

PRESENTATION OF THE STRATEGY THEME ON “RESEARCH AND TECHNOLOGY DISSEMINATION”

BY

**VICE PRESIDENT CHANDRA MADRAMOOTO
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“Thank you very much Mr. President, distinguished guests, ladies and gentlemen, under the strategy theme “Research and Technology Dissemination”, there are four main workbodies and work teams : (1) Advisory Committee on IPTRID (AC-IPTRID); (2) Research and Development (WG-R&D); (3) Editorial Board for ICID Journal (EB-JOUR); and (4) Working Group on Coordination of Dictionaries (WG-CD). So what I would like to present to you this morning is, first of all, where we are with respect to these four Workbodies and secondly, what I foresee some of the chances in the “future needs” for ICID in the areas of Research and Technology Dissemination.

First of all, I start with the AC-IPTRID. The mandate of that Committee is to give advice on IPTRID Programs, prioritize research needs, provide positive expressions of demand for research, and suggest new research requirements and foster cooperation amongst key institutions/organizations. In ICID, we need to reflect very strongly on how this mandate would develop in light of the changes that might be taking place in IPTRID and secondly, whether we want to reinforce parts of this mandate into IPTRID Support Program. This important decision will have to be taken over the next few months.

The mandate of WG-R&D is three folds - (1) to keep National Committees informed of relevant new developments in irrigation, drainage and flood control; (2) to promote multidisciplinary research, effective training and technology transfer; and (3) assessment of the impacts R&D makes on performance in the field. WG-R&D acts as the focal point for ICID’s liaison with IPTRID and other relevant research bodies such as FAO and IWMI and networks serving the irrigation and drainage professionals. These three mandates of the WG-R&D also need to be highlighted and reinforced today.

If you look at the first objective to keep National Committees (NCs) informed of relevant new developments in irrigation, drainage and flood control, it means that we need strong WG-R&D connected to the NCs continuously disseminating the information. NCs should not be just operationally oriented but we also need NCs to have a very strong research and development focus.

Secondly, as we talk about promotion of multidisciplinary research, effective training and technology transfer, we need to re-examine if our research programs are thoroughly multidisciplinary crossing a broad spectra of disciplines. It is not just irrigation engineers or irrigation scientists that are involved but it also involves environmentalists, people from law and economics, geography, politics, geology, sociology and institutional systems. We have to make sure that we are really doing multidisciplinary research by bringing all of these people into our activities. So that, the impact of multidisciplinary research and challenges that we face today, in water research, can be effected. Again, we talked something about very strongly but have done very little about it, is drainage.

Thirdly, the focal point for ICID’s liaison with IPTRID and other relevant research bodies. If you want true participation from IPTRID, then our WG-R&D should have a much stronger focus with respect to IPTRID.

Coming to the ICID Journal Editorial Board, there are five key objectives of the Editorial Board. They are - to ensure with the Editor that the Journal is published in accordance with editorial

policy; the appointment of Editor and Associate Editors to review and update editorial policy when required; to conform with the ICID objective; to address and resolve issues pertaining to the Journal; to review guidelines for authors, manuscript reviewers and book reviewers and liaise and coordinate with ICID workbodies. I think these are very clear and straight forward objectives for high scientific quality of the Journal. M/s John Wiley as Publisher of the Journal had effected some changes to strengthen the work of the Journal.

As far as the Working Group on Dictionaries (WG-CD) is concerned, the mandate of the WG-CD is : to encourage the preparation and publication of translations of the English/French revision/edition of the Multilingual Technical Dictionary (MTD) to produce copies of the MTD in other formats, especially electronic, so as to make it more valuable to users; and to produce periodic updates of the MTD. This is important for us because we use this dictionary in all water professional activities. The Dictionary is likely to be translated in Arabic and Spanish soon. I think that the Committee had a very strong role to play in producing the dictionary in those languages.

