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Annual Report 2008



Water for food, livelihoods and the environment

Our Mission

To improve the management of land and water resources for food, livelihoods and the environment

Our Vision

Water for a food-secure world

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20008 was a momentous year for the CGIAR in that it saw the endorsement of the proposals for significant reform of the system. Whilst most of the proposed changes including the establishment of a new Fund, Consortium of Centers and the focusing of work under Mega Programs are still under detailed analysis and discussion, IWMI has been an enthusiastic supporter of the change management process and has committed significant time at senior management level towards successful outcomes. Final decisions on these will be made in December 2009.

For IWMI, 2008 was a year of significant change and consolidation. Highlights included the launch of our new Strategic Plan, the commencement of several new major project initiatives and a very sound financial outcome.

The Strategic Plan was developed with input from approximately 100 key stakeholders from around the world. It represents IWMI aligning its work around four themes that tackle fundamental water issues relevant to our mandate and mission "to improve the management of land and water resources for food, livelihoods and the environment." The themes address the questions of "how much water do we have and how will that change in the future," "how can we make water uses more productive in irrigated and rainfed environments," "how

Joint Message from the Board Chair and Director General



can we improve the management of water quality and reduce risks to human health and the environment" and "how can we improve governance and management of water via better policies, institutions and involvement of women in decision making."

To implement the plan we have appointed four senior research managers as Theme Leaders for the themes described above, and they now have the responsibility for the scientific direction, scientific quality, and project oversight, including that of people management in their themes under the general direction of the Deputy Director General (Research). Our three regional directors have been placed in charge of building regional research portfolios that align with IWMI's scientific directions. They also take on the tasks of liaison with key stakeholders in their regions and of planning for project impact, to ensure that IWMI's outputs are translated into on-ground change.

We have also continued to strengthen regional offices with new appointments and transfer of senior staff from headquarters. The move of the majority of our Southeast Asian staff

IWMI Annual Report 2008

from Penang to Vientiane was also completed and we are looking forward to building strong partnerships with the Mekong Riverine countries (Laos, Cambodia, Vietnam and Thailand) and the Mekong River Commission. Our work in India with the Sir Rattan Tata Trust continued to deliver sound outputs and has seen the development of many active partnerships with a broad range of Indian agencies and universities. In Africa, some serious foundations were laid that have led to new large projects on groundwater, and geographically and economically appropriate interventions for water management by smallholders funded by the Rockefeller Foundation, the Bill and Melinda Gates Foundation and the International Fund for Agricultural Development (IFAD).

On the financial front IWMI had its best year for many years and was able to record a surplus of US\$1.6 million which was transferred to reserves. The key CGIAR Center financial targets were all met. These results were achieved by a policy of more targeted, large project fund raising and administrative reviews that saw some rationalization of headquarters staffing through amalgamation of functional areas.

As we moved into 2009, the peak of the 2008 food crisis had waned, but in our view the critical factors that impact food security are likely to reoccur over the next few decades with increasing frequency and severity. These factors include population growth, water scarcity, dietary change, urbanization and globalization, climate change, biofuels production and financial and food price crises. IWMI has worked hard to alert the world that freshwater cannot be viewed as a basically infinite free good any longer and that we have a water crisis. The global economic crisis has emerged as a new threat to investments by countries in sustainable use of their natural resources, including water. At the same time we are working hard to come up with solutions and adaptive management strategies that will protect all water users, particularly small farmers, from the worst impact of this crisis. Water and food security will be defining issues for the 21st century and we are well placed to help governments and farmers to deal with them using evidence-based approaches and solutions.

We are very pleased to report that IWMI has been rated as "outstanding" by the World Bank. We are one of four centers to receive this ranking in the CGIAR.

This reflects all the hard work put in by staff, the Management Team and the Board. It also reflects improved impact and publication performance, sound financial management and good governance.

Dr John Skerritt FTSE Board Chair

Dr Colin Chartres Director General







Overview of Research 2008

By Dr. David Molden,

Deputy Director General - Research



I am pleased to report significant progress on the challenge of providing sound scientific knowledge to pressing water problems of the day, and at the same time delivering science outputs into developmental outcomes and impacts. Over the last few years, IWMI has increased its number of peer reviewed publications per scientist as well as delivering well documented outcome stories. As seen in the Table on Performance Indicators, IWMI has made significant progress over the last 3 years in quantity and quality of science output, impact culture, and outcomes.

The year 2008 was a year of transition, with evolutionary shifts into a new structure to implement a new strategic plan. With increasing concern over water and food globally, increasing demands for relevant science to solve these problems, IWMI is learning and adapting, and will be able to rapidly respond to changes in its operating environment, and changes as the CGIAR goes through reform.

Accomplishments

IWMI's current focus addresses the key interlinked development challenges of water scarcity, food security and climate change. The project portfolio builds on IWMI's extensive work in irrigation—which is critical for food security but also a key driver of water scarcity; the Institute's view of water and agriculture from the perspective of competing urban, industrial and environmental uses in a river basin context; and IWMI's core strength in examining the underlying policies and institutions to govern and manage the water resource base.

The IWMI-led Comprehensive Assessment of Water Management in Agriculture, completed in 2007, set forth key challenges for the future, and has been instrumental in setting the water and agricultural research and development agenda. IWMI has taken on a number of these challenges as part of its own project portfolio, has quickly responded to new challenges as they arise, and has influenced the agriculture and water agendas at the global, regional, and national scale. The CGIAR Challenge Program on Water and Food (CPWF) has been an important vehicle for IWMI to enter into partnership to tackle key research for development issues. We would argue that the fact that water scarcity is now seen in many countries as a potential limitation to development and poverty alleviation, food production and overall economic growth, is largely because of our success in putting the issue on center stage via a sound, evidence-based approach. For example:

- IWMI has been a leader and key contributor on water productivity, environmental flows, wetlands and agriculture, wastewater irrigation, groundwater governance, multiple uses of water, water policies and institutions, and gender and water.
- IWMI has responded rapidly to issues of the food crisis and its relation with water, as well as issues of water and biofuels and energy.
- The Institute's water scarcity work is widely quoted in the scientific literature and media of all kinds.
- IWMI has provided policy support in countries, especially in India, where IWMI work is regularly cited and up for debate at the national and state level.
- IWMI has worked with the World Economic Forum to put water scarcity and agriculture on the agenda of the business community, and has since been increasingly engaged with the business community on the topic of water for agriculture.

IWMI's work has led to significant outcomes and impacts for countries and local settings in 2008.

- Based on a proposal outlined by IWMI researchers, the Government of Gujarat launched the Jyotigram (lighted village) scheme, which invested US\$290 million to separate agricultural electricity feeders from non-agricultural ones, and established a tight regimen for farm power rationing in the countryside. By 2006, Gujarat covered almost all of its 18,000 villages under the Jyotigram scheme of rationalized power supply. The Jyotigram scheme has radically improved the quality of village life, spurred non-farm economic enterprises, halved the power subsidy to agriculture, and reduced groundwater overdraft.
- In the Ferghana Valley of Central Asia, IWMI is involved with the Swiss Development Corporation and SIC ICWC to form Water User Groups, and federations of groups to improve irrigation water management leading to a better match of supply and demand and more equitable distribution. Water savings under this scheme will help compensate for the expected loss of 30% of irrigation water due to climate change.
- In Sri Lanka, IWMI supported post-tsunami water supply in areas where over one million wells were affected by saline intrusion.
 IWMI provided timely, sound and simple well cleaning protocols and guidance, the results of which impacted both the tsunami relief efforts as well as the development of international emergency relief guidelines.
- IWMI's environmental flow work is recognized globally, with many requests for the Environmental Stress Map, and related tools for analysis. At the national scale, environmental flow computations developed at IWMI are also having significant impact. In India, for example, IWMI's methodology is being used to calculate environmental flow requirements at the state and national level.
- Eco-friendly clay technology has rejuvenated degraded soils to improve yields and incomes in Northeast Thailand. An impact assessment study showed higher yields and higher quality of produce for 200 to 400 adopters, and the technique continues to spread with over 20,000 people now exposed to the technology.

Evolving into IWMI's New Thematic Structure

The new thematic structure represents an evolution of IWMI's past work, and should not be seen as a major shift. Significant changes include the forming of a theme on Water and Society revitalizes IWMI's traditional strength in policies and institutions. Within this theme, gender and poverty issues find a home, but remain crosscutting across the institute. Impact assessment has its separate sub-theme, both to house the impact assessment of IWMI's work, but also to gather methodologies and results and impacts of other people's work. Climate change has arisen to the forefront of IWMI's agenda in Theme 1 on Water Availability and Access. Revitalizing irrigation has returned as an area of focus given the importance of water for food security, and the need for irrigation to grow more food with increasingly constrained water supply. Water quality takes a key role in this strategy and is seen as an area for growth. Issues of water productivity, multiple uses of water, trajectories of basin development, and environmental flows receive less thematic emphasis as special topics, but are integrated into IWMI's work.

