

ICARDA's Cooperation within the CGIAR: Multilateral SWP/EPs, Challenge Programs, Consortia & Bilateral Cooperation

W. Erskine

Content

1. Introduction
2. Multilateral Cooperation among Centers
 - 2.1 Systemwide and Ecoregional Programs
 - 2.2 Challenge Programs
 - 2.3 Other Consortia (additional to 2.1 and 2.2)
 - 2.4 Communities of practice
3. Additional Bilateral Cooperation among Centers
 - 3.1 Joint positions
 - 3.2 Joint special projects
 - 3.3 Co-location/Shared facilities and platforms
4. Summary of Cooperation by Center focusing on Bilateral links with ICARDA
 - 4.1 Natural Resource-based Centers: CIFOR, ICRAF, IPGRI and IWMI
 - 4.2 Commodity-based Centers: CIMMYT, CIP, ILRI, IRRI, WARDA & WorldFish
 - 4.3 Eco-regional Centers: CIAT, ICARDA, ICRISAT and IITA
 - 4.4 Policy Center: IFPRI
5. Future Perspectives in Summary

1. Introduction

The aim of this paper is to describe the current context of CG Center – Center interaction and at the same time indicate the future perspectives for such collaboration at ICARDA.

After a period of rapid change the CGIAR has now perhaps temporarily stabilized with 15 Centers (where previously there were 16), a Science Council (in lieu of the Technical Advisory Committee (TAC)), a new Challenge Program format (to add to the Systemwide and Eco-regional Programs), and a Systems Office. However, despite these changes Centers remain largely competitive for a finite pool of funds targeted by donors for research for development. Nevertheless there is now a common understanding among CG Centers that many of the most important and intractable problems in research for poverty alleviation can only be solved through collaborative research involving more than one Center. As a result during a retreat in 2004 the Center Directors Committee deliberated a code of conduct to ensure harmonious interactions among Centers.

ICARDA perceives collective action not so much as a goal in itself, but rather as a means to improve efficiency and effectiveness to better serve the Poor in the Dry Areas eco-region. ICARDA, like other Centers, already has extensive cooperation with other Centers through a

variety of formats which may be divided into multilateral cooperation involving several (>2) Centers and additional bilateral Center-Center cooperation. This paper covers 1. Inter-Center Multilateral cooperation; 2. Additional CGIAR bilateral cooperation; 3. Summarizes the status and future prospects of ICARDA's relations with each CG Center; and ends with 4. A Summary of ICARDA's Inter-Center Perspectives.

2. Multilateral Cooperation among Centers

The forms of multilateral cooperation among CG Centers are via:

- Systemwide Programs and Eco-regional Programs (SWP/ERP)
- Challenge Programs (CP)
- Other Consortia
- Communities of Practice

2.1 Systemwide and Ecoregional Programs

In the CGIAR there is currently a total of twelve active Systemwide Programs (SWP) (Table 1) and six active Eco-regional Programs (ERP) (Table 2). ICARDA participates in the following seven Systemwide Programs: Systemwide Genetic Resources Research Programme (SGRP); Systemwide Livestock Program (SLP); Systemwide Program – Integrated Pest Management (SP-IPM); Systemwide Program on Collective Action and Property Rights (CAPRI); Systemwide Program on Participatory Research and Gender Analysis (PRGA); Systemwide Water and Nitrogen Management Program (SWNM); and Systemwide Initiative on Comprehensive Assessment of Water Management (SWIM 2).

Table 1. Active Systemwide Programs indicating ICARDA's current participation (*)

| SWP Title | Convening Center | ICARDA participation |
|---|------------------|----------------------|
| Alternatives to Slash and Burn (ASB) | ICRAF | |
| Collective Action and Property Rights (CAPRI) | IFPRI | * |
| Global Mountain Program (GMP) | CIP | |
| Participatory Research and Gender Analysis (PRGA) | CIAT | * |
| Systemwide Genetic Resources Program (SGRP) | IPGRI | * |
| Strategic Initiative on Urban and Periurban Agriculture (Urban Harvest) | CIP | |
| Systemwide Initiative on HIV/AIDS (SWIHA) | WARDA | |
| Systemwide Initiative on Malaria and Agriculture (SIMA) | IWMI | |
| Systemwide Initiative on Water Management (SWIM 2) | IWMI | * |
| Systemwide Livestock Program (SLP) | ILRI | * |
| Systemwide Program on Integrated Pest Management (SP-IPM) | IITA | * |

ICARDA is the convening Center for the Eco-regional Program: *Collaborative Research Program for Sustainable Agricultural Development in Central Asia and the Caucasus (CAC)*. Through an ICARDA initiative, the ERP for CAC was established in 1998 by a consortium of nine CG Centers (CIMMYT, CIP, ICARDA, ICRISAT, IFPRI, ILRI, IPGRI, ISNAR, and IWMI). IRRI has since joined the ERP. The CAC region consists of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan in Central Asia, and Armenia, Azerbaijan and Georgia in the Caucasus.

