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CACnews

12th Steering Committee Meeting of the CGIAR Program for Sustainable Agricultural Development in Central Asia and the Caucasus

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

CGIAR Collaborative Research Program for Sustainable Agricultural Development in Central Asia and the Caucasus is being implemented in the region since 1998. The goal of the Program is to contribute to achieving the overall goal of food security, economic growth, environmental sustainability and poverty alleviation in the countries of Central Asia and the Caucasus. Its immediate objective is to assist the CAC countries in achieving sustainable increases in the productivity of crop and livestock systems through development, adoption and transfer of production technologies, natural resource management and conservation strategies, by strengthening agricultural research and fostering cooperation among the CAC countries and international agricultural research centers.

WELCOME MESSAGE

Message from Akad. Hukmatullo Ahmadov

I would like to take this opportunity to express my deep gratitude on my own and on behalf of the Tajik Academy of Agricultural Sciences to the CGIAR Program for Sustainable Agricultural Development in Central Asia and Caucuses and all International Centers for the continuous support in development of agricultural research in region.

Because of CGIAR Program activity the scientists from the Central Asia and Caucasus have the opportunity to collaborate and conduct researches with scientists of the International Centers. The significance of the CGIAR Program is in creating capacity of integrated researches in the region in which scientists from all countries actively participate. It has led to development of the common and mutually beneficial solution of the problems. The majority of the countries in the region have the operating genbanks. The Network of Plant Genetic Resources (PGR) in Central Asia and Southern Caucasus has been created. Eight groups operate in this network nowadays.

There have been many are many achievements of the Tajik scientists as a results of their activities within the framework of the CGIAR Program. Many researches on crop selection and seed-growing have been conducted in Tajikistan. As a result, several varieties of grain and leguminous crops have been disseminated and nowadays occupy significant areas of the Republic.

Major success of Tajikistan is connected to its joining to the Central Asian Countries Initiative for Sustainable Land Management (CACILM).This helped to improve the livelihood of people living in rural areas, increase the effectiveness of natural resources and prevent extensiveness of land degradation.

The integrated IFAD funded researches on livestock and forage production running by ICARDA in the Central Asia and Caucasus have helped to enhance the livestock and forage production sectors in the region.

I have great expectations from the new IFAD-funded Project on «Improving Livelihoods of smallholders and Rural Women through Value-Added Processing and Export of Cashmere, Wool and Mohair». This Project is concentrated on creating opportunities to increase income and provide food security for rural communities by developing production, processing and export of fibre with value-added cost in industrial areas of Tajikistan, Kyrgyzstan and Iran.

In conclusion, it is necessary to highlight the considerable progress in agricultural sector of Tajikistan. However, we should not forget about the important issues of nowadays. Development of small households, hill agriculture, and conservation of soil, water, forest resources, and natural pastures are among them. I am sure that the active work of regional scientists will be a support in detecting the most effective solutions to these issues.

Akad. H. Ahmadov
President
Tajik Academy of Agricultural Sciences

IMPORTANT EVENTS

12th Steering Committee Meeting of the CGIAR Program for Sustainable Agricultural Development in Central Asia and the Caucasus (CAC)

The 12th Steering Committee Meeting (SCM) of the CGIAR Program for Sustainable Agricultural Development in Central Asia and the Caucasus (CAC) successfully took place in Tbilisi, Republic of Georgia on 12 -14 September, 2009. The Meeting was attended by the Heads of the National Agricultural Research Systems of Georgia, Armenia, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, the Directors General and representatives of CGIAR and the other International Centers, and representatives of donor agencies. Also, many scientists from several research institutions working in the region participated. The overall more than 100 people attended the meeting. There was a particularly active involvement of 20 research institutions from Georgia.

The Inaugural session was addressed by H.E. Bakur Kvezereli, the Minister of Agriculture of Georgia, who welcomed the participants of this significant meeting and expressed his great appreciation for the contribution of the CGIAR Centers to agricultural research and development in all CAC countries. The Minister further expressed his belief that this extremely beneficial cooperation might serve to further strengthening ties with Georgia, and that Georgia was interested in providing all the assistance and cooperation toward it. H.E. Nodar Surguladze, Deputy Minister of Science and Education of Georgia, in his talk, explained the major principles of scientific research funding in Georgia. Dr. Mahmoud Solh, Director General, ICARDA introduced the current changes in the CGIAR system to the audience, which are currently being managed in response to the urgent need for structural change in the CGIAR, in order to respond to new challenges the world is facing, such as the food crisis of 2008 and the global climate change. The changed management in the CGIAR should restore the full potential of the CGIAR to address those crises. Dr. Solh also argued in favor of a new accord, based on separate governance and management with clear decision-making roles. Dr. Solh also pointed out to the fact that a considerable funding for projects will be channeled to so-called mega-programs, the portfolio of which is currently being debated and which will shape the future of the CGIAR. Not least, the CGIAR CAC Program was once more mentioned as an excellent model for a mega-program, having a clear regional mandate and a very lean management structure, which is providing an excellent ratio of external funds acquired to core funds attributed to the PFU, of almost 10:1.