In addition to science content, the new thematic structure and relation to regional work allows for sharper science and impacts within regions. IWMI has strengthened accountability links to strengthen project delivery and science output, with researchers supervised by project leaders who report to the theme leaders. All research is now designed with impact in mind. IWMI is developing a new 'triple' approach to achieving uptake and eventual impact from its research work, with 1) uptake built into projects, 2) regional strategies both to target relevant research and to turn research into use, and 3) corporate information and communication strategies.

A Learning Organization

IWMI has gone through its internal reform process to respond to needs to deliver more relevant and better science, and to deliver more developmental outcomes. The change was made seemlesly with researchers continuing to deliver high quality results. The world will keep changing, as water and food issues rise on the global agenda. The CGIAR system will change to better respond to rising issues of poverty, food and the environment. IWMI has developed an adaptive learning culture, and is ready for these changes.

Research for Impact Small is beautiful And Now Comes With its Own Toolkit

A multi-disciplinary team developed and refined approximately 30 'tools' and techniques covering four topic areas: intervention planning, storage and hydrology, ecosystems and health, and institutions and economics.

Hind ydrologic modeling and decision support tools developed by an interdisciplinary team are helping farmers and other water users design, and site small multi-purpose reservoirs. The new tools are helping to

maintain water-related ecosystem services and adequate downstream flows while improving food security in three 'benchmark' river basins where IWMI undertakes research.

Water management institutions in the Volta, Limpopo, and Sao Francisco basins, three 'benchmark' river basins of the CGIAR Challenge Program on Water and Food were seeking ways to improve their operations to better serve poor farmers. A multi-disciplinary team worked with stakeholders and farmers to search for ways to improve the planning process by treating groups or 'ensembles' of reservoirs as systems.

Small multi-purpose reservoirs are an age-old adaptation for living in dry areas with highly variable rainfall where droughts or seasonal floods are common. Small reservoirs supply water for domestic use, livestock and small-scale irrigation, and help reduce the risk to farmers' precarious livelihoods. Small, seemingly isolated, reservoirs are in fact linked by small rivers and streams that have been dammed to create them and/or by the aquifers that feed them. Taken as a whole, these reservoirs store significant quantities of water and while they can have an effect on downstream flows, they are rarely considered as systems.

The project began with objectives for basin and local levels. The basin level objective is to promote and support the planning, development, and management of small reservoir ensembles. Planning reservoirs at this scale limits conflicts over water, markets, and other resources, and minimizes undesirable environmental interactions among the reservoirs. The local level objective is to support use of small multi-purpose reservoirs that are well located and designed, operated and maintained in a sustainable fashion, and are economically viable and contribute to improved livelihoods of local residents.

A multi-disciplinary team developed and refined approximately 30 'tools' and techniques covering four topic areas: intervention planning; storage and hydrology; ecosystems and health; and institutions and economics. This toolkit is intended for use by people working for NGOs, research institutes, universities, donor agencies, multilateral organizations, and government agencies. The project was an interdisciplinary research enterprise with eight partnering institutions involved in developing the toolkit.

Some of the tools are technical. For example, there is a Calibration of Runoff Model that requires remote sensing data as input. Most of the existing runoff models are geared towards temperate climates and do not adequately capture the relevant hydrological processes and runoff production in semi-arid areas. This tool presents a method to develop simple hydrological models for upland watersheds based on monitoring reservoir surface areas with radar images. The model helps planners understand the 'filling processes' of these reservoirs, which in turn helps them determine their impact on downstream flows.

Other models are designed specifically to engage poor farmers in planning processes. The Stakeholder and Conflict Analysis (SCA) model, for example, provides a structured way to identify who the key stakeholders are and explore how potential interactions among them may affect a project.

By harmonizing the interests of individuals served directly by small multi-purpose reservoirs and other people living in a basin, IWMI is contributing to this interdisciplinary effort to maintain water-related ecosystem services, the long-term sustainability of local water supplies, and adequate downstream flows.

Irrigation canals can be designed to serve multiple uses such as fishing, bathing or recreation.

© Photo: Ranjith Ariyaratne

lighlights

Outcome Story 2

Integrated Water Resources Management Supports Irrigation Reform in Ferghana Valley

Reformed institutions led to improved food security, better livelihoods and environmental sustainability in Central Asia's Ferghana Valley. Working with local partners, IWMI helped implement reforms that directly affected 200 Water User Groups, hundreds of people representing governance and management bodies of dozens of Water User Associations, and three pilot Main Canal Management Organizations as well as hundreds of thousands of rural households with backyard gardens spread over 13 administrative districts in three countries.

Independent third-party evaluations confirm that there have been measurable improvements in people's lives in the Ferghana Valley. Results show improvements in matching water supply with demand, equity of supply to and within Water User Associations, a substantial reduction in overall water use, wider participation in decision-making and fewer disputes over water. Evidence based on increased water access, crop yields, awareness, and empowerment indicate that there has been an improvement in people's diets, household incomes, overall social capital, and environmental health. These improvements did not come easily.

Irrigation and drainage are crucial to agricultural productivity, competitiveness, and environmental management in this once thriving valley. Unfortunately, over the last few decades, irrigation infrastructure and related management systems had fallen into decline. Water use was inefficient, many stakeholder groups were excluded from the decision-making processes, and disputes over water use were

not uncommon. Reform was badly needed. Researchers and water management experts from the Scientific-Information Center of the Interstate Coordination Water Commission of Central Asia and IWMI set out to promote reforms through the reorganization of water management institutions along hydrographic boundaries instead of administrative boundaries. Funding was provided by the Swiss Agency for Development and Cooperation and IWMI core funds. The reforms incorporated principles of Integrated Water Resources Management (IWRM) into local government planning and decision-making mechanisms, facilitated policy and legal changes and, most importantly, improved the livelihoods of farmers through reformed institutions and an increase in land and water productivity.

Researchers employed social mobilization techniques to promote Water User Groups and Water User Associations and Main Canal Management Organizations to engage water users and introduce improved practices in land and water productivity through existing and new systems of extension services. The research team was successful in introducing new management tools, identifying key interrelationships between

livelihoods and water institutions, and facilitating policy improvements, regular performance assessments, and annual user perception surveys.

The main outcome of the project was the Conceptual Framework for Transition to Integrated and Participatory Water Resources Management in the Ferghana Valley. Water resources managers in all three countries adopted the Framework and enacted new laws to support the necessary institutional changes carried out by the ministries in charge of reforms in three pilot canals and Water

User Associations: Aravan-Akbura Canal and WUA Japalak in Kyrgyzstan; South Ferghana Canal and WUA Akbarabad in Uzbekistan; and Khodja-Bakirgan Canal and WUA Zaravshan in Tajikistan. The jurisdictions of the new Canal Management Organizations and Water User Associations were transformed from administrative to hydrologic units and have effectively separated management and governance functions, and include major stakeholder representation in the governance process.

The bottom-up, social mobilization approach proved to be a successful way of introducing new elements such as Water User Groups and their benefits for Water User Associations and canal level organizations, and resulted in measurable improvements in the equity of water distribution along the main canals and those managed by Water User Associations.

National Dialogue on Dams and Development

With plans progressing quickly for the new Bui Hydropower Dam in Ghana's western region, old questions have come to the fore. IWMI's role as an 'honest broker' is helping local agencies to improve transparency and decision-making in the planning and management of dams in general and of the new Bui Dam in particular.

ith plans progressing quickly for the new Bui hydropower dam in Ghana's western region, old guestions have come to the fore; guestions about adequate compensation for affected communities, impacts on upstream and downstream livelihoods, and local wildlife habitats. Working with concerned ministries, IWMI helped initiate a National Dialogue on Dams and Development to address what was widely recognized as an urgent need to improve transparency and decision-making in the planning and management of dams, in general, and of the Bui Dam, in particular, as it will support irrigation.

Given the fact that the power supply concerns the whole of Ghana, the Dam Dialogue has generated much interest and captured significant national attention. Prof. Gorge Gyan-Baffour, Deputy Minister for Finance and Economic Planning, said "It is the hope of the Ministry of Finance and Economic Planning that this Forum, which brings together almost all the relevant stakeholders in water and energy issues, will help resolve the issues pertaining to existing dams and those yet to arise."

