



CAC NEWS

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

No. 20

April-June, 2004

Consortium
Members



ARMENIA * AZERBAIJAN * GEORGIA
* KAZAKHSTAN * KYRGYZSTAN * TAJIKISTAN * TURKMENISTAN * UZBEKISTAN

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Message from Dr. Ronald Cantrell Co-Chairman, CGIAR Program Steering Committee

Dear colleagues!

The International Rice Research Institute (IRRI) is especially excited about the opportunities related to rice in Central Asia. At the same time, IRRI is firmly committed to helping the main rice-producing countries of the region overcome their respective



rice production challenges. Despite being a long way from Central Asia, the Philippines-based IRRI has more than 40 years experience in helping countries like those in Central Asia boost their rice production and, in the process, boosting the livelihoods of local rice farmers.

Rice is an important cereal crop in Central Asia and it is an important part of the national diet particularly in Uzbekistan and Kazakhstan, where it forms the basis for the national dish plov. On average, 51% of the total rice area in Central Asia is in Uzbekistan followed by Kazakhstan (30%) and Turkmenistan (12%). Rice prices are several times higher than that of wheat and 2-3 times higher than the world price, making it attractive to farmers as a source of income. However, rice research in the region has been dwindling since independence, due to the lack of local government and international support. Infrastructure for research and production are seriously lacking and substantial inputs are required to sustain rice research activities. The total area grown to rice in the region was about 341,000 ha in 1992, just after independence, but this has decreased progressively during the last ten years to just 181,000 ha in 2002. Total production decreased even further, from 1.1 million Mt in 1992 to only 0.51 million Mt in 2002.

I'm pleased to report that during 2003-04, IRRI achieved, or planned, the following activities in relation to rice production in Central Asia:

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SEVENTH CGIAR-CAC PROGRAM STEERING COMMITTEE MEETING HELD

The seventh Program Steering Committee (PSC) meeting of the CGIAR Collaborative Program for sustainable agricultural development in Central Asia and the Caucasus (CAC) was held in Baku, Azerbaijan, from 6-8 June, 2004. The meeting was hosted by the Ministry of Agriculture and the Agrarian Sciences Center of Azerbaijan in collaboration with the CGIAR Program Facilitation Unit (PFU). In all, 46 participants attended, including the NARS Heads from the CAC region, representatives of donor organizations and the nine CG Centers participating in the Consortium.

The meeting was inaugurated by H.E. Mr. Abbas Abbasov, First Vice Prime Minister of Azerbaijan and the Chair of the Commission of Agrarian Reforms. He emphasized the commitment of the Azerbaijan Government to the overall agricultural development being reflected in the recent Decrees by the President. He felt happy about the progress achieved in Azerbaijan through the CGIAR

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Participants of the Seventh CGIAR-CAC Program
Steering Committee Meeting

The participants of the CGIAR Program for CAC heartily congratulate both Acad. Bobo Sanginov and Dr. Ronald Cantrell for having been elected as Co-Chairpersons of the Program Steering Committee for the year 2004-2005.

Important Events



Participants observing chickpea varieties at the RI of Agriculture collaborative program, especially in the field of varietal improvement. He also appreciated the inclusion of Azerbaijan in the ADB project on on-farm water and soil fertility management. He felt happy for the strong support provided by ICARDA and the other CG centers of the Consortium in the area of human resource development. Mr. Abbasov also hoped that the meeting will give a new impulse to the development of agricultural research in Azerbaijan as well as other countries of the CAC region.

Dr. Asad Musaev, Director General, Agrarian Sciences Center, Azerbaijan and Co-Chairman, representing CAC region NARS, welcomed the participants and expressed his pleasure that Azerbaijan was chosen to host this important meeting. During the opening session, the participants were also addressed by Prof. Dr. Adel El-Beltagy, Director General, ICARDA, Dr. Jitendra Srivastava, Chairman, Executive Committee and Dr. Hubert Zandstra, Director General, CIP being the Co-Chairman of the Steering Committee. Dr. El-Beltagy highlighted the important role of enhanced regional and international research collaboration as well as mobilization of additional resources for agricultural research and development, being strategic consideration for the CGIAR Program for CAC.

MESSAGE FROM DR. RONALD CANTRELL

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The evaluation of at least 500 accessions for performance in the region.

The conducting of two workshops in the region to train scientists in modern rice technology. The first workshop "Rice Production Technologies for Improved Rice Quality" was conducted on August 2-9, 2003; while the second workshop "Modern Technologies for Efficient Rice Production in Central Asia" will be conducted on August 26-28, 2004.

Four rice researchers, two from the Rice Research Institute (UzRRI), Uzbekistan, and two from the Pri Aral Institute of Agroecology and Agriculture, Kazakhstan, were sponsored to attend an intensive English course from November 2003 to March 2004, in Tashkent, Uzbekistan.

Two scientists, one from UzRRI, Uzbekistan; and one from the Pri Aral Institute of Agroecology and Agriculture, Kazakhstan, received on-the-job training at IRRI, each for one year.

Such activities, while important, are just the beginning for IRRI in Central Asia and we look forward to working with the countries of the region and interested donors to ensure not only food security but that local rice farmers can have profitable and productive livelihoods.

Ronald P. Cantrell
Director General, IRRI

He also assured that all the CG centers of the Consortium will continue striving hard in order to bear desired fruits from on-going research collaboration with CAC NARS.

Dr. Raj Paroda, Head, PFU presented the highlights of the annual achievements under the title "Moving Ahead" He also emphasized the need for further strengthening of the CGIAR program for CAC.

Dr. Geoff Hawtin, Interim Executive Secretary, Global Crop Diversification Trust (GCDT) made a presentation entitled "GCDT: a foundation for food security", in which he outlined the main strategy for building partnership between the CAC region and the Trust, especially with regard to strengthening of *ex-situ* collections of important crops covered under FAO Treaty on genetic resources.

The presentations by all the Heads of the NARS indicated the benefits that they have received from the collaborative research. It was encouraging that already ten varieties have been released and more than 40 new varieties of cereals and legumes are presently in the final stage of testing in different countries. The NARS representatives also appreciated the support received in the area of human resource development and desired all the CG Centers involved in the Consortium to play more active role, similar to those of ICARDA and CIMMYT. Need for strengthening linkages among NARS and international centers was emphasized in all the reports. Presentations by different CG Centers on various collaborative activities highlighted that considerable progress has been made during the year 2003/2004.

A field visit was organized by the Ministry of Agriculture on 6 June to show various research activities in the Research Institute of Agriculture and at the Gobustan Experimental Station. The participants were particularly impressed by seeing the performance of new varieties of winter wheat, Azamety-95 and Nurlu-99, which have recently been released under the collaborative wheat improvement program.

The Steering Committee unanimously decided to hold the next meeting at ICARDA Headquarters in Aleppo, Syria sometime in May/June, 2005. Both Acad. Bobo Sanginov and Dr. Ron Cantrell were elected as Co-Chairpersons representing NARS and CG Centers, respectively.