The Inaugural session was followed by a novelty in the SCM, introduced according to the request of His Excellency Nodar Surguladze, the Deputy Minister of Science and Education of Georgia. In a poster session organized by Georgian Agrarian Research Institutions and International Organizations, the work of more than 20 research institutes of Georgia was presented together with posters from the CG Centers and of some of the eight NARS. The session gave opportunity for interaction between poster presenters and other meeting participants, and was a great success insofar as it generated a lot of new contacts and interactions.

The technical part of the meeting, which started after

Participants of The 12th Steering Committee Meeting of the CGIAR Program for Sustainable Agricultural Development in Central Asia and the Caucasus (CAC), Tbilisi (Georgia)

the posters presentation, was co-chaired by H.E. Bakur Kvezereli (Minister of Agriculture of Georgia) and Dr. Mahmoud Solh (Director General, ICARDA), who welcomed the participants to the 12th SCM. This was followed by presentation of Dr. Christopher Martius, Head of PFU-CGIAR Program in CAC, who outlined the main points of PFU annual activities and future research perspectives. In his talk he emphasized the strategic respond of the Program to the challenges, research activities of all centers, and the technologies that are being implemented among others. Presentations on germplasm enhancement and crop improvement were made by Dr. Ravza Mavlyanova (AVRDC), Dr. Ram Sharma (Wheat breeder, ICARDA) and Dr. Carlo Carli (CIP); presentation on Conservation of genetic resources was made by Dr. Z. Akparov (Azerbaijan) with valuable contributions of Dr. M. Turdieva (Bioversity International), Dr. Z. Khalikulov (PFU/ICARDA) and Dr. A. Amri (ICARDA).

Technical session continued by Acad. A. Musayev (Azerbaijan) and Dr. F. Taha (ICBA), who greeted the meeting participants. The presentation on "Water Management" was made by Dr. H. Manthritilake (IWMI, Uzbekistan); on "Marginal water utilization and biosaline agriculture" by Dr. K. Toderich (ICBA, Uzbekistan); and on "Socio-economic and policy research and climate change in the CAC region" by Dr. M. Ahmed (ICARDA).

The Executive Committee Meeting of the Program took place on 13th of September, 2009, which was opened by Dr. Colin Chartres and Academ. Dr. Shota Chalaganidze. Several important decisions regarding the future financing of the PFU were discussed during this meeting but the final decisions were postponed to the next SCM. On the invitation of Turkmen delegation was decided that the 13th SCM will take place in June or July, 2010 in Ashgabat, Turkmenistan. Also, on occasion of Dr. Martius resignation from the position of Head of PFU and Regional Coordinator, ICARDA-CAC, Dr. Solh thanked him for his services and great contribution to the region Program.

The Steering Committee Meeting was followed by several other events: the Annual meeting of the Central Asia and the Caucasus Association of Agricultural Research Institutions (CACAARI), the Regional Workshop on "National Integrated Strategies for Plant Genetic Resources Management and Use in Central Asia and the South Caucasus" (FAO/ICARDA) (both on 15th September, 2009), and the ICARDA-CAC Regional Coordination Meeting (16th September).

This year's meeting had the high importance for the future of the Program and the effective coordination of CGIAR CAC program activities in the region. Many important research issues were brought up during this meeting. The CGIAR CAC will follow up to solve them together with National partners, by the courses and trainings organization, capacity building and fund-raising activities for new projects to be implemented in the region.

Annual Steering Committee Meeting of CACAARI in Tbilisi, Georgia

The Annual Meeting of the Steering Committee (SC) of the Central Asia and the Caucasus Association of Agricultural Research Institutes (CACAARI)was held on the 15th of September, 2009 and brought together SC members from eight countries of the region – Dr. Levon Minosyan from Armenia, Acad. Asad Musaev from Azerbaijan, Dr. Guram Aleksidze from Georgia, Dr. Abdrahman Ombaev from Kazakhstan, Acad. Jamin Akimaliev from Kyrgyzstan, Acad. Hukmatullo Ahmadov from Tajikistan, Dr. Muhammed Nepesov from Turkmenistan and Dr. Bakhtiyar Kamilov from Uzbekistan, as well as the partners from Georgian agricultural institutions and CGIAR-CAC Program. The international organizations were presented by Dr. Faisal Taha (Director General of ICBA), Dr. Kamil Shideed (Assistant Director General of ICARDA), Dr. Christopher Martius (Head, CGIAR-CAC PFU/Reg. Coordinator, ICARDA-CAC), Dr. Zakir Khalikulov (Deputy Head, CGIAR-CAC PFU), Dr. Stephanie Christmann (Environment Specialist, ICARDA-CAC), Dr. Elcio Guimaraes (Plant Breeding Specialist, FAO), Dr. Herath Manthrithilake (Regional Coordinator, IWMI-CAC), Dr. Mesut Keser (Wheat breeder, ICARDA-Turkey), Dr. Muhabbat Turdieva (Regional Coordinator, Bioversity International-CAC), Dr. Ravza Mavlyanova (AVRDC Regional Coordinator for CAC Region), Dr. Kristina Toderich (ICBA Regional Coordinator for CAC Region) and Dr. Ajit Maru (Agricultural Research Officer, GFAR).

