

SCIENCE COUNCIL OF THE CGIAR

Commentary on the Third External Program and Management Review (EPMR) of the International Water Management Institute (IWMI)

April 20, 2007

The Report of the 3rd EPMR of IWMI was discussed at the Seventh Meeting of the Science Council (SC), held at ICRISAT, Patancheru, India. Dr. Jeff Bennett on behalf of the review team presented the main findings and recommendations of the Report. IWMI Board Chair Dr. Nobumasa Hatcho and the Director General of IWMI, Frank Rijsberman responded on behalf of the Center. The SC thanks the Panel for its comprehensive, perceptive and analytical assessment of the Center and, in particular, for its careful strategic analysis and forward looking perspective. The review report is well written and the conclusions clearly documented. The SC notes that the Center has responded positively to the review report's major findings and recommendations.

The SC commends the panel for the novel approach used to measure the quality and performance of the center, offering ideas for use in future EPMRs. In particular, it considered it both innovative and instructive for the Panel to request IWMI to nominate the key papers that illustrate the outputs of each program and to identify the key outcomes and impacts from each. The Panel in this case was able to make perceptive suggestions for refinements in research designs in order to improve the relevance and impacts of the outputs as a result of reading the nominated papers.

The 3rd EPMR has assessed an institute that has been largely restructured in response to the 2nd EPMR six years earlier. Since 2000, IWMI has undergone a substantial growth in funding – an almost tripling of its budget – with a corresponding expansion in research capacity. The panel found that the Center has become a more vibrant and more viable institution; it has improved its management, administration and research publications performance, and has produced a number of important achievements. In addition to improving its research publication rate, the report highlights IWMI's leadership and global influence through activities such as the Comprehensive Assessment of Agricultural Water Management, the WWF discussions and agenda, the Hyderabad Declaration, membership in the RAMSAR Conventions and the DG's paper on small scale water management selected for the Copenhagen Consensus. IWMI and its Director General are to be commended for these achievements.

The panel, however, concludes that IWMI has the potential to do much better, and has made 17 recommendations aimed at helping the Center become stronger. The key issues identified by the panel requiring IWMI's attention include: clarifying its specialized research niche (current niche and mission are wide ranging and ambitious), deepening the analytical component of its research, injecting a stronger disciplinary base in its research, and demonstrating impact. The SC believes that the report has highlighted key challenges facing IWMI that require a research effort at multiple levels, i.e., from local to global, from basic to applied, from upstream to downstream and from private to public. None of these are polar choices, but rather reveal the complexity of mixtures along the multiple continuums. The main recommendations of the panel, aimed at pushing IWMI above the CGIAR average, are related to the need for: (i) strategic planning, staffing and partnership review exercises, (ii) a more tightly focused research agenda, (iii) more effort directed to analytical research, (iv) recruitment of experienced and well established scientists and research leaders, (v) the development of an effective publications strategy, (vi) changes in the programmatic structure, and several others related to poverty, gender and impact.

Based on the panel's assessment and evidence provided, the SC endorses the panel's 17 recommendations.

The Center agrees with the vast majority of the report's recommendations and the SC notes that steps are already underway at IWMI to implement these, with a few exceptions. There were two recommendations 'noted', but not 'agreed to' by the center: #2 on merging of the Water and Cities theme into the Health and Environment theme, and #8 to appoint four experienced and well respected researchers in major disciplines (although agreeing to appoint a DDG for Research). These are discussed below.

Priorities and Strategy

With respect to its re-defined mission and mandate, IWMI has evolved from a Center focused on water management issues in irrigated agriculture to a Center with a greatly expanded scope that now embraces nature in its mandate and, accordingly, has re-oriented itself as a Center for Water, Food and the Environment. In doing so, IWMI has captured the concerns of the day, and is attempting to carve out a new niche for itself in a world with multiple institutions addressing the water sector at large. The SC believes the pendulum must swing back through the process of prioritizing the research agenda within this institutional context. The Panel recommends that IWMI initiate a strategic planning exercise in 2008 with the arrival of the new DG, and through this process identify clear priorities for itself that can serve the staff in more carefully defining their research programs. The SC strongly endorses this recommendation and urges the Center to pay particularly attention to the panel's strategic analysis and perspective on IWMI provided on pages 1-10 of the report. The assessment of IWMI's conceptual framework and poverty mapping merits careful consideration. The need for IWMI to reexamine the breadth of its mission within the context of a strategic planning exercise is of paramount importance.