In an effort to help realize this dream, IWMI is acting as co-secretariat with a national NGO, the Volta **Basin Development** Foundation, for the National Dialogue on Dams and Development in Ghana. With financial assistance from Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ), IWMI is facilitating this multi-stakeholder dialogue process. The process has a Secretariat, a National Coordinating Committee and a sixty-member Forum which has been structured according to the guidelines of the World Commission on Dams. The Forum comprises representatives from government ministries, decentralized government departments, research institutions, opinion leaders of dam-affected communities, traditional leaders, the private sector, and other stakeholders to discuss priority issues relating to dam construction and development in Ghana.

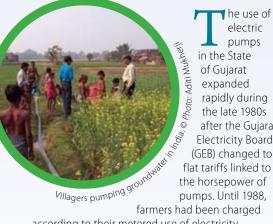
The dialogue model is being replicated by GTZ in Togo and Uganda, with different levels of success. An external evaluation commissioned by GTZ has commended the model in Ghana as "an unbiased facilitation of an important multi-stakeholder process, made possible through the facilitation of an international institute."



Outcome Story 4

New Electricity Scheme Solves Old Problems and Drives Rural Development in Gujarat State

An innovative plan to resolve a long-standing problem of tariff charges for electricity used by farmers' irrigation pumps helped propel the State of Gujarat to the leading ranks of India's agricultural producers.



electric pumps in the State of Gujarat expanded rapidly during the late 1980s after the Gujarat Electricity Board (GEB) changed to flat tariffs linked to the horsepower of pumps. Until 1988,

according to their metered use of electricity. However, as the use of electric pumps increased to hundreds of thousands, problems arose with meter reading and billing. To solve this problem, the GEB introduced a flat tariff system. Initially, the new tariff system was beneficial for poor farmers, but eventually led to over-exploitation of groundwater.

Power professionals and international lenders argued for an increase in the flat tariff charge, but farmers successfully opposed such moves through energetic political mobilization. Faced with mounting financial losses, The GEB began reducing the power supply to agriculture, but this only created further problems.

The GEB found it difficult to ration the power supply to wells without affecting power supply to domestic and other rural uses. Normally, single-phase power that can run domestic appliances was provided 24 hours per day, but three-phase power required to operate wells, grain mills, and other heavy equipment was restricted to 10-12 hours per day. To beat this system, farmers began using capacitors to convert two- or even single-phase power into three-phase power to run their wells. This reduced the voltage available to village communities, while wells continued to operate unhindered for 18-20 hours per day. The rural society and its non-farm economy were held hostage by the burgeoning groundwater economy of Gujarat.

As a potential solution to the problem, IWMI researchers proposed separating electricity

feeder lines supplying power to wells from other rural feeder lines. By separating the lines, GEB could provide farmers with the three-phase power they needed without 'starving' other users of electricity. The IWMI scheme was widely discussed and shared with senior policymakers in Gujarat and other states in December 2002.

In September 2003, the Government of Gujarat instituted an electrical power distribution scheme called Jyotirgram Yojana, which took IWMI's suggestions as a starting point and built on them. First launched in eight districts in Gujarat on a pilot basis, by November, 2004, it was extended to the entire state. By 2006 over 90% of Gujarat's 18,000 villages were covered under the scheme. This was a massive operation which involved laying a parallel rural transmission network across the state at a cost of US\$260 million. Today, rural Gujarat enjoys a 24-hour power supply that is unrivalled in quality by rural areas elsewhere in India. The scheme has reduced the cost of non-farm businesses such as flour and rice mills, which now do the same amount of work by consuming less power because they get full-voltage, uninterrupted three-phase power supply round the clock.

Never before known as a vibrant agricultural economy, Gujarat recorded 9.6% growth in State Gross Domestic Product from agriculture and allied activities from 2000/01 to 2006/07-the highest in all India for that period. A continuous and reliable power supply made it possible for farmers to keep to their irrigation schedules, conserve water, save on pump maintenance costs, and use labor more efficiently. These and other benefits helped drive agricultural production to new heights. During the same period the Gross Domestic Product from agriculture at an all-India level grew at only 2.9% per annum. The reform of the rural power system, reform of agricultural marketing institutions, and a revitalized and reinvented agricultural extension system have all contributed to Gujarat's impressive performance. Gujarat could well be a model of agricultural growth for other states and developing regions.

Rejuvenating Degraded Soils in Northeast Thailand

A simple, inexpensive improvement technique is working wonders on soil degraded by decades of overuse in Thailand's northeast region. IWMI field trials with Thailand's Land Development Department and local farmer networks has attracted attention from as far away as South Africa and Australia.

uch of Northeast Thailand lies on the Korat Plateau, a gently sloping region of sandy, saline, laterite soils bordering Laos and Cambodia. Historically remote and covered in dense jungle, the entire region was subject to dramatic changes in land use as Thailand's economy rocketed to double-digit growth throughout the 1980s and most of the 1990s. Traditional household farming systems were transformed into large-scale cash crop enterprises in a few short decades. Such rapid intensification amounted to a form of 'resource mining' that robbed already poor soils of the few nutrients and water-retaining properties they had. Not surprisingly, soil quality and farm productivity was seriously compromised.

A research collaboration between IWMI and Thailand's Land Development Department (LDD) is helping to reverse this trend with the careful application of bentonite clay, an impure form of clay that can absorb and hold both essential nutrients and water critical for crop

> growth. Several studies carried out by an IWMI-LDD research team have demonstrated © Photo: IWM that introducing bentonite to depleted soil can have a ^{nite Clays. ©} significant and long-lasting impact on productivity. The research team engaged with local farmer

Apora sa et in the island which was cultivated using the sess pror networks to carry out field trials to assess productivity, particularly under rainfed rice production.

> The researchers wanted a better understanding of how the properties of tropical sandy soils are affected by changes in land use, how that affects the productivity of farm production systems, and if the use of bentonite can help reverse land degradation and increase water productivity. They were also interested in promoting soil rehabilitation technologies amongst farmer

networks through their participatory on-farm assessments. There are a growing number of farmer 'wisdom networks' made up of farmers who help each other to reduce their dependence on external inputs. Their participation is essential to long-term uptake of any research program.

In the field trials, researchers observed a sixfold increase in biomass production when they broadcast powdered bentonite over a field and then mixed it into the soil using either a rotavator or disc plough. They created a unique Saturation Index as a measure for assessing chemical degradation and quantified changes in soil water retention with a new technique that has since been adopted by the Soil Physics Research Laboratories of the Land Development Department in Bangkok. They have also shown that increases in all-important surface charge characteristics of the soil are permanent. The responses associated with this one-off application of clay persisted for over 3 years and resulted in significant increases in the water productivity of rainfed production systems.

The research team did a post-impact assessment three years after the project ended using a structured survey with 250 farmers equally split between those who had adopted clay-based approaches versus those who had not. The average output price for farmers using the bentonite clay technique was 18% higher than that for non-clay users and they also achieved higher net returns.

This simple soil improvement technology also led to changes in the economics of farm production by changing the level and composition of different farm inputs and giving farmers the capacity to be more responsive to markets. Estimates showed that some 200 farmers in Northeast Thailand and 400 in neighboring Cambodia have adopted the technology and a further 20,000 farmers were exposed to it. The trials have also generated interest among bentonite producers in South Africa who are conducting trials with the aim of developing a marketable product, and an Australian venture looking at alternative uses of mined bentonite for rehabilitating the soil after a phosphorus mining operation.

Outcome Story 6

IWMI named a Ramsar International Organization Partner

IWMI's role in the Ramsar Convention represents a stronger focus on sustainable development and integrated management of wetlands. It also acknowledges the important roles that water management and agriculture have in wetland loss and degradation.

WMI was confirmed as the fifth International Organization Partner (IOP) of the Ramsar Convention on Wetlands during the 9th Conference of Parties in Kampala, Uganda, in November 2005. Resolution IX.16 welcomed IWMI as a formal partner; the first from outside the original conservation NGOs. IWMI's application was strongly supported by the existing conservation-based IOPs and the contracting parties, with many taking the floor and enthusiastically offering support. Presently, there are 158 contracting parties.

IWMI's nomination as an IOP was based on its demonstrated support for the Convention's Scientific and Technical Review Panel. IWMI co-led a working group on water resources management and contributed specific input to a report on environmental flows, and led discussions on agriculture-wetland interactions.

At the Conference, IWMI contributed formally to side events covering data needs for wetland management, wetlands and poverty reduction, and application of the ecosystem approach to wetlands. IWMI made a substantial contribution through the Panel to the wetland synthesis report of the Millennium Ecosystem Assessment.

IOPs serve as permanent observers on the Standing Committee and as full members of the Scientific and Technical Review Panel. The latter includes ongoing contributions to technical priorities of the Convention. IWMI was welcomed as an organization with a strong tradition of scientific achievement and as a member of the CGIAR with the potential to contribute more widely to the wise use of wetlands. This stems directly from IWMI's research and outputs on environmental water requirements and agricultural-environmentlivelihood interactions.

IWMI's formal involvement represents a stronger focus within the Convention on sustainable development and integrated management of wetlands and the many ecosystem services they provide. It also acknowledges the important roles that water management and agriculture have in wetland loss and degradation.

The Ramsar List of Wetlands of International Importance now includes 1,801 sites covering around 1,630,000 square kilometers, up from 1,021 sites in 2000. Many of the countries where IWMI and other CGIAR centers work are signatories and have designated Ramsar sites, but getting practical action on the ground is a different story.

Wetlands cover a relatively small portion of the earth's land surface, only about 6%, but their ecological importance far exceeds their size. Climate change could radically alter these highly sensitive and important ecosystems thereby affecting the lives of millions of the poorest of the poor. IWMI has been active in working with partners in critical wetlands such as the Sudd wetland located in Southern Sudan, one of Africa's largest wetlands, and the Tonle Sap in Cambodia, a critical wetland and a United Nations Educational, Scientific and Cultural Organization Biosphere Reserve.

ng The nutriple services of a Sri Lankan wetland. © Credit: David Molden

IWMI and the CGIAR Change Management Process



In December 2008 at the CGIAR Annual General Meeting, the CGIAR members unanimously agreed to change its governance structure and way of doing business to respond more effectively to the needs of its beneficiaries and to enhance its position as a key global provider of agricultural research for development.

This decision was based on input from an external review and from an internal Change Management Initiative, which based its conclusions on the work of four working groups:

- Visioning and Development Challenges
- Strategic Partnerships
- Governance at the Center and System levels
- Funding Mechanisms

As a result of the decision, the Alliance of the 15 CGIAR research Centers was asked to develop a new *modus operandi* as a legally constituted Consortium governed by an independent board. On the donor side, a proposal was adopted that would see the development of a new fund that would support "Mega Programs" via performance contract arrangements managed by the Consortium.

At the time of writing, progress against the above objectives has been considerable and the proposed new arrangements will be considered for adoption at a CGIAR business meeting in December 2009. Individual center boards will make decisions whether to join the Consortium in the September to October period. In May 2009 all centers had given in principle support to the proposed changes.

IWMI has been an enthusiastic supporter of the change management process. The Director General is a member of a key committee charged with the development of a Strategy and Results Framework for the Consortium, which aims to set new and integrative directions for the Mega Programs based on compelling cases for research for development and the development of new partnership arrangements.

The IWMI Board has endorsed, in principle, the proposed changes. In the meantime, IWMI will be undertaking its own due diligence with respect to the inevitable impacts of the proposed changes as a Consortium is formed in terms of relative powers of the IWMI and Consortium boards, financial arrangements and operating freedom. IWMI looks forward to a significant revitalization of the CGIAR system and a consequent greater external recognition of the relevance and importance of its future work.





Highlight

IWMI Rated as 'Outstanding' by the World Bank

World Bank gave IWMI an "outstanding" rating for performance. IWMI is one of four centers in the CGIAR to receive this rating, the highest of three performance categories. Centers were assessed on the basis of their 2008 performance in the CGIAR performance measurement system. The Bank plans to continue this results-based funding approach in the new CGIAR.

IWMI Results on the 2008 CGIAR Performance Measurement Indicators

		2008			2007			2006	
Indicator	IWMI Result	CGIAR Centers' Mean	IWMI Ranking	IWMI Result	CGIAR Centers' Mean	IWMI Ranking	IWMI Result	CGIAR Centers' Mean	IWMI Ranking
Publications									
1A: Number of peer-reviewed publications per scientist in 2008 that are published in journals listed in Thomson Scientific/ISI	1.26	1.14	5th	0.93	1.07	8th	0.73	0.99	12th
1B: Number of externally	1.53	1.22	3rd	1.87	1.24	3rd	1.19	1.02	4th
peer-reviewed publications per scientist in 2008 (excluding articles published in journals listed in the Thomson Scientific/ISI									
1C: Relative rating of Center's best publications	2.85	2.38	3rd	2.39	2.41	8th	Not assessed	-	-
Overall score (out of 10) for 1A, 1B & 1C	7.38	6.17	3rd	Not assessed	-	-	Not assessed	-	-
2: Percentage of scientific papers that are published with developing country partners in refereed journals, conference and workshop proceedings	40.99	46.11	13th	41.22	45.37	9th	33.00	42.44	10th

IWMI Results on the 2008 CGIAR Performance Measurement Indicators

(Continued)

			2008			2007			2006	
Inc	licator	IWMI Result	CGIAR Centers' Mean	IWMI Ranking	IWMI Result	CGIAR Centers' Mean	IWMI Ranking	IWMI Result	CGIAR Centers' Mean	IWMI Ranking
Ou	tcomes									
3:	Mean score (out of 10) for Outcome Stories	7.9	6.8	4th	8.0	6.2	2nd	7.0	7.6	Joint 8th
Im	pact Culture									
4:	Overall score for 2008 (score out of 10)	7.9	6.6	Joint 3rd	3.0	6.0	15th	3.1	6.4	15th
Go	vernance									
5A:	Composite Score on Governance Checklist (score out of 100)	78.3	85.5	12th	No overall score given	-	-	No overall score given	-	-
5B:	Board Statements Assessment (score out of 4 in 2008)	3.5	3.0	Joint 3rd	7.33/10	7.02/10	Joint 5th	5.33	6.28	12th
5C:	Culture of learning and change (score out of 100)	35.4	50.6	14th	No overall score given	-	-	No overall score given	-	-
5D:	Percentage of women in management	37.5	24.8	4th	25.00	24.66	Joint 6th	50.00	27.72	Joint 1st
5E:	IRS Nationality concentration: Percentage of	France (13%)	N/A	N/A	India (16.8%)	N/A	N/A	India (19%)	N/A	N/A
	internationally- recruited staff that comes from the top two countries represented in the IRS staff nationality list for the Center	India & USA (10% each)			France (14.7%)			France (14%)		
Fin	ancial Health									
6A:	Long-term financial stability (adequacy of reserves). The lower benchmark is 75 days.	104	127	10th	77	130	14th	64	124	14th
	Cash Management on Restricted Operations (The benchmark is less than 1.0) tes:	0.2	0.5	Joint 2nd	0.18	0.51	Joint 3rd	0.31	0.55	4th

Notes:

1. Mean refers to the average score across the 15 CGIAR centers

2. Ranking means IWMI's performance in comparison to the other CGIAR centers.

3. All results for 2008 are available at www.iwmi.cgiar.org/About_IWMI/Performance/index.aspx

4. IRS = International Research Staff

IWMI Board of Governors - 2009

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Bottom row L-R :

Dr. Fatma Attia, Dr. Margaret Catley-Carlson, (Vice Chair), Dr. John Skerritt (Chair), Dr. Colin Chartres (Director General), Ms. Shanthi Weerasekera (Board Secretary) **Top row L-R:** Ir.K.W. Ivan de Silva, Dr. Mamadou Khouma, Dr. Pietro Veglio, Mr. Asger Kej, Mr. Getachew Engida *Photo* © *Mohamed Maied Khatib, ICARDA*

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Board Statement on Risk Management

WMI's Board of Governors have the responsibility for ensuring that an appropriate risk management process is in place to identify and manage high and significant risks to the achievement of the Institute's business objectives, and to ensure alignment with CGIAR principles and guidelines which have been adopted by all CGIAR centers. These risks include operational, financial and reputational risks that are inherent in the nature, modus operandi and location of the Institute's activities, and are dynamic as the environment in which the Institute operates changes. They represent the potential for loss resulting from inadequate or failed internal processes or systems, human factors, or external events. They include low impact (and therefore irrelevance) of scientific activities: misallocation of scientific efforts away from agreed priorities; loss of reputation for scientific excellence and integrity; business disruption and information system failure; liquidity problems; transaction processing failures; loss of assets including information assets; failures to recruit, retain and effectively utilize qualified and experienced staff; failures in staff health and safety systems; and failures in the execution of legal, fiduciary and agency responsibilities.

The Board has adopted a risk management policy, communicated to all staff, that includes a framework by which the Institute's management identifies, evaluates and prioritizes risks and opportunities across the organization; develops risk mitigation strategies which balance benefits with costs; monitors the implementation of these strategies; and periodically reports to the Board on results. This process will draw upon risk assessments and analyses prepared by the Institute's staff, internal auditors, Institute-commissioned external reviewers, and the external auditors. The risk assessments will also incorporate the results of collaborative risk assessments with other CGIAR centers, System Office components and other entities in relation to shared risks arising from jointly managed activities. The risk management framework seeks to draw upon best practice promoted in codes and standards promulgated in a number of CGIAR member countries, and it is subject to ongoing review as part of the Institute's continuous improvement effort.

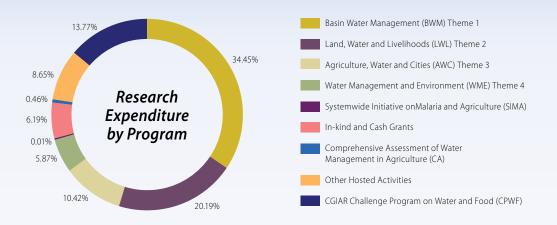
Risk mitigation strategies include the implementation of systems of internal control which, by their nature, are designed to manage rather than eliminate the risk. The Institute endeavors to manage risk by ensuring that the appropriate infrastructure, controls, systems and people are in place throughout the organization. Key practices employed in managing risks and opportunities include business environmental scans, clear policies and accountabilities, transaction approval frameworks, financial and management reporting and the monitoring of metrics which are designed to highlight positive or negative performance of individuals and business processes across a broad range of key performance areas. The design and effectiveness of the risk management system and internal controls is subject to ongoing review by IWMI's internal audit service, which is independent of business units and reports on the results of its audits directly to the Director General and Board through the Board's Audit Committee.

IWMI Donors 2008

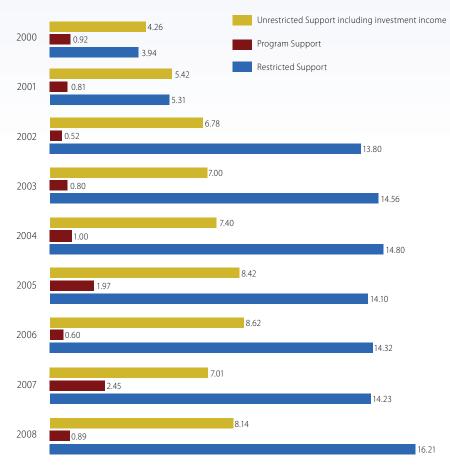
- Asian Development Bank
- Australia (ACIAR)
- Canada (CIDA)
- European Commission (EC)
- France
- Germany (BMZ, GTZ)
- Global Environment Facility (GEF)
- Google
- Ireland
- Japan (JBIC, JICA)
- Netherlands
- Norway

- South Africa
- Sweden (Sida)
- Switzerland (SDC)
- Ratan Trust International (RTI)
- United Kingdom (DFID)
- United States of America (USAID)
- World Bank
- The Government of India and European Commission (EC) provided program support for IWMI-related activities
- Natural Resources International Limited (NRIL)
- Stockholm Environment Institute (SEI)

Financial Overview and Highlights



Income 2000-2008



For the full financial report see, www.iwmi.cgiar.org/About_IWMI/PDF/IWMI_Financial_Statements_2008.pdf Printed Copies are available on request.



New Projects 2008

Donor	Name as per agreement	Grant amount USD (Original currency)	Duration (no. of months)
GTZ	Rethinking water storage for climate change adaptation in sub-Saharan Africa The project aims at increasing resilience of rural poor vulnerable to climate change (CC)-related risks in sub-Saharan Africa (SSA) through better water storage mechanisms, improved investment strategies and institutional support. It will examine various storage options and storage creation processes, their economic feasibility, suitability in various physiographic and sociopolitical conditions, distributional outcomes, impacts on local livelihoods, environmental consequences, adoption potential and resilience under different climate change scenarios. The study will be carried out in Ghana and Ethiopia which will be affected differently by CC, cover the variety of storage options, attract attention of international investors and have well established relationships with the project members. A diverse range of national and international stakeholders are involved in the proposed project. Outputs will be disseminated through established regional networks, peer- reviewed papers, online sources and policy roundtables.	1,490,568 (EURO 1,120,000)	36
WWF	Environmental flows & climate change impacts in the Ganges River Basin The objective of the project is to develop and apply environmental flow (EF) assessment and management approaches which conserve biodiversity and support livelihoods in the Upper Ganga Basin (UGB) of India, under current conditions and under climate change (CC) scenarios.	329,640	36
Government of Japan	Sustainable dissemination of small-scale lowland paddy fields development in inland valleys in West Africa The project in 2008 will focus on: (a) Investigating current agricultural uses and issues in inland valleys in West Africa; (b) Analyzing an ongoing farmer-managed lowland paddy field construction project like Inland Valley Rice Development Project (IVRDP) and Sawah project; and (c) Suitable site selection for paddy cultivation in the inland valley wetlands of Ghana.	178,865 (YEN 17,400,000)	12
Gates Foundation	Scoping study on small-scale Agricultural Water Management The project aims to improve the livelihoods of millions of poor men and women farmers by equipping investors, policymakers and implementers with concrete knowledge and tools to make agricultural water management (AWM) interventions more successful in terms of benefiting the greatest number of poor men and women at the least social and environmental cost. Sound AWM is a proven factor in rural poverty reduction but in	71,965	5

Donor	Name as per agreement	Grant amount USD (Original currency)	Duration (no. of months
Gates Foundation <i>(Continued)</i>	many places the rural poor have no access to or limited control over water resources. This proposal describes a 3-year program to evaluate options for improving smallholder AWM and to create and disseminate a portfolio of promising interventions that can be deployed in support of agrarian poverty reduction for male and female smallholders in sub-Saharan Africa (SSA) and South Asia (SA). The project will assess promising, pro- poor AWM interventions and their 'market potential', analyze which technologies 'fit' in which environments, recommend out-scaling strategies, and assess environmental risks. The project will utilize a nested scale approach to examine AWM interventions at the farm-, community-, watershed, and national levels in selected countries in SSA and Indian states. The results will be presented in country level investment guides for selected countries and be scaled-out as far as possible to the regional level to assess the potential, costs and benefits of smallholder AWM across SSA and SA.		
Google	Project to develop recommendations and a road map for the provision of decentralized sewage service provision in Ghana In sub-Saharan Africa (SSA), urbanization has outpaced public services, especially in the sanitation sector, harshly affecting environmental and human health. In line with the latest edition of the Guidelines for the Safe Use of Wastewater, Excreta and Greywater (WHO-FAO-UNEP, 2006), this study should test the feasibility of a larger project, transforming our reserach into impact by outsourcing health risk reduction services from the city to the farm and post-harvest sector.	195,800	7
IFAD	Livelihood improvement and empowerment of rural poor through sustainable farming systems in Northeast India Objectives: 1. generate and employ social and water poverty maps for selected sites; 2. Design and help in implementation of appropriate water harvesting structures and MUS and their impacts on livelihoods of smallholder farmers; 3. Improve the livelihoods through interventions for agricultural intensification; and 4. capacity building. The project aims to develop, through a large consortium, suitable and more productive farming systems through land and water centric interventions for the resource poor farmers of the most disadvantaged districts of northeast hill region of India. IWMI's role shall be to help/ guide in designing such interventions, conduct poverty analysis and assess the impact of such interventions.	55,000	26
Indian Council of Agricultural Research (ICAR)	Livelihood improvement and empowerment of rural poor through sustainable farming systems in Northeast India	76,960 (INR 3,674,650)	26