The meeting was opened by Abdushukur Khanazarov, Executive Secretary of CACAARI, who welcomed the participants and wished them a productive meeting. He was followed by Chairman of CACAARI, Hukmatullo Ahmadov who reported to the participants about CACAARI activities for the period from September 2008 to August 2009. The Chairman briefly described CACAARI's goals and organizational structure, as well as past achievements. The introduction was followed by information on CACAARI's activities concerning the membership expanding - the requests of 35 regional organizations were satisfied. Chairman Ahmadov stated that the CACAARI Constitution was being amended to incorporate two new Consortia – Consortium of Farmers' Organizations and Consortium of NGOs. The Chairman also informed participants that Mr. Anvar Rahmetov

Representatives of CAC Countries

(Assistant Executive Secretary) and Mr. Sherzod Qosimov (ICT officer) were recruited to facilitate CACAARI activities. In the final part of his speech, Chairman gave the information about the process of regional preparations for the Global Conference on Agricultural Research for Development (GCARD): the Regional Review Study, electronic consultations and the face-to-face meeting are planning to be held in October, 2009, Tashkent, Uzbekistan.

Chairman Ahmadov's briefing was followed by Dr. Ajit Maru's report on the global GCARD process, its aims and relation to the CGIAR reforms. Dr. Maru explained that GCARD is a series of biennial conferences, which are organizing to provide an action plan and strategy for improved agriculture throughout the world, bring together many stakeholders around a common agenda. Dr. Maru's presentation was followed by discussion session. The participants thanked Dr. Maru for a very informative presentation about this important process.

Executive Secretary Dr. Khanazarov passed the floor to Dr. Surendra Beniwal, CACAARI Consultant who presented the Regional Review - a document that thoroughly analyzed needs and priorities of agricultural research of the region. He identified the areas and researchable issues which may have the mainly impact on the poor. The full version of the presentation is available on the website: http://www.cacaari.org/activities/reports. Dr. Beniwal's presentation was a subject of tremendous interest from participants and due to the number of questions asked by participants, went way over the time allocated for it. In the end, participants thanked Dr. Beniwal for the Regional Review and the excellent job he did.

The Steering Committee reviewed the amendments to CACAARI Constitution. Several issues were raised about changes needed in view of CACAARI's extending membership to various regional stakeholders. Due to a large number of suggestions, the Chairman proposed that the Constitution's finalized draft will be approved at an extraordinary meeting during Tashkent Face-to-face regional consultations on 16-17 October, 2009. The Chairman expressed his concerns about ownership issues with the Regional Review and proposed that Steering Committee members would form a GCARD Regional Review Task Force. Armenia, Azerbaijan, Georgia and Kazakhstan nominated national candidates for the Task Force immediately, others committed to doing so shortly.

During the Tbilisi meeting the issue of membership fees was partially solved. The participants agreed that membership fees are crucial for CACAARI's financial stability and agreed on the amounts for international members. The amount of membership for NARS organizations are to be finalized till the Extraordinary Meeting of CACAARI Steering Committee in Tashkent.

Overall, the Tbilisi meeting was very short (only half a day), intensive and productive. CACAARI team wants to thank the participants for their very useful comments and suggestions and the CACAARI leadership for effective work.

The Second Annual Meeting of the CIP-BMZ/GTZ project: "Enhanced food and income security in South West Central Asia through potato varieties with improved tolerance to abiotic stress"

The second Annual Meeting of the CIP-BMZ/GTZ project was held in Tashkent last 18-19 September. It was a profitable one and a half day meeting followed by a visit to laboratories, greenhouses and fields to document working progress in Tashkent.

There were participants from Germany (Julius Khüne Institut), namely Drs. Sylvia Seddig and Anne Bartelmann; an important delegation from India, namely the Director General of Central Potato Research Institute (CPRI); Dr. SK Pandey, a Senior potato Breeder; Dr. Singh and Dr. Govindakrishnan, GIS Specialist; Dr. Rana, Socio-economist; Dr. M. Kadian, Senior Agronomist (CIP-Delhi); Neeraj Sharma, CIP Assistant-Delhi; Dr. Tapan Day, Pathologist and current Leader of the Potato Programme at TCRC (Tuber Crops Research Center) from Bangladesh; CIP Assistant, Dr. E.Rahaman; participants from Tajikistan - Dr. Kurbon Aliev and Dr. Zulfiya Davlyatnazarova from the Research Institute of Plant Physiology and Genetics; Dr. Elmurod Holmuratov, Mrs. Galina Nasirova and Mr. Timur Abdurakhmanov from the National University of Uzbekistan; Mr. Ahmedjan Rasulov and Mr. Abdumurat Satmuratov from the Institute of Vegetables, Melon and Potato; and CIP staff based in Tashkent - Dr. C. Crissman, DDG for Research, CIP-Lima and Dr. Roland Schafleitner Potato Physiologist from CIP-Lima.