The ERP for CAC is organized under the following five broad themes: 1. Productivity of Agricultural Systems, 2. Natural Resource Conservation and Management, 3. Conservation and Evaluation of Genetic Resources, 4. Socioeconomic and Public Policy Research, and 5. Strengthening National Programs. These themes provide the overall framework in which specific projects are developed and implemented in partnership between NARS and CGIAR centers. Each Center finances its own projects.

A Program Facilitation Unit (PFU) has been established in Tashkent, Uzbekistan, hosted by ICARDA's regional office for Central Asia and the Caucasus and staffed by an internationally recruited Unit Head supported by a locally recruited support staff. Of the Centers involved, four have posted staff in the region: ICARDA, IPGRI and IWMI have placed scientific staff in Tashkent. CIMMYT had a program office in Almaty, Kazakhstan which will move to the PFU. The PFU provides logistic support to the scientists involved in the various program activities. Some non-CGIAR centers have recently joined the Consortium – AVDRC, ICBA, GM of UNCCD and the IPM CRSP at MSU.

Table 2. Active Ecoregional Programs indicating ICARDA's current participation (*)

| ERP Title | Convening Center | ICARDA participation |
|--|------------------|----------------------|
| African Highlands Initiative (AHI) | ICRAF | |
| Collaborative Research Program for Sustainable Agricultural Development in Central Asia and the Caucasus (CAC) | ICARDA | * |
| Consortium for the Sustainable Development of the Andean Ecoregion (CONDESAN) | CIP | |
| Desert Margins Program (DMP) | ICRISAT | |
| Rice-Wheat Consortium for the Indo-Gangetic Plains (RWC) | CIMMYT | |
| Consortium for the Sustainable Use of Inland Valley Agroecosystems in Sub-Saharan Africa (IVC) | ICRAF | |

Perspective: ICARDA will continue in its lead role in the ERP for CAC and as a partner in those SWP and ERPs relevant to its mission.

2.2 Challenge Programs

ICARDA is participating in three of the pilot Challenge Programs:

- *CP Water and Food*: ICARDA has approval for four projects in this CP through the competitive grants program and received funding for three of these: two in the Karkeh River Basin, Iran and one in Eritrea within the Nile River Basin.
- *HarvestPlus*: ICARDA is responsible for two projects on the Phase II crops - barley and lentil - to identify germplasm with high concentration of β -carotene, iron and zinc.
- *Generation*: ICARDA is a full member of the CP and is involved in a series of research activities targeted to exploiting new aspects of biotechnology to improve drought tolerance in mandate crops in both competitive and commissioned grant formats.
- *Sub-Saharan Africa*: The pilot learning sites for Year 1 of this CP are in eco-regions outside the non-tropical dry areas, so ICARDA despite being involved in the planning is currently outside this CP.

Perspective: ICARDA will continue to participate in the three pilot CPs. ICARDA with ICRISAT will keep trying to launch a Challenge Program on Desertification, Poverty and Drought in Agriculture (DDPA) (see below). We will join new CP initiatives relevant to our Mission.

2.3 Other Consortia (additional to CPs and SWP/ERPs)

Other CG Consortia (additional to CPs and SWP/ERPs) and Communities of Practice are listed in Table 3. These Other CG Consortia can be further sub-divided into those that ICARDA leads/co-leads and those where it is a partner.

ICARDA was co-convenor with ICRISAT of a Challenge Program pre-proposal on Desertification, Poverty and Drought in Agriculture (DDPA). It was rated as ‘meritorious’ by ExCo but the CP experiment is now limited to the three Pilot CPs and the putative SSA CP. Meanwhile, following a stakeholders’ meeting in August 2002 at ICARDA with support from IFAD and the Global Mechanism (GM) of UNCCD, the DDPA initiative is being pursued in a Consortium mode because of considerable NARS and donor encouragement.

