

Trip Report

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From May 29 - June 6, 2010, I represented the Central Asia IPM CRSP on a trip to visit project activities in Tajikistan and a visit to the USAID Central Asia Regional Office in Almaty, Kazakhstan. The trip also included discussions about project activities in Uzbekistan and Kyrgyzstan. Because of the recent civil unrest in Kyrgyzstan, we were instructed not to visit the IPM CRSP projects in this country during this trip. As an alternative, we had Murat Aitmatov meet with us in Tajikistan.

Sunday afternoon (May 30) was spent discussing the wheat line evaluation component of the project designed for resistance to the Cereal Leaf Beetle. This was done in conjunction with Anvar Jalilov of the Tj Plant Protection Institute and Mustapha Bohssini and Nurali Saidov of IPM CRSP. Two potential candidates for the CPM CRSP Tj wheat Ph.D. Assistantship were interviewed: Mr. Rasulov Bakhtiyor Rahmonberdievich and Ms. Shahlo Safarzoda.

On Monday (May 31) the delegation divided itself into two groups, one to visit wheat growing areas throughout southwestern Tj and the other to visit a vegetable producing region (including tomato-potato) near Kuybyshevskiy. The objectives of the trip were to evaluate the extent of various pest problems, determine the current state of pest management and identify appropriate sites for IPM CRSP research/demonstration/education projects. I was part of the vegetable system delegation. The two groups rejoined to visit the final wheat rust site on the return trip to Dushanbe. During the trip to the Kuybyshevskiy region, we observed extensive examples of severe soil erosion due to overgrazing, over-cultivation and deforestation. The large fields along the river basin bottom land were planted to cotton.

The first site we visited was a 40-farm area with each farmer having one hectare of excellent river bottom land, consisting of the soil eroded from the surrounding mountains. The first farm we visited was a father-two son operation. When I asked the father who was the best farmer of the 40 farmers in the area, he assured me that he was. The sons were in the process of harvesting potatoes by hand. It was by far the most efficient potato hand-digging system I have ever seen. The potato yield and crop quality appeared good. The tomato crop was inter-planted with sweet corn. There were extensive foliar and fruit symptoms of infectious diseases caused by fungal and bacterial pathogens. The farmer indicated that the fungicides he applied no longer worked. We were unable to determine if this was due to pathogen resistance, improper application procedures or poor product. This farmer appeared to be a highly respected local leader-early adopter and we recommended the site for one of the IPM CRSP tomato demonstration/education sites to be developed by a Tj Agrarian University M.S. candidate. Several hectares of the 40 hectare area

contained former Soviet-Era glass houses. The system was no longer functional and the area was farmed around and within the remaining steel and concert structures.

The second tomato-potato farm we visited was operated by a male farmer with assistance from his spouse and three daughters. Everything appeared to be done by hand labor. After a fairly high cull-out rate, the quality of tomatoes to be marketed was good. The potato yield was poor and had excessive scab. At least part of the matter removed by the crop was being replaced with manure. Based on the dike at the side of the road, I assume that the site was in a flood plain. Although the farmer was very glad to see us and helpful with our questions, he did not appear to the type of early-adopter required for local leadership.

On Tuesday, June 1, we began the day with a visit to the Aga Khan Foundation Office in Dushanbe. The heads of various projects were in attendance and we discussed potential future collaboration in relation to mountain communities with specific relation to potato and wheat. The group was highly focused on water quality resources and local quality of life. They were concerned about salinization, local quality of life and the fact that life was especially difficult for women. It was determined that there should be ample opportunity for collaborative projects in the future.

The visit to the Tajik Agrarian University focused on future IPM CRSP cooperative research opportunities for M.S. students. Most of the individuals we met with, including the Rector, were individuals that we had worked with before. Classes were in session and it appeared that the campus was barely large enough for its 8,500 student population.

The structure of agricultural research in Tajikistan was discussed in a meeting with Academician Khikmatullo Akhmadov, President of the Academy of Agricultural Science. The Academy has branch research stations that work on both plant protection and economics. IPM CRSP would be welcome to interact with these facilities in relation to the pilot sites and student M.S. projects. The academy has Extension training responsibilities. Soil, food security, seed banks and diagnostics were focal points of the discussion. Potato, tomato, apricots and grapes were mentioned as important areas for future research. In the discussion with the Director of the Horticulture Institute (established in 1932), plant breeding, irrigation needs, new farmer capacity building and post harvest losses were mentioned as high priorities. The capacity building of new scientists was also identified as a very high priority and one that should be very compatible with IPM CRSP.

The visit with Winrock focused on food security, water use associations, cultural issues and value chain problems associated with getting produce to market. In Tajikistan, the value chain risk is high. The ICARDA seed unit was seen as very important and seed availability is an important issue.

At the USA Embassy in Dushanbe we met with the USAID Director and the meeting focused on the value chain topic, water uses, family farming and food security.

We visited the National University of Tajikistan which was founded in 1948 and has 20,000 students. It appears to be a very high quality institution with 73 specializations for awarding Bachelors, Masters and the Ph.D. degrees. We met with Rector Nuriddin Saidovich in his office with the Provost and one member of the science faculty. We learned that there are 35 institutions of higher learning in Tajikistan. The rectors of 33 of these universities report directly to the Minister of Education. The Rector of the Tajikistan Agrarian University reports to the Minister of Agriculture, while the Rector of the National University has Minister status. Professor Saidov is also a member of Congress. The National University opened a new modern science campus in the fall of 2010. Rector Saidov indicated that he was ready for collaborative projects in the areas of science research/education, student exchange, faculty exchange and publications. Areas of specific interest included wind-solar energy, flora and fauna studies, virus-free plant production, ecology.

In Almaty, Kazakhstan, Dr. Maredia and I had a meeting with Andrew B. Session, Regional Mission Director of USAID for the Central Asian Republics and his Mission Environmental Officer, Nina Kavetskaya. We had an excellent general discussion with Director Sessions and he was well aware of IPM CRSP. After our meeting with Director Sessions, we had an additional discussion with Nina Kavetskaya. The topic focused on environmental compliance. She wondered why we did not have more details on pesticide regulations in the Central Asia IPM CRSP reports that she had read. While pesticides are only to be used as a last resort in IPM programs (President Jimmy Carter, 1977), I assured her that I would look into the situation. It appears that a significant portion of the pesticide supply in the region comes from illegal trade, resulting a number of serious problems. So far, the results are that: 1) Tajikistan does not appear to have pesticide legislation and it is presumed that the former Soviet Law is used, 2) Uzbekistan has pesticide legislation. It is written in Russian and no English Translation exists (I have asked Bohodir Eshahonov to provide me with an English summary) and 3) I was unable to obtain a response about this matter from Kyrgyzstan.

We returned to U.S. on June 2, 2010.