If you look at the current activities of IPTRID and the minutes of meetings of the last two meetings, there are many points that were brought up for discussion. I have summarized the discussions and I want to discuss the key highlights of the activities because it gives a framework for this Committee and what we want to do in future. First of all, the role of AC-IPTRID, Consultative Group on the Research Program, in view of ICID. Secondly, there has been an establishment of the Asia Drainage Program on Humid Tropics. There is now strong focus for country networks and Text Delivery Service (TDS). When we look at the future, there is a three-year work plan that has currently been prepared by the Program Manager and country presentations and elaborations with various NCs are being used to prepare that work plan. The Central Office should contact the NCs to provide feedback on research prioritise for review and presentations through the AC-IPTRID. Country presentations have taken place and continue to take place on the status and expectations of participatory country projects and knowledge gaps. If you look at the three year work plan, in many of our Committee reports to the WG-R&D, they have produced the report that looked at the impact and evaluation of research. The Working Group completed the report on the title "Research and development in irrigation, drainage and flood control" and this report has been well received by the Working Group and gives a very broad overview about what has been the impact of some of the research activities. Certainly, the report has not widely covered many countries to produce the specific cases. I want to highlight one thing, that it was very difficult to measure the impact of research. There are really no strong criteria that could be used in terms of impact measurement. We know how much fund has gone into the research program. We also know the beneficiaries, but actually measuring impact on the field is very difficult and that is why the report in some ways is inconclusive.

Collaboration with IWMI has been another activity of the Working Group which is "Integrated river basin management in irrigation management transfer". The Working Group collaborates with other ICID workbodies and NCs to bring issues to the notice. Some of the future activities of the WG are : research priorities in projects and water saving, initiatives on the environment and the ecology, approaches and impacts of watershed management, prioritize the use of water of different quality and to link improvement in water use efficiency with most of the water uses.

I want to stop for a moment because one of the problems that I see currently is that some of the workbodies do not have above information and have not been able to take this information into some of their work programs and so I see some missing links between WG-R&D and the other workbodies within the ICID. This is something we need to look into very strongly.

During my presentation to PCTA on Wednesday, this matter came up again because it was felt that there is a bit of missing connection between what the WG-R&D is doing and reported on and what the AC-IPTRID is doing and reported on. However, bringing these two workbodies closer together in their activities is something that we need to explore. Additionally, collaboration amongst ICID WGs are required to avoid overlap. Further, the involvement of the young professionals is necessary in many work committees including WG-R&D, for a variety of reasons.

It brings in new ideas, new blood, new vigour into the Committees. The senior members of the WG-R&D could act as very effective mentors to our younger researchers and promising scientists.

In terms of technology dissemination, I would like to say that our new ICID Journal under M/s John Wiley has done a remarkable job under the management of President Hon. Hennessy and this is one of the success stories of the strategy theme on Research and Technology Dissemination, I think. The Journal in its new format came into being in 2001 and sales have been very significant. It exceeded the royalty threshold and sales in 2002 were up by 12 per cent compared to the first year. Thirdly, there has been an increased access to journal articles because M/s Wiley now puts all the abstracts and titles on the internet for the research community to have immediate access. We should be proud of the ICID Journal, which is now respected and peer reviewed. We should all strive to continue to publish in this Journal. The future activities are to look at the congresses and pick some of the best papers for publications. I encourage all of you in your NCs/authors, to screen those papers, take the best ones and submit them to the review board to promote the work of NCs in the Journal. Discussion papers and book reviews are also to be included in the Journal in future.

In the WG-CD, two new chapters i.e. project water management and on farm water management have been completed in 2nd version of the MTD. There was a review and modification of all the chapters. A new updated version of the MTD on CD-ROM is now available.