ICARDA leads the Future Harvest Consortium to Rebuild Agriculture in Afghanistan (FHCRAA) involving CIMMYT, CIP, ICRISAT, IFPRI, ILRI, IPGRI, and IWMI; and has formed a similar Consortium to Rebuild Agriculture in Iraq.

Table 3. Listing of CG Consortia (excluding SWP/ERPs and CPs) and Communities of Practice indicating ICARDA’s current participation (*)

| Acronym | Title of Consortium/ Community of Practice | Convening Center(s) | ICARDA particip. |
|----------------|---|-------------------------------|-------------------------|
| CSI | CGIAR Consortium for Spatial Information | CIAT | * |
| G&D | Gender and Diversity Program | All Centers | * |
| INRM | Integrated Natural Resource Management | Centers with NRM | * |
| ICIS | International Crop Information System | Centers with Crop Improvement | * |
| SPIA | Standing Panel for Impact Assessment (SPIA) | All Centers | * |
| INTG | Inter-Centre Training Group | All Centers | * |
| ERA | Ecoregional Alliance | Eco-regional Centers | * |
| FHCRAA | Future Harvest Consortium for Rebuilding Agriculture in Afghanistan | ICARDA | ** |
| DDPA | Desertification, Poverty and Agriculture | ICARDA & ICRISAT | ** |
| FHCRAI | Future Harvest Consortium for Rebuilding Agriculture in Iraq | ICARDA | ** |

Other Consortia with ICARDA as partner include:

Eco-regional Alliance (ERA): CIAT, ICARDA, ICRISAT and IITA are sister CG Centers with non-overlapping (complementary) ecological mandates. As such all are members of the Eco-regional Alliance, a grouping of eco-regional CG Centers, which aims to exploit the commonality in methodology and comparative advantage emanating from natural resource

management and commodity mandates of the eco-regional Centers. ERA tried unsuccessfully to launch a CP on legume improvement.

Perspective: ICARDA is an eco-regional CG Center for Dry Areas. This is a key part of our mandate requiring constant re-affirmation. ICARDA should activate the ERA alliance to further stimulate eco-regional thinking in the CG System.

ICARDA is an active partner in the CGIAR Consortium for Spatial Information (CSI) and CGIAR Consortium for Southern Sudan.

Perspective: ICARDA will participate in those current and future Consortia and Communities of Practice relevant to its Mission.

2.4 Communities of practice

ICARDA is an active partner in several communities of practice such as the Integrated Natural Resource Management working group (INRM-WG); the International Crop Information System (ICIS) group; the Inter-Center Training Group (INTG); Knowledge Management Information Technology Initiative (IT-KM); Gender and Diversity Program (G&D); and the Marketing Group. The term community of practice is used loosely to describe groupings within the CG based on thematic interest irrespective of their reporting lines (CDC; FHAO etc).

Perspective: ICARDA will participate in those current and future Consortia and Communities of Practice relevant to its Mission.

3. Additional Bilateral Cooperation among Centers

Bilateral (CG Center - Center) cooperation additional to multilateral is via:

- Joint positions
- Joint special projects
- Co-location/Shared facilities and platforms

3.1 Joint positions

The Center had a joint appointment with IFPRI on policy and property rights to August 2005 and has an agreement with IFPRI to recruit a new joint appointee. In 2004 ICARDA recruited two joint appointments – one with IWMI on marginal quality water and the other with ILRI on small ruminant health and marketing. ICARDA has a barley breeder posted in CIMMYT to run the ICARDA/CIMMYT barley improvement program for Latin America. In December 2005 ICARDA signed a MoU with CIMMYT for a joint ICARDDA-CIMMYT Wheat Improvement Program in CWANA hosted at ICARDA and run by a jointly appointed Director. Earlier we also had joint research programs and senior scientists at ICARDA on chickpea improvement with ICRISAT. The ICRISAT positions were withdrawn because of core funding shortfalls.

