

### **3. ICARDA/NARS Collaboration**

#### **3.1 Research Continuum: Links between Headquarters and NARS**

The expression research continuum is a very broad concept and is used here in the context of collaborative research management and implementation between various partners. It covers matters such as: priority setting, project formulation, project implementation, monitoring of research activities, technology transfer, and feedback from field to headquarters. Ideally, and to the extent possible and practical, these matters should be addressed jointly by the major partners concerned.

ICARDA's research agenda is planned, conducted and reported within the 19 Medium Term Plan (MTP) projects. This agenda spans the themes of germplasm enhancement, production systems management, natural resource management, socio-economics and policy, and institutional strengthening. Research is conducted with numerous partners and in many locations throughout CWANA. The agenda runs from very upstream and basic issues through to research clearly aimed at development outcomes.

Operationally, the planning of this research is done with various partners at a series of national and regional planning meetings, and at the ICARDA internal annual planning meeting.

Most of the research is now on special project funding, and these special projects dovetail into the 19 MTP projects. Coordination of special projects is either by a Regional Coordinator or by a scientist at headquarters depending on the nature and scope of the project. Special projects are implemented by scientists, based at headquarters and in the field, as well as by Regional Coordinators and partners.

Various modalities are used to implement the planned research. These include:

- hands-on research of ICARDA scientists based at ICARDA Tel Hadya;
- joint research conducted by ICARDA scientists based in the sub-regions;
- joint research conducted primarily by NARS partners in cooperation with ICARDA scientists; and
- joint research with Advanced Research Institutions (ARI) inside and outside CWANA.

The different arrangements put in place have ensured that over the years of working in the dry regions the research priorities for the Centre have evolved based on the specific needs of this particular agro-ecological zone. There have been inputs from a wide range of stakeholders into the development of the overall strategic plan and the current 19 research projects, and in their updating. This has been achieved mainly through the above-mentioned national and regional coordination/planning meetings, but also in various other ways such as travelling workshops, direct contact among NARS and ICARDA scientists and research managers, visits of NARS scientists and leaders to ICARDA, and regular feedback from NARS, either directly or through staff in the regions.

With respect to the day to day research activities ICARDA has developed a pragmatic set of working practices of which the main thrusts may be summarized as follows.

- In the area of germplasm enhancement emphasis has always been placed by ICARDA on the development of improved materials for specific adaptation to marginal conditions. The training activities that were undertaken in parallel helped to build up a solid basis for decentralizing plant breeding activities to NARS. Currently, headquarters is providing improved germplasm upon request of NARS for further development locally. Often, crossing work is undertaken to meet specific demands of the national scientists, and segregating populations are provided to them for *in situ* selection. NARS scientists provide feedback through reports on assessment of tested germplasm, which helps in the mid-course correction of the breeding programmes to address emerging constraints in the region.
- In the area of the collection, conservation and utilization of plant genetic resources, the Centre has established long-standing relationships with various national programmes. These collections have been jointly developed with the countries in CWANA and are used for the benefit of all. This is done in collaboration with the ICARDA gene bank, which houses one of the world's largest germplasm collections.
- For natural resource management research, scientists from headquarters are addressing issues of general importance for CWANA, whilst collaborative research with NARS has been addressing the same issues taking into consideration the specific constraints and matching solutions with those tried and tested for adoption/verification in other regions.

These mechanisms as such seem adequate to further develop the research agenda as necessary. But, the CCER Panel feels that it must be ensured that the wide range of information received from the joint research activities is reviewed in a systematic manner and that appropriate follow-up action is taken. An active flow of information from Programmes/Units to field and *vice versa* is essential to maintain the existing harmony between the research activities undertaken at both levels.

### **3.2 Coordination Mechanisms with NARS**

There are a number of mechanisms for the coordination of collaborative activities with NARS. The national and regional planning and coordination meetings are the more formal ones. But, for the day to day research activities, more important are the multiple direct contacts between researchers, through visits, training, workshops, correspondence, etc.

The national planning/coordination meetings have the advantage of bringing national leaders and researchers together. They constitute a forum to assess national agricultural research and development needs and to determine research priorities. The meetings also offer the opportunity for NARS researchers from different departments or institutes within the country to meet, to share and review results and ideas on national research and research-related issues, to interact with ICARDA scientists participating in the meetings, and to develop joint work plans for the following season. The number of ICARDA scientists participating in the meetings varies, but is usually rather limited.

Sub-regional annual coordination and planning meetings are held within sub-regions where two or more countries, often geographically contiguous, share common issues,

interests, and projects (e.g. Mashreq and Maghreb project; dry-land agro-biodiversity project for West Asia; Sunn pest project for Syria, Turkey and Iran, cereal rusts project in the Nile Valley etc.). These meetings allow ICARDA scientists to interact with scientists from different countries. Results of inter-country experiments and activities are jointly reviewed and work plans prepared for the following season. These meetings also offer the opportunity for contacts with policy makers or senior research managers.