The objectives of the Workshop were to: (i) discuss results obtained during first year of activities of the project; (ii) readjust protocols for laboratory, greenhouse and field experiments; (iii) reorient project activities based on new developments; (iv) discuss on the joint preparation of scientific articles based on the results of at least two-year experiments; and (v) develop comments on training activities initiated by the project and formulate recommendations on future needs.

Results of last year's field trials were presented in detail as well as the results of some in-vitro screening methods adopted in Tashkent and Dushanbe. This year, two young scientists from India and Uzbekistan have been trained in

Participants in the 2nd Annual Meeting of the BMZ-funded project, Hotel Shodlik, Tashkent

screening methods at the Julius Khüne Institut, Germany, while 4 participants from SWCA (India, Bangladesh, Tajikistan and Uzbekistan) took part in a Germplasm Management Training Course, held at CPRI, Shimla, India.

In the fields of the Research Institute of Vegetables, Melon and Potato, participants could visit five trials among them one drought tolerant trial (Strip plot design with 3 treatments, 3 reps and a plot with 3 rows and 10 pl./row) with 12 CIP clones and a standard check, the Dutch var. Sante; and one trial with potato intercropped with maize (Factorial design with 2 treatments, 2 CIP potato clones, 3 different planting dates and 3 reps) to study the effects of intercropping on the potato crop under the torrid and arid conditions of the second growing season in the lowlands of Uzbekistan. In the latter, two CIP clones, 397077.16 and 397073.16 were chosen for their behaviour in terms of drought tolerance and drought sensitiveness, respectively. At the end of the field visit, participants visited some of the newly installed facilities with GTZ funds like the cold chamber (of 13 m3 capacity) and the Hobo Meteo Station to collect rainfall, temperature, relative humidity and radiation. Before leaving the Research Institute, all the participants appreciated the organoleptic session organized by the Institute with tasting of different varieties of melons and water melons produced by researchers of the Institute.

Dr. C.Carlo Carli,
CIP

The 2nd World Congress on Agroforestry (WCA): "Agroforestation of Salt Affected Lands in Central Asian countries"

The 2nd World Congress on Agroforestry (WCA) took place on 23-28 August 2009 in Nairobi, Kenya. Over 1400 participants from 97 countries including researchers, governmental officials and policy markers, leaders of farmers associations and representatives of mass-media attended this event. The overall Congress theme entitled "Agroforestry - The Future of Global Land Use" consisted of three sections addressing (i) Food Security and Livelihoods, (ii) Conservation and Rehabilitation of Natural resources, and (iii) Policies and institutions and presented at keynote/ plenary talks, symposia and technical sessions.

At the session "Agroforestry for salinity control, and land rehabilitation" oral and poster presentations from Central Asian region generated considerable interest among audience and were dedicated to current priorities of possible ways on sequential agroforestry (afforestation) for rehabilitation of marginalized cropland and for improving rural livelihoods. Due to the carbon sequestration via agroforestation the Central Asian countries could be involved in the global carbon sequestration efforts by selling credits gained via the Clean Development Mechanism (CDM).

The session report calls for immediate actions to direct research towards reclamation of saline prone and decertified lands, generation of useful non-timber products and achieving co-benefits of carbon sequestration by conserving natural resources and reducing poverty through improving household food and nutrition security.

Dr. John Lamers, ZEF-UNESCO, leading the technical session "Agroforestry for salinity control and land rehabilitation"' at the 2nd World Agroforestry Congress, 23-28 August, 2009 Kenya, Africa

This WCA - 2009 will be remembered by many as a landmark showing and shaping the future of land use gearing towards poverty reduction, food security and targeting climate change.

Dr. Kristina Toderich
ICBA-CAC

RESEARCH HIGHLIGHTS

Wheat breeding lines resistant to yellow rust, leaf rust and powdery mildew

Researchers from ICARDA-CAC and NARS-Uzbekistan jointly evaluating research plots for yellow rust

There was a severe outbreak of yellow rust in Uzbekistan in 2009 in Uzbekistan. Yellow rust was also the most important disease of wheat of winter wheat across the region. Powdery mildew was widely spread in the CAC region on irrigated wheat crop in 2009. Twenty two of the 24 winter wheat varieties released for cultivation in different parts of Uzbekistan showed susceptibility to yellow rust in 2009. On the other hand, many advanced lines from IWWIP were resistant to yellow rust. A summary of the wheat lines resistant to yellow rust (YR), leaf rust (LR) and powdery mildew (PM) in different winter wheat nurseries in Uzbekistan is presented in the Table below.

Nursery	№ of test lines	% Resistant (<20% severity) lines					
		YR	LR	PM	YR+ LR	LR+ PM	YR+ LR+ PM
12th IWWYT-Irrigated	14	79	57	29	14	21	7
11th IWWYT-Semi-arid	15	67	27	27	13	13	13
16th FAWWON-Irrigated	81	53	80	40	15	35	12
16th FAWWON-Semi-arid	56	50	59	32	18	27	7
Total:	**166**	**55**	**66**	**35**	**16**	**29**	**10**

Table: Number of winter wheat lines resistant to yellow rust, leaf rust and powdery mildew in different nurseries at Kibray, Uzbekistan, 2009.