Perspective: We will search for more relevant opportunities for joint funding of other CGIAR scientists e.g. ICRAF on agro-forestry possibilities for Dry Areas. Widening the discussion beyond the CGIAR briefly, as our research agenda has diversified we will also have to look for the secondment of scientists from other organizations to complement our existing staffing (many of the needed complementary disciplines are not to be found within

the CGIAR) – e.g. We had a scientist from CIRAD at ICARDA Tunis for three years to 2004 and at ICARDA Aleppo we are now hosting one CIRAD scientist on Policy and Property Rights and another from JIRCAS, Japan (plus a post-doctoral fellow) on cereal drought tolerance/pre-breeding. This *modus operandi* should increase. For example, we need additional expertise in horticulture and value-added opportunities from such partners as the Asian Vegetable Research and Development Center, Taiwan, CIRAD, France and the University of California (Davis), USA.

3.2 Joint special projects

Joint special projects strengthen cooperation between Centers and often lay the foundation of Inter-Center joint appointments. To give two examples: The IFAD-funded small ruminant health project for NENA with ILRI supports the new ILRI/ICARDA appointment. ICARDA coordinated the implementation of a regional collaborative project on the Conservation and Sustainable Use of Dryland Agrobiodiversity with the NARS of Jordan, Lebanon, Syria and the Palestinian Authority funded by GEF/UNDP, which deepened our interaction with both IPGRI and the ACSAD (Arab Center for Studies of Arid Zones and Dry Lands).

Perspective: With the diminishing availability of core funding, joint special projects with other centers (inside and outside the CGIAR) will become increasingly important as a mechanism to support Inter-Center linkages on an opportunistic/‘as-needed’ basis in addition to the Systemwide and Challenge Programs.

3.3 Co-location and shared facilities/platforms

ICARDA Tel Hadya houses the IPGRI Office in WANA. By virtue of joint scientific positions ICARDA Tel Hadya is also the eco-regional platform for CIMMYT, ILRI, IWMI and IFPRI; while CIMMYT serves as a platform for the ICARDA/CIMMYT Latin America barley program. Several of our sub-regional and national program offices house other Centers’ offices: For example, the ICARDA CAC regional office houses the CGIAR Program Facilitation Unit for CAC in Tashkent, where there is staff from IWMI, IPGRI, CIP and soon CIMMYT. A scientist from GM-UNCCD is also posted in the ICARDA Regional Office in Tashkent and three post-doctoral fellows from the IPM CRSP will join soon. Additionally the PFU houses the regional forum – CACAARI. The ICARDA Office in Kabul houses staff from CIP and formerly staff from IPGRI. In Ankara, Turkey ICARDA shares an office with CIMMYT.

Perspective: As we expand our role as a Knowledge Center/Platform for the Dry Areas eco-region, we aim to be a platform for complementary research and development organizations from both inside and outside the CGIAR.

4. Summary of Cooperation by Center focusing on Bilateral links with ICARDA

The Centers can be categorized by major type:

- Natural Resource-based Centers
- Commodity-based Centers
- Eco-regional Centers
- Policy Center

4.1 Natural Resource-based Centers: CIFOR, ICRAF, IPGRI & IWMI

IWMI: Research on water is a key feature of the Missions of both IWMI and ICARDA. ICARDA has responsibility for on-farm water use efficiency in Dry Areas and IWMI's comparative advantage is at higher scales such as the basin level. ICARDA now links closely with IWMI using specific bilateral arrangements (joint position and co-location in outreach office (see 3.1 & 3.3)), and also multilateral arrangements - System-wide Program (Comprehensive Assessment of Water Management in Agriculture), Challenge Program (Water for Food) and other Consortia.

Perspective: Looking to the future these various vehicles for Inter-Center cooperation, which currently cover a wide range of joint research possibilities, are adequate for deepening our cooperation with IWMI in the foreseeable future.

IPGRI: ICARDA shares a common interest with IPGRI in the conservation and use of the genetic resources of CWANA. Additional to our multilateral cooperation with IPGRI (SGRP), we have cooperation on genetic resources in CWANA through special projects and co-location of staff (see 3.1 & 3.3). We anticipate more cooperation under the Global Diversity Trust.

CIFOR and ICRAF: ICARDA has no purely bilateral cooperation with these Centers. Links with ICRAF should be increased to focus on the important silvicultural component of systems in Dry Areas.

4.2 Commodity-based Centers: CIMMYT, CIP, ILRI, IRRI, WARDA and WorldFish

CIMMYT

CIMMYT has a global mandate for research on wheat improvement while ICARDA has a regional mandate for wheat research for Central and West Asia and North Africa.

