



CAC NEWS

CGIAR Collaborative Research Program for Sustainable Agricultural Development
in Central Asia and the Caucasus (CAC)

No. 17

July-September, 2003

Consortium
Members



ARMENIA * AZERBAIJAN * GEORGIA

* KAZAKHSTAN * KYRGYZSTAN * TAJIKISTAN * TURKMENISTAN * UZBEKISTAN

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Message from Acad. Asad Musaev Co-Chairperson, CGIAR Program Steering Committee

Dear colleagues,

It is a great honor for me to extend my greetings to all of you through this Newsletter, which keeps us abreast of the major research developments and activities carried out under the CGIAR Collaborative Program for Sustainable Agricultural Development in the CAC region. From its very beginning, this Program was based on priority issues in agricultural research identified through several consultation meetings. Most of these issues are largely associated with the difficulties of transition toward market economy, faced by almost all countries of the region.



First acquaintance with the CGIAR system had been strongly associated with ICARDA, as its scientists were the first to start research collaboration in Azerbaijan. After the first few meetings, we got convinced that collaboration with CGIAR would help us solve many important issues in different fields of agricultural research. I would like to specifically emphasize that effective coordination mechanisms, established by the CGIAR Program Facilitation Unit in Tashkent, helped in restoring the linkages among NARS of the region. Activities on germplasm improvement and seed production, genetic resource conservation, feed and livestock production, natural resource management and human capacity building were initiated. In a short period, this Program has become critically important for integration of our research results and for moving forward through established partnership.

Now that the scientists of the region have got an access to the world scientific knowledge and experience, they are able to use international methodologies in their research work. Joint efforts are being undertaken on developing and adoption of new varieties of cereals and legumes as well as improved technologies of natural resource management.

I am pretty sure that the activities carried out under this Program have vital importance for Azerbaijan and the CAC region as a whole. In this connection, I would like to thank all the donor agencies supporting various projects, under our Collaborative Program, that enhance research activities and strengthen human and institutional capacities through specialized as well as English training courses, and through supply of much needed field, laboratory and computer equipment.

There is no doubt that this Collaborative Program is important and hence must be further continued. In my opinion, more emphasis is to be laid on these issues: assessment of available crop varieties in the region, identification and development of drought and salt tolerant, early maturing and disease resistant varieties; range rehabilitation and improved feed production; soil salinity and erosion management; increased water use efficiency; and improved livestock management.

The progress made so far by the Program indicates its effectiveness as well as high importance. I am sure that our collaboration will get further strengthened and its results will contribute to improved livelihood of people in the region through increased farmers' income, better food security and environmental sustainability.

Acad. Asad Musaev, Director General
Agrarian Sciences Center of Azerbaijan.

SEVENTH ICARDA-CAC REGIONAL COORDINATION MEETING HELD

Seventh ICARDA - CAC Regional Coordination meeting (RCM) was held in Yerevan, Armenia, from 26 - 28 September, 2003. The meeting was hosted by the Ministry of Agriculture of the Republic of Armenia. In all, 45 participants attended the meeting, including the Heads of seven NARS from the CAC region, ICARDA scientists, representatives of other international and donor organizations as well as NGOs. The Inaugural Session was chaired by Prof. Dr. Adel El-Beltagy, Director General, ICARDA and co-chaired by Dr. Samvel Avetisyan, First Deputy Minister of Agriculture of Armenia. Prof. Dr. El-Beltagy greeted the participants and thanked the chief guest, H.E. Mr. Vache Terteryan, First Deputy Minister of Regional Coordination of Armenia for gracing the occasion. Prof. Dr. El-Beltagy briefed the audience on ICARDA's activities in different regions of the world, emphasizing the efforts undertaken in the CAC region.

(Continued on page 2)



Participants of the Seventh ICARDA-CAC Regional
Coordination Meeting, Yerevan, Armenia

Important Events



HE Mr. V. Terteryan addressing the participants region, stressing that since then, a significant progress has been made. Prof. Dr. El-Beltagy expressed his satisfaction regarding partnership, which need to be further strengthened through joint efforts on poverty alleviation and agricultural productivity increase. He also highlighted that the CAC region offers tremendous potential for agricultural growth and development, and once again, reaffirmed ICARDA's commitments to the idea of developing agricultural research in the CAC region.

Mr. V. Terteryan welcomed the participants on behalf of the Government of Armenia. He highly appreciated the support provided by ICARDA to the agricultural research system in his country and expressed the hope for further strengthening of on-going collaboration.

Presentation of the Annual Report was made by Dr. Raj Paroda, Regional Coordinator, ICARDA-CAC. He highlighted the achievements in different areas of collaborative research, including genetic resource conservation, germplasm enhancement and natural resource management as well as human capacity building. He also emphasized on the new initiatives undertaken by ICARDA to broaden the partnership with various research institutes in the region as well as international organizations.

The Heads of NARS made their respective country reports on the progress made during 2002-2003 cropping season. They were very appreciative of the ICARDA's support in the area of human resource development, stressing the importance of both specialized and English language training courses for the scientists of the region.

During the scientific session on 27 September, nine presentations were made by ICARDA scientists and other participants, including Drs. J. Valkoun, M. Mosaad, R. Malhotra, A. El-Moneim, A. Van Gastel, S. Ceccarelli, M. Suleimenov, Ms. B. Hartwell and Mr. Y. Azhigaliev.

Discussions were held in two groups: Germplasm

He brought back to the memory of the participants the first workshop, which was held in Tashkent in 1995 to identify the agricultural research needs of the

Enhancement Group and Soil and Water Management Group. The results of collaborative activities carried out in 2002-2003 crop season and the proposed work plan for the 2003-2004 were discussed and finalized.

Two separate special sessions on developing project proposals on Mountain Agriculture and Biodiversity Management were held on 28 September under the chairmanship of Prof. Dr. A. El-Beltagy and Dr. M. Saxena, respectively. Drs. F. Turkelboom and J. Valkoun introduced the concept papers, followed by discussion on further action to be taken in order to move forward with these proposals.

As an outcome of the meeting, all the participants agreed that there is a need for strengthening the activities on germplasm enhancement especially emphasizing the importance of the seed production and technology transfer components. It was also agreed to develop two separate proposals on Mountain Agriculture for Kyrgyzstan and Tajikistan in Central Asia and Armenia and Georgia in the Caucasus to be submitted to GEF. NARS Heads expressed their satisfaction on a very fruitful meeting and appreciated the excellent support received from ICARDA.

At the end, while thanking the host Government for excellent arrangements, Prof. Dr. Adel El-Beltagy expressed his satisfaction regarding the outcome of the meeting and assured the participants of ICARDA's best possible support to strengthen the national agricultural research systems in the CAC region.