Dr. Ram C. Sharma, Dr.Zakir Khalikulov
Mr. Safar Alikulov, Mr. Zafar Ziyaev
ICARDA

Collaboration of the Kazakh Research Institute of Potato and Vegetable Growing with AVRDC – The World Vegetable Center

Vegetables have the big importance for food safety, nutrition and a diet diversification of a population in Kazakhstan.

The Kazakh Research Institute of Potato and Vegetable Growing (KRIPVG) collaborates with AVRDC- The World Vegetable Center in the framework of Regional Network on Vegetable System Research & Development (CACVEG). The Institute is located on the foothill of Zaliyskiy Alatau in south-east zone of Kazakhstan. This zone combines unique conditions of steppes and mountain climatic zones. The climate of this region is sharp-continental, and it is one of the most important factors in studies and adoption to local conditions of vegetable crops' germplasm introduced from other regions. Regional variety trial of vegetable crops' accessions introduced from AVRDC is conducted in conditions of such climatic conditions.

Since 2006, a total of 68 accessions of six vegetable crop species were introduced for a study, including tomato- 32, sweet pepper- 9, hot pepper – 4, eggplant – 14, vegetable soybean – 3, mung bean – 5, and vegetable bean -1. Introduced germplasm has unique economic valuable features for enrichment of the institute's vegetable crops gene pool for using it in a breeding.

Promising line of sweet pepper PBC 276 named "Kaz-Tai" and the line 0037 -7645 named "Bayan Supu", and also hot pepper line 9950 – 5195 named "Pikant" revealed by the scientists of the institute as a result of complex study are under the state varietal trial now. These varieties are of universal use, and have higher yield and quality of fruits.

Complex study of other vegetable crops is continuing and promising lines will be submitted to the state varietal trial.

Dr. Temirjan Aytbayev
National coordinator on Vegetable System R&D in Kazakhstan
Dr. Nina Kiseleva
Researcher of KRIPVG

Harvesting potato trials in Tajikistan

Dr. Firuz Yuldashev, Breeder and CIP Assistant, participated in the harvest of many CIP potato selections in the highlands of Jirgatal district (at about 350 km north of Dushanbe, and precisely 30 km from the Kyrgyz border, and at the altitude of 2700 m asl) on 23-27 September, 2009. The selections were cultivated in the fields belonging to the NGO "Tuckmiparvar" that is one of CIP's partners in Tajikistan. This NGO is composed by staff specialized in potato breeding and it was formed at the completion of a FAO project axed on the development of potato seed production. A total of 74 CIP advanced clones issued from in-vitro plants and minitubers produced by the Institute of Plant Physiology and Genetics of the Academy of Sciences, Dushanbe, Tajikistan were planted in the field at the end of May, 2009. Twenty eight of them belong to the LTVR (Lowland Tropic Virus Resistant) population that was distributed to Tajikistan in 2005, while 46 of them to the AVR (Abiotic and Virus Resistant) Population distributed last year in the framework of the BMZ/GTZ-funded project "Enhanced food and income security in South West Central Asia through potato varieties with improved tolerance to abiotic stress".

Apart from the above germplasm materials, harvesting operations included 14 CIP clones of the Regional Clonal Selection that started in the highlands of Tajikistan in April 2005 from True Seed combining virus resistance, earliness, long day adaptation and market requirements. Furthermore, one True Potato Seed (TPS) family, CIP No. 998010 (LT-8 x TS-15), was multiplied for further distribu-

Review of varietal trial in the Kazakh Research Institute of Potato and Vegetable Growing

A CIP promising clone (CIP No. 303414.4)

CIP No. 392797.22

tion to farmers. This year, it has been delivered to the State Commission of Variety Testing for further release under the candidate name of "Dusti". Another clone has been delivered to the same Institution with the candidate name "Faizabad".

As you can see from the below pictures, harvest was excellent. Very promising performances were obtained with CIP clones issued from the Regional Clonal Selection conducted in Tajikistan from 2005: 303414. 4 (C92.140 x 92.187) and 302478. 1 (TITIA x C93.154). This is also to remind that 14 clones issued from the Regional Clonal Selection were distributed to each CAC country for further testing. A CIP advanced clone 392797.22 from the LTVR population is also considered as a potential candidate for further release due to its excellent yield of oblong, red skin tubers (see Pic.). In Tajikistan and Uzbekistan, for instance, red skin varieties are more appreciated by consumers and get a premium price in the local markets.

Dr.Carlo Carli,
CIP

Testing Indian pheromone traps in Uzbekistan

Fruit worm or bollworm Helicoverpa armigera is a very dangerous pest for cotton and tomato crops during summer time in Central Asia. Feeding fruits it can cause very big damages up to 30% crop yield loss. The most effective method of the pest control is the biological control, one of which is the use of pheromone traps. IPM CRSP project received 10 pheromone traps for Helicoverpa armigera produced in India at Pest Control Pvt. Ltd. PCI, Division: Bio-Control Research Laboratories.

