mapping and analysis, water productivity with regard to poverty	a.farrow@cgiar.org	Uganda, Kampala

50	EcoDev Consultancy Pvt. Ltd.	Subrata Rana	Participatory action research in the field of agriculture, fisheries, aquaculture, forestry, wetland ecology, and poverty analysis, institutional assessment, extension research, policy research	ecodev@vsnl.net ; ecodev_2003@yahoo.com	India Active in India, Bangladesh, Nepal, Bhutan, Sri Lanka
51	Center for Research & Development (CRD), Eastern University, Bangladesh	M.A. Ghani, Executive Director	Irrigation engineer, Water management and Agricultural development specialist	maghani@bdonline.com	Bangladesh
52	DHV B.V.	G.Uittenboogaard	* Water (Resources) Management, Water Availability and Access in particular * River Basin Management * Environmental Impact Assessment * Poverty Analysis * Institutional Analysis * Agricultural Water Productivity * Irrigation * Data Base / GIS development	gert.uittenboogaard@dhv.nl	Netherlands
53	CSIRO Land and Water, Private Bag No 2, Glen Osmond SA 5064, Australia		John Ward: Policy analyst/economist Geoff Syme: Social psychology of natural resources management Wendy Proctor: Policy analyst/economist Brett Bryan: Policy analyst/economist Jeff Connor: Policy analyst/economist Wendy McIntyre: Social psychology of natural resources management	J.Ward@csiro.au ; Geoff.Syme@csiro.au ; Wendy.Proctor@csiro.au ; Brett.Bryan@csiro.au ; Jeff.Connor@csiro.au ; Wendy.McIntyre@csiro.au	Australia
54	CSIRO Land and Water, GPO Box 1666, Canberra ACT 2601, Australia		Mac Kirby: Systems integration Geoff Podger: Hydrologist Mohammed Mainuddin: System analyst/irrigation and water resources scientist Shahbaz Khan: Hydrologist, water resources/irrigation engineer	Mac.Kirby@csiro.au ; Geoff.Podger@csiro.au ; Mohammed.Mainuddin@csiro.au ; Shahbaz.Khan@csiro.au	Australia
55	Institut de recherche pour le développement(IRD)	Patrick Le Goulven	water resources and water uses assessment and modelling, Andes (Ecuador, Colombia), agricultural water management, water allocation in basins (analysis and modelling)	patrick.legoulven@ird.fr	2006 Montpellier France, starting 2007

					Quito Ecuador
56	Ain Shams University, Faculty of Science, Centre of Protected Areas Research	Prof. Magdy T. Khalil	Water Management, Aquatic Ecology, Water Pollution	mtkhalil52@hotmail .com, Tel. 202-4185436 Fax: 202-4146591	Ain Shams University, Faculty of Science, Abbassia, Cairo, Egypt
57	BRLingénierie	Gilles ROCQUELAIN (Project Manager) Anne Claude Peton (Business department)	<p><u>CONSULTING SERVICES IN :</u></p> <p>Integrated water resource management and development</p> <ul style="list-style-type: none"> ▪ Integrated River Basin Management ▪ Integrated water resource management ▪ Flood prevention ▪ River improvement ▪ Quantitative management of water resources ▪ Qualitative management of water resources and aquatic habitats <p>Irrigation and drainage</p> <ul style="list-style-type: none"> ▪ Planning, design and implementation of irrigation and drainage schemes ▪ Technical Assistance for infrastructure operation and maintenance ▪ Waste water reuse ▪ Support to irrigation users <p>Regional development</p> <ul style="list-style-type: none"> ▪ Land-use management ▪ Regional and local development ▪ Sustainable development ▪ Regional planning <p>Water Supply and Sanitation</p> <ul style="list-style-type: none"> ▪ Drinking water treatment plant and distribution network design ▪ Securing water supply ▪ Designing and improving waste water disposal and treatment systems <p><u>SERVICES :</u></p> <ul style="list-style-type: none"> ➤ STUDIES AND DESIGN <p>Land-use management and development planning Regional and sector planning Economic studies Engineering studies</p>	<p>Gilles.rocquelain@brl.fr</p> <p>acpeton@brl.fr</p>	FRANCE