Participants attending the meeting

MEETING WITH THE FIRST DEPUTY PRIME MINISTER OF ARMENIA

On 27 September, 2003, Prof. Dr. Adel El-Beltagy, Director General, ICARDA, met with the First Deputy Prime Minister of Armenia H.E. Mr. Manuk Tokuzyan in Yerevan. H.E. Mr. Tokuzyan welcomed Prof. Dr. El-Beltagy, emphasizing that the ancient land of Armenia is open for collaboration with international organizations. He was particularly



H.E. Mr. M. Tokuzyan (third from the right) receiving DG of ICARDA

appreciative of the noble mission being accomplished by ICARDA, especially with regard to the support provided to the national agricultural research system. He also stressed on the importance of such support in view of the recent disaster faced by the Armenian people, particularly those living in rural areas.

In response, Prof. Dr. El-Beltagy thanked Mr. Tokuzyan for sparing his valuable time. He also congratulated the Government of Armenia with recent progress achieved by the national economy, which was reflected in the highest GDP growth (14.5%) during the first half of 2003. Prof. Dr. El-Beltagy urged him for further support to agricultural research, highlighting that such an investment can bring very high returns. Finally, he assured him of ICARDA's commitment to further strengthen existing collaboration with the Ministry of Agriculture of Armenia.

IWMI DIRECTOR GENERAL VISITS UZBEKISTAN



Prof. Rijsberman addressing the scientists

Professor Frank Rijsberman, Director General, International Water Management Institute (IWMI) visited Uzbekistan from 28 September to 1 October, 2003. He had an intensive visit including field trips and meetings

around 50 scientists and officials at the Tashkent Institute of Irrigation and Agriculture Mechanization Engineers (TIAME) on subject entitled “Water, Food and Environmental Challenges in the 21st Century and IWMI in Central Asia”.

Later, he met with H.E. Prof. Abduvokhid Juraev, Minister of Agriculture and Water Management of Uzbekistan, and his two deputies, Drs. Jalalov and Nurmatov. Prof. Juraev was highly appreciative of the role of IWMI, ICARDA and other CG Centers in the region and desired a group of Uzbek water specialists to visit IWMI Headquarters and research sites in Sri Lanka and India to learn from successful examples in water management. Prof. Rijsberman assured his best possible support for strengthening the existing collaboration between IWMI and the Government of Uzbekistan.

with representatives of local authorities of Water Management as well as International Organizations. During his visit to Fergana Province, Prof. Rijsberman visited research sites of IWMI and ICARDA projects. He also went to see a new Water Users Association (WUA) “Akbarabad”, established under an SDC funded project on “Integrated water resource management in Fergana Valley”, and got familiarized with the training and extension materials that are now readily available to the farming community.

In Tashkent, Prof. Rijsberman had a meeting with Mr. Johan Gely, local representative of SDC, and proposed that the project should carry out a farming system analysis on livelihood and risk management strategies. He also met all the scientists of ICARDA, IPGRI, IWMI and PFU and listened to the presentation of Dr. Raj Paroda, Head, CGIAR-PFU for CAC on the overall progress made by the Program. Mr. Mehmood UI Hassan, IWMI and Ms. Muhabbat Turdieva, IPGRI also presented their achievements in the region.

On 30 September, 2003, Prof. Rijsberman addressed



Meeting with the Minister of Agriculture and Water Management of Uzbekistan

Research Highlights

**GERMPLASM ENHANCEMENT
BARLEY**

COLLABORATIVE BARLEY IMPROVEMENT IN CAC

Over the last four years, barley breeders in CAC have identified promising lines, which have been distributed by ICARDA. Many of them have been widely used in breeding programs, as sources of valuable traits and qualities. An example is the spring barley variety “Mamluk”. Identified as a result of collaboration between ICARDA and the Krasnodar Research Institute, Russia, “Mamluk” was officially released in Armenia in 2000. The Armenian Government has purchased 1,000 tons of seeds of this variety from Russia for the fast dissemination to farmers.

Over the last two years, Armenian barley breeders have selected four promising lines from ICARDA nurseries. These lines were tested in demonstration nurseries and in on-farm trials. The seed was planted for further multiplication.

Azerbaijan breeders have identified a promising new variety “Bakharly” from ICARDA nurseries. The variety has, over the last three years, outyielded the local check (“Siklon”) by 35-40%. Based on the results of these three-year trials, “Bakharly” was submitted for release to the State Variety Testing Commission (SVTC) in 2001. In Azerbaijan, breeders produced 1.5 tons of “Bakharly” seed, all of which was planted in the fall of 2002 for on-farm testing and seed multiplication.

Kazakhstan is the largest producer of barley in the CAC region. Most of it is in fact spring barley, and is grown, for use as feed, in the semi-arid climate of the steppes under rainfed conditions (250- 300 mm per year).

In northern Kazakhstan, the rains normally occur in the spring. However, this is followed by periods of drought, leading to severe soil dryness to a depth of 7-8 cm. Rains begin again in

the area in July. To avoid planting in dry soil, and also to protect seeds from drought stress during the boot stage, it is recommended that barley be sown at a depth of 8-10 cm, either in mid-May or at the end of May. Two selected lines of spring barley (“Batir-1” and “Batir-2”) have been found to be well adapted to conditions in northern Kazakhstan. During three years of testing, these lines yielded 20-30% more than the control (“Akmolinskaya-25”). Based on the results of these trials, the two varieties were submitted to the SVTC in 2002. Another new spring barley variety (“Birlik-1”), also for use in northern Kazakhstan, was selected from ICARDA nurseries in 2002. This variety outyielded the control variety (“Akmolinskaya-25”) by 90-95%, and yielded 5.6 t/ha during the last two years of testing. Four hundred kilograms of seed has become available for on-farm testing and multiplication.

In southern Kazakhstan, winter barley is grown, and the Krasniy Vodopad Breeding Station is responsible for the improvement of this crop. Three winter barley varieties (Aziret-114, Sultan-118 and Ortai-111) were selected from ICARDA nurseries for testing in this region. Of the selected lines, Ortai-111 (CWB117-77-9-7//Hml-02/ArabiAbiad*2) demonstrated a high level of resistance to diseases, pests and lodging, and was found to be cold tolerant. It also produces large kernels, with a 1000-kernel weight of 52 g. From each line, 200 kg of available seed was planted in the fall 2002, for the purposes of seed multiplication and on-farm testing. Efforts made under the collaborative barley breeding program undertaken by ICARDA and Kyrgyzstan have also resulted in the identification of new promising lines of spring and winter barley. *(Continued on page 4)*

Research Highlights

"Adel" (MV46/Mazurka/3/Roho//Alger/Ceres), the best line identified, outyielded the standard check "Osnova" by 20-25% in advanced yield trials. The 400 kg of seed available from this line will be tested in a wide range of environments in order to assess its adaptation.

In Turkmenistan, breeders selected three promising barley lines (Sonata, Alpha/Durra and Lignee-131) in 2000/01, from ICARDA nurseries that were suitable for local conditions. Selection was based on the results of trials conducted in previous years. Over the last two years, these lines have shown advantages in terms of disease resistance, heat and drought tolerance, and productivity. Available seed from these barley lines was then planted for seed multiplication and testing in on-farm trials (Sonata, 0.18 ha; Alpha/Durra, 0.29 ha; and Lignee-131, 0.14 ha).