From 1996 to 2003 there was a joint CIMMYT/ICARDA wheat improvement program for WANA (later expanded to CWANA - excepting Kazakhstan) based at ICARDA with breeders of spring bread wheat and durum wheat posted by CIMMYT to ICARDA Aleppo and with a program on facultative and winter wheat in Turkey (also with major Turkish cooperation). The CIMMYT wheat breeders at ICARDA Aleppo were unilaterally withdrawn in 2003 and subsequently re-hired by ICARDA for spring bread wheat and durum improvement in CWANA. From 2003 to 2005 the cooperation with CIMMYT on wheat improvement was confined to the facultative and winter wheat program in/with Turkey. Finally, as mentioned above, in December 2005 ICARDA signed a MoU with CIMMYT for a joint ICARDDA-CIMMYT Wheat Improvement Program in CWANA hosted at ICARDA and run by a jointly appointed Director.

Perspective: Within the context of the agreed ICARDA/CIMMYT wheat program, ICARDA looks forward to improved cooperation with CIMMYT on wheat on the basis of our emerging joint wheat strategy to serve the poor in CWANA.

ICARDA has a global mandate for research on the improvement of barley and CIMMYT researches barley for Latin America. ICARDA has a barley breeder posted at CIMMYT Mexico who runs the ICARDA/CIMMYT barley improvement program for Latin America within the framework of ICARDA's global barley program. ICARDA is reviewing the options for location of its Latin America barley project.

Regarding multilateral cooperation ICARDA is an active member of the Challenge Program (Generation) and CIMMYT is an active member of both the CAC and Afghan Consortia.

Concurrently discussion is underway between CIMMYT and IRRI on a joint agenda.

CIP with its mandate for potato and sweet potato research is an active member of both the CAC Consortium and the Afghan Consortium (FHCRAA). CIP convenes the Systemwide Program – Integrated Pest Management (SP-IPM) in which ICARDA is an active member.

With ILRI, ICARDA shares a joint animal health position based in Aleppo and associated project and ICARDA participates in the Systemwide Livestock Program (SLP) primarily on issues related to animal feed.

IRRI, the Rice Center, is a member of the CAC Consortium. ICARDA works with IRRI on the development of the International Crops Information System (ICIS).

ICARDA has no purely bilateral cooperation with either WARDA with its focus on Rice in Africa or WorldFish with its interest in Marine Fishery.

4.3 Eco-regional Centers: CIAT, ICARDA, ICRISAT and IITA

CIAT, ICARDA, ICRISAT and IITA are sister eco-regional CG Centers with non-overlapping ecological mandates. As such they are all members of the Eco-regional Alliance (see 2.3).

ICRISAT

Multilateral: ICRISAT is an active member of the CAC Consortium and the Afghan Consortium (FHCRAA). ICARDA recently joined a Consortium led by ICRISAT to rehabilitate agriculture in southern Sudan.

The International Crops Research Institute for Semi-arid Tropics (ICRISAT) has both an eco-regional mandate and a crop mandate. The eco-regional mandate of ICRISAT is for the semi-arid tropics which is largely complementary to ICARDA's eco-regional mandate for non-tropical dry areas. The DDPA co-convened by ICARDA and ICRISAT has been discussed above.

ICRISAT has a global mandate for chickpea research whereas ICARDA has a regional mandate for chickpea improvement. In the early years we ran an ICARDA/ICRISAT improvement program focused on kabuli chickpea based on the placement of ICRISAT senior scientists (pathologist and breeder) at ICARDA. ICRISAT's support to the chickpea program terminated in 1996. Although ICARDA and ICRISAT won the CGIAR King Baudouin Award in 2002", since 2000 our chickpea cooperation has been 'spotty' primarily because of ICRISAT's reduced overall effort in chickpea improvement.

Perspective: Nonetheless considerable scope exists to build on our past partnership to jointly submit project proposals for restricted project funding on chickpea improvement and legume diversification on an opportunistic basis. For example, we have joint activities on genetic characterization of a chickpea core collection within the 'Generation' Challenge Program and we recently submitted a joint project on diversification through legumes in South Asia to

IFAD with ICRISAT and AVRDC through APAARI under the Cereals and Legumes Asia Network (CLAN) umbrella.

Perspective: ICARDA will continue on an opportunistic bilateral basis to work with ICRISAT on kabuli chickpea improvement and legume diversification. ICARDA and ICRISAT will continue to explore ways to run the DDPA either as a Challenge Program or a Consortium in order to exploit the synergy of our respective experience: ICRISAT in the semi-arid tropics and ICARDA in non-tropical dry areas. These bilateral and multilateral vehicles of operation are adequate for future ICRISAT-ICARDA interaction.