		<p>Complete engineering and project management services</p> <ul style="list-style-type: none"> ➤ INSTITUTIONAL SUPPORT <p>Institutional strengthening, and advisory services Organizing and restructuring water and environment managing entities Support to Water Users Organizations</p> <ul style="list-style-type: none"> ➤ PROJECT DEVELOPMENT AND IMPLEMENTATION <p>Setting up project finances Works management and commissioning Turnkey contractor assignments Public-private partnerships</p> <ul style="list-style-type: none"> ➤ MANAGEMENT AND OPERATION <p>Technical operation Financial and commercial management</p> <ul style="list-style-type: none"> ➤ TRAINING AND TECHNICAL ASSISTANCE <p>Technical assistance services Training</p>		
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EXPERIENCE:

COUNTRY	PROJECT
PERU	Technical Assistance with a programme of micro-projects in the PUNO region of PERU.
PERU	Support programme for native population of Central America
VENEZUELA	Technical Assistance with the Programme for Development of Agriculture and Stockfarming in VENEZUELA
BOLIVIA	MITZQUE and TIRAQUE - Agricultural development of Mitzque and Tiraque valleys - Project preparation
BOLIVIA	TARIJA Project identification - Support to productive activities, social aspects, strengthening of rural community organization, environment protection and irrigation.
BOLIVIA	MONTERO - PIRAI Project identification - Protection against flood of the river Pirai in the town of Montero and other areas.
COSTA RICA / GUATEMALA / EL SALVADOR / HONDURAS / NICARAGUA / PANAMA	Support programme for native population of Central America
GUATEMALA	Rural Development in Huehuetenango Region Project identification and evaluation.

GUATEMALA	Integrated rural development for EL QUICHE - Project identification
HONDURAS	Identification of a new project in the field of water supply and sewage in rural areas of Honduras.
HONDURAS	Protection against floods in La Sula Valley. - Project Identification, study, analysis
URUGUAY	Rural Communities Development - Preparation of a financial and technical cooperation program to develop rural communities in Uruguay with extremely poor populations.
BOLIVIA	POTOSI - ORURO - Water supply of Potosi
BOLIVIA	Agricultural development in the Inter-Andean Valleys of the Cochabamba Region.
VENEZUELA	Prefeasibility study for the rehabilitation and development of irrigation systems in Guárico State
ARGENTINA	Support services to the modernization of irrigation in the Province of Mendoza
ARGENTINA	Feasibility study for the protection and development of Punta Lara area
COLOMBIA	Assessment of Pereira DWS and sewerage systems
BRAZIL	Regional Development Plan for the central western region of Brazil
ALL LATIN AMERICA	Identification of a regional project to reduce vulnerability to natural risks in Latin American countries
GUATEMALA, HONDURAS, EL SALVADOR, NICARAGUA, COSTA RICA ET PANAMÁ	Elaboration of a regional project to reduce vulnerability to natural risks and environmental degradation
CHILI	Support to the development of sustainable household economy in Caaguazú Department
COSTA RICA	Woodland conservation and sustainable development in buffer zones in the North Atlantic region of Costa Rica

58	MRAG Ltd	Dr Chris Mees	MRAG (see www.mrag.co.uk) is an international consultancy dedicated to promoting sustainable use of aquatic resources through sound integrated management policies and practices. We have a long and highly successful history of designing and implementing integrated resource management systems in estuarine, riverine and floodplain environments, optimising water management for fisheries and agricultural benefits. We have experience of working, amongst others, in the Mekong, Ganges and Amazon river	c.mees@mrag.co.uk	UK
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			<p>basins, and the African lakes. Our expertise is relevant at the global, basin and systems levels of the Water and Food Programme.</p> <p>Our multi-disciplinary skill base comprises a core staff of more than 30 full time specialists with a wide variety of expertise and practical and technical experience in natural resource assessment and management. Support we are able to offer includes: Social evaluation and support for community-based and co-management of aquatic resources; Environment, and Resource Surveys and Assessment; Policy and Institutional Development; Information Technology and GIS; Programme Management and Development; Performance Monitoring & Project Review.</p> <p>A focal area of our expertise relates to fisheries management, and MRAG managed DFID's Fisheries Management Science Programme (www.fmsp.co.uk) related to poverty alleviation and food security through better management systems. MRAG also managed the Land Water Interface component of the DFID Natural Resources Systems Programme.</p>		
59	International Network on Participatory Irrigation Management (INPIM)	Dr Intizar Hussain	Water resources management, Participatory irrigation management, public-private partnerships in water, Crop productivity, Value of water, Policy analysis, Water and poverty linkages, Livelihoods Analysis, Soci-economic impact analysis, Capacity building and training programs	ihussain@inpim.org	Pakistan, India, Nepal, China, Vietnam, Albania, Turkey, Indonesia, Jordan, Egypt