Uzbekistan's main breeding center for the improvement

of barley under rainfed conditions is Galla-Aral Branch of the Andijan Research Institute of Grain. From ICARDA's nurseries, breeders from Galla-Aral identified three lines of barley for use under rainfed conditions: Arizona 5908/Aths//Avt, 7028/2759/3/69-82//Ds/Apro/4/OP/Zy//Alger/Union 385-2-2 and Arar/Lignee527//Arar/Rhn. These lines demonstrated some advantages, in terms of disease resistance and heat and drought tolerance. They also outyielded the local check variety ("Lalmikor") by 60-65%. Three other lines (GkOmega /3/Roho/Masurka//ICB-103020, 73TH/105//E10BulkCI7321/3/CWB117-5-9-5 and Wieselbuger/Ahor1303-61//Ste/ Antares, from IWBO02) were also selected for use in irrigated areas, where these lines outyielded the local check ("Mavlon") by 7-10%. Available seed from promising lines (3-5 kg per line) have been planted for further multiplication.

(Source: ICARDA Annual Report 2002)

INTEGRATED PEST MANAGEMENT

WHEAT DISEASE SURVEY IN NORTHERN KAZAKHSTAN AND SIBERIA

Spring wheat disease survey in Northern Kazakhstan and Siberia was conducted in the framework of the GTZ-CIMMYT Seed Network Project from 3-12 August, 2003 with the objective to evaluate the distribution and severity of the main foliar diseases in wheat. The survey team consisted of Dr. M. Koishibayev, Kazakh Research Institute of Crop Protection, Dr. Y. Zelenskiy, Kazakh Research Center of Grain Farming, Dr. H. Maraite, Pathologist, Catholic University of Leuven, Belgium, Dr. E. Diveiller, Pathologist, CIMMYT-Nepal, Dr. Bernd Pett, Pathologist, GTZ-CIMMYT-DED Project in Tajikistan and Dr. A. Morgounov, CIMMYT Regional Office in Almaty. The survey covered 3600 km following the route Karagandy-Astana-Pavlodar-Omsk (Russia)- Petropavlovsk- Kostanay-Karabalyk.

This survey revealed that the overall status of spring wheat is variable this year. Due to heavy rains in spring, some producers were not able to plant in time. Late planting is often associated with the risk of inadequate rainfall and cold weather during the important growth phases of wheat. The survey identified leaf rust and *Septoria* as main prevailing diseases this year. The survey team laid special emphasis on Tan Spot (*Pyrenofora tritici-repentis*), which causes severe yield losses and has similar symptoms to those of *Septoria*. The samples of leaves were collected from more than 70 sites and were sent to

the Catholic University of Leuven, where the pathogens will be isolated and identified. It is anticipated that a scientist from Kazakhstan will go to Belgium to work on identification of disease pathotypes and reaction of Kazakh varieties on the pathogen population.

The survey also addressed the issues of disease resistance of the varieties cultivated in Northern Kazakhstan and Siberia. It was observed that, in general, all the cultivated varieties are susceptible to leaf rust and other diseases, and, therefore, future activities should focus on development and promotion of resistant germplasm.

(Source: Dr. Alexey Morgounov, CIMMYT-Almaty)



Drs. E. Diveiller and M. Koishibayev inspecting wheat fields

SURVEY OF INSECT PESTS

Dr. Moustafa El-Bouhssini, Entomologist, ICARDA conducted survey of insect pests in Kazakhstan, Kyrgyzstan and Uzbekistan. In Kazakhstan, survey activities covered Almaty, Taldykourgan and Taraz areas. As was observed in the past, infestation by Thrips was heavy on spring barley. Also, Russian wheat aphid was observed on spring barley, which was just at the tillering stage. In Taldykorgan area, he noticed heavy infestation of greenbug. Sunn Pest infestation was light in the surveyed area, and the highest number of Sunn Pest was found in Sharab and

Triskolov districts with 1-2 nymphs/m².

In Uzbekistan, survey was conducted in Zangata, Syr-Darya, Gizzak, Galaaral and Samarkand areas. Sunn Pest infestation was quite significant (with 2-4 nymphs/m²) in all these areas, except for Galaaral. In Galaaral, however, as in previous years, considerable infestation of CLB was observed, causing complete damage of some bread wheat and barley lines. He also found quite heavy leaf miner infestation on winter-sown chickpea.

(Source: Dr. Moustafa Bouhssini, ICARDA, Aleppo)



Mrs. Venera Junusova evaluating the CLB nursery

CEREAL LEAF BEETLE NURSERY

Dr. ElBouhssini visited the Cereal Leaf Beetle (CLB) nursery, located at Jal Experimental Station in Kyrgyzstan. It is the first nursery in

CWANA region for the evaluation of resistance to CLB. Presently, the nursery possesses about 3,580 accessions of bread wheat, of which 80 lines were planted during 2002-2003. Dr. El-Bouhssini, together with Mrs. Venera Junusova, Wheat Breeder, Kyrgyzstan have selected 64 lines for further testing in Kazakhstan and Uzbekistan.

(Source: Dr. Moustafa Bouhssini, ICARDA, Aleppo)

CEREAL DISEASES IN CAC

Surveys of barley and wheat diseases were conducted in Central Asia and the Caucasus (CAC) over the past four years. The surveys covered four countries (Azerbaijan, Uzbekistan, Kyrgyzstan and Kazakhstan), where cereals are of major importance. The primary diseases of wheat were yellow rust, tan spot and septoria leaf blotch. Other less prevalent diseases on this crop were leaf rust, common bunt, scab, and powdery mildew. The average incidence of these diseases varied according to the surveyed zone. Yellow rust (*Puccinia striiformis fsp. tritici*) continues to be the most spread and most important bread wheat disease in Central Asia. The survey in Kazakhstan revealed possible movement of yellow rust from south to north as the wide maturity range of the wheat crop would allow survival of the fungal spores. Late appearance of leaf rust in Uzbekistan causes damage in certain areas in

Tashkent, Fergana, and Samarkand regions. Another rapidly evolving disease on both durum and bread wheat is the tan spot disease (*Pyrenophora tritici repentis*) that is basically found in all fields that were devoted to the common wheat cropping system practiced in CAC countries that is succession of spring and winter wheat in a fallow rotation. Tan spot was severe in most farmers' fields in Azerbaijan, Kyrgyzstan and Kazakhstan. Leaf rust was important in Azerbaijan and Uzbekistan in 2002. In Azerbaijan, common bunt was a problem in many wheat-growing areas and a high *Fusarium* infection was observed in Zaqatala Region. For wheat, it is rather common to find a field with more than three diseases at the same time. Table 1 summarizes the disease distribution and their relative importance in CAC countries.

Country-Location	Wheat diseases*						
	Yellow rust	Tan spot	Septoria	Common bunt	Leaf rust	Powdery mildew	Scab
Azerbaijan
Kazakhstan	
Kyrgyzstan
Uzbekistan	

*Obtained on the basis of average incidence per zone: low incidence (.), medium incidence (..) and high incidence (...).