IWMI has indicated that three of the panel's recommendations will be considered in the context of the strategic planning exercise, i.e., #4 which emphasizes greater priority on critical water management issues (e.g., sustainable groundwater management, groundwater depletion); #5 on reinstating the Policies, Institutions and Management theme; and #15 on constituting an Advisory Science Council for the Board. The SC agrees with this response but encourages the Center to consider during that process the issues and concepts put forward by the panel in their assessments and recommendations.

On the specific recommendations themselves, SC concurs that IWMI should enhance its effort on sustainable groundwater management. The need to strengthen IWMI's institutions and policies work is well made but care is required to ensure that this theme is pursued in close collaboration with other themes like water allocation and environmental flows in rivers to exploit the synergies that the panel correctly articulates. Finally, the Panel has expressed concerns about the vision and oversight functions of the Board and recommends that an external Scientific Advisory Board be put in place to provide more guidance. The SC endorses the notion of a need for such oversight, but accepts that the Board could take other action that could be equally effective and less costly. The strategic planning exercise would presumably also address issues of comparative advantage raised by the Panel, e.g., should wastewater management issues be addressed at all and if yes, should they be restricted to periurban agriculture or to disposal issues within a full-basin environmental context. At this point, the SC considers that IWMI's wastewater research was catalytic but that the health aspects may be now getting beyond its comparative advantage.

Research Leadership

The criticism of the senior research leadership team and generally insufficient experience among its scientists is a major strategic issue for the center. This is the motivation for the panel's lengthy and strong recommendation (#8) to appoint four experienced and well respected researchers in major disciplines and hire a DDG for Research, which the SC endorses. IWMI has been purposeful in the choice of a relatively young team with project management skills in preference to research experience. It has strongly defended this strategy. The SC was not convinced by the Center's response to the criticisms of the panel in this regard, i.e., that a focus on strong disciplinary skills comes at the expense of a multi-disciplinary approach. Strong research leadership can foster the desired multi- and inter-disciplinary interactions required of a mission-oriented institution like IWMI. Additionally, there are an increasing number of reputable journals that encourage multi-disciplinary innovations in research.

A related concern is the panel's assessment that too many studies at IWMI are descriptive and the need to be more dynamic, interdisciplinary, analytical and directed to outcomes and impacts by the addition of institutional and policy analysis. In the SC's view, the panel has provided an excellent analysis of descriptive vs. analytical research at IWMI, and correctly highlighted the need for more rigor and depth, and how this depends critically on having strong disciplinary skills as a necessary condition for establishing strong and effective interdisciplinary teams (rather than grouping generalists together – who may work nicely with each other but not necessarily produce the rigorous results). Thus, the SC strongly supports the panel in their recommendation on this issue.

Publications

IWMI questions the use of ISI as a primary indicator of a Center's performance, especially considering the multi-disciplinary nature of their work, i.e., not as easy to publish interdisciplinary research. The SC maintains that publications is one of the most widely accepted basis for evaluating research quality, and assuming the work is relevant, is likely to be a strong indicator of the potential for future impact. The SC does not agree with the Center's characterization of the Panel as giving IWMI advice to reform itself in the direction of "a university with disciplinary departments that favour 'deep science' and where publications dominates all else". Rather, in the SC's view, the Panel is urging the Center to establish a solid basis for conducting good, rigorous science such that results emerging are valid and robust that is more likely to lead to improved technologies, policies and institutions and, ultimately, to impact on the ground. The SC believes that good science and impact go together and suggests that lack of impact at IWMI may at least in part be explained by a slow drift away from good disciplinary-based science.