Hundreds number of fruit worm Helicoverpa armigera caught by Indian pheromone trap in Tashkent region (left) and in Namangan region tomato fields in 2 days (right)

There were differences noticed between fruit worm species caught in Namangan region and in Tashkent region (on upper side)

In a field experiment was tested effectiveness of pheromone traps produced in India in comparison with triangular Uzbekistan pheromone traps made at the Tashkent Institute of Bioorganic Chemistry, which farmers traditionally used in cotton production areas but are rarely used in tomato crops in any Central Asian countries. Five of the Indian pheromone traps where tested on tomato fields in Namangan region and other five traps in Tashkent region. Traps in the Namangan region were observed from 25 June through 5 July, and in the Tashkent region from 28 June through 20 July. Fruit worm were presented in all of the tomato field plots. More moths were caught with the Indian traps, the average number for the first sampling date was 56 individuals, whereas the Uzbekistan traps attracted on average 3 moths per night. The total number of moths caught in the Namangan region with the 1 imported Indian trap was on average 232 individuals, in compare with 23 in the local traps. In Tashkent region 1 imported trap caught in average 200 butterflies and 15 by Uzbek trap. It was defined that only male fruit worms were attracted to the traps. According to the results the effectiveness of imported pheromone trap is much more higher (up to ten times) then effectiveness of Uzbek trap.

There were conducted the biological control, estimated phonological flight of the pest and determined some differences between species of Helicoverpa armigera captured in the Namangan and in Tashkent regions by using these pheromone traps.

Dr. Barno Tashpulatova
IPM Project

WORKSHOPS AND TRAININGS

Inception Workshop

The Inception Workshop of the new IFAD-funded Project called "Improving Livelihoods of Smallholders and Rural Women through Value-Added Processing and Export of Cashmere, Wool and Mohair" was held in Khujand, Tajikistan, from 24 to 27 September 2009. Dr. Barba-

From left to right: Dr. Mueller, Dr. Ikramov, Dr. Rischkowsky and Akad. Akimaliev

Participants of the SLMR final workshop

ra Rischkowsky, Project Coordinator, Director of DSIPS Program, represented ICARDA. Dr. Antonio Rota, Senior Technical Adviser, Livestock and Farming Systems Technical Advisory Division, and Ms. Laura Puletti, IFAD Focal Point, took part on behalf of IFAD t. The workshop was hosted by the Tajik Academy of Agricultural Sciences and Tajik Research Institute of Livestock.

During the inception workshop, participants were introduced to the new selected project sites in Iran, Kyrgyzstan, and Tajikistan. Researchers also shared their ideas on value-added fiber processing technologies and community based livestock breeding programs. It was emphasized that in order to develop fiber processing it is necessary to enhance both production of small ruminants and cashmere, increase the wool and mohair processing skills of women communities. Group discussions were conducted on the work plan and budget for the first project year - 2010. Participants were divided into three groups by the project sites, and all groups came up with the basic activities and expected budget distribution.

On the final day of the project inception workshop (27 September)., participants met with the IFAD/FAO Study Tour teams, which are working in other IFAD-funded and FAO-funded development projects in Tajikistan as well as representatives of Tajik state agencies and local authorities. During the meeting, both groups shared with information about the activities being implemented to improve the livelihoods of the rural communities in Tajikistan and other countries involved into the current project.

Mr.N.Nishanov, Dr.H.Hamdamov, Dr.Aziz Nurbekov
ICARDA

SLMR Project final workshop

On August, 2009, ICARDA-CAC organized an International workshop to discuss the results of the Sustainable Land Management Research (SLMR) Project in the Poytakhkt Hotel in Tashkent. The SLMR project, financially supported by the Asian Development Bank and the Global Environmental Fund (GEF), is part of the framework of the Central Asian Countries' Initiative for Land Management (CACILM). The project lasted from July 2007 to August 2009 and focused on research to promote sustainable land management options, to contribute to restoration, maintenance and enhancement of the productive functions of land to improve the economic and social well-being of the population while preserving the environmental functions of these areas.

The workshop participants included around thirty scientists from the five Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan), Heads of the CACILM National Secretariats, UNCCD Focal points, Heads of the National Agricultural Research Systems (NARS) of the five countries and National Coordinators of the SLMR project, the Head of the Multi-Country Secretariat of CACILM, and ICARDA staff from Headquarter in Aleppo, Syria, as well as from the regional office for Central Asia and the Caucasus in Tashkent.

During the meeting, the participants actively discussed the results and gave recommendations for enhancing agricultural production, while increasing sustainable land management and improving rural livelihoods in Central Asia. They exchanged ideas and planned that the next phase of CACILM, which depending on the funding, will focus on climate change adaptation and mitigation strategies for the CAC region.

Dr. Kirsten Kienzler
SLMR Project

Training Workshop on "Challenges of sustainable water use in arid and semi-arid regions under conditions of climate change"

This International training workshop on "Challenges of sustainable water use in arid and semi-arid areas under conditions of climate change" was co-organised by Center for Development Research (ZEF), University of Bonn in Germany, the Regional Center on Urban Water Management (RCUWM) in Tehran, Iran, and ICARDA-PFU in Tashkent and took place from September 28 until October 1, 2009 in Tashkent, Uzbekistan. The workshop was funded by the German Federal Ministry of Education and Research (BMBF).