(Source: Dr. Amor Yahyaoui, ICARDA, Aleppo)

GROUNDNUT

PROMISING VARIETIES IDENTIFIED

Dr. Ana Gulbani, Groundnut Specialist, Georgia, who was trained at ICRISAT in groundnut breeding in 2002, evaluated the trials, comprising 48 accessions and identified 5 promising varieties (ICGV-94214, ICGV-95165, ICGV-95172, ICGV-96108 and ICGV-96110), which are early

maturing, high-yielding and having high oil content.

In August, 2003, ICRISAT also supplied to Georgia one set each of the Ninth International Confectionery Groundnut Varietal Trial (IX ICGVT) and the Ninth International Medium-duration Groundnut Varietal Trial (SB)[IX IMGVT(SB)].

CONSERVATION AND EVALUATION OF PLANT GENETIC RESOURCES

COLLECTION MISSIONS IN ARMENIA AND TAJIKISTAN



Participants of the collection mission in Armenia

In collaboration with the Ministry of Agriculture of Armenia, the Tajik Academy of Agricultural Sciences and the Vavilov Research Institute (VIR), ICARDA organized two

collection missions in Armenia and Tajikistan in July-August, 2003. The collection mission in Armenia was supported by the Australian Center for International Agricultural Research (ACIAR) and ICARDA, whereas the expedition in Tajikistan was jointly funded by ACIAR and the United States Department of Agriculture (USDA) with contribution from the Grains Research and Development Corporation of Australia (GRDC). Also, specialists from CIMMYT and the Uzbek Research Institute of Botany participated in the collection mission in Tajikistan. Total number of accessions collected were 364 in Armenia and 318 in Tajikistan. The collected germplasm is being kept by the host country and stored "in-trust" in ICARDA's gene bank, providing safety duplication.

WORKSHOP ON PGR DATA MANAGEMENT

Mr. Jan Konopka, Documentation Specialist from ICARDA-GRU, Aleppo, Syria visited Azerbaijan, Armenia and Georgia from 28 July to 8 August, 2003 with a purpose to conduct training on the last updated version of ICARDA/CAC database to the members of PGR Units and specialists from other research institutes. Following this, two documentation specialists (Mrs. Natalya Rukhkyan, Armenia and Ms. Tamriko Jinjikhadze, Georgia) visited Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan from 10-31 August to conduct similar training. The new version has been installed in all countries, except Turkmenistan, where the required training will be provided soon by Mr. Faizulla Abdullaev, Documentation Specialist from the Uzbek Research Institute of Plant Industry (UzRIPI), Uzbekistan.



Members of the Uzbek PGR Unit being trained

Research Highlights

STRENGTHENING THE PGR CENTERS

- ▶ Since the establishment of the Genetic Resource Center in Tajikistan, PFU and ICARDA have provided support for upgrading the facilities at the Center. In particular, 10,000 seed containers and electronic weighing scale have been installed. Also, plans are under way to have a walk-in cold storage chamber for the conservation of genetic resources.
- ▶ The Uzbek Gene Bank facility, of which the renovation was supported by USDA, ICARDA and IPGRI in 2002, has come up exceedingly well and now looks quite modern and functional.
- ▶ Catalytic support has been provided to Georgia for the renovation of three rooms so that Genetic Resource Team along with computers provided earlier could be housed at the Georgian Research Institute of Farming. Also plans have been finalized for the cold storage facility to house 5,000 accessions.
- ▶ Support for creating the Kyrgyz Plant Genetic Resources Center has been provided. As many as 5,000 seed containers and an electronic weighing scale have been added to the Center. Cold storage facilities and shelves for seed samples are now being installed.

POLICY MAKERS CATALYZED

President of Uzbekistan has recently approved a proposal for the renovation of three germplasm storage facilities at the Uzbek Cotton Breeding Research Institute, the Research Institute of Genetics and Experimental Biology of Plants and the Andijan Research Institute of Grain and Legume Crops. For each of these institutes, about US \$ 100,000 has been allocated for renovation activities under the PL 480 grant through United States Department of Agriculture (USDA), for which Dr. Raj Paroda has been requested again to provide technical backstopping.

APPRECIATION RECEIVED

In a letter to Dr. Raj Paroda, Dr. F. Khodjiev, Director General, the Uzbek Research Institute of Plant Industry (UZRIPI) has expressed, on behalf of his staff, appreciation of the continuous support received from the CGIAR Program for CAC for the renovation of National Gene Bank at the Institute and also for human resource development.

NATURAL RESOURCE CONSERVATION AND MANAGEMENT

IWMI PROJECT IN FERGANA)

This project is being implemented in the Fergana Valley by IWMI in collaboration with the Scientific Information Center of the Interstate Commission on Water Coordination (SIC-ICWC) and the Ministries of Agriculture and Water Resources of Tajikistan, Kyrgyzstan, and Uzbekistan. During July-September, 2003, IWMI launched three field teams to work with the pilot Water Users Associations (WUAs). A baseline survey of the three pilot WUAs has been carried out. Presently, the field teams are working on improving the governing mechanism of these WUAs and identifying the

training needs of their staff and members. Also, they are evaluating a number of pilot plots to select one demonstration field in WUA "Zarafshan", Sogd Province of Tajikistan, where the results of precision land leveling on water and land productivity will be tested.

SIC carried out analysis of the existing policies regarding water disputes and their resolution. Based on this analysis and other materials, in November, 2003, IWMI will organize a training on dispute resolution mechanisms for the members of Dispute Resolution Committees of WUAs.

(Source: Mr. M. Ul Hassan, IWMI-Tashkent)

Strengthening of NARS

NEW IFPRI INITIATIVE

IFPRI conducted research on addressing poverty and food security in the Central Asian countries. Based on the secondary sources of existing available data for countries such as Kyrgyzstan, Tajikistan, and Kazakhstan, a comprehensive report on "Poverty in Central Asia: Policy Reforms and Options" was prepared. The paper is currently being reviewed for further update. Drs. Suresh Babu and Valerie

Rhoe participated in the International Association of Agricultural Economists conference in Durban on 18-22 August, 2003, presenting a paper entitled "Economic Reforms and Poverty Alleviation in Central Asia: Case Study of Tajikistan." IFPRI also plans to develop a comprehensive approach to policy analysis and capacity strengthening in the Central Asia region.

(Source: Dr. S. Babu, IFPRI)

ISNAR PREPARING AN ICT PROJECT FOR GEORGIA

Drs. T. Temel and A. Maru from ISNAR are working with Georgian Academy of Agricultural Sciences (GAAS) to prepare a project proposal on the Information Communication Technology infrastructure and use in agricultural research in Georgia to be funded by FAO. The objective of the project is to assess the needs of national agriculture research institutions and their partners for innovative and efficient information and communication systems in Georgia. It will be achieved through assessing the availability of local and relevant international information necessary for the development of improved national agricultural research capacity; compiling an inventory of existing and preferred communication tools, channels, and actors; assessing the strengths, potentials, and constraints of the present information

and communication capacities and policies in research and knowledge transfer; and identifying potential partners for the development of solutions, including already active or interested donors.