Financial Overview

IWMI Annual Report 2008

Donor	Name as per agreement	Grant amount USD (Original currency)	Duration (no. of months)
SDC	Water productivity improvement at plot level In Central Asian countries, the information available about crop water requirements is still widely based on old estimates and has little consideration for the current challenges of water scarcity and environmentally sound water use. Therefore, there is a critical need to update this information on the basis of soil, crop and climatic conditions for the different agro-ecological zones. Leveling of farmer fields is generally poor and plot layouts are not adapted to soil conditions and water flow at the farm gate. Changing and adapting plot and furrow layouts and leveling of fields are therefore considered to be important elements to minimize water application losses and achieving rapid water productivity improvements. During the past years, first activities in the field of water productivity at plot level were implemented within the IWRM project. The project implementing consortium SIC ICWC/IWMI (Scientific Information Center of the Interstate Coordination Water Commission of the Central Asia and the International Water Management Institute) focused mainly on applied research, from which fair amounts of data are available. However, the IWRM project had and still has a clear focus on the institutional, organizational and management aspects related to reliable, timely and adequate water supply to the farm gate. Activities at plot level were an add-on to assess the impact of reliable availability on water use and the crop yields. To take full advantage of the water savings potential created by the IWRM project, a specific focus on plot level water efficiency and productivity within a specialized initiative is now required and justified. The project is thus a logical continuation of the plot-level work within the IWRM project. Improved water application methods and techniques generated by IWRM or available – not least through IWMI - from other countries/projects have to be tested on-farm, to be adapted to the local socioeconomic context and disseminated to farmers by exis	320,315	6
SDC	Integrated Water Resources Management - Ferghana Valley Project - Phase IV Integrated Water Resources Management in the Ferghana Valley (IWRM-Ferghana) – Phase IV. Phase I – Inception Phase from September 2001 to April 2002; Phase II – Implementation Phase from May 2002 to April 2005; Phase III – Dissemination Phase from May 2005 to April 2008; and Phase IV - May 2008 to December 2010. During the fourth phase, institutional, organizational and management approaches of IWRM developed and tested in pilot canals, in command areas below those canals and in Transboundary small rivers shall be completed, consolidated and made operational. The overall	3,654,000	32

Donor	Name as per agreement	Grant amount USD (Original currency)	Duration (no. of months
SDC (Continued)	goal of the project is contribution to more secure livelihoods, increased environmental sustainability, and greater social harmony, through improved effectiveness of water resources management in the Ferghana Valley. Three specific project objectives have been identified for phase IV: a) Pilot areas and selected TSR functions according to IWRM principles. Approaches are consolidated and ready to be promoted in other areas of the region; b) Governments and donors follow the same principles concerning the roles and scope of IWRM institutions from WUA to basin level; and c) There is clarity on financial and economic aspects as well as the ability to pay at the different operational and management levels.		
IFAD	Sustainable livelihood improvement through need based integrated farming system models in diseduce to get districts of Biber	110,000	22
	disadvantaged districts of Bihar This project seeks to generate location-specific knowledge and better understanding of the resources and complex farming systems in some of the most disadvantaged districts in Eastern India such as Bihar. The project will suggest suitable interventions and policy options for reducing poverty and improving the livelihoods of the poorest population. It will be implemented by a consortium of national partners led by the Indian Council of Agricultural Research (ICAR) and with specific contributions from two CG centers: IWMI and IFPRI. Specific contributions of the IWMI component include the following: i. Water poverty and productivity mapping for better targeting of communities and interventions (in the identified districts and clusters); ii. Planning appropriate measures for improving access to water resources and its optimal use; iii. Identification and prioritization of high potential interventions for water congested areas; iv. Study of groundwater markets in Vaishali District and crafting local institutions for enhanced use of groundwater; and v. Capacity building of project functionaries in advanced techniques and methodologies in the above areas.		
IDRC	Expert workshop "Hyderabad II" on wastewater use in Arrigated agriculture To organize a 'Think Tank' on key topics of relevance for wastewater research in developing countries not sufficiently covered by conventional wastewater workshops and conferences and to publish and disseminate the results of the workshop widely, most likely in the form of an Earthscan publication.	53,467 (CAD 56,100)	12

IWMI Annual Report 2008

Donor	Name as per agreement	Grant amount USD (Original currency)	Duration (no. of months)
Natural Resources International Limited (NRIL)	Coalition to diversify income from underused crops CoDI is a group of organizations in India and Vietnam led by the International Centre for Underutilised Crops. Funded by DFID's Research into Use (RIU) Program 2008-2011, the coalition will provide community services for production, post-harvest and marketing. It will help disadvantaged people in India and Vietnam have better market access to generate sustainable income, and have more options for better land husbandry. The project will build upon in-depth experience of each of the partners; in India, on integrated rural development especially for tribal and marginalized farm communities; and in Vietnam on making markets work for the poor by facilitating links between rural cooperatives and urban supermarkets, it will focus on women farmers who form the majority of vegetable and traditional crop producers, in an increasing urban environment where many men move to the towns for off-farm employment. The project has a comprehensive Monitoring, Impact & Learning system (MIL) to capture impacts on the beneficiaries' household income, skills development and related parameters. The MIL includes a communication strategy to facilitate dialogue and influence policy. This monitoring and learning component contributes to broader efforts, beyond the immediate countries involved, to develop mechanisms for spotting future winners at an early project development stage.	751,498 (GBP 402,083)	36
ICRAF	Secondment - Gayathree Jayasinghe	55,073	12

Financial Overview and Highlights

Grant Revenue 2008-2007

	Total 2008 US\$	Total 2007 US\$
UNRESTRICTED INCOME		
Australia	440,500	375,550
Canada	185,167	609,658
China	10,000	10,000
DFID	1,034,397	1,281,420
France	244,274	
Germany	336,420	285,142
India	37,500	37,500
Ireland	625,574	537,972
Israel	(324)	184,676
Japan	39,628	29,708
Netherlands	734,311	616,980
Norway	857,322	480,191
South Africa	89,318	
Sweden	376,434	404,121
Switzerland	390,663	354,044
USAID	641,794	616,400
World Bank	1,400,000	550,000
Subtotal Unrestricted Income	7,442,978	6,373,362
RESTRICTED		
ACIAR - Growing more rice with less water (AUS06)		
		32,048
ACIAR - Krishna Project (ACI0076)	150,840	
	150,840 236	266,726
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project		266,726
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246)	236	266,726
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002)	236 8,346	266,726 (16,109
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246)	236 8,346 (2,492)	266,726 (16,109
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment	236 8,346 (2,492) 68,627	266,726 (16,109
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003)	236 8,346 (2,492) 68,627 34,508	266,726 (6 16,109 275,454
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247)	236 8,346 (2,492) 68,627 34,508 880	266,726 (6 16,109 275,454 7,089
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197)	236 8,346 (2,492) 68,627 34,508 880	266,726 (16,109 275,454 7,089 9,749
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14)	236 8,346 (2,492) 68,627 34,508 880 288	266,726 (16,109 275,454 7,089 9,749 272,565
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14) BMZ - Improving Water in crop-livestock SSA (BMZ0186)	236 8,346 (2,492) 68,627 34,508 880 288 484,092	266,726 (0) 275,454 7,089 9,749 272,567 271,025
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14) BMZ - Improving Water in crop-livestock SSA (BMZ0186) BMZ - Wastewater Irrigation South Asia (BMZ0100)	236 8,346 (2,492) 68,627 34,508 880 288 484,092 105,450	266,726 (16,109 275,454 7,089 9,749 272,565 271,029
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14) BMZ - Improving Water in crop-livestock SSA (BMZ0186) BMZ - Wastewater Irrigation South Asia (BMZ0100) BTC - IWMI-PIMD Training in Cambodia (BTC0164)	236 8,346 (2,492) 68,627 34,508 880 288 484,092 105,450 3,800	266,726 (0) 275,454 7,085 9,745 272,567 271,025 8,500
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14) BMZ - Improving Water in crop-livestock SSA (BMZ0186) BMZ - Wastewater Irrigation South Asia (BMZ0100) BTC - IWMI-PIMD Training in Cambodia (BTC0164) BVI Rehabilitation (BVI0256)	236 8,346 (2,492) 68,627 34,508 880 288 484,092 105,450 3,800 2,800	266,726 (16,109 275,454 7,089 9,749 272,567 271,025 8,500 17,655
ACIAR - Krishna Project (ACI0076) ACIAR - YRB ABARE/CCAP/IWMI Project AIT - CSO - CGIAR competitive grants program (AIT0246) ADB - Benchmarking the performance of RBO (ADB0002) ADB - Bright Spot in Central Asia (ADB0003) ADB - Assessment ADB - Assessment ADB - Sustainable Wetland Management China (ADB0247) AFD - M&E for FWUCs (AFD0197) AFDB - African Investment study (AFB14) BMZ - Improving Water in crop-livestock SSA (BMZ0186) BMZ - Wastewater Irrigation South Asia (BMZ0100) BTC - IWMI-PIMD Training in Cambodia (BTC0164) BVI Rehabilitation (BVI0256) Canada - Irrigation Innovation IPMS (CDA0039)	236 8,346 (2,492) 68,627 34,508 880 288 484,092 105,450 3,800 2,800	32,048 266,726 0 16,109 275,454 7,089 9,749 272,567 271,025 8,500 17,655 79,183 135,447