National and regional meetings are generally held annually, however, the option of holding national meetings every two years might be considered. Alternatively it has been suggested that headquarter staff might be attending each other year. Adequate representation in the coordination meetings should be planned between Programme Directors, Unit Heads and International Cooperation. In that respect it would be useful if criteria for attendance at national and regional planning meetings were developed, to ensure that the various Programmes and Units of ICARDA are well represented.

The feedback of relevant information to the ICARDA research agenda from the national and regional meetings requires special attention. Care must be taken to ensure that national meetings do not give rise to too many expectations that cannot be fulfilled by ICARDA.

### **3.3 Annual Research Planning Cycle**

ICARDA's internal planning process has changed in recent years in response to the requirements of the CGIAR. The logical framework was formally adopted at International Centres Week 1998 as the basis for CGIAR planning, financial monitoring and evaluation. This reflected a paradigm shift in research planning, financing, monitoring and evaluation. Beginning in 1998 the CGIAR also adopted a three year forward planning horizon, based on rolling three year Medium Term Plans, requiring a revised three year plan each year. Since 2000 the logical framework approach had to be explicitly incorporated into the Centre's project descriptions, starting with the 2001-2003 MTP.

Given these developments in the CGIAR's planning process, ICARDA incorporated the log-frame approach into the centre's project management planning process and streamlined its planning and reporting procedures. These changes are reflected in the reporting to the Programme Committee of the Centre's Board of Trustees and the interim Science Council of the CGIAR.

The annual cycle of research planning at ICARDA begins with the national coordination/planning meetings followed by the regional coordination/planning meetings, which take place primarily in the period from September to November. Feedback from these meetings with national programmes is brought to ICARDA headquarters by individual scientists and Regional Coordinators. ICARDA staff also interacts with their NARS partners within specific projects, throughout the year and develops joint plans based on these interactions. In late January/early February the Internal Research Planning Meetings are held at ICARDA Tel Hadya to review the research plans for the 19 Medium Term Plan projects. The framework for most of the discussion in the internal planning meetings is that of the MTP projects. Adjustments

to research plans are made on the basis of discussions involving various staff members, outreach and headquarter based.

The 19 MTP projects are designed to cover all the research, including that conducted at headquarters and within special projects funded through restricted grants and undertaken with NARS partners.<sup>2</sup> As some of these special projects are managed from the regional programmes, and may cut across a number of MTP projects, it is important that the outreach staff attend the Internal Research Planning Meetings to ensure that the results of these projects are integrated within the MTP project planning process. Moreover, the Internal Research Planning Meetings offer the prime opportunity for the outreach staff to learn about new research developments and their implications for the outreach programme. This includes matters such as new methodologies and approaches, advances in science, and the current structural changes within the CG towards Challenge Programmes and greater integration between Centres and with other non-traditional partners,

Since 2000 to meet the requirements of the CGIAR and the Board of Trustees two planning documents are produced: (i) logframes for each of the 19 MTP projects, and (ii) rolling three year Medium Term Plan project updates. The steps to produce these documents are as follows:

- Based on discussions and feedback in the internal planning meeting, Research Project Managers (RPMs) for each MTP project update the project logframe with respect to milestones and any other adjustments for the current year and the three MTP plan years.
- Based on the logframe, RPMs update their MTP project descriptions. This includes a list of collaborators and anticipated funding sources that contribute to the planned research in each MTP project.
- The updated MTP is submitted to the Programme Committee of the Board of Trustees for approval, and then to the interim Science Council.

### **3.4 Linkages between Regional Programmes and Headquarters**

Linkages between regional programmes and headquarters are established through the office of International Cooperation. The Regional Coordinators keep regular contacts with the office on all subjects concerning their outreach programme. Besides, all outreach research programmes have been developed with the assistance of the Directors of the two Research Programmes: Germplasm Enhancement and Natural Resources Management. Close linkages are maintained with scientists in headquarters in particular those acting as Project Coordinators for specific field projects. The Project Coordinators are keeping continuous contact with outreach staff and national scientists on all matters related to project implementation. Consequently, in the specific areas of expertise informal thematic networks have often evolved.

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<sup>2</sup> Restricted grants for special projects are grants awarded according to a specific fixed-term proposal and itemized budget and governed by a specific contract or agreement with the donor. Within ICARDA each Special Project is managed by a Project Coordinator. Each of these special projects has its own workplan, which contributes to achieving the overall research plans of the Centre through direct links to the 19 MTP projects. ICARDA currently has 66 operational special projects.

All administrative linkages between regional programmes and ICARDA headquarters, concerning matters such as finance, administration, purchasing and personnel, are established following ICARDA general rules and policies. The Regional Coordinator is administratively responsible to the Assistant Director General for International Cooperation and scientifically accountable to the Assistant Director General for Research and the Leaders of the two Research Programmes. All project collaborative activities concerning, for example, annual meetings and workshops, are organized through the regional offices. The Project Coordinators or other staff members develop itemized budgets for their activities in the respective sub-regions, and the Regional Coordinator facilitates their timely implementation.