It is suggested to set up an Information Center for Horticulture, Viticulture and Wine Making at the GAAS with support from TECHINFORMI. This Center should organize information related to these topics and, in future, be an agricultural library with a "virtual", on-line access component. The project activities will also include generation of quality human resource with appropriate computer use and foreign language skills for horticulture, viticulture and wine making. The State Agrarian University will need to strengthen its ICT infrastructure and information base to achieve this.

(Source: Dr. T. Tugrul, ISNAR)

CGIAR PROGRAM APPRECIATED

“The CGIAR Program for Sustainable Agricultural Development in Central Asia and the Caucasus is highly important. It is contributing towards rational use of natural and economic potential of the region, improved food security and alleviating poverty. We will extend our full support for the success of our cooperation with CGIAR.”

H.E. Prof. Abduvokhid Juraev, Minister of Agriculture and Water Management of the Republic of Uzbekistan



H.E. Prof. Juraev (center) with the participants of the Conference

CONFERENCE ON LIVESTOCK DEVELOPMENT

Regional Conference on Policies and Technology Options for Livestock Development in Central Asia and the Caucasus was held in Tashkent from 4-5 October, 2003. The objective of the conference was to overview the research activities undertaken during the first phase of the IFAD funded project during 1999-2002 on Integrated Feed and Livestock Production in the Steppes of Central Asia and to discuss future perspectives for livestock development policies as well as technology adoption issues. In all, 30 participants attended the conference, including representatives of the Ministries of Agriculture from CAC countries, National Coordinators, principal investigators both from ICARDA HQ and NARS as well as representatives of IFAD, the World Bank and the European Union.

Presentations made by the principal investigators addressed the issues of land and livestock tenure, range management, market oriented sheep production, research and technology transfer, and socio-economic aspects of feed and livestock production.

National Coordinators presented their vision regarding institutional and management issues on future research activities in the livestock sector. Based on the results of the discussions, recommendations on policy, research and technology transfer were developed. All the participants appreciated the support provided by IFAD and emphasized the importance for having the continuation of the project in the region, including the Caucasus.

NARS MODERNIZATION IN AZERBAIJAN

At the invitation of the Government of Azerbaijan, Head, PFU and ICARDA Regional Coordinator for CAC Dr. Raj Paroda visited Baku from 29 July to 2 August, 2003 to provide expert advice relating to modernization of National Agriculture Research System to be funded by the World Bank. During the visit, he met with H.E. the Minister of Agriculture, Mr.

AGRICULTURE MINISTER, UZBEKISTAN INAUGURATES LIVESTOCK CONFERENCE

H.E. Prof. Abduvohid Juraev, Minister of Agriculture and Water Management of Uzbekistan inaugurated the Regional Conference on Policies and Technology Options for Livestock Development in Central Asia and the Caucasus, which was held from 4 -5 October, 2003 in Tashkent. In his opening address, he was highly appreciative of the ICARDA's efforts for strengthening the collaboration with NARS and among NARS of the region. He emphasized that the collaboration established by ICARDA in CAC can be an excellent example of partnership with international organizations. Prof. Juraev also stressed that ICARDA Regional Office, in a very short time, has turned to be a strong center of strategic and applied agricultural research in the region and has been able to build a great team of "like-minded scientists" from CAC. He dwelt upon some of the most significant achievements of the ICARDA -NARS collaboration in Uzbekistan, focusing, especially, on the progress made under the project "Integrated feed and livestock production in the steppes of Central Asia", funded by IFAD. Prof. Juraev highlighted the importance of continuation of this project for its second phase and hoped that IFAD will consider this need and approve the proposal. He also desired to continue the initiative on artificial insemination in order to improve milk productivity of livestock in Uzbekistan in particular, and in CAC in general. Other suggestions with regard to the second phase included: biotechnology studies for improved feed production, on-farm demonstration of environmentally safe utilization of livestock production residues, improved practices for range rehabilitation, and expansion of socio-economic activities to cover more aspects relating to new market conditions.

On behalf of ICARDA management, Dr. Raj Paroda welcomed the senior policy makers and the livestock scientists from all the eight countries.

Irshad Aliyev, Acad. Jalal Aliyev, Chair of the Agricultural Research Board, and Dr. Asad Musaev, Director General, Agrarian Science Center of Azerbaijan. Mr. Irshad Aliyev desired to have enabling environment for the scientists by creating appropriate facilities and incentives through modernization of agricultural research system in Azerbaijan, for which he was highly appreciative of Dr. Paroda's advice in the matter. He saw the Competitive Grant Scheme, funded by the World Bank, as an opportunity to create modern facilities in the institutes and also regional research stations for undertaking much needed interdisciplinary research activities. He was happy to learn that the next Steering Committee Meeting of the CGIAR Program for CAC will be held in Baku in 2004, and assured of his best possible support for strengthening collaboration with all the CG Centers working in the region.



H.E. Mr. Aliyev receiving Dr. Paroda

Meetings/Workshops/Conferences Organized

NATIONAL WORKSHOP ON WHEAT IN UZBEKISTAN

The second National Workshop on "Strengthening wheat program in Uzbekistan" was organized jointly by ICARDA, CIMMYT and GTZ in Tashkent on 12 September, 2003. The workshop was attended by 65 participants including representatives of the Presidential Office of Uzbekistan, UzSPCA, GTZ from Tajikistan and Kazakhstan, CASE and the scientists and wheat breeders from all the Research Institutes of Uzbekistan. A Technical Council, established during the first National Workshop held in September, 2002, presented an overview of the national wheat breeding program reflecting the details of incoming international lines and accessions, number of crosses made, number of varieties included for initial seed production, competitive varietal testing, etc. Dr. Bitore Djumakhanov, Cereal Breeder, ICARDA-CAC, presented a report on demonstration nurseries and uniform trials. The workshop was chaired by Dr. Sherali Nurmatov, Deputy Minister of Agriculture and Director General,

UzSPCA and attended by Dr. Raj Paroda, Regional Coordinator, ICARDA and Dr. Alexey Morgounov, Regional Representative, CIMMYT. Dr. Amir Amanov from the office of the President chaired the meeting.



Participants of the National Workshop

MEETINGS WITH THE MINISTER OF AGRICULTURE, ARMENIA

During the 7th ICARDA-CAC Regional Coordination Meeting, Prof. Dr. Adel El-Beltagy, Director General, ICARDA, was received by H.E. Dr. Leon Luhkyan, the Minister of Agriculture. Also Dr. Luhkyan met separately Dr.

Mohan Saxena, Assistant Director General (At-Large), Dr. Raj Paroda, Regional Coordinator, and Dr. Mekhlis Suleimenov, Assistant Regional Coordinator, ICARDA-CAC, and had detailed discussions. He expressed his satisfaction relating to cooperation with ICARDA and other CG Centers in Armenia. He also highlighted the major problems faced by the country such as:

1. Increased soil salinity, mostly in Ararat Valley.
2. Urgent need for conservation of large ruminants, since no breeding work has been done during the last 15 years.
3. The need to have research and development support for sheep and goat production.