IWMI Annual Report 2008

RESTRICTED (Continued)	Total 2008 US\$	Total 2007 US\$
CGK - Safe Food Despite Wastewater Irrigation (CGK0224)	(1,754)	1,754
CIAT - Case Study in Mekong (CIA0192)	(1,7.5.1)	12,258
CIAT - EMBRAPA AFRICA (EMB0156)	333,879	153,788
CIAT - FARA IAR4D in the Lake Kivu (CIA0231)	33,315	199,700
CIAT - Mapping Indicators for Analyzing the Dynamics of Temporal (CIA0106)	1,590	0
CIP - Wastewater (CIP0107)	2,392	5,132
DANIDA - Local water governance (DAN0191)	13,443	16,598
DANIDA - IWRM Demonstration Project in SADC Region (DAN0109)	27,467	64,308
DANIDA - Wastewater Reuse in Agriculture in Vietnam (DAN13)	1,154	58,023
DANIDA/KVL Production in Aquatic Peri urban Systems in Southeast Asia		1,751
DFID - IWMI in RIPPLE (DFI0188)	30,427	6,058
DFID - ICUC Underutilized crops Research (DFI0035)	266,797	253,391
DFID - Mitigating diffuse agriculture Pollution (DFI08)	1,664	3,356
DFID - RIPARWIN (DFI0038)	5,655	29,106
ECU - SWITCH (ERU0113)	52,781	37,746
ECU - Encorfor Land sustainability for Carbon Sequestration		12,100
ECU - Sustainable Water Andra Pradesh (ERU0114)	510	30,760
ECU - WASPA (ERU0116)	277,023	221,893
ECU - Waterman (ERU0203)	15,382	26,348
ECU -European Community Contribution (ERU0169)		2,101,372
ECU -European Community Contribution 2008	886,707	
FANRPAN Support (FAN0117)	(3,008)	1,030
FAO - Delta 2007 Conference (FAO0205)	6,321	7,647
FAO - Urban Producers - India (FAO16)	518	108
FAO - Zimbabwe Drip Irrigation Study (FAO15)	587	900
Ford - Enhancing the Prof. Role of Women in Water Mgmt. (FRD53)	452	0
France - MSEC - IRD (Catchments Approach to Managing Soil Erosion in Asia) (IRD01)	967,050	754,000
France - Staff Secondment (FRA25)	110,000	193,208
France - APPIA (Improving Irrigation Performance in Africa) (FRA0127)	38,962	105,394
France - Program Support (FRA24)		209,897
GAT - MUS Scoping (GAT0163)	(1,847)	19,395
GAT - Scoping Study on Small-scale AWM (GAT0243)	71,965	
GEF - Inland Wetlands in Southern Africa (GEF0129)	256,427	208,223
GGL - Google contract for Ben Lamptey (GGL0230)	43,308	
GGL - Google wastewater (GGL0239)	195,800	
GTZ - Ghana Dams Dialogue (GTZ0195)	16,460	32,111
GTZ - Ghana Dams Dialogue - Work Shop (GTZ0247)	20,321	
GTZ - Re-Thinking Water Storage for Climate change SSA (GTZ0235)	244,975	
GWP - IWMI/GWP - South Africa (GWP0061)	143	(13,884)
GWP - South Asia (GWP - SAS) (GWP05)		39,662

RESTRICTED (Continued)		Total 2008 US\$	Total 2007 US\$
ICL - GOFAU (ICL0184)		2,100	19,830
ICA - Livelihood Improveme	nt in NE India (ICA0260)	3,282	
IFA - Livelihood Improvemer	nt in NE India (IFA0261)	12,429	
IFA - NAIP Bihar (IFA0265)		7,413	
ICM - Wetlands Tibet			12,000
ICR - Secondment Gayathree	e (ICR0229)	55,073	
ICRISAT - Ghana (ICS0226)		50,014	
IDRC - CGIAR NBI Synergies (IDR0048)	18,740	31,916
IDRC - Waste Water (IDR0263	3)	53,467	
IDRC - Health Impact Assess	ment Small Dams Morocco (IDR0049)	157	6,510
IFAR - Fellowship Grant Cent	ral Asia (IFR0078)	15,742	18,647
IFPRI - SAKSS-SA (IFP0180)		363,643	292,443
IFPRI - Ghana (IFP0042)		36,067	(34,522)
India - Central India Initiative	es (RTT05)		49,522
India - Government of India	(IND0170)		137,500
India - Kerala Basin Study		60	1,345
India - North Gujarat sustain	able Ground Water Initiatives (RTT04)	119,922	75,256
India - Research Phase of No	rth East Initiatives (RTT0168)		12,321
India - TATA Water Policy Pro	gram (RTT01)		11
India - TATA Water Policy Pro	gram Phase ii (RTT06)	160,518	240,231
IPGRI - Post Tsunami Food Se	ecurity in Dodanduwa (IPG02)		3,798
Iran - New Project (IRN0034)			66,293
IRD - WEAP Volta (CP)			13,726
IRRI - Disaster Resilience Pro	ject (IRI0089)	32	570
IRRI - Delta		11,000	0
IUCN - Coastal Zone Govern	ance Study Sri Lanka (IUC0200)	8,524	3,476
IUCN - Mekong Tributaries IE	3FM (IUC0161)		8,400
IWMI Components of Non-IV	NMI CP Projects		
ICRISAT - CP 1: Food Secu	urity & Income in Limpopo	10,770	69,410
SAVANA AGRI RESEARCH	INS. CP 6: Strategic Innov. in Dryland Farming	15,530	37,557
ICARDA - CP 8: Improving	g Water Prod. in Karkheh	27,996	59,330
IRRI - CP 10: Coastal Res I	Mgt Impr L/hood-IWMI	945	158,490
CIMMYT - CP 12 Yellow R	iver Rainfed Conservation	45,277	57,047
CIMMYT - CP 12 Yellow R	iver Rainfed Conservation	0	32,416
CIRAD - CP 25: Companie	on MdIng & Water DynIWMI	26,934	41,263
ILRI - CP 37: CP Nile Lives	tock	29,716	41,763
KNUST - CP 38: Wastewa	ter West Africa	(9,871)	130,246
UNIVERSITY COPENHGAN	N - CP51: Health Impact of wastewater Use	0	40,625
CMU-USER CPWF PN 67		13,570	0
HUMAN PEOPLE - Water	Efficient Farming & Recharge	0	17,126
Japan - Water Forum (Sri Lar	ika)		41,154

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RESTRICTED (Continued)	Total 2008 US\$	Total 2007 US\$
Japan - Water Forum (Tashkent)	30,000	0
JIBC - Poverty Assessment at UWLB	42,091	69,356
JICA - Contract Research Agreement between IWMI & JIRCAS	10,112	32,311
Japan - West Africa	160,223	52,511
JICA - Farmers Participation in Irrigation Management Ghana	2,020	2,397
KNU - WHO Guideline Testing in Kumasi Ghana	21,631	7,613
MDP - Delta	957	(605)
MRC - Climate Change IBFM 3 Mekong (MRC01)	1,029	20,427
MULTI - 2008 International Symposium	192,764	643
NES - IWMI Nestle Cooperation		13,433
Netherlands - IRC - SRIWASH (IRC0014)		862
Netherlands - Urban Agriculture Policy Support - Ghana/India (DUH0016)	571,917	332,587
Netherlands - WATPRO Wageningen University (WAU01)	326	0
NIRE - Analysis of Water Management	210	25,000
NIRE - Watersim (NIR01)		(205)
NRI - RIU Wastewater Proposal	13,082	
NOA - Climate Variability - Malaria Transmission		59,095
NUJ - Japan Capacity Building Program	3,268	9,922
NUJ - JCBPAAR	17,315	
NRI - CoDI Coalition to Diversify income	84,997	
OTHER DONORS		
PARC - Donor Intelligence tool		0
PFR01 - Tsunami Area Research Management Initiatives	8,137	45,627
PIP - RS Irrigation Performance Pakistan	121,345	108
RBN - IWRM Training in Laos		5,690
Rockefeller Foundation		
SANDEC - Nutrient Loop - Co-Composting (SDC 08)		1,373
SEI - Dayashree Pachpute	27,956	30,367
SEI - Sustainable Mekong	24,647	36,195
SEI - Sustainable Mekong (PES Cluster Research)	75,218	94
SEI - Sustainable Mekong IFS	15,694	
SIDA - GWP - CACENA (SID06)	478,242	373,628
SIDA - GWP Resource Center (SID06)		0
SIDA - International Training on IWRM - Ramboll (SID12)	2,937	147,491
SIDA - International Training on IWRM - Ramboll Workshop	793	0
SIDA - IWRM Zambezi	147,624	
SIDA - SAKSS	294,936	83,966
SIDA - Smallholder System Innovation in Irrigated Water Shed Management	377,867	370,480
SIDA - Sri Lanka National Water Partnership (SLNWP) (SID07)	31,618	11,665
SIDA - Water Partnership South Africa (GWP03)	2,257	0
Sri Lanka - GOSL/JAPAN - Mahaweli System C (GOS05)	1,131	0