CIP DIRECTOR GENERAL VISITS GEORGIA

Dr. Hubert Zandstra, Director General of the International Potato Center (CIP), Lima, Peru and Co-Chairperson of the Steering Committee of the CGIAR program for Central Asia and the Caucasus, accompanied by Dr. Sarath Ilangantileke, Regional Leader for South, West and Central Asia of the International Potato Center (CIP) and Dr. Zakir Khalikulov, PFU-CGIAR, visited Tbilisi, Georgia on 9 June 2004, after attending the 7th Meeting of the Steering

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Dr. H. Zandstra visiting the Georgian RI of Crop Husbandry

Research Highlights

Committee, in Baku, Azerbaijan. Dr. Zandstra made an impressive presentation at the Georgian Academy of Agricultural Sciences in the presence of distinguished agricultural scientists and academicians and highlighted CIP strategy for global potato research and development. Prior to leaving Georgia he visited the Institute of Crop Husbandry and discussed tissue culture activities for potato with the scientists of the Institute. He also visited the newly constructed Gene Bank on the campus. Dr. Zandstra assured of his support to research work on potato in CAC region, which has almost 0.5 million hectare area with great importance of potato for food

security as well as poverty alleviation through enhanced livelihood of resource poor farmers. Dr. Sarath Ilangantileke and Dr. Zakir Khalikulov also visited the office of the IFAD project on "Georgian Rural Development Program for Mountains and Highlands Areas" where potato seed production activities were discussed. From Georgia, both of them traveled to Yerevan, Armenia and met with officials of the Ministry of Agriculture and the Scientific Research Center of Agrobiotechnology. Collaborative activities on potato were also discussed and 19 families of True Potato Seed (TPS) were handed over for evaluation.

Research Highlights

WHEAT

VARIETY BITARAP RELEASED IN TURKMENISTAN

Annually about 1000 lines of cereals, maize and legume crops are being tested by the breeders of Turkmenistan. Thanks to the existing cooperation, a new variety of bread wheat "Bitarap" has recently been released by the Government in view of its superior performance. It is a selection from the international nursery EYTIR-96 (SN64/SKE/2# 7H) Entry-19. This variety out-yielded the local check "Skifianka" by about 10-12 % and demonstrated resistance to drought and diseases for the last five years. Average yield of Bitarap was 5.4 t/ha, as against 4.9 t/ha of the local check. Currently, Turkmen Research Institute of Grains has 1200 tons of elite and super elite seed of Bitarap. The area planted under this variety during 2003-2004 was about 610 ha.

ICAR PROJECT REVIEWED

As already informed in the previous issues, the International Cooperation in Agricultural Research (ICAR) project aims to link the agricultural scientists from CAC region with those from US universities to address common challenges. The project, funded by USDA and implemented by the Washington State University (WSU) and CIMMYT, was initiated in 2002. The WSU mission, consisting of Dr. W. Pan, Chair, Soil and Plant Science Department, Dr. K. Campbell, USDA-ARS, Mr. A. de Graffenreid, International Relations Department, and Mr. J. Brabb, Financial Officer, started review mission from Georgia, when the International Caucasian Cereal and Grain Legumes Conference was held in Tbilisi.

A meeting was held with the project partners to share their results. The mission also visited on-farm demonstration site at Asureti on bed-planting technology of wheat. H.E. Mr. David Shervashidze, Minister of Agriculture received the



Wheat variety Bitarap in Turkmenistan

members of the mission and was very supportive of the project, since it was helping in re-building the research capacity of Georgian scientists.

From 10 - 14 June, Drs. K. Campbell, A. de Graffenreid and A. Morgounov visited the project sites and research institutions in Armenia and Azerbaijan. The mission was happy with the results of the on-farm demonstration of new barley and triticale varieties in Armenia, conducted by the Kotayk Extension Center, and dryland wheat testing in Gobustan, Azerbaijan. In both cases, the new varieties and improved technologies demonstrated clear advantage over the traditional farmers' practices.

In Kazakhstan, the mission had several meetings with the project participants both in Almaty and Astana, to discuss the progress achieved, especially in the specific spring wheat environment in northern Kazakhstan.

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

BARLEY

PROMISING LINES IDENTIFIED

For the first time during the last five years of research collaboration, Uzbek breeders from Galla-Aral Branch of Andijan Research Institute of Grain succeeded in selecting a new barley variety named "Pallidium 2002". Its origin is from ICARDA's nursery IEBON-98 (CWB-117-77-9). It gives an average yield of 6.9 t/ha under irrigated conditions, compared to 5.4 t/ha for the standard variety. The 1000 grain weight is around 45 gram as against 38 gram for the check variety. The new variety is resistant to *Helmenhosporium* and also resistant to lodging and cold. Based on its superior performance, the variety "Pallidium 2002" has been submitted to the State Official Testing Commission in March, 2003. Once released, this variety will be a good source of both grain and green fodder for livestock feeding.

LEGUMES

A NEW VARIETY SUBMITTED TO SVTC

Galla-Aral Branch of the RI of Grain, Uzbekistan, has submitted a new lentil variety named "Oltin-don", selected from ICARDA's nursery ILL-7513, to the State Variety Testing Commission for final evaluation. The



Lentil variety Oltin-don in Uzbekistan variety matures in 116 days and is high yielding (1.2 t/ha). It can be harvested with a combine as the first pod branching is about 20 cm above the ground and the plant has around 60 cm height. This is likely to be the first lentil variety released so far in Uzbekistan.

PROMISING VARIETIES IDENTIFIED

Legume crops are important being a significant source of vegetable protein. ICARDA scientists are working in close collaboration with the national legume breeders in the CAC region to identify promising chickpea and lentil varieties. In Turkmenistan, promising varieties of chickpea (FLIP-98-48C) and lentil (ILL-699) have been selected as drought-resistant and tolerant to diseases. Seeds of these varieties are being multiplied for submission of their release proposals to the State

Variety Testing Commission (SVTC).

In Southern Kazakhstan, promising chickpea line FLIP-94-25C was planted in spring this year in an area of 4 ha for seed multiplication. It is expected to obtain about 1.0 ton of seed so that its proposal is submitted to SVTC for testing and release. Legume breeders are studying the optimal planting dates and seed rates of chickpea under the rainfed conditions of Southern Kazakhstan.

IPM

DISEASE MONITORING IN CENTRAL ASIA

Cereal pathologists Dr. Etienne Duveiller, CIMMYT-Nepal and Dr. Berndt Pett, DED-GTS-CIMMYT project in Tajikistan conducted a survey of wheat diseases with special emphasis on leaf spots in irrigated and rainfed areas of Kofarnihon, Gissar, Kurgan-Tube, Dangara, Sovetskiy, Isfara regions in Tajikistan, Tashkent, Djizak and Samarkand regions of Uzbekistan, South Kazakhstan, Djambul and Almaty regions of Kazakhstan during early June, 2004. The group at different stages was accompanied by Dr. H. Mundjanov (GTZ-CIMMYT, Tajikistan), Dr. S. Baboev (GTZ-CIMMYT, Uzbekistan) Dr. M. Koishibayev (Crop Protection RI), T. Murzatayeva (Agrosemconsult company) and A. Massalimov (CIMMYT-CAC).