On behalf of the Republic of Uzbekistan, Dr. M Toshboltaev, Deputy Head of the Scientific Production Center of Agriculture welcomed the participants. Dr. H. Loewe of BMBF expressed the expectations from the site of the German Government.

About 50 participants came from Afghanistan, Belgium,

Participants of the Training Workshop

Germany, India, Iran, Oman, Tajikistan and Uzbekistan discussed the scientific implications of climate change for water management in dry land areas and explored concepts, tools, and technologies that can be developed into effective adaptation measures and mitigation strategies. The lectures, presented by experts from German Universities, the German Space agency and also by members of RCUMM and ZEF covered a wide range of topics including the impact of climate change on glacier melting and regional water availability, developing information systems for climate change analysis, improving agricultural water productivity, adaptive management of cropping systems, enhancing the efficiency of irrigation system by using GIS and remote sensing technologies, sustainable management of freshwater lakes, and urban water management.

The last two days of the workshop in Tashkent were followed by a two-day guided tour in the Khorezm region, where the participants visited the field and observed the lab activities of the ZEF/UNESCO Project in Uzbekistan and the urban water supply station of the Khiva city.

FIELD DAYS

Utilization of marginal lands and water for biosaline forage production in Tajikistan

A Farmers' Day on "Introduction of biosaline agriculture technologies for improvement of abandoned farms in Tajikistan" was conducted on 19-20 August, 2009 at the Yangiobod Farm, Asht district, Northern Tajikistan. This event was organized by ICBA and soil-melioration station of the Academy of Agriculture of Tajikistan and Khukumat of Asht district. Administrative leaders, policy markers, farmers and herders from Asht region showed a great interest on introduction of salt tolerant germplasm for forages and production under arid saline environments.

Participants of the Farmers' Day, Yangiobod, Asht

The ICBA-CAC representative points out the importance of evaluation of genetic resources of traditional and non-conventional salt-tolerant crops with focus on their potentialities as grain and livestock feed materials. Dual-purpose (grain and fodder) nutrition cereals (sorghum and pear millet) with limited irrigation were taken up as second crops after early legumes, winter wheat and barley. Introduced pearl millet and sorghum germplasm were more water efficient, high salt tolerant/drought and did not require leaching work before planting. Furthermore, pearl millet could become a possible and economically interesting alternative in the marginal salt affected lands that will also reduce summer fallow practices by increasing the land use ratio improved biodiversity and generate alternative flexible options for improved livelihoods of poor farmers.

Incorporation of these plants into a biosaline farming system represents the only source of income for many poor rural families, who live far away from markets.

Mr. Bakhtyor Usmanov - Department of Agriculture and Water Management of Asht district, Mr. Davron Ohundzhanov - Deputy of Khukumat of Asht district outlined that the availability of seeds of improved lines of non-conventional salt tolerant crops still remains a major constraint. Potential extension and large-scale seed multiplication of top-yielding varieties of sorghum, pearl millet and alfalfa should be planned to meet the growing demand of farmers. Trials for breeder seeds and seeds production plots have to be established and monitored in order to maintain the purity and quality of seed, as well as to distribute among interested farmers. Progressive farmers under supervision of ICBA scientific/technical staff could become a strong unit in crop diversification and seed production programs in order to utilize the marginal low quality water and enhance the productivity of salt affected lands and increase the income of rural poor. Farmer-participatory research on village/kishlak level is crucial in transferring the biosaline technologies of cultivation of salt tolerant crops for rapid adoption.

The planting of trees for improving the unfavourable natural drainage conditions, which in Asht massive, northern Tajikistan are aggravated by the deterioration of the drainage network, may be a cost effective option or addition to the conventional drainage systems. A special attention was given to the utilization of marginal/drainage low quality water to ensure forage during feed shortage time.

Dr Kristina Toderich,
Dr.Muazam Khamidova
ICBA

Strengthening of collaboration with farmers

Crop diversification has an importance for agriculture. Recent years for rational use of the land, vastly increased the need of using the repeated crops in a crop rotation system, with attraction of new crops and early-ripening varieties, facilitating to soil fertility improvement, increasing of safe product manufacture, diversity of nutrition and increasing farmers' income.

Farmers' Day was organized on 5th of September, 2009 in Tashkent region by AVRDC-CAC Regional Office – The World Vegetable Center jointly with Farmers' Association of Uzbekistan and local district government (Khokimiyat) of Kibray region.

The demonstration field of releasing and promising varieties of vegetable crops revealed by Uzbek Research Institute of Plant Industry was created jointly with AVRDC at the "Yangiobod Husanov Durbek" farm.

Farmers' Day

More than 70 people participated on this event; amongst them were representatives of the parliament of the republic, leaders of republican, regional and district organizations, farmers, businessmen and scientists of the research institutes.