H.E. Dr. Luhkyan assured of his full support for the ongoing collaborative programs, which according to him, are well recognized by the various Ministries in his country. He particularly expressed the desire of Armenia to participate in the second phase of the IFAD project on "Integrated Feed and Livestock Production" and also in the newly proposed project on Mountain agriculture.

Prof. Dr. Adel El-Beltagy assured the Minister of his continued support for agricultural development in Armenia.

Dr. Saxena also assured the Hon'ble Minister of best possible assistance by ICARDA as well as other CG Centers for improving the livelihood of resource poor farmers in the region.



H.E. Dr. Leon Luhkyan (second from the right) meets Dr. Mohan Saxena and Dr. Raj Paroda

MEETING ON SEED HARMONIZATION IN CAC

A special meeting on seed harmonization in the CAC region was held on 25 September, 2003 in the Ministry of Agriculture of Armenia, Yerevan. Dr. Antonius Van Gastel, Head of Seed Unit, ICARDA, Dr. Michael A. Larinde, FAO, Rome, Dr. Mogens Lemonijs, FAO, Consultant, Dr. Raj Paroda, Head of CGIAR-PFU, Dr. Mekhlis Suleimenov, Assistant Regional Coordinator and Dr. Bitore Djumakhanov, Breeder, ICARDA-CAC attended the meeting and had a detailed discussion on issues related to seed harmonization in the CAC region.

It was decided to hold a Regional Conference on Seed Harmonization for CAC sometime in June, 2004 in Tashkent, Uzbekistan. Also experts from FAO agreed to provide necessary support for development of a regional TCP.

The participants also emphasized the importance of human resource development in the field of seed harmonization and seed production. In order to strengthen seed production, seed marketing and seed quality control in the region, a decision was taken to assist NARS of the region in organizing a Regional

Seed Network or to link it with WANA Seed Network, being coordinated by ICARDA.



Discussion during the meeting

FAO-TCP IN KAZAKHSTAN

Facilitated by CIMMYT, Dr. M. Nossier, Country Project Officer from FAO Regional Office in Cairo, Egypt visited Kazakhstan from 18-20 August, 2003 to review the on-going FAO TCP project on conservation agriculture implemented jointly by the Ministry of Agriculture of Kazakhstan and CIMMYT.

In Astana, Dr. M. Nossier, accompanied by Dr. A. Morgounov, met with the TCP project team and discussed the implementation of the work plan and activities to be undertaken in the ensuing cropping season. He also met with Vice-Minister of Agriculture Dr. A. Kurishbayev, who was very appreciative of the progress made under the project. During the meeting, emphasis was laid on potential areas of cooperation between FAO and Kazakhstan, which included natural resource management, food quality assessment, animal science as well as forestry and genetic resources.

(Source: Dr. Alexey Morgounov, CIMMYT-Almaty)



Dr. Nossier (right) meets Dr. Kurishbaev

PREPARING FOR UNEP-GEF REGIONAL PROJECT

IPGRI organized the second National Workshops in all the five countries of Central Asia from 30 July to 3 September, 2003 under the PDF B phase of the UNEP-GEF project on "In Situ/On-Farm Conservation of Agricultural Biodiversity (Horticulture Crops and Wild Fruit Species) in Central Asia" with the purpose to develop specific country components for the full project proposal.

The main objectives of the workshops included: revision of criteria for priority crop setting; listing of priority crops; criteria for project site selection and agro-ecological zones; assessment of training needs; establishment of electronic knowledge network; revision of logframe matrix; budget; required time frame; and identification of responsible institutions and stakeholders.

Representatives of various national research institutions and other organizations, dealing with plant genetic resources, as well as donor agencies and NGOs (around 40 in each

country) participated.

Ms. Shirin Karryeva, Regional Coordinator, explained in details how to develop the budget and instructed on GEF requirements for co-financing.

National Coordinators reported about the activities undertaken in their countries within the PDF B phase. Dr. K. Baymetov, Regional Consultant, presented a regional survey procedure on assessment of diversity level and its distribution for in situ/on-farm conservation of fruit crop genetic resources based on the preliminary results obtained during the missions to the pilot sites.

National components, developed during the Workshops, will be included in the regional project document for discussion during the third ISC meeting which will be held on 13-15 October, 2003 in Tashkent.

(Source: Shirin Karryeva, IPGRI-Tashkent)

IPGRI TRAINING ON PARTICIPATORY APPROACH

A regional training course on "Participatory approach in plant genetic resources management" was organized by IPGRI from 16-18 July, 2003 involving newly established Regional Training Center on Socio-economic Studies at the Kazakh Research Institute of Agro-industrial Economy and Development of Rural Areas, Almaty, Kazakhstan, within the UNEP-GEF (PDF B Phase) project on "In situ/On-Farm Conservation of Agricultural Biodiversity in Central Asia". The main objective of the course was to train the partners on using

participatory approach in fruit crops genetic resources management and testing the training program module developed for a five-year project. The training course was attended by the representatives from all the five Central Asian countries.

The training course followed the official inauguration of the Regional Training Center on Socio-economic Studies by Acad. Gali Kaliev, Deputy of the Parliament of Kazakhstan, Dr. Altynbek Moldashev, Director of the Kazakh Research Institute of Agro-industrial Economy and Development of Rural Areas and Dr. Tleu Nurmuratuly, Project National Coordinator.

Ms. Shirin Karryeva, Regional Coordinator of the project on "In situ/On-Farm Conservation of Agricultural Biodiversity in Central Asia", made presentation on the achievements and briefed the participants about the role of the new Regional Training Center.

The instructor, Dr. M. Malki, Deputy Director General, National Research Institute of Agronomy, Algeria introduced the trainees to community approach and participatory methods in bio-diversification management. He delivered lectures on stakeholders' analysis, participatory rural appraisal, establishment of social communication, and importance of the facilitators' role when working with rural and farming communities. The participants also visited a village adjacent to the Kazakh Pomological Garden to interact with the farmers and to apply some of the tools learnt during the course.

(Source: Shirin Karryeva, IPGRI-Tashkent)



Acad. Gali Kaliev inaugurating the Training Center

APPRECIATION BY GEORGIAN MINISTER OF AGRICULTURE



H.E. Mr. David Kirvalidze receiving Dr. Raj Paroda

Dr. Raj Paroda visited the Georgian Academy of Agricultural Sciences, Tbilisi from 30 August to 1 September, 2003 to assess the progress achieved under the CGIAR collaborative program for CAC. He met with H.E. the Minister of Agriculture and Food, Mr. David Kirvalidze and Mr. David Shervashidze, Deputy Minister. Mr. Kirvalidze expressed his special appreciation of the CGIAR program activities in the field of germplasm enhancement as well as genetic resource conservation. He emphasized especially on the need for testing and identification of new drought resistant varieties of cereals and introduction of alternative crops such as chickpea and lentil. He also desired to have specific support for the plant genetic resources including the establishment of a Gene Bank. He also reiterated the need for having ICARDA's sub-regional office in the Caucasus, for which Georgia would provide all needed support. He was happy to learn that ICARDA in partnership with some International Centers was planning to prepare a proposal on Mountain Agriculture for the Caucasus, for which he assured full cooperation by his Ministry.