In general, 60-70% of the wheat fields surveyed appeared to be in good condition. Among air-transmitted diseases, incidences of brown and yellow rust, tan spot and septoriosis were found. However, level of their development varied across regions. Severe tan spot incidence was observed in Tajikistan (Gissar), at the Farming Institute. In rainfed areas, the disease level was low. Yellow rust incidence varied from low (1-5%) to moderate (10-20%) throughout South Kazakhstan.

In Almaty Province, the first symptoms of yellow rust were discovered only in the first half of June, when wheat had already reached the heading stage. At the same time, in many

fields in Jambyl Province and western part of Almaty Province, a good incidence of tan spot was observed. Its first symptoms in Jambyl district (farms Svetana and Umbetaly) were

observed in the second half of May. In the middle of June, many varieties, particularly Egemendy, Steklovidnaya 24 were infected up to 50-75%, which could result in reduced growth period and up to 15-20% yield loss. High infection of tan spot was also noticed in Baizak, Turar Ryskulov, and Merke districts of Jambyl Province and also in a number of districts in Almaty Province. The survey revealed that this disease is becoming more and more important in the region.

The Research Center for Farming and Crop Production, Almaty, is testing more than 200 *Helminthosporium* and tan spot resistant entries of spring wheat.

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



Wheat diseases survey mission

CONSERVATION AND EVALUATION OF PLANT GENETIC RESOURCES

IN-SITU/ON-FARM CONSERVATION OF AGRO-BIODIVERSITY - AN UPDATE

The five Central Asian countries are working in collaboration with IPGRI to identify options for conserving horticultural crops and their wild relatives through a regional project on "In Situ/On-Farm Conservation of Agricultural Biodiversity (Horticultural Crops and Wild Fruit Species) in Central Asia". The aim of this five-year project is to equip farmers, institutes and local communities with the knowledge, methodologies and policies to enable the *in situ/on-farm* conservation of globally significant horticultural crops and wild fruit species in Central Asia. This will contribute to achieve a sustainable agricultural development, food security and environmental stability. The project focuses on traditional local varieties of fruit crops maintained by farmers and wild relatives growing in forests, and on the enhancement of farmers' and community capacities to conserve *in situ* horticulture diversity.

The project involves consulting of a wide range of stakeholders, including farmers and NGOs, academics, agricultural and forestry research institutes, and national decision-makers. Funding to this project is provided by the Global Environment Facility (GEF) through the United Nations Environment Program (UNEP), and the PDF B phase (second phase) of the project is now under implementation and will be completed in August 2004.

During the PDF B phase, the criteria for crop priority

setting were tested on pilot sites, priority agroecosystems/ecological zones were identified, project pilot sites were selected, training needs were assessed and Training Strategy was developed. The Strategy for Participatory Approach in PRG Management with a focus on participation of farmers and local communities to be used during the whole project has also been developed. Local communities are involved in the project and in agrobiodiversity conservation efforts by the establishment of multidisciplinary committees at each pilot site. A regional procedure on assessment of diversity level and distribution for *in situ/on-farm* management of priority species has been developed and tested at the pilot sites during the survey missions.

Two regional training centres on Apricot Genetic Resources and on Socioeconomic Studies were established in Tajikistan and Kazakhstan respectively, and the regional training courses on Assessment of Distribution of Diversity of Apricot Genetic Resources and on Participatory Approach in Fruit Genetic Resources Management were held in 2003.

Three meetings of the International Steering Committee and two National Workshops in each country were organized to refine the project and countries' components, and a feedback from stakeholders was incorporated into the full project document.

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During the PDF B phase, the Fund Raising Strategy for project co-funding was developed and is being presently implemented. Different international agencies, donors, embassies were visited in the region and the issues of cooperation and co-funding were discussed. Additional funding is being sought to ensure the successful and effective implementation of the project and to complement the existing support of the GEF. The financial

statements and endorsement letters from donors and governments are in the process of preparation and submission.

The full 5-year project proposal with an overall outlay of US\$ 11.7 million has been developed as per the GEF requirements and will be submitted to its Secretariat in September 2004 for consideration and approval.

(Source: Shirin Karryeva, IPGRI-Tashkent)

NATURAL RESOURCE CONSERVATION AND MANAGEMENT

STEERING COMMITTEE VISITS FERGANA

The Project Steering Committee (PSC) members of the IWMI-SIC collaborative project "Integrated Water Resources Management in the Fergana Valley" visited the field sites along the Khojabaqirgon Canal in Khojent Province of Tajikistan, South Fergana Canal in Andijan and Fergana Provinces of Uzbekistan and Aravan Akbura Canal in Kyrgyzstan from 24-26 June, 2004. The PSC verified the separation of management responsibilities through Canal Management Organizations (CMOs) and participatory governance mechanisms through Canal Water Committees (CWCs) along these canals, as well as the establishment and strengthening of democratic Water Users Associations along the pilot secondary canals. The PSC members were also briefed about the Management Information System, improved water distribution mechanisms, and the improvements in water and land productivity in the 10 pilot plots.

The PSC members proposed to further intensify and deepen activities related to the project and to support the

experience of transition to hydrographic principles on pilot canals and to expedite the dissemination of this very successful experience in other parts of the regions. They also recommended to clarify issues related to the legal status of CWC, financing for governance, institutionalizing capacity building of CWC and WUAs, and to organize extension services for water-users. The PSC members stressed the need to speed up the process of appropriate legislation for WUAs in Uzbekistan and Tajikistan.



Participants of the PSC Meeting

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

FAO TCP PROJECT IN KARAKALPAKSTAN

In order to launch a new FAO-TCP project in Karakalpakstan, a team from FAO consisting of Drs. T. Bachmann, T. Friedrich and G. Munoz along with Drs. R. Ikramov, National TCP Coordinator, A. Nurbekov, Tashkent State Agricultural University and M. Suleimenov, ICARDA Coordinator for TCP visited Nukus to conduct an Awareness Creating Workshop for the project entitled "Sustainable agricultural practices in drought affected regions of Karakalpakstan", 13-14 May. The workshop was opened by Dr. Sh. Nurmatov, Deputy Minister of Agriculture and Water Resources and Director general, Uzbek Scientific Production center of Agriculture (USPCA), who emphasized the importance of the project, stressing that the new project had been developed at the request of the Government of Uzbekistan after we had a sequence of dry years during 2000-2001 in Karakalpakstan. He wished that the project implementation would be successful.

Dr. T. Bachmann, Project Leader in FAO stressed that they would do their best to achieve the goal of the project in introducing world known practices to control drought and combat desertification in irrigated farming of Karakalpakstan. He emphasized that crop diversification and improved irrigation practices will be introduced, whereas the permanent bed planting will be the focal point of the agronomic practices. Dr. T. Friedrich, Mechanical Engineer also indicated that conservation

tillage will be tested using the equipment manufactured and widely used in Mexico. Dr. G. Munoz, water specialist presented his views on irrigation practices in Karakalpakstan, including better land leveling, introduction of improved irrigation practices, establishment of Water Users Associations etc. Dr. E. Kurbanbayev (SANIIRI-Karakalpakstan), Dr. S. Shamshetov (Director, Karakalpakstan affiliation of USPCA), and Dr. D. Edenbayev (private seed company) also made valuable comments. The second day, workshop continued at Shymbay town, involving about 30 representatives of all stakeholder groups in the district, including Mr. Maksat, District Governor, Mr. J. Kaipov, Director of the Low Amudarya Basin Management, Mr. R. Koshekov, Head of the Kyzketken-Kegeyli watershed, as well as representatives of Agriculture and Water Management Departments, research institutes, farmers associations.

After the meeting, the group including the Governor and local specialists visited several farms in a potential project area and interacted with the local farmers. Five farmers, each having 15-60 ha land, were selected to be involved in the project.

On 17 May, 2004, the FAO team met in Tashkent with Mr. H. Jalalov, First Deputy Minister of Agriculture for a briefing. Mr. Jalalov emphasized the importance of the project and wished the team all the success.

TREATED WASTEWATER USE FOR COTTON IN TAJIKISTAN

It is a well known fact that the major cities of the region cause significant pollution of surface and ground water resources. Tashkent and Chirchik in Chirchik river basin; Kokand, Fergana, and Khodjent in Syrdarya river basin; Almaty in Ili river basin; and Akhangaran and Angren in Akhangaran river basin are the main sources of pollution of these rivers. Tashkent City alone generates daily more than one million m³ of wastewater resulting in pollution of surface and underground water sources. In this context, Khodjent is one of the cities of Tajikistan having developed industry and high density of population. Syrdarya river crosses the city from east to west and receives daily from

90-100 thousand m³ of wastewaters from the city treatment plants. Syrdarya is an inter-state river crossing Uzbekistan just after Khodjent city. The enforcement of inter-state water pollution in the near future will obviously force Tajikistan to consider alternative ways of utilization of the wastewater from Khodjent city. Considering the importance of this problem, in 2001 a collaborative research experiment was initiated jointly by ICARDA and the Tajik Soil Science Institute, with Dr. M. Khamidova as Principal Investigator, at Kzyl Tuqai site, located next to the treatment plant of Khodjent city.

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The experiment on cotton was established on one hectare area in a replicated experiment having the treatments: surface water use for irrigation (control); conjunctive use of surface and treated wastewater for irrigation; and treated wastewater use for irrigation. The experiment is carried out with standard fertilizer rate and with no fertilizer application.

Crop biomass studies proved that treated wastewater use for irrigation and application of fertilizers increased weight of cotton bolls. The weight of bolls was 10-20% higher than

under other treatments. Using treated wastewater and application of fertilizers positively affected the yield of raw cotton. Average yield of raw cotton was higher by 1.59 t/ha using treated wastewater and fertilizers, as compared to that under surface water use. Water use efficiency was two times higher using treated wastewater and fertilizers as compared to fresh water and fertilizer use. The data indicated that the quality of cotton fiber was not affected adversely by the use of treated wastewater.

SOCIO-ECONOMIC ACTIVITIES LAUNCHED

Socio-economic component of the ADB project on "Improving Rural Livelihood through Efficient On-farm Water and Soil Fertility Management" has now been initiated. Two research fellows, Ms. Madina Musaeva and Mr. Anvar Nasritdinov, joined the project team recently. Anvar Nasritdinov has undergone one-month training at ICARDA Headquarters in Aleppo, Syria under the guidance of Senior Economist Dr. Aden Aw Hassan on socio-economic issues of natural resource management. During his visit, he interacted with socio-economists working on various aspects in NRM and was trained on the concept of economic evaluation of soil and water technologies, crop-water function and relationship between water use and farmers' income as well as rural livelihood analysis. Ms. Madina Musaeva, already trained at ICARDA, will be working on livelihood analysis sub-component of the project.

The socio-economic component envisages assessing technologies of soil and water management ex-ante. Consequently, this year, it is planned to complete two main activities: rapid rural appraisal and farm enterprise budgeting. Both activities are now being actively implemented in each country in close cooperation with the farmers, scientists and local administrators. Farmers that are members of Water User's Associations (WUA) have been chosen for the study and

necessary linkages established. As harvest season progresses, socio-economists will collect data on enterprise budget and monitor prices of agricultural products in the local markets.



Socio-economists visiting the experimental site in Merke, Kazakhstan

Strengthening of NARS

REGIONAL FORUM MEETING HELD IN BAKU

The Meeting of CAC Regional Forum CACAARI was held in Baku, Azerbaijan, on 8 June 2004. Besides the Heads and representatives of seven NARS, Prof. Dr. A. El-Beltagy, DG, ICARDA, Dr. H. Zandstra, DG, CIP, Dr. E. Frison, DG, IPGRI, Dr. J. Srivastava, World Bank, Dr. R. Paroda, Head of PFU-CGIAR, Dr. B. Kamilov, Executive Director of CACAARI and Dr. Z. Khalikulov, PFU-CGIAR attended the meeting. In the absence of Dr. Sh. Nurmatov, the participants requested Dr. N. Karkashadze to Chair the meeting.

Dr. Kamilov made presentation on the activities undertaken by CACAARI, including participation of its representatives in GFAR Steering Committee Meeting, in October, 2003 in Nairobi, Kenya, organization of a Regional Agricultural Information System (RAIS)

Workshop for CAC, in January, 2004 in Tashkent, and the participation by the representatives of CACAARI in GFAR Retreat, held in Florence, Italy in February, 2004.

All participants appreciated the progress made, particularly because of the facilitation function of PFU-CGIAR, Tashkent and support of ICARDA to the CACAARI Secretariat. Also they desired to have more close collaboration with GFAR and other Regional Fora such as AARINENA and APAARI. They were also pleased to note that an inter-regional network on cotton (INCANA) would have its second meeting in Tashkent with the active involvement of CACAARI. All the DGs present promised their support for strengthening cooperation for agricultural research in the CAC region.

EXPERT CONSULTATION ON WATER MANAGEMENT

IWMI organized a consultation meeting of 26 experts in Tashkent, from 11-17 May, 2004, involving representatives from IWMI, ICARDA, ICBA, University of Grisson, Germany and NARES, including Water Management Research Institutes of Turkmenistan, Kazakhstan, Uzbekistan, Tajikistan, Karakalpakstan Rice Research Institute, Tashkent Institute of Irrigation and Land Reclamation, Uzbekistan Research Institute of Water Management and Design, Guliston State University of Uzbekistan, and Tashkent and Karakalpakstan Branches of the Central Asian Irrigation Research Institute (SANIIRI).