This event was attended by representatives of television, radio and newspapers of the republic. Participants of Farmers' Day got acquainted with new varieties of vegetable crops, technology of their growing, pre-sowing preparation of seeds, and new types of bio-fertilizers for production of safe vegetables, as well as household economy issues.

There was achieved agreement about initiation of several demonstration fields in the Republic during the coming year for undertaking the Farmers' days, multiplication of seeds and dissemination them among farmer

Dr. Ravza Mavlyanova,
AVRDC

Field Day

Field day in frames of the project inception workshop of the new IFAD-funded project "Improving Livelihoods of Smallholders and Rural Women through Value-Added Processing and Export of Cashmere, Wool and Mohair" was organized on 25 September, 2009. Participants visited Markhamat and Oshobo villages located in the Asht district of the Sogd province in Tajikistan. Visitors got acquainted with the existing mohair processing practices of local women communities and observed several flocks of white and colour mohair goats.

Field day participants getting acquainted with the knitted products made from livestock fiber

Mr.N.Nishanov, Dr.H.Hamdamov, Dr.Aziz Nurbekov
ICARDA

FUTURE EVENTS/ ANNOUNCEMENTS

The Global Conference on "Agricultural Research for Development" (GCARD)

The Global Conference on Agricultural Research for Development - 2010 (GCARD) being held in Montpellier, France on 28-31 March, 2010 will provide a global action plan and strategy for improving agricultural research in order to make maximum impact on development, especially of the poor. This plan and strategy will be developed on the basis of a global framework of agricultural research needs and priorities, which will be established through consultations

with representatives from a wide range of agricultural research stakeholders around the world. The Conference is expected to usher in change that will reshape agricultural research and innovation, improve resources for research.

GCARD is being organized by the Global Forum on Agricultural Research (GFAR) in collaboration with the Consortium and Independent Science and Partnership Council (now being formed) of the Consultative Group on International Agricultural Research (CGIAR). The Conference will replace both the GFAR Triennial Conferences and the Annual General Meetings of the CGIAR.

Memorandum of Understanding

On the occasion of the 12th CGIAR-CAC Steering Committee Meeting, Dr. Charlie Crissman, Deputy Director General for Research, CIP (The International Potato Center), Lima, signed an umbrella Memorandum of Understanding (MOU) with Agro-Cartu, Tbilisi, for future research activities. Agro Cartu is an agricultural enterprise engaged in various for-profit and non-profit activities. Its objective is to serve the small holder agriculture sector in Georgia. Recently created by a Georgian philanthropist, Agro Cartu has established a seed enterprise in which it has a potato seed unit. Led by a husband-wife team of Ana and Illya Grombonin the unit is well financed and represents a potentially stable base for improved potato seed production in the country. CIP-CAC has provided technical assistance in the design and equipping of the tissue culture, greenhouse and storage facilities. Agro Cartu will introduce and promote CIP varieties for release, and through their seed program represent an important opportunity for diffusion of new potato varieties to small-holder farmers who represent the majority in Georgia.

Dr. Christopher Martius left the post of the Head of PFU-CGIAR

Dr. Christopher Martius, Regional Coordinator, ICARDA-CAC in Tashkent, Uzbekistan, after two years of service to CGIAR Program relinquished the post of the Head of PFU at the beginning of October, 2009. Considering his pivotal role in the development of the CGIAR Program in CAC, it is highly appropriate to appreciate his leadership role and mention the achieved results - CGIAR Program has been awarded by “Science Award of King Baudouin for Outstanding Partnership”. Dr. Martius will continue his activity as a Deputy Director of Inter-American Institute for Global Change Research (IAI) in Brazil. Inter-American Institute for Global Change Research – is an interstate organization uniting 19 representatives from North and South American countries.

All staff members and scientists of the Centers thanking Dr. Martius and wish him successes in his future career!

His contact e-mail address:cmartius@dir.iai.int

Dr. Zakir Khalikulov appointed as the Head of PFU-CGIAR

Dr. Zakir Khalikulov has been stated as the Head of PFU-CGIAR in Tashkent, Uzbekistan from the october , 2009.

He is one of the pioneers and founders of Program implementation in CAC region and ICARDA Office opened in Tashkent, Uzbekistan in 1998.

After serving the ICARDA for more then 11 years, Dr. Zakir Khalikulov has a rich experience not only in agricultural research field but also in the management and coordination of organizational activities of ICARDA CAC. Dr. Zakir Khalikulov is a current Germplazm scientist and Liaison Officer of ICARDA-CAC in Tashkent.

Dr. Zakir Khalikulov will be acting as a Head of PFU till the official designation of new Head of PFU-CGIAR. All staff members and Centers’ scientists wish Dr. Zakir Khalikulov success and good health!

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All queries regarding CAC News be addressed to:
PFU-CGIAR Office in Tashkent, P.O. Box 4564, Tashkent 100000, Uzbekistan
Tel.: (998-71) 237-21-30/69/04; 234-82-16; 234-83-57; 237-47-19; **Fax:** (998-71) 120-71-25;
E-mail: pfu-tashkent@cgiar.org **Web site:** http://www.icarda.org/cac