Central Asia IPM CRSP Project Phase II Year 1 Work Plan (October 1, 2009 – September 30, 2010)

The proposed activities are linked to the technical objectives.

Objective 1. Develop ecologically-based IPM packages for wheat, tomato and potato cropping systems through collaborative research and access to new technologies.

Activity 1: Conduct assessment of key pests, current pest management practices and pesticide use surveys in Kyrgyzstan, Tajikistan and Uzbekistan for wheat, tomato and potato. This will gather baseline data to be utilized in the IPM Package development and impact assessment.

Participating scientists/institutions: N. Saidov, B. Tashpulatova and M. Aitmatov, IPM CRSP project coordinators in Central Asia, Socio-economic impact assessment team from MSU.

Expected output: Baseline information and data on key pests, pest management practices and pesticide use.

Time line: October – December 2009

Activity 2: Conduct research on biological control practices/products, cultural control/practices and resistant varieties for wheat, tomato and potato in collaboration with Ministries of Agriculture and local universities.

Participating scientists/institutions: N. Saidov, B. Tashpulatova and M. Aitmatov in collaboration with team members from MSU, UC-Davis, KSU, ICARDA, AVRDC and CIP.

Expected output: Biocontrol and cultural control practices identified and evaluated for integration in IPM packages

Time line: October 2009 – September 2010

Activity 3: Initiate development of guidelines for potato seed certification.

Participating scientists/institutions: M. Aitmatov (IPM CRSP Kyrgyzstan), Carlo Carli (CIP), George Bird, Walter Pett, David Douches, Willy Kirk from MSU.

Expected output: Baseline information and data on key pests and pest management practices

Time line: October 2009– September 2010

Activity 4: Tomato grafting method introduction and evaluation, demonstrational field.

Participating scientists/institutions: Collaborative research with Tashkent State Agrarian University in Uzbekistan and AVRDC; training coordinated with South Asia IPM CRSP Project.

Expected output: For the first time innovation research of tomato grafting for developing disease resistant root stocks and its adoption will be conducted in the three countries for further introduction into vegetable production in the region.

Timeline: October 1, 2009 to September 30, 2010

Activity 5: Evaluation of pheromone traps for monitoring pest populations in tomato.

Participating scientists/institutions: N. Saidov, B. Tashpulatova and M. Aitmatov in collaboration with plant protection institutes and local universities.

Expected output: Potential new technologies identified for use in vegetable IPM programs.

Time line: May 2010 – September 2010

Objective 2: Disseminate IPM packages to farmers and end-users through technology transfer and outreach in collaboration with local NGOs and government institutions.

Activity 1: Establish IPM pilot sites in each country to evaluate and demonstrate existing and new IPM technologies, and research biocontrol practices/products and resistant varieties.

Participating scientists/institutions: N. Saidov, B. Tashpulatova and M. Aitmatov in collaboration with local agriculture ministries, local NGOs and ICARDA regional program.

Expected output: IPM pilot sites selected for wheat, tomato and potato in each of the three countries, and develop implementation plans including experimental designs and collaborators.

Timeline: October 2009 – April 2010

Objective 3: Build institutional capacity through training and human resource development.

Activity 1: Graduate student training in IPM in wheat, tomato and potato.

Participating scientists/institutions: Doug Landis, Frank Zalom, George Bird, Walter Pett, Mustapha Bouhssini, Carlo Carli, Ravza Mavlyanova and local universities in Central Asia.

Expected output: 3 graduate students identified for PhD degree training at MSU and UC-Davis. 3 students identified for master degrees at local universities in each Central Asