
Report on the Action taken by ICARDA on the Recommendations of the 4th External Program and Management Review (1999/2000)

Action Update: March 2006

Recommendation 1

In view of a diminished expertise in fungal pathology at ICARDA, the Panel recommends that the Center should strengthen its scientific capacity for strategic and applied research in crop pathology, and its pathology support to the Cereal and Legume Enhancement Programs

Response

The recommendation to increase the Center's scientific capacity in crop pathology has been accepted and is being implemented.

We have a full-time senior pathology consultant from Aleppo University who provides input in legume pathology. Following an unsuccessful round of interviews, we will re-advertise the P-level legume pathologist position for a young scientist to replace the above consultancy. Additionally we have recently recruited a post-doctoral fellow in legume pathology for three years funded by GRDC. In cereal pathology we continue to have a senior pathologist position that up to 1 March 2006 was additionally supported by a post-doctoral position on Swiss funding. Further post-doc positions will be included in the new special projects being developed in the field of plant pathology.

Recommendation 2

The Panel recommends that ICARDA should review the opportunities that may be available if it should expand its research role in malting barley in developing countries. In undertaking this review, the Panel would expect ICARDA to complete a social and economic assessment of the potential of work in this area to meet CGIAR priorities.

Response

ICARDA has implemented the recommendation and the review report is available.

In 2002, ICARDA sponsored the first regional meeting of malt producers, brewers, millers and bakers to promote linkage of production of improved quality malting barley and wheat with contract-based production for premiums by regional farmers. This assessment of industry needs demonstrated the growing potential for higher on-farm revenues through production of varieties of malting barley and bread wheat that meet user needs. During 2004 a survey of malting barley production was undertaken in Ethiopia, which confirmed the importance of such barley.

Building on industry malt barley improvement, the ICARDA/CIMMYT barley improvement project is incorporating multiple disease resistance (including Fusarium Head Blight) into malt quality lines in a program sponsored and partly funded by Anheuser Busch, USA. In Syria, with El Sharkh brewery, we are exploring local malt barley production. We are also in discussion with Heineken on cooperation in aspects of malt barley research. The aim is to take advantage of existing private sector malting barley knowledge and experience for the developing world.

Recommendation 3

The Panel recommends that as a matter of priority ICARDA seek discussion with CIMMYT to develop mutually acceptable plans for the incorporation of doubled haploids and marker-assisted selection technologies in their joint durum wheat, spring bread wheat and facultative/winter bread wheat breeding programs.

Response

The recommendation has been implemented.

After detailed discussions at various levels ICARDA and CIMMYT agreed in December 2005 to jointly implement a wheat improvement program in CWANA, named the 'ICARDA/CIMMYT Wheat Improvement Program' (ICWIP) hosted by ICARDA and managed by a jointly appointed Director based at ICARDA, Aleppo. As part of this broader discussion, biotechnology cooperation is also being addressed.

Meanwhile ICARDA continues to scale-up existing efforts on doubled haploid breeding and marker-assisted selection and for its mandate crops, including the joint ICARDA/CIMMYT activities. ICARDA is currently producing 3000 doubled haploid plants per year in wheat and barley.

Recommendation 4

Given the reductions in the Genetic Resources Unit staff that have occurred, the demands placed on the Unit for collection and conservation activities, and so as not to threaten its existing activities, the Panel recommends the GRU make a concerted

effort to seek additional P and RA level staff from either internal or external sources, if it is to undertake an expanded programme of research in situ conservation, pre-breeding and the evaluation of collections using molecular markers.

Response

The recommendation has been implemented by attracting project funding.

ICARDA hired a P-level genetic resources scientist to coordinate an Agrobiodiversity Project supported by GEF/UNDP for four years, which involved participation of national genetic resources scientists from Jordan, Lebanon, Palestine and Syria. This project has recently closed. The scientist concerned is now the Coordinator of the Iran/ICARDA research project in Tehran and he continues part-time on in situ conservation activities initiated in the Agrobiodiversity Project. Meanwhile, proposals for the next phase are being developed.

In 2004 ICARDA hired two P-level scientists in genetic resources on restricted project funding: (a) Legume Curator and (b) CAC Genetic Resources Coordinator. The Legume Curator has also recently taken over responsibility for the genetic characterization laboratory in GRU and the previously-responsible RA-level scientist shifted to cereal and pathogen marker research.

An NPO-level scientist based at ICARDA has been registered at the University of Birmingham for a PhD to upgrade our in-house capacity in plant taxonomy to further strengthen the genetic resources work.

Recommendation 5

In view of the critical nature of water scarcity in the CWANA region, the Panel recommends that ICARDA place more emphasis on strategic issues of water use / allocation and management at rural community level, and that it join in strategic partnerships to carry out this work.

Response

ICARDA has fully implemented the recommendation.

ICARDA's strategy on water was revisited in the light of the EPMR and the evolving global and regional trends and demands. It now focuses on strategic issues such as improving water productivity under scarcity, environment issues, drought management and linking on-farm research to basin level research. One of the six MegaProjects through which ICARDA's research agenda is implemented is now devoted entirely to the management of scarce water resources.