Human Resource Development

IRRI SUPPORT

A three-day training workshop on "Rice Production Technologies for Improved Rice Quality" was held in Tashkent from 5-7 August, 2003. Organized jointly by IRRI and CGIAR-PFU for CAC, the training workshop involved twenty-five participants from Uzbekistan, Kazakhstan, Turkmenistan, Kyrgyzstan, Tajikistan and Azerbaijan. The participants evaluated the rice variability in the local market both



During the brainstorming session

for physical and cooking qualities. Field trips were conducted to a rice mill, a co-operative farm and the Uzbek Rice Research Institute.



Participants of the training workshop

Lectures were delivered by five IRRI scientists, Drs. D. Dawe, J. Rickman, I. Abdelbagi, K. Ho-Yeong and K. Jena, relating to the subjects of world rice economy, breeding for salt and cold tolerance and other aspects of rice production. Participants also presented their country reports on the status of rice production and marketing.

In the Plenary, a brainstorming session was organized for need assessment. All the participants emphasized the importance of training and information communication. Among the problems faced by the rice producers in the region, water related aspects were particularly highlighted. Also, early maturing, high yielding japonica varieties with tolerance to salinity and cold are urgently needed. IRRI specialists assured to establish necessary linkages with the IRRI-Korea program relating to the supply of suitable germplasm. Also it was decided to have the young scientists from Kazakhstan and Uzbekistan trained at IRRI Headquarters and at IRRI program in South Korea during 2004 crop season.

FOOD LEGUME TRAVELING WORKSHOP

The second traveling workshop on food legumes in Central Asia was organized in Uzbekistan and Kazakhstan from 1-5 July, 2003 by ICARDA-CAC Regional Program. A total of 11 scientists from Uzbekistan, Kazakhstan, Tajikistan, Turkmenistan, Azerbaijan, Georgia, and Kyrgyzstan participated along with ICARDA scientists, Drs. Rajendra Malhotra, Ashutosh Sarker and Bitore Djumakhanov. The objectives of the traveling workshop were to evaluate and select improved lentil and chickpea lines, and also to discuss problems and future directions for legume improvement. The group jointly visited Andijan and Galla-aral research stations in Uzbekistan and Krasny Vodopad station in Kazakhstan.

In Andijan, where chickpea and lentil are showing good success, two chickpea lines (FLIP 98-44C and FLIP 95-74C)

and two lentil lines (FLIP 95-22L and FLIP 96-59L) were selected. A large number of chickpea breeding lines received from ICARDA were planted at Galla-aral research station, and these were jointly evaluated by the group. The seed of the improved chickpea lines in pre-release stage is being multiplied. A lentil line named "Altyn dan" is presently under evaluation by the State Variety Testing Commission.

In Kazakhstan, all the elite lines of chickpea and lentil were evaluated at the Krasny Vodopad station. More than 1000 lines of chickpea planted in spring were evaluated and an elite chickpea line was identified for future release.

As a part of the workshop, farmer's fields were also visited and evaluated for improved production technologies.

(Continued on page 11)

According to Dr. Malhotra, "there is a real need to grow the elite lines for their evaluation and demonstration at farmers fields as these lines possess desirable traits like high yield, large seed size and erect growth habit suitable for mechanical harvesting". On the last day, the participants took part in a wrap-up discussion on future strategies for seed production and adaptive research. Drs. Malhotra, Sarker and Djumakhanov, with the help of the participants, summarized the achievements and developed a work plan for 2003-2004 concerning seed production and on-farm demonstrations. Dr. Raj Paroda, Regional Coordinator, ICARDA-CAC, chaired the Plenary Session and congratulated the participants for their good efforts in identifying elite chickpea and lentil cultivars. He also assured of all assistance in strengthening further the legume improvement program in the region.

(Source: Dr. R. Malhotra, Legume Breeder, ICARDA)



Participants of the workshop examining the chickpea field in Galla-aral

Miscellaneous News

NETWORK ON FOREST GENETIC RESOURCES MEETS

The Fourth Forest Genetic Resources Meeting of Central Asian and Transcaucasian Network on Plant Genetic Resources (CATCN-PGR) was held from 11-13 August, 2003 at the Institute of Forest and Nut Industry of the National Academy of Sciences, Bishkek, Kyrgyzstan. Seventeen participants representing Azerbaijan, Georgia, Tajikistan, Turkmenistan, Kazakhstan, Kyrgyzstan and Uzbekistan attended the meeting along with staff of the State Forestry Service of the Kyrgyz Republic. The meeting was organized jointly by IPGRI-CWANA and the NARS of Kyrgyzstan.

During the opening session, the participants were welcomed by H.E. Dr. Turatbek Musuraliev, Minister and Chairman of the State Forestry Service, Dr. Abdukhalil Kayimov, Head of the Regional Working Group, Dr. Eshali Turdykulov, Director of the Institute of Forest and Nut Industry, Dr. Oleg Kolov, Head of the National Working Group on Forest GR, Kyrgyzstan and Ms. Mukhabbat Turdieva, Forest Genetic Resources Scientist, IPGRI-CWANA-Tashkent office.

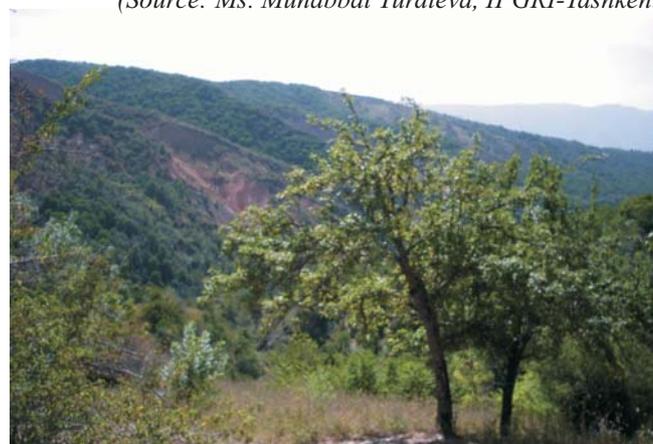
Dr. Musuraliev emphasized that the State Forestry Service is currently involved in a number of international projects. He dwelt upon the achievements under one of such projects, funded by the Swiss Government, which covers forest inventory, training, policy issues, timber processing and the establishment of model forestry farms. It was highlighted that though the area of forests in Central Asia and the Caucasus is not large, yet forests play an important role for environmental sustainability in the region and are the source of many non-timber products.

Ms. Mukhabbat Turdieva thanked her colleagues from Kyrgyzstan for implementing the PDF B Phase of UNEP-GEF

project on 'In situ/On-farm Conservation of Agrobiodiversity in Central Asia', particularly with regard to conservation of wild fruit relatives and forest species.