So, let me now synthesize what I have gleaned from everything that I have read and collected so far. First of all, I would like to say that there has been much more research and development activities and knowledge dissemination over the past five years due to two primary activities. First of all, because of IPTRID which was created in early 1990s. Ten years later we begin to see some pay off from that investment undertaken by IPTRID. By looking at research activities in some of our client countries, we begin to see the fruits, ten years later. It takes five years to put projects in place, get the funding to undertake the research and now we begin to see the first results of that research, coming forward into the professional community through publications, workshops and increased information. Secondly, I talked about the Journal. At one time many of our publications were primarily along the operational lines but if you look at some of our publications today, they have a very strong R&D focus, for example, papers on benchmarking and modernization. Our work is becoming known to wider target audience. I think this is a strong point for us and we need to continue to build on this.

Out of all of these, the challenges I see are fourfold. First of all, we need a better integration on the AC-IPTRID and WG-R&D. This is a very weak link at the moment. Our WG-R&D should be very broadbased that encompasses all research activities and IPTRID is a smaller base within our

WG-R&D. This therefore, means that WG-R&D needs to take a much stronger role in R&D and it should not be overshadowed by what is going on in IPTRID. The WG-R&D should be the flagship and IPTRID should be one of the vehicles in that flagship. I think we need to discuss to explore to better link AC-IPTRID and WG-R&D. How do we link IPTRID programs to the NCs? There are many NCs who feel that they are not aware of what goes on in IPTRID. We need to look at how the NCs see themselves as partners, clients to IPTRID programs, how can NCs participate in the development of IPTRID programs and activities in their countries and then secondly, how can NCs take the results from IPTRID programs and put them into some operational measures in their countries. This means that we need to strengthen our NCs in R&D. Many of our NCs are still very strongly focused in the operational line of thinking. And we need to expand the membership of our NCs, to bring in people with more research emphasis. We need to make the NCs, therefore, more inductive to feel the full impact with more participation of the academicians, the private sectors, water users and irrigators, on R&D activities. I want to emphasize the private sector. which we have neglected in the past, except the engineering consultant firms. There are bio-technology companies who are developing water-resistant, pest-resistant and salt tolerant crop varieties. We have to look at all aspects of genetic engineering. We talked today about

precision agriculture, precision farming, we talked about information technology. What I would like to reinforce today is, that we must be aware of the many significant advances that are taking place in information technology, in precision-farming systems, the GIS, the computer modelling, remote sensing and satellite images, which are going to have very major impact in our profession. These are people who have finances, and unless we find ways to match their expectations, I think we are going to be falling behind. We need to establish research priorities that are demand driven. I am not saying that there is no scope for basic fundamental research. Of course, we need people doing a bit at the basic level but we also need to determine our research priorities to say what is important and then we need to work on how to act and tap funds for that research.

We need to strengthen our national and regional research institutions throughout the world by capacity building. We need to raise the profile of research and development within ICID to look at some of the important critical issues like water management for food production and environment protection. We are doing some of this through the dialogue that President Schultz reiterated earlier and I hope that we can find avenues and streams for R&D within water management at the basic scale as well.

We should look at the technological advancement, water conservation devices, mechanisms for water conservation, drought tolerant and salt tolerant cropping systems, new systems for the management of water, crops and soils on a larger scale, making use of precision farming systems, information technologies, and also incorporate socio-economic and institutional development that are so fundamental and critical to the sustainability of our system.

In terms of knowledge transfer, we need to make better use of electronic media for timely and rapid dissemination of information. During the luncheon with President Hon. John Hennessy earlier this week, he mentioned that it will take six months to a year for an article to get published in the ICID Journal. That is fine for a peer reviewed journal but sometimes we need rapid dissemination of information. We need to do more in terms of specialized workshops and not just annual IECs/Congresses. We do that quite a few times, I am not disputing that but we can do more and some of these workshops need not be at international/regional level, they can also be on national level, because many of our countries cover very large geographical areas like China, India and Central Asia for example. There is also a need to publish specific newsletters on drainage, newsletters on modernization and newsletters on benchmarking. And this is where, I believe, we need to have some discussions Mr. President.

I thank you very much for the opportunity given to me for making this presentation.”

Applause.....