The objectives of the meeting were to design a research program in the areas of salinity, drainage, wastewater reuse and land degradation. The group identified and discussed the research issues and existing gaps, capacity of the partners to address the research issues, and IWMI's niche to address the research gaps together with partners. The group agreed on a



Participants of the Expert Consultation

research program having five priority areas for IWMI, including, but not limited to:

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Research Highlights

Application of best practices on productive use of land and water in land degraded areas;
Testing and adopting the Sequential Biological Concentration concept for targeting "zero" drainage discharge out of the command areas;
Assessing Scope of GIS/ RS applications, modeling tools, etc. for water and salt accounting and status assessment;
Water Users Associations and their role in addressing land

and water degradation issues;
Designing and testing appropriate institutional, economic and regulatory arrangements at the basin scale for addressing problems related to water, salinity, drainage and wastewater use.

The group also stressed that the most successful strategy to implement this research program would be through a financial partnership with the development projects.

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

Meetings/Workshops/Conferences Organized

INTERNATIONAL CAUCASIAN CONFERENCE

The first International Caucasian Conference on Cereals and Food Legumes was held from 14-17 June 2004 in Tbilisi, Georgia to assess the current status of cereals and food legume research and production in the region and develop a network for information exchange and cooperation. The conference was held under the aegis of the Georgian Ministry of Agriculture and co-sponsored by CIMMYT, ICARDA, FAO, Georgian Academy of Agricultural Sciences, GTZ, South Dakota State University, USDA-Georgia Agricultural Quality Project, Washington State University, WB-funded Agricultural Research, Extension and Training Project and Asian Vegetable Research and Development Center (AVRDC).

The conference was attended by 149 participants from 12 countries (Armenia, Azerbaijan, Australia, Canada, Denmark, Iran, Kazakhstan, Mexico, Taiwan, Turkey, USA, and Uzbekistan). Minister of Agriculture of Georgia Mr. David Shervashidze opened the conference. The minister stated about the great agricultural potential of the Caucasian countries, and emphasized the importance of agricultural research in promotion of improved agricultural technologies and achieving self-sufficiency in food production. The participants were also addressed by the representatives of sponsor organizations: Acad. N. Karkashadze (GAAS), Dr. E. Kueneman (FAO), Dr. H Braun (CIMMYT), Dr. W. Pan (WSU), Dr. J. Fouts (USDA), Dr. Khalikulov (ICARDA), and Dr. S. Shanmugasundaram (AVRDC).

Plenary sessions, group discussions and poster presentations were held in six main sections of the conference: 1) wheat breeding, 2) wheat production technologies, 3) barley



During the Plenary Session

and triticale breeding and production technologies, 4) maize breeding and production technologies, 5) food legume breeding and production technologies, and 6) socio-economic aspects of cereal and food legume production in the Caucasus.

The major recommendations of the conference were:

To strengthen regional cooperation in agricultural research and production;

The next conference to be held in the region every 2-3 years;

The regional cooperative activities like germplasm exchange and testing, information exchange, publications in the scientific journals, mutual exchange visits of the scientists etc. are to be promoted.

(Source: Dr. David Bedoshvili, CIMMYT-the Caucasus)

MEETING WITH THE NEW AGRICULTURE MINISTER OF TAJIKISTAN

A National Planning and Coordination Meeting for the ADB project on "Improving Rural Livelihoods through Efficient On-Farm Water and Soil Fertility Management in Central Asia" was held in Dushanbe, Tajikistan, in which about 40 scientists participated and finalized the technical workplan for 2004. During this visit, Dr. Raj Paroda, Regional Coordinator, ICARDA-CAC had a meeting with H.E. Dr. Voris Madaminov, Minister of Agriculture of the Republic of Tajikistan. Dr. Madaminov was highly appreciative of support being provided by the international centers and said that through this collaboration the research scientists working in agricultural institutions of Tajikistan have been activated and results have become evident on the farmers' fields. He was particularly happy with the progress achieved in the area of varietal improvement, genetic resource conservation and natural resource management. Dr. Madaminov also highlighted the importance of the ADB funded project on on-farm soil and water management, which has provided the resource poor farmers of Tajikistan with low-cost and effective technologies for crop diversification, conservation tillage, cotton-wheat rotation, terracing and mulching, drip and sprinkler irrigation as well as salinity and drainage management. He specifically appreciated support provided by ICARDA for the establishment of Genetic Resource Center, including a cold storage facility that has been created at the Tajik Research Institute of Farming. H.E. the Minister emphasized that

involvement of ICARDA and other CG Centers in Tajikistan is very much needed and also desired to have more support in the area of Integrated Pest Management. Dr. Madaminov at the end assured of his full support to strengthen research partnership with all



Meeting with H.E. Mr. Voris Madaminov (center)

CIMMYT PROGRAM DIRECTORS VISITED CENTRAL ASIA

Dr. Hans-Joachim Braun, Director, Rainfed Wheat Systems Program and Dr. Larry Harrington, Director, Intensive Wheat Agro-ecosystems Program visited Central Asia from 24 May to 5 June, 2004. The objective of the visit was to review the on-going CIMMYT activities, to present a new CIMMYT strategy and also to discuss about the future collaboration with partners from the region.

In Kazakhstan, they together with two experts on Conservation Agriculture from FAO, Drs. T. Bachman and T. Friedrich, visited Kzyl-Orda and Shymkent. This visit was in the context of a request from the Ministry of Agriculture, Kazakhstan to demonstrate resource saving technologies, namely raised -bed planting of wheat, in Amu-Darya River basin. Technology of raised -bed planting of wheat tested by CIMMYT was found to be very promising and the same has presently been adopted on about 300 ha by the farmers in Shymkent Province.

In Uzbekistan, Drs. Braun and Harrington met with the scientists and staff of the PFU-CGIAR for CAC, ICARDA, IPRGI and IWMI to discuss issues concerning regional cooperation, priorities and future plans. They also visited on-station and on-farm trails and demonstrations conducted by the Uzbek scientists in collaboration with CIMMYT and were pleased with the good progress made.

In Tajikistan, during the meeting with Acad. Bobo Sanginov, President, Tajik Academy of Agricultural Sciences, future collaboration between CIMMYT and Tajikistan in the areas of seed multiplication, variety promotion, IPM and improved production technologies were discussed. Severe incidence of wheat Tan Spot disease was observed at the Tajik Research Institute of Farming, suggesting that this location could be a "hot spot" for germplasm screening in future.

In Kyrgyzstan, Drs. Braun and Harrington visited experiments on wheat breeding under irrigated and rainfed conditions as well as on raised bed-planting technology under the ICAR project. They were especially impressed with the performance of two wheat varieties, Jamin and Almira, which are selections from the breeding materials received through international nurseries. The former has recently been released for general cultivation in Kyrgyzstan.

In each of the countries visited, Drs. L. Harrington and H.-J. Braun gave seminars on the topics: "New CIMMYT strategy and implications for Central Asia" and "Wheat improvement at CIMMYT", respectively, to the national breeders and other agricultural specialists. They also met with several donor organizations having active programs in the region.

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

APSA DELEGATION VISITS UZBEKISTAN

Mr. Vinich Chuanchai, President and Dr. J. S. Sindhu, Director, Asia and Pacific Seed Association (APSA) visited Uzbekistan from 15-16 April, 2004.