The Center's response to the adverse comments of the panel about their peer publication record by resorting to the argument that impacts are more important than publications is unconvincing. Firstly, these should not be viewed as substitutes but complements and secondly, and more importantly, IWMI is one of the poorest performing centers as far as the documentation of its impact is concerned in the 3a and 3b components of the PM exercise.

IWMI as a 'Knowledge Center'

At the time of the 2nd EPMP the Center had a strong research orientation and was focused on increasing the amount of 'crop per drop'. In the past six years this focus has changed to that of a

Knowledge Center that involves not only IWMI's outputs but those of multiple partners. In-depth (disciplinary) research was de-emphasized in favour of inter-disciplinary research with its ancillary complexities and transaction costs. The Panel rightly suggests that this shift threatens the ability of the Center to "deliver cutting edge research outputs" and makes a number of remedial propositions such as improved mentoring of younger staff, restructuring of the leadership team and a professional development program. The SC accepts the analysis and agrees that some of the suggested remedies might alleviate the problem, but sees room for alternative measures that the new DG might wish to pursue.

The report suggests a move back to a stronger disciplinary-oriented scientific research paradigm. The SC concurs with the Panel that roles such as brokering, sharing, application should be complements to IWMI's research along the impact pathway and not alternatives. The forthcoming meta-review of EPMRs should assess whether such "pendulum swings" are justified or not.

Also, in the context of becoming a Knowledge Center, IWMI has inevitably greatly expanded its partnerships and drifted rather far downstream on the research – development continuum. The Panel questions whether IWMI could legitimately claim that 80% of its activities could be placed in the SP agenda that should lead to IPGs. Indeed, the panel's analysis of several of the IWMI's research programs indicates that much of the research is not IPG oriented and does not build on past research and comparative advantage sufficiently by way of synthesis reports. This requires attention. The SC would agree with the panel that the R-D balance be reconsidered in the context of developing a new strategic plan.

Partnerships

The panel noted that relatively few of IWMI's publications are with partners. It is of concern that IWMI's partnerships are questioned in a number of places by the panel. There are issues of their number and type and the need for IWMI to be more strategic and selective if it is to pursue an IPG agenda and if it is to become a center of preference for collaboration by other research providers. Of concern to the SC also is the apparent tensions between IWMI and IFPRI resulting in competing rather than collaboration in water policy research; and there are poor host country relationships.

There are tensions between the CP on W&F and IWMI as evidenced by the recent criticisms of the CP competitive grants process by some partners. The Steering Committee arrangements require scrutiny and the forthcoming review of the CP is timely. It is fortunate that Dr Bennett has agreed to be involved in the CP review as he now has a full understanding of IWMI and can approach the review of the CP with full information.

Scope of effort, devolution and critical mass

The Center decided that its new scope required a new basis of analysis and moved from perimeters to river basins. Though sensible and commendable, IWMI then proceeded to adopt a rather large number of river basins in many parts of the world, some of which are highly complex. The result is that a critical mass is absent in many of the basins and the outputs in the Basin theme are disparate and require more focus and prioritization. The Panel suggests that IWMI revisits its decision to get involved in so many basins and the degree of decentralization that this implies. The SC concurs.

The SC agrees with the need to review the value and desirability of the massive decentralization that has occurred in recent years. It questions whether this phenomenon may have contributed to the decline in IPG research outputs.

Impact Assessment

The Panel believes and SC concurs that there is probably more influence or adoption of management practices derived from IWMI's work that could well be assessed and more effort by IWMI needs to be given to its documentation. The Panel was aware that IWMI is making a serious effort to explore a number of different approaches, such as outcome mapping, impact pathway monitoring, etc but encouraged the Center to keep the effort focused on documentation and limit experimentation with new methods.

In the SC's view it is clear IWMI requires a more conventional impact assessment team than it has now. It lies towards the bottom of the PM ranking in this regard and could push the frontiers on policy oriented research impact assessment vis-a-vis water institutions and policy research with a strengthened IA capacity. The panel is rightly critical of the center for a lack of ex ante and ex post impact assessment to inform priorities. The SC agrees with the recommendation about the need for a senior staff member in this area and a systematic evaluation of its past and future portfolio.