

How much irrigation do we really need?

Shortly after being appointed at IWMI in March of 2000, I stood in for David Seckler in the plenary session on Water for Food and Rural Development at the 2nd World Water Forum, and I asked the question: “*How much irrigation do we really need?*”

Both the intensity and the diversity of the reactions that I received—and continue to receive—might surprise you. Probably the most disappointing result of the Vision and Forum process was that we did not really manage to create a genuine dialogue between those for and against irrigation. These two camps are equally deeply convinced *that irrigation is an absolute necessity and needs to be expanded* and *that irrigation is a waste of precious water, has cost the public purse billions and has not delivered on its promise*. And yet, both the Vision¹ and the Framework for Action² conclude that resolving this issue is the most critical for sustainable development of water resources in the coming decades.

Global Dialogue and Comprehensive Assessment

IWMI can be relevant to this debate in several ways, and these are worked out in our new Strategic Plan.³ First, IWMI has offered to initiate—and possibly facilitate—a dialogue among the main stakeholders. To this end we are organizing—jointly with FAO, GWP, ICID, IUCN, and WHO—an exploratory workshop in Colombo in December.

Water for food and



¹Cosgrove and Rijsberman. 2000. *The World Water Vision: Making Water Everybody's Business*. Earthscan Publications, London.

²Global Water Partnership Framework for Action Unit. 2000. *Framework for Action: Towards a Water Secure World*. GWP, Stockholm.

³The latest draft is available on our website: www.iwmi.org. Approval of the Plan is expected at our Board meeting in December 2000.

Second, we are preparing for a Comprehensive Assessment of Irrigated Agriculture (1950–2000). We expect that if we—with partners, of course—are able to provide an authoritative assessment, deemed credible by all stakeholders, this will be an important input to the debate on the future of irrigation. Such an assessment would deal not only with the beneficial impacts of the investments in irrigation on food production and rural livelihoods as well as with all public and private costs involved, but also with the costs in terms of people displaced, and ecosystems destroyed and affected. One of the difficult parts in such an assessment will be to separate the impacts of investments in water from the investments in genetic improvement in their joint impact on increased productivity in agriculture. This will be a task that—if anybody can—should be done jointly by the institutes of the CGIAR, possibly as a Task Force that might replace the System-Wide Initiative on Water Management.

Increased Emphasis on Groundwater Management and Smallholder Farming

Even as IWMI reports on its achievements in 1999–2000, we are preparing an effective contribution in the years to come. The emerging research themes in the new strategic plan focus on:

- Integrated water resources management in irrigation, including the dialogue and comprehensive assessment outlined above, but maintaining IWMI's traditional strength in management of irrigation systems.
- Smallholder land and water management, with a focus on poor farmers and an approach that includes watersheds, sustainable land management, micro-irrigation and rainwater harvesting.
- Sustainable groundwater management, also included in the two themes above, but sufficiently important to warrant special focus, both related to groundwater assessment and modeling as well as groundwater policy and management.
- Water resources policies and institutions, where maintaining strengths in community level (farmer-) organizations, will go hand-in-hand with strengthening our expertise in basin-level institutions and conflict management—all with a strong policy focus.
- Health and environment, where we will maintain our strength in health impacts of water management—for example on malaria—while strengthening our environmental work on the interface of ecosystems and irrigated agriculture.

environmental security

New Programs in Southern Africa and India

In line with the increased focus in the CGIAR on poverty in sub-Saharan Africa and South Asia, IWMI has recently closed its offices in Turkey and Mexico, and is strengthening its programs in the SADC (Southern Africa Development Committee) and SAARC (South Asia Association for Regional Cooperation) regions. The agreement with the South African government that will formally allow IWMI to open a sub-Saharan Africa office in South Africa will be signed during ICW 2000. In 2001, we also expect to expand our activities in India significantly. This will be done administratively through close cooperation with ICRISAT, which will allow for highly efficient operations.

Assessing Impacts and Benchmark Basins

The majority of IWMI's work to date has directly impacted the managers of irrigation systems—both farmers and managers in irrigation agencies. In recent years, IWMI has also focused on making high-impact research reports widely available in printed and electronic formats. While all of this is useful, and will be continued, it needs to be complemented by ways to reach larger audiences both faster and with lasting impacts.

The two new pathways that IWMI will explore vigorously are:

- Closer cooperation with development NGOs that have the means to reach large numbers of villages and farmers directly—with IWMI-produced knowledge or interventions.
- Actively incorporating IWMI-produced international public goods research results into the curricula of universities that can pass these on to generations of new managers and scientists.

At the same time, IWMI will assess its own impacts more actively. The methodologies IWMI has developed to monitor irrigation system performance, as well as new methodologies for benchmarking, may also be used to measure the impact of IWMI research. Assessing impact does require long-term monitoring. To this end IWMI plans to develop and expand the concept of benchmark basins. These are basins where IWMI will make a commitment to long-term research in partnership with local organizations.

Partnerships

There is considerable scope for IWMI to improve its effectiveness and impact through stronger and deeper partnerships in various forms. First, we see rapidly increasing cooperation within the CGIAR, both in terms of regional integration and harmonization of CG-institute research agendas—drawn up in consultation with stakeholders—and in terms of harmonization of administrative policies and procedures. The latter can result in system-wide policies—such as personnel policies—or a shared CG-wide Intranet. In any case, we see

considerable scope for both increased effectiveness and increased efficiency, whatever form the current reorganization within the CGIAR eventually takes. Second, whilst we have many relationships of various forms with the national agricultural research systems, we think we can considerably deepen substantive partnerships with a limited number of research institutes. Third, NGOs and universities can become more direct partners in delivering the impact of IWMI research.

Fourth and finally, IWMI is developing its profile in the water world outside agriculture research, focusing on 'non-ag' water research as well as water-environment research. Two programs that we have targeted to link into the world of 'mainstream' water research are the UN World Water Development Report and the new Hydrology for Environment, Life and Policy (HELP) program. Partnerships on environmental research target the Millennium Assessment program and a rapidly developing relationship with IUCN.

Gender and Diversity: More Young Researchers from the South

Given the relatively large group of senior scientists currently at IWMI, there is considerable scope to expand the group of young scientists (Postdocs and up) while maintaining a balance. Through a focus on young scientists from the South—with recently completed doctoral research in our key areas of interest—we are increasing our science capacity, reducing our overheads and getting a better representation from the countries where we want to work. A recruitment drive in the second half of 2000 has allowed us to appoint an excellent group of young researchers, all from Asia and Africa. We have high expectations of the stimulus to our research that this group will provide.

At the same time, this policy will increase the representation from the South in our scientific cadre. During the five years of our new Strategic Plan, I target the percentage of scientists at IWMI from the South to rise to above, and probably considerably above, 50 percent. I also target the percentage of female scientists to rise to above 33 percent—including in-senior scientist and management positions.

The International Water Management Institute is ready for the New Millenium—for a significant contribution to integrated management of water and land resources for food security, rural livelihoods and nature conservation.

Frank Rijsberman
Director General