The main issues addressed included review of the 2000-2002 report, finalization of the draft format of the Regional Strategy on FGR, development of recommendations on conservation, regeneration and sustainable use of rare, endemic and endangered forest species, discussion on concept note of a regional project on "Conservation of indigenous forest species and their use in combating land degradation and improving living conditions in mountainous area of Central Asia and the Caucasus", and the work plan for 2003-2005.

(Source: Ms. Mukhabbat Turdieva, IPGRI-Tashkent)



Walnut-apple forest in Jalalabad, Kyrgyzstan



DUSHANBE FRESHWATER FORUM

The International Freshwater Forum was held in Dushanbe, Tajikistan from August 29 to 1 September, 2003. About 500 participants from 53 countries participated and deliberated on different aspects of water management. H.E. Mr. Emomali Rakhmonov, President of the Republic of Tajikistan inaugurated the Forum and emphasized the importance of water management in Central Asia. He also suggested to declare the decade of 2005-2015 as an International decade of "Water for Life".

The topics addressed by the Forum included integrated river basin management, water use efficiency in agriculture, etc.

The participants also agreed to develop a unified approach for water management in the Aral Sea basin. Session on "Water use efficiency in agriculture" generated considerable interest among the participants and an integrated approach aiming at "more crop per drop of water" was adopted.

Beside Dr. Margaret Catley-Carlson, Chairperson, Global Water Partnership, who is also the Chairperson of ICARDA BOT, scientists from IWMI and ICARDA participated and displayed posters and publications depicting the activities relating to water management being carried out in Tajikistan and other countries of Central Asia.



IWMI HOSTING A SESSION

IWMI hosted a session during the Dushanbe Freshwater Forum entitled "Challenging you to think differently about water". Mr. Mehmood Ul Hassan, IWMI-CAC presented the key findings of IWMI's recent research on water productivity, irrigation management transfers, and the knowledge management institutions for water. The session was attended by regional and national policy makers, donors, international organizations and water specialists.

At the request of the Organizing Committee, IWMI also facilitated and led the discussions in one of the five working groups on "Water conservation in agriculture". The participants of the working group included representatives of water management authorities, international organizations, policy makers and NGOs. The working group developed policy actions needed to be taken at both national and inter-state level. These recommendations were then presented by IWMI during the Plenary Session chaired by H.E. Mr. Emomali Rakhmonov, the President of Tajikistan.

(Source: Mr. M. Ul Hassan, IWMI-Tashkent)

DRYLANDS INTERNATIONAL WORKSHOP

An International Workshop on "Challenges for Drylands in the New Millennium: A Cross-Cutting Approach for Assessment" was organized jointly by United Nations University (UNU), Millennium Ecosystem Assessment (MA) and ICARDA in Tashkent, Uzbekistan from 11-15 August, 2003. In all, 30 experts from all over the world, representing 15 countries, participated. The workshop was intended to capitalize on existing efforts for sustainable development of drylands, to explore the role of dryland ecosystem goods and services in



Participants of the workshop

promoting such development and also to address desertification as an expression of human-induced impairment of the provision of ecosystem goods and services. The working groups discussed about driving forces in drylands, overlap with other ecosystems and sustainability and vulnerability of drylands. The workshop recommended completing a scientific assessment of dryland ecosystems under the umbrella of the Millennium Assessment to go beyond science, into the issues of policies and legislation for dryland management.

FUTURE EVENTS

INTERNATIONAL SEMINAR ON SALINITY

International Seminar on Salinity Mitigation for Water Resources Management will be held from 26-28 March, 2004 at the Center of Excellence in Water Resources Engineering (CEWRE), University of Engineering and Technology, Lahore, Pakistan. All interested may contact the Seminar Secretariat by e-mail: center@xcess.net.pk

INTERNATIONAL BARLEY SYMPOSIUM

The Ninth International Barley Genetics Symposium will be held from 20-26 June, 2004 in Brno, Czech Republic and hosted by the Agricultural Research Institute Kromeriz, Ltd. All interested are invited to visit the web site at: www.ibgs.cz.

NEW CO-CHAIRPERSON OF THE CONSORTIUM

Dr. Hubert Zandstra, Director General, International Potato Center (CIP), Lima, Peru has agreed to be the Co-chairperson of the CGIAR Consortium for Central Asia and the Caucasus Steering Committee, representing all the ten CG Centers involved in the program. Dr. Asad Musaev, Head of Agricultural Research System in Azerbaijan is the Co-chairperson representing the NARS of eight countries involved.

Dr. Zandstra carries vast experience with him of working in developing countries, including earlier at the International Rice Research Institute (IRRI). He is an able research manager and has great commitment for the well being of farmers in the developing countries. Under his leadership, the CIP has decided to provide improved germplasm for increased potato production in the CAC region, including much needed strengthening of NARS.

STRATEGIC PARTNERSHIP FORUM

The Sub-regional Partnership Forum for Central Asia: Confronting Land Degradation and Poverty through Enhanced UNCCD Implementation was held in Tashkent, Uzbekistan from 30 June 4 July, 2003 with representatives from the Ministries and agencies dealing with Environment, Finance, Agriculture, Economy, Planning, Foreign Affairs and International Cooperation of the Central Asian countries, members of research organizations, sub-regional bodies and civil society representatives as well as representatives of international development cooperation agencies. In all, 78 participants attended the forum, which was convened under the aegis of the Strategic Partnership to Combat Desertification in Central Asia (SPA). This partnership was established in 2001, bringing together the Global Mechanism of the UNCCD, the Asian Development Bank (ADB), the Canadian International Development Agency (CIDA) and the CCD Project of GTZ. During this forum, ICARDA and Switzerland through its Swiss Agency for Development Cooperation (SDC) joined the Strategic Partnership Agreement. The participants welcomed the broadening of this partnership and looked forward to the joining of the International Fund for Agricultural Development (IFAD) and other organizations in future.

A comprehensive set of challenges and opportunities were identified in relation to UNCCD implementation in Central Asia, and a pragmatic course of action was formulated entitled the Tashkent Joint Platform of Action for UNCCD Implementation. The Joint Platform of Action outlines a clear set of objectives and preliminary tasks for both the respective Central Asian countries as well as for the development cooperation agencies and other partners.

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

Seventh Conference of the Parties to the Convention on Biological Diversity: CBD COP-9 will be convened from 9-20 February, 2004 in Kuala Lumpur, Malaysia. All interested are invited to visit the web site at:

www.biodiv.org/convention/cops.asp or contact e-mail: secretariat@biodiv.org

INTERNATIONAL CONGRESS ON IRRIGATION AND DRAINAGE

Nineteenth International Congress on Irrigation and Drainage (ICID) will be held from 10-18 September, 2005 in Beijing, China. For more information, contact: Chinese National Committee on Irrigation and Drainage, e-mail: cncid@iwhr.com or visit the web site at:

www.icid.org/index_e.html