The main goal of the visit was to introduce APSA to the national seed organizations and to invite them to join APSA. The APSA was established in 1994 by the Food and Agriculture Organization (FAO) of the United Nations, with the aim of promoting quality seed production and marketing in the Asia and Pacific region. Today, APSA is the largest regional seed association in the world with its Headquarters in Bangkok. APSA members include the national seed associations, government seed agencies, and public and private seed organisations.

During the visit, they met with Acad. Jamin Akimaliev, Director of Kyrgyz Research Institute of Agriculture, Heads of cotton and cereals department of the Ministry of Agriculture and Water Management of Uzbekistan, representatives of private seed production organizations, agriculture consultant in the President Office, Director General of potato Seed Production

Association "Uzkartoshkanavuruglari", and the managers and scientists of the Uzbek Scientific Production Center. They also visited the Uzbek Gene Bank at the Uzbek Research Institute of Plant Industry.

Mr. Chuanchai stated that APSA can help in the area of seed research, production, marketing, trade or other related activities. Membership of APSA receive the following benefits:

APSA membership provides opportunities to meet and interact with key persons in the global seed industry and thus promote their seed business.

Access to exclusive training programmes and study tours.

PFU-CGIAR facilitated the visit of APSA delegation with a view to strengthen seed sector in Uzbekistan. Dr. Sindhu assured to have some seed sector representatives invited to participate in the next APSA Conference to be held in Republic of Korea during September, 2004. More details regarding APSA are available on their website <http://www.apsaseed.com>.

DIRECTOR OF AVRDC VISITS CENTRAL ASIA

Dr. George Kuo, Director for International Cooperation, Asian Vegetable Research and Development Center (AVRDC), Taiwan visited Uzbekistan and Kazakhstan from 17-24 June, 2004. He met with Dr. Raj Paroda, Head, CGIAR-PFU for CAC and discussed about future activities of AVRDC in the region and the possibilities of joining the Consortium for CAC as a new member. Dr. Kuo was accompanied by Dr. Ravza Mavlyanova, Deputy Director, UzRIPI, whereas PFU facilitated his visit to the region.

Dr. George Kuo visited the Uzbek Scientific Production Center for Agriculture and met with directors and senior scientists of the Uzbek Institute of Market Reforms, Uzbek Research Institute of Vegetables, Melon crops and Potato, Uzbek Research Institute of Plant Industry (UzRIPI), Tashkent State Agrarian University and Samarkand Agricultural Institute. He discussed the possibilities for future collaboration for strengthening research on vegetables. In Kazakhstan, he

visited the Research Institute of Potato and Vegetables and "Agrosemconsult" private company. Dr. George Kuo also met with the representatives of donor agencies, such as the World Bank, Asian Development Bank, JICA, KOICA, GTZ, Winrock International, etc. both in Uzbekistan and Kazakhstan, to explore the possibilities of getting their support to AVRDC activities in the region.

Potential areas for AVRDC's involvement in the CAC region include increasing productivity of the vegetable sector; equity in economic development in favor of rural and urban poor; healthy and more diversified diets for low-income families; environmental friendly and safe production of vegetables; and the sustainability of cropping systems. AVRDC is planning to organize a regional workshop sometime in November-December this year in the region with participation of vegetable specialists from all the CAC countries.

(Source: Dr. Rovza Mavlyanova, UzRIPI)

TRAVELING WORKSHOPS ON CEREALS AND LEGUMES

A traveling workshop on wheat and legume crops was organized from 11-12 May, 2004 in Turkmenistan. In all, 52 participants attended the workshop, including representatives from Bayer and Singenta companies. During the opening ceremony, speakers mentioned about the problems and successes in seed production and breeding of new lines. The representatives of Bayer and Singenta presented the methods of pesticide and herbicide use in the field. A presentation about ICARDA activities in CAC region was made by Dr. Bitore Djumakhanov. Participants then visited the research fields of the Turkmen Grain Research Institute and farmers' fields, where they saw many promising varieties of cereal and legume crops, including durum wheat named as DACK/KIWI and bread wheat named as AGRI/NACK, which are likely to be submitted to SVTC for testing and release.

A similar traveling workshop, involving 42 participants, was organized in Karakalpakstan, Khorezm and Bukhara Provinces of Uzbekistan from 14-16 May, 2004. The participants visited the fields of Karakalpakstan Farming Research Institute and Karakalpakstan Rice Research Institute as well as the ARAL station. Demonstration plots included number of promising wheat varieties, selected from the international nurseries. Two lines of wheat, ATAY and SERI, were found to demonstrate good performance on saline soils.

Workshop participants also visited Khorezm Branch of the Agricultural Research Institute of Grain and Legumes, where they saw a promising new variety of bread wheat "Buzkala", suitable for cultivation in this region because of high resistance to diseases. In Bukhara Branch of the Agricultural Research Institute of Grain and Legumes, the participants examined the trials of cereals being tested under irrigated conditions.



Participants of the traveling workshop in Turkmenistan

KYRGYZ DELEGATION VISITS ICARDA AND NILE VALLEY PROGRAM



H.E. Mr. Kostiuk being presented an ICARDA silver plate

A high level delegation headed by H.E. Mr. Aleksandr Kostiuk, Minister of Agriculture of Kyrgyz Republic, along with Mr. Samagan Mamatov, Chairman of Agrarian Committee of Parliament of Kyrgyz Republic, Mr. Kamarali Kasymov, Member of the Parliament of Kyrgyz Republic and Dr. Asanbek Ajibekov, Director General of Agricultural Production Center visited ICARDA, Aleppo from 30 May to 3 June, 2004. During the visit, the delegation was acquainted with the programs of NRMP and Germplasm improvement. Dr. Mohan Saxena, Assistant Director General welcomed the delegation and presented an overview of ICARDA. The delegation visited laboratories and experimental sites at Tel Hadia and saw different aspects of cereal and legume crops variety improvement, water harvesting and fodder improvement. Dr. Adel El-Beltagy, Director General ICARDA, during the wrap up meeting with H.E. Mr. Kostiuk, informed about ICARDA's activities in Kyrgyzstan under ADB Soil and Water and IFAD Feed and Livestock projects. He also highlighted that Project on Mountain Agriculture for Kyrgyzstan and Tajikistan is likely to be approved by ADB. H.E. Mr. Kostiuk appreciated the cooperation of ICARDA with his national program and requested particular

help on seed production aspects, the functioning of WUA and training of young specialists of the Kyrgyz Republic on different aspects of natural resources management and germplasm improvement. He stated that in Kyrgyzstan, already 65% of on-farm irrigation and drainage system is managed by WUA. During the transition period, the Ministry of Agriculture faced several problems relating to the functioning of WUA, such as low income of the farmers, lack of water measuring devices, shallow ground water table, etc. ICARDA's experience on improvement of on-farm soil, water and crop management can increase farmers' income and improve irrigation system maintenance. Dr. A. Van Gastel, Head, Seed Unit informed the delegation about seed production activities at ICARDA and exchanged his views on possible involvement of Kyrgyz farmers in the areas of seed production. The delegation also visited ICARDA's Nile Valley & Red Sea Regional Program and Agricultural Research Center of the Government of Egypt. During their visit to the Cairo, they also met with H.E. Mr. Yusuf Wali, Deputy Prime Minister of Egypt.