ICARDA is a major partner in the ‘Water and Food Challenge Program’ and is implementing major research projects developed with the NARS and executed at the community level with a wide range of partners.

ICARDA has a joint appointment with IWMI for research on marginal quality water.

Recommendation 6

Regarding social science research, the Panel recommends that ICARDA should: (i) reduce its scope and concentrate on fewer issues, selected in close collaboration with the Center’s physical and biological scientists and the national programs - that are central to the operational mandate of the Center; and (ii) seek to improve the quality of output by among others, (a) judicious recruitment or designation of a lead social scientist, (b) recruitment of high quality support staff, and (c) entering into more cooperative arrangements like those existing with IFPRI.

Response:

Agreeing with the Panel’s recommendation to focus our social science research and enhance quality by recruitment/designation of a lead scientist and high quality support staff, ICARDA has moved to implement it.

The Center’s social science research has focused on four major priorities:

- (a) analyzing rural livelihoods and the determinants of rural poverty, paying specific attention to the gender dimension of poverty and the structures that determine differential access to resources and income earning opportunities, and identifying potential “pathways out of poverty”,
- (b) assessment of research impact, with a focus on the adoption and impact of ICARDA’s research outputs on productivity, income generation and natural resource management,
- (c) market and non-market valuation of the natural resources used by rural communities and analysis of the impact of NRM research on rural livelihoods, and
- (d) analysis of policy and institutional issues governing natural resources management, particularly common property resources such as water and rangelands, with a view to creating an enabling environment that supports the dissemination and adoption of technology and livelihood options.

To improve quality, ICARDA has recruited a Senior Economist to lead the socio-economics group. We continued the joint appointment with IFPRI in policy and institutional research and are now negotiating with IFPRI for a replacement scientist. We have expanded cooperative arrangements with other partners, including two joint appointments with ILRI in the area of livestock marketing and with CIRAD in institutional

aspects of rangeland management. Within the framework of the Challenge Program on Water and Food, ICARDA is collaborating with CIAT on livelihoods resilience and with IWMI on water productivity and basin level water allocation and policies. ICARDA is effectively contributing to the System-wide programs and consortia, such as the eco-regional program for CAC, CAPRI, PRGA, Consortium for Spatial Information, and SPIA.

ICARDA also recruited a senior seed economist. The socioeconomics group has strengthened their collaboration with advanced research institutions such as Yale University and Virginia Polytech in USA and CIRAD in France. There have been sustained efforts to recruit high-quality support staff, including junior professional officers, and associate experts, PhD students, and attempts to recruit Post-Doctoral Fellows for key research areas. Quality research outputs have been published in refereed journals, chapters in books, and other peer-reviewed publications.

Recommendation 7

Recognizing ICARDA's efforts to consolidate its natural resources management research by merging its former projects into a more integrated program, the Panel recommends that ICARDA, together with appropriate partners, articulate a vision, strategy, and an implementation plan for natural research management research, drawing on CGIAR and other experiences and centered on Unified Research Sites most appropriate for its emerging poverty alleviation focus.

Response

Accepting this recommendation, ICARDA continued its efforts to strengthen research in Natural Resource Management (NRM).

With the appointment of a new Director of the NRM Program in 2001, the Program developed a new strategy, logframe, and goal and purpose statements. The strategy was developed taking into account the CGIAR INRM Task Force findings, the NRM strategies of donors and the outcomes of Regional Priority Setting done by ICARDA with NARS and regional forums.

ICARDA expanded its efforts in the INRM Task Force of the CGIAR Centers: it organized the 2002 meeting at ICARDA and the 2005 INRM workshop at IRRI.

A key chapter on ICARDA's NRM work was published in the CGIAR Science Council's book on 'Towards INRM' in 2004. ICARDA staff contributed to a publication on guidelines for the implementation of NRM research in the CGIAR. These guidelines resulted from the 2002 Aleppo workshop that used ICARDA's Integrated Research Site in Khanasser Valley as a pilot project to test and validate the guidelines.

Since 2001 the program has been adopting the CGIAR-INRM approach to its integrated research sites in the region. With the recent adoption of the MTP research structure of six MegaProjects there has been further consolidation of NRM research and a more clearly articulated implementation plan.

Recommendation 8

In view of the importance of the Regional Programs to ICARDA's interactions with its stakeholders and the Programs' increasing share of the total financial resources of the Center, the Panel recommends that ICARDA undertake a strategic review of its outreach activities to examine issues of strategic importance including: regional coverage, devolution /outsourcing, interaction with NARS, interplay between research and outreach, information management and its role in the diverse regions.

Response

ICARDA implemented the recommendation to review issues of strategic importance of the Regional Programs. The ICARDA Board commissioned an External Review (CCER) of Outreach Activities, which was completed in 2003. The major recommendations of the CCER were: the annual planning meeting become the main joint research planning exercise during the year; a highland research network be established; the flow of information from field to headquarters and *vice versa* of results obtained from special projects as well as the practice of updating MTP projects be examined and used in developing a set of best practices; ICARDA's management structure be reviewed to have one clear line of reporting for all research matters; the research agenda be reviewed to reformulate 19 MTP projects into a smaller number of interdisciplinary projects to effectively address the research needs of the major production systems in the dry areas; opportunities for strengthening linkages with rural development be explored with national partners to increase resources for agricultural research; ICARDA's role as an honest broker in triangular arrangements involving the Center, specialized research institutes and countries in the region be examined for promoting research on problems outside the traditional mandate; and the current training policy to be revised to attract more students to augment manpower for research. Implementation of the main recommendations of the CCER has started.