RESTRICTED (Continued)	Total 2008 US\$	Total 2007 US\$
Sri Lanka - Uniliver KBS Lanka (UNL02)		8,792
SWISS - Associate Expert	(87,899)	127,845
SWISS - CoCompositing in Irrigation & Rain Fed (CIRUPA) (SDC12)	2,621	26,008
SWISS - Ferghana Valley Phase III	512,229	1,065,956
SWISS - Ferghana Valley Phase IV	725,088	
SWISS - Ramsar Wetland site Representation	15,250	0
SWISS - Water Flumes	166,550	0
SWISS - Water Productivity at Plot Level	239,724	
SWISS - IWMI/TATA Water Policy Research Program (SDC09)	11,453	0
SWISS - CA/Ramsar Wetland Ag Report	3,453	37,874
UBC - Aquaculture Inst Data collection		(400)
UDS - WHO Guideline Testing in Tamale	7,909	1,734
UNE - Joint Appointment Yasir	58,193	76,804
UNEP - Central Asia (UCC01)		19,995
UNESCAP (UCP03) DMC Pilot Sites	1,623	(510)
UNESCO - Alreria Sinbad Project	15,426	
USAID - Ag. Water Technology inventory Africa (AID35)		5,526
USAID - AWM Technologies (AID0006)	60,572	96,356
USAID - Collaborative Research (AID0007)		59,130
USAID - Climate Change Modeller Mekong (AID0245)	22,682	
USAID - Natural Resources Management (AID0008)	154,411	502,880
USAID - SA-SAKSS (AID0009)	229,063	201,652
USDA - Heavy Metals in Irrigation	550	13,754
UOC - Kumasi Research Platform	23,486	
UOS - IWMNET in Eastern Africa	10,040	
WFC - Hydrological Modeling of pond water		11,963
WHO - Assessing Health Impacts of SR in BF (WHO02)		1,716
WHO - Water Res.Dev Perspective of Burden of Disease (WHO01)	8	0
WIN - Best Practices Wetland	22,158	26,771
WIN - Sudd Wetland System	20,862	
World Bank - Ethiopia CWRAS (WLB23)	2,833	6,181
World Bank - Gujarat Agricultural Policy (WLB26)	587	0
World Bank - Water Institution (WLB25)	290	0
WWF - E-Flows & climate change - IGB		13,448
WWF - India	5,315	
WNT - Integrated WRM	33,936	28,592
WIN - SLNWP	10,139	
ZEF - Environment Flows Volta Basins	5,120	7,620
ZEF - Glowa Volta Project (ZEF01)	(148,257)	(44,754)
Subtotal	10,993,539	11,648,595

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	Total 2008	Total
SIMA	2008 US\$	2007 US\$
IDRC - Ecohealth Symposium (IDR13)	331	0
IDRC - Grant Uganda Project 2 (IDR11)	427	0
IDRC - Mwea Phase II (IDR10)		34,490
IDRC - Proposal Development Workshop for Mwea Phase II (IDR08)	270	0
Netherlands -Competitive Grants (DUH15)		2,560
USAID - Workshop (AID25)		3,193
Subtotal	1,028	40,243
Comprehensive Assessment		
Austria - Irrigation Impact on Poverty	43,167	165,113
Japan - Research on Intensification of Effective Water-use Policy	107,733	111,307
Japan - JIID - INWEPF	(24)	3,150
Japan - NIRE Research on Water Use Efficiency		1,049
Linköping University - Mats Operation	3,304	12,320
Netherlands (DUH0136)		565,502
OPEC - GW in Arid & Saline Env	0	9,377
OPEC - GW in Arid (New)	70,417	
Switzerland	63,557	(60,703)
Taiwan - Impact of Irrigation	22,015	14,429
Subtotal	310,169	821,545
Challenge program on water and food (MUL03)		
Consortium of Donors	5,789,558	4,170,503
Subtotal	5,789,558	4,170,503
Subtotal (Restricted)	17,094,294	16,680,886
GRAND TOTAL	24,537,272	23,054,248

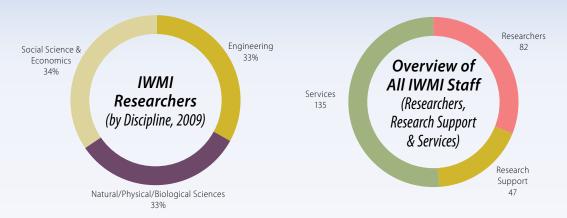
Financial Overview and Highlights

Statement of Financial Position

(December 31, 2008 and 2007)

	Notes	2008 US\$′000	2007 US\$'000
ASSETS			
Current Assets			
Cash and cash Equivalents	1	17,481	16,387
Investment	2	13	31
Accounts Receivable (Net of US\$300,000			
allowance for doubtful accounts)			
Donor	3	2,430	3,285
Employees	4	257	448
Other CGIAR centers	5	170	142
Others	6	663	1,103
Prepaid Expenses	7	73	109
Inventories	8	37	43
Total Current Assets		21,124	21,548
Non-Current Assets			
Property, Plant and Equipment, net	9	1,720	1,881
TOTAL ASSETS		22,844	23,429
LIABILITIES AND NET ASSETS			
Current Liabilities			
Accounts Payable			
Donor	10	9,552	4,937
Employees	11	779	787
Other CGIAR centers	12	263	121
Other	13	1,009	638
Amount held for Challenge Program	14	622	8,292
Accruals		547	202
Total Current Liabilities		12,772	14,977
Non-Current Liabilities			
Accounts Payable			
Employees	15	1,772	1,782
Total Non-Current Liabilities		1,772	1,782
Total Liabilities		14,544	16,759
Net Assets			
Unrestricted			
Designated		3,180	3,180
Undesignated		5,120	3,490
Total Net Assets		8,300	6,670
TOTAL LIABILITIES AND NET ASSETS		22,844	23,429

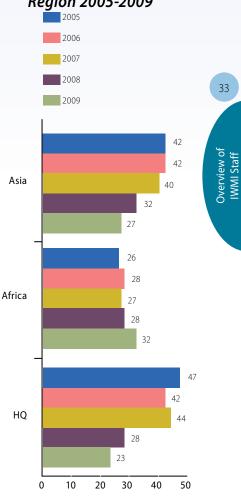
Overview of IWMI Staff



IWMI Diversity at Different Organizational Levels - as at 31 January 2009

	Male		Female		Total
Board of Trustees	North	South	North	South	
	4	3	1	1	9
	44%	33%	11%	11%	100%
Management Team	5	3	4	1	13
	38%	23%	31%	8%	100%
Researchers	21	35	13	13	82
	26%	43%	16%	16%	100%
Breakdown of Researchers					
Principal Researcher - I*	9	5	6	1	21
Senior Researcher - I*	6	11	2	0	19
Senior Researcher - R*	0	0	0	2	2
Researcher - I*	2	5	1	4	12
Researcher - R*	0	2	1	3	6
Researcher - N*	0	9	0	1	10
Postdoctotal Scientists	4	3	3	2	12
Subtotal	21	35	13	13	82
Research Support	5	34	0	8	47
	11%	72%	0%	17%	100%
Breakdown of Res Support					
Research Support - R*	5	0	0	0	5
Research Support - N*	0	34	0	8	42
Subtotal	5	34	0	8	47
Services	0	79	4	52	135
	0%	59%	3%	39%	100%
Breakdown of Services					
Services - I*	0	1	4	1	6
Services - R*	0	1	0	3	4
Services - N*	0	77	0	48	125
Services - IN	Ŭ				
Subtotal Total IWMI Staff	0	79	4	52	135

Researchers by Region 2005-2009



* I = International R = Regional

N =National



IWMI Publications - 2008

Research Reports

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- 12. **Bhaduri, Anik [IWMI]; Barbier, E. B. 2008.** International water transfer and sharing: the case of the Ganges River. Environment and Development Economics [ISI], 13:29-51.
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