Prof. Dr. El-Beltagy receiving the Kyrgyz delegation at ICARDA Club

Meetings/Workshops/Conferences Organized

TAJIK CONFERENCE ON CEREALS AND PULSES

The Tajik Ministry of Agriculture, The Tajik Academy of Agrarian Sciences (TAAS), the Agrarian University of Dushanbe, CIMMYT and ICARDA organized a National Conference on Cereal Crops and Pulses in Dushanbe, Tajikistan, from May 31 to June 2, 2004, supported financially by GTZ.

According to the aim of the conference, recent results of research and selection on cereals and pulses were summarized and future priorities and perspectives were developed. Besides, the areas of further cooperation of Tajik agricultural institutions with CIMMYT and ICARDA were discussed.

More than 40 papers on cereal and pulse breeding and research were collected in advance and published in the proceedings of the conference. 110 participants of the Ministry of Agriculture, research institutes, the Agrarian University, international organizations and NGOs working in the agricultural sector attended the conference. 20 papers were

presented on different aspects of cereal and pulse production. Beside national participants, representatives of CIMMYT and ICARDA took part at the conference. Dr. L. Harrington, Director of the Irrigation Programme, Dr. H. Braun, Director of the Rainfed Programme, Dr. E. Duveiller, plant pathologist, and Dr. A. Morgounov from CIMMYT, and Dr. B. Djumakhanov from ICARDA-Tashkent, and Mr. A. Rogger, DED agrarian economist, attended the conference.

The conference was chaired by the Academician Prof. Dr. B. Sanginov, president of TAAS. The Minister of Agriculture of Tajikistan, Prof. V.S. Madaminov, gave his opening address on state and development perspectives of cereals and pulses in Tajikistan. Dr. L. Harrington and Dr. H. Braun presented new strategies of CIMMYT and emphasized on the importance of future cooperation with national research institutions.

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

Human Resource Development

CIP WORKSHOP ON POTATO DEVELOPMENT IN CAC



Participants of the CIP Workshop

27-30 April 2004. The main objective of the workshop was to gather information on potato production in eight CAC countries and use this meeting to analyse and prioritize potato research and development needs for the CAC. Afghanistan, a neighbouring country was also invited to participate in the workshop. Country papers were presented and each country itemized their priority needs. Eight countries participated. Due to logistical problems, Armenia could not attend. However, its country paper was submitted to be read at the workshop.

A regional workshop to "Identify Research and Development Needs to Increase Potato Production in CAC" was organised by CIP and PFU-CGIAR in Tashkent, Uzbekistan from

Around 28 scientists participated in the workshop, including Dr. Oscar Ortiz, Division Leader, CIP Headquarters, Lima, Dr. Sarath Ilangantileke, Dr. Mohinder Kadian, Regional Office of CIP in Dehli, as well as representatives from Afghanistan, Azerbaijan, Georgia, Kazakhstan, Tajikistan, Turkmenistan, Kyrgyzstan and Uzbekistan. Dr. Raj Paroda, Head, PFU highlighted the importance of potato research in the region in his opening remarks and wished that research on potato will get further strengthened with active involvement of CIP. At the conclusion of the workshop, research and development needs for CAC were identified. The priority areas identified were: (i) Seed system development, (ii) Breeding and selection for improved varieties, (iii) Integrated crop management, (iv) Regional information systems for potato, and (v) Higher degree training. On the last day of the workshop, participants visited the Uzbek Research Institute of Vegetables, Melon and Potato and the Tashkent Agrarian University. The workshop was an important event since for the first time potato scientists of the CAC countries met on a common platform to discuss research and development issues of potato production in the respective countries.

IPM TRAINING COURSE

A regional course on integrated pest management of diseases and insect pests of cereals was organized in Tashkent, Uzbekistan from 18-23 May, 2004. This course, which was organized by ICARDA in collaboration with CIMMIT-GTZ, was attended by 22 participants from seven countries: Kazakhstan, Tajikistan, Kyrgyzstan, Uzbekistan, Azerbaijan, Turkmenistan and Georgia.

The major instructors of this course were Drs. A. Yahyaoui, Senior Cereal Pathologist and M. El Bouhssini, Senior Entomologist from ICARDA. Dr. A. Morgounov, CIMMYT-CAC gave a lecture on breeding for diseases resistance. The course covered diseases and insect pests diagnosis, control methods (host plant resistance, biocontrol, and cultural practices) and pests variability. Half of the course was devoted to practical aspects in the lab or field visits for diagnosis, nursery evaluation and conducting surveys. A two-day field trip to Samarkand was organized for disease and insect pests survey. As requested by the instructors, the participants made oral presentations in English on their country's IPM work and



Participants of the IPM training course

included recommendation for improvement based on the information learned from the course.

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

SCIENTISTS TRAINED FOR WUE

A training course on "Management of Water Resources and Improvement of Water Use Efficiency" was held at ICARDA Headquarters, Aleppo, Syria from 3 May to 10 June, 2004. The course was organized with financial support from the Japan International Cooperation Agency (JICA) in collaboration with the Syrian Ministry of Planning and ICARDA. The purpose of this course was to provide participants from CWANA with the necessary practical and theoretical information to improve water use efficiency in agriculture, and to increase their capability to support sustainable agricultural production. The



Participants of the training course on WUE

course, for which the coordinator was Dr. Theib Oweis, Senior Irrigation Specialist, ICARDA, included classroom lectures and discussions, as well as practical field and laboratory exercises.

From the CAC region, four young specialists attended this course. These were: Mr. Ussen Bekbayev, the Taraz

Research Institute of Water Management, Kazakhstan, Ms. Aida Umanova, the Irrigation Research Institute, Kyrgyzstan, Mr. Toshpulot Rajabov, Samarkand Division of Science Academy, Uzbekistan and Mr. Ikrom Ergashev, the Central Asian Research Institute of Irrigation, Uzbekistan (SANIIRI).

SCIENTISTS GETTING TRAINING AT IRRI

Two young scientists Mr. Ikrom Jumanov from the Rice Research Institute, Uzbekistan and Mr. Ablay Karlykanov from the Priaralski Research Institute of Agroecology, Kazakhstan have gone in June, 2004 for one year intensive training on rice breeding and rice production management, respectively at the International Rice Research Institute (IRRI), Los Banos, Philippines. Both of them earlier received English training for 3.5 months in Tashkent, facilitated by PFU. Mr. Karlykanov will be trained on "Modern rice production, processing and post harvest technologies" and Mr. Jumanov on "Conventional and modern rice breeding approaches". They can be contacted by following e-mails: i.jumanov@cgiar.org; and a.karlykanov@cgiar.org.