Recommendation 9

To improve research quality and relevance, and to help develop a more prominent place for the conduct of multidisciplinary research at ICARDA, the Panel recommends that the Management promote quality and multidisciplinary research through recognition, rewards, and other incentives, and by assuring that appropriate criteria are covered in its Performance Evaluation process.

Response

The Panel's recommendation for further promotion of multidisciplinary research through a variety of reward and recognition systems has been implemented.

The reduction in 2004/5 in the number of Medium-Term Plan projects (previously 19) to six (MegaProjects) has de facto resulted in increased integration and multidisciplinary.

New criteria were included in the annual planning and appraisal process of scientific staff in 2001 to increase the incentive for interdisciplinary research and the production of high quality scientific outputs. During 2006 we will further refine the planning and appraisal process with a focus on quality scientific outputs, project funding, integration and multidisciplinary.

The Center has expanded the scope of the Staff of the Year Awards, with clear identification of outstanding researchers in P, RA and GS-levels as well as by recognizing an outstanding research support team. An annual award for Outstanding Scientific Article of the Year was initiated in 2003. The multidisciplinary nature of research is one of the criteria used for evaluation of the submissions.

Recommendation 10

Recognizing that ICARDA has conducted a wide range of studies offering partial insights into poverty, the Panel recommends that ICARDA determine, with its partners, the rural livelihood strategies of the poor in its region to clarify what research options, investments, policies, and technologies are most likely to benefit them. Special emphasis should be given to highly vulnerable segments of the population.

Response

The well being of the poor in the dry areas being central to the mandate of the Center, ICARDA accepted the recommendation and has made progress in implementing it.

ICARDA realizes the need for a deeper understanding of the determinants of poverty in the CWANA region, and of rural livelihood strategies adopted by rural communities, in order to continually refine the targeting of research and identify pathways out of poverty. Accordingly, the Center initiated a new MegaProject (MP5) on "Poverty and Livelihood Analysis and Impact Assessment in Dry Areas" as cross-cutting among other thematic megaprojects. MP5 uses detailed analyses of the organization of households and communities, employing a sustainable livelihoods approach, and evaluation of the natural resources on which they depend. ICARDA has established a Geographic Information Service Unit (GISU) which is supporting the efforts in poverty mapping and analyzing associated features.

ICARDA has also made rural livelihood analysis a core component of most of its other research projects. This will help understand the conditions of target communities and environments, including marginal environments where highly vulnerable communities live, and identify constraints that hamper the wide dissemination of technological options proposed.

Recommendation 11

The Panel recommends that TAC undertake a comprehensive analysis of the impact of the continuing decline in unrestricted core funds on the Centers' research activities and their outputs and impact, as well as on their interactions with national agricultural research systems and advanced research institutions.

Response

The Center greatly appreciated this recommendation. The dramatic shift at ICARDA in unrestricted core funds from nearly 80% to about 30% in the last fifteen years has had significant impacts in terms of proposal preparation and reporting requirements. These changes have had an impact on scientists' time and the Center's flexibility. It is, however, a System-wide issue.

Some donors have responded positively to this recommendation after considerable lobbying. Canada increased its unrestricted funding for Africa to ICARDA and other relevant Centers in 2003 up to the end of 2005. In 2004 DFID shifted its directed funding to unrestricted core, and in 2005 the Swiss Development Corporation gave ICARDA its first unrestricted financial contribution. As a result, core funding in 2005 accounted for about 41% of ICARDA's revenue.

Recommendation 12

Realizing that the complexities of managing research at ICARDA require many interactions between project managers and other units, and that staff productivity will be greatly enhanced if a computerized management information system (MIS) is available, the Panel recommends that ICARDA implement a purpose-built MIS system for project management, if necessary acquiring the services of a consultant with experience on the recently-commissioned Oracle financial package, so that a user-oriented system is put in place.

Response

Agreeing with the Panel's recommendation regarding the MIS system for project management, ICARDA has moved to implement it.

After reviewing various options, ICARDA adopted the CIAT 'Project Manager' which was developed by CIAT and was being implemented in some sister Centers. The system uses a web-based application as the front-end (interface) and Oracle as the back-end database. It uses Oracle RDBMS and will be interfaced to the Oracle Applications 11i, which is the backbone of our MIS.

The Project Office and CBSU have worked together to implement the system, which is now installed, and a large part of the data loaded. A technical team from CIAT visited ICARDA in April 2005 for training and technical consultations required to fully implement the system.

Reports development will evolve as the use of the system progresses. It is expected that the system would be fully operational in the very near future.

Implementation of the Oracle Applications 11i, currently under way, will strengthen our MIS and provide an integrated Project Management System.