Financial reporting is done on a monthly basis from both the headquarters and the regional offices. Financial statements are usually handled and finalized by headquarters. All financial reporting to the donors, like the technical reporting, is handled by headquarters. With regard to administrative procedures, purchases of equipment and human resource development activities, the institute manual and guidelines are followed. Training activities are organized in close collaboration with the Human Resources Development Unit at headquarters.

Information technology is an important component of all regional programmes and keeps growing. Close contact is maintained with the Communication, Documentation and Information Services (CODIS) and the Computer and Biometrics Services Unit (CBSU), both for technical advice and inputs, and for training. In some regional offices a specialized staff member has been appointed. Regional web sites have been developed in the regions and transmitted to CODIS for editing and placing on the Internet. In some regions e-mail services for NARSs have been set up with the assistance of CBSU.

### **3.5 Role of Regional Coordinators**

The role of the Regional Coordinators has been described as follows:

- contribute to the sustainability of the research continuum between ICARDA and its NARS partners by ensuring coordination of activities, follow-up of implementation, and providing feedback to headquarters;
- enhance interaction among countries of the sub-region through research networks, regional special projects, and to forge partnerships among NARS and ICARDA; and
- contribute to the mobilization of funds in support of bi-lateral and regional collaborative projects.

Regional Coordinators are the first formal line of contact with the countries in the CWANA region. Their responsibilities have evolved considerably over time. Originally countries were assisted mainly by undertaking specific research tasks to ensure that a national or regional research agenda could be implemented that addressed the major agricultural production constraints in the country or region. Nowadays, the Regional Coordinators are to a much larger extent involved with advisory and supervisory activities, in addition to their extensive liaison responsibilities. This requires special communication capabilities and a broader

knowledge of a wider range of agricultural research and development matters. Thus, the job requirements and responsibilities have changed and there may be a need for training for new skills development.

The Regional Coordinators are paid out of special projects when and wherever possible. When special projects end they revert back to the core budget. This seems logic considering their direct responsibility for the outreach activities, which are now almost exclusively paid through restricted funding. However, it must be assured that their activities will continue to be financed when certain projects come to an end, given the key role they play in the collaboration between ICARDA and the NARS, which is such a dominant part of the Centre's research agenda.

### **3.6 Human Resources Development**

Training clearly strengthens links with NARS, and while it is not implicitly part of the CCER's terms of reference it is considered useful to include in this report a brief overview of ICARDA's training activities. Training is coordinated by the Human Resources Development Unit, but the two Research Programmes have also a training officer. The Centre has a training policy which is regularly updated.

A systematic evaluation of training has never been undertaken but, a follow-up study to determine the effectiveness of the training activities has been conducted during 1988-1990 by a consultant, and published in 1991. Occasionally, information has been gathered on a case by case basis. Planning of training is currently done annually; the Regional Coordinators consider that it would be useful if this was done over a longer time-span.

The first ICARDA training courses were offered during the 1977/78 cropping season, with only a modest number of participants. Since then, the number of training participants, countries served, and the type of training opportunities have gradually increased. To date more than 11,500 agricultural technicians and scientists from over 100 countries have been trained at or with the help of ICARDA. The number of participants by type of training was as follows:

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| • long-term group training             | 643  |
| • headquarters short-term training     | 2446 |
| • non-headquarters short-term training | 5983 |
| • individual non-degree training       | 1632 |
| • individual degree training           | 929  |

Training is well appreciated by the countries, but comments were received that the information provided on training opportunities offered by ICARDA is not always up to date. With the evolution of the NARS there is a stronger need for individual training. At the same time the countries in the CAC region regret, for example, the current lack of season-long crop improvement courses. Furthermore, the value of short term training was questioned by a number of NARS and in that respect it was noted that ICARDA should ensure that participants in the same course have about the same level of basic knowledge. There was a strong demand from Countries in North Africa for more assistance for the training of PhDs and Post-docs to help the countries

to develop the necessary new manpower for strengthening their agricultural research capacity.

### **3.7 Information management**

ICARDA has a very active information management and dissemination programme. Information management is listed by its partners as one of the priority areas for future support by ICARDA. The Regional Coordinators are of the opinion that they generally receive good support from the Communication, Documentation and Information Services. However, access to headquarter databases remains an issue in certain cases where there is no direct e-link to headquarters.

The information services, sources and databases that are currently available are the following:

- tables of contents, literature searches and document delivery;
- training on information management and scientific writing;
- support to the information functions of specific networks;
- a whole range of ICARDA publications;
- technical support to NARS;
- ICARDA web site, which includes also information on the regional programmes; and
- meteorological and GIS data bases.

Some countries feel that certain ICARDA publications are of little technical and scientific value. It was suggested that an annual list of ICARDA publications in scientific journals could be sent to NARS collaborators while offering the opportunity to ask for reprints of the articles of particular interest to them. This would compensate somewhat for the current difficulties of some NARS to have access to international scientific journals.