CIAT: ICARDA has multilateral cooperation with CIAT through the Systemwide Program on Participatory Research and Gender Analysis (PRGA); the CGIAR Consortium for Spatial Information (CSI) and the Challenge Program – HarvestPlus. We are bilateral partners with CIAT in the Karkeh River Basin projects of the CP – Water for Food.

ICARDA has no purely bilateral cooperation with IITA.

4.4 Policy Center: IFPRI

With IFPRI, ICARDA has a shared scientific position (currently vacant) and associated joint projects notably the Mashreq and Maghreb Project. ICARDA participates in the Systemwide Program on Collective Action and Property Rights (CAPRI) and the Challenge Program (HarvestPlus)

5. Summary of Perspectives

As mentioned at the start ICARDA sees collective action as a way to improve effectiveness and efficiency in serving the Poor in the Dry Areas eco-region. Collective action has several benefits such as:

- Enhanced knowledge sharing among partners
- Improved ability to tackle complex problems
- Broader dissemination of global public goods
- Development of role of ICARDA as a regional knowledge platform
- Avoid repetition and use available resources more efficiently based on the Center's comparative advantage

Multilateral Cooperation among Centers:

- Regarding Systemwide and Ecoregional Programs, ICARDA will continue in its lead role in the ERP for CAC and as a partner in those SWP and ERPs relevant to its mission.
- As concerns Challenge Programs, ICARDA will continue to participate in the three pilot CPs. ICARDA with ICRISAT will keep trying to launch a Challenge Program on Desertification, Poverty and Drought in Agriculture (DDPA). We will join new CP initiatives relevant to our Mission.
- Other Consortia and Communities of Practice: Regarding the Eco-regional Alliance as ICARDA's eco-regionality in Dry Areas is a key part of its mandate, ICARDA should activate the ERA alliance to further stimulate eco-regional thinking in the CG System. ICARDA will participate in those current and future Consortia and Communities of Practice relevant to its Mission.

Additional Bilateral Cooperation among Centers:

- Regarding joint positions, ICARDA will search for additional relevant opportunities for joint funding of other CGIAR scientists e.g. ICRAF on agro-forestry possibilities for Dry Areas. Widening the discussion beyond the CGIAR, as our research agenda has diversified we will also have to increasingly search for the secondment of scientists from other organizations to complement our existing staffing (many of the needed complementary disciplines are not found within the CGIAR). For example, we need additional expertise in horticulture and value-added opportunities from such partners as the Asian Vegetable Research and Development Center (AVRDC), Taiwan; CIRAD (France) and the University of California (Davis), USA. This *modus operandi* should increase.
- As concerns joint special projects, with the diminishing availability of core funding, joint special projects with other centers (inside and outside the CGIAR) will become increasingly important as a mechanism to support Inter-Center linkages on an opportunistic/as-needed basis to supplement the Systemwide and Challenge Programs.
- Regarding co-location and shared facilities/platforms, this is anticipated to expand as our role as a Knowledge Center for the Dry Areas eco-region grows, because we aim to be a platform for complementary research and development organizations from both inside and outside the CGIAR for the eco-region.

Perspectives for ICARDA in cooperation with Centers with related mandates:

- IWMI: Looking to the future the current array of possible *modus operandi* for Inter-Center cooperation, which currently covers a wide range of joint research possibilities, is adequate to deepen our cooperation with IWMI in the foreseeable future.
- CIMMYT: Within the context of the recently agreed ICARDA/CIMMYT wheat program, ICARDA will have improved cooperation with CIMMYT on wheat on the basis of our emerging wheat strategy to serve the poor in CWANA. While the ICARDA/CIMMYT barley improvement program for Latin America continues within the framework of ICARDA's global barley program, ICARDA is reviewing options for location of its Latin America barley project.
- ICRISAT: ICARDA will continue on an opportunistic bilateral basis to work with ICRISAT on kabuli chickpea improvement and legume diversification. ICARDA and ICRISAT will continue to explore ways to run the DDPA either as a Challenge Program or a Consortium in order to exploit the synergy of our respective experience: ICRISAT in the semi-arid tropics and ICARDA in non-tropical dry areas. These bilateral and multilateral vehicles of operation are adequate for future ICRISAT-ICARDA interaction.