Two more young scientists are expected to receive training this year in the Republic of Korea, supported by IRRI.



Young scientists from Central Asia (2nd and 3rd from right)

Miscellaneous News

PROF. DR. EL-BELTAGY AND DR. PARODA HONORED



Prof. Dr. El-Beltagy receiving the Honorary Doctorate Degree

The Azerbaijan Agricultural Academy has conferred the Honorary Doctorate degree on Prof. Dr. Adel El-Beltagy, Director General, ICARDA and Dr. Raj Paroda, Head, CGIAR Program for CAC. The degrees were awarded to them in view of their valuable contributions in the field of agriculture and strengthening agricultural research in Azerbaijan by the Chairman of the Academic Council Acad. M.I. Jafarov in the presence of around 400 scientists and post-graduate students at the prestigious National Science Academy building in Baku, Azerbaijan on 7 June, 2004. Prof. Dr. Adel El-Beltagy also delivered an impressive lecture to the audience on "Towards Sustainable Agricultural Development in CWANA", which was Co-Chaired by Acad. Jalal Aliev, Chair, Agriculture Board, and Acad. Makhmood Kerimov, President of the Academy.

4TH INTERNATIONAL CROP SCIENCE CONGRESS

Dr. Raj Paroda has been invited to deliver a Plenary Lecture in the 4th International Crop Science Congress (ICSC) to be held in Brisbane, Australia from 26 September - 1 October, 2004. He will speak on "Scaling-up: how to reach a billion resource-poor farmers in developing countries" and cover success stories relating to breakthroughs in crop

improvement work in India, China, Indonesia and other developing countries of Asia. Dr. Paroda had earlier organized a very successful 2nd ICSC in New Delhi in 1996, in which 1500 delegates from all over the world had participated. He is also serving on the International Continuing Committee of the International Crop Science Congress.

IFPRI LAUNCHES NEW ISNAR PROGRAM IN ADDIS ABABA, ETHIOPIA

On 31 March, 2004, the International Service for National Agricultural Research (ISNAR), based in The Hague, officially ceased operations, and a new ISNAR program began within IFPRI on April 1. The new program is based at the International Livestock Research Institute (ILRI) campus in Addis Ababa, Ethiopia. While the international search for the director of the division is ongoing, IFPRI has engaged Dr. Jim Ryan (former Director General of ICRISAT to serve as the Interim Director for the ISNAR division from April to July 2004.

As agreed by the CGIAR at its Annual General Meeting in October, 2003, the ISNAR program will be guided by a Program Advisory Committee (PAC). The Committee was established at the beginning of April, 2004 for a three-year term. As Interim Division Director, Dr. Ryan will oversee the implementation of the ISNAR program and assume management responsibilities. He will work closely with the PAC, especially on stakeholder dialogues, as well as with ILRI management and staff, and the Ethiopian Government.

Drawing upon the External Program and Management Review, the report of the ISNAR Restructuring Team (IRT), established by the CGIAR, and the ensuing discussion in the CGIAR, IFPRI has defined three board strategic themes on which the new ISNAR Program is expected to focus:

Institutional Change: to produce new knowledge, with strong international public goods characteristics, that contributes to institutional change in agricultural innovation systems enhancing the impact of agricultural research on all elements of the food system.

Organization and Management: to enable innovations that benefit the poor, with a particular focus on Sub-Saharan Africa.

Science Policy: to examine factors in the underlying socioeconomic and political environments that inhibit or enhance the performance of food and agricultural science and technology, in order to suggest policies for improved effectiveness.

Research involving a range of disciplines is envisaged on these themes, in collaboration with stakeholders and partners. This will include case studies, action research and syntheses that will distill lessons adding value to the training and capacity building activities of the ISNAR Division. The division will continue to provide support to NARS and other agricultural R&D institutions.

IFPRI plans to have ISNAR programs closely associated with Regional Fora of NARS in different parts of the world. It is expected that CACAARI and ISNAR program of IFPRI would have much closer partnership in future.

POPULARITY OF IWMI'S WEBPAGE

In March 2004, IWMI launched a webpage (www.iwmi.org/centralasiawaterusers/) containing the guidelines on "how to establish WUAs" in English, Russian, Uzbek, Tajik and Kyrgyz languages. The web use statistics of March to June show that more than 30 copies are being downloaded every day by water professionals, universities and NGOs.

Publications

CSSA SPECIAL PUBLICATION

A special publication by the Crop Science Society of America (CSSA) "Challenges and Strategies of Dryland Agriculture" has been brought out, which includes some papers on Central Asia, presented in the Annual Meeting held in Indianapolis, USA in November, 2002. A copy will be made available to all the NARS Heads when received.

Future Events

ADB-ICARDA REGIONAL WORKSHOP

A Regional Workshop on "Strengthening Partnerships for More Effective Planning, Research and Development in Agriculture for Central Asia", organized jointly by ADB and ICARDA, will be held from 23-25 August, 2004 in Tashkent, Uzbekistan. Senior policy makers, researchers and NGOs are likely to participate.

FOURTH MEETING OF CATCN-PGR COORDINATION COMMITTEE

IPGRI in partnership with ICARDA will organize the Fourth Meeting of the Coordination Committee of CATCN-PGR Network, which will be held in Tashkent from 23-25 August, 2004.

SECOND IRRI WORKSHOP

The second workshop on "Modern Technologies for Efficient Rice Production in Central Asia" will be conducted jointly by IRRI and PFU-CGIAR for CAC in early September, 2004 in Tashkent.

ICBA-ICARDA TRAINING COURSE

A regional training course on "Principles and applications, with reference to Central Asia and Caucasus region", organized by International Center for Bio-saline Agriculture (ICBA), in partnership with ICARDA, will be held from 2-10 September, 2004 in Tashkent, Uzbekistan.

SECOND INCANA MEETING

Second meeting of the Inter-regional Network for Research Collaboration on Sustainable Cotton Production in Asia and North Africa (INCANA), established last year with its Secretariat in Iran, will be held in Tashkent from 6-8 September, 2004. Leading cotton experts from 15 countries will participate.

PARTICIPATORY TRAINING COURSE

A training course on "Participatory approach in natural resource management research" will be organized under the ADB project on "Improving rural livelihood through on-farm water and soil fertility management in Central Asia" from 6-11 September, 2004 in Tashkent.

TRAVELING WORKSHOP TO INDIA

A traveling workshop to India will be organized under the ADB project on "Improving rural livelihood through on-farm water and soil fertility management in Central Asia" from 18-26 September, 2004.

REPORT ON WATER REFORMS IN KYRGYZSTAN

IWMI-CAC's work on the assessment of reforms in Kyrgyzstan has been accepted for publication in the IWMI Research Report Series. The publication is currently in the press and will be out in August.

BROCHURE ON WATER AND LAND PRODUCTIVITY

IWMI and SIC-ICWC have jointly produced a brochure for farmers in Tajik, Uzbek, Kyrgyz, Russian and English describing the simple guidelines to improve water and land productivity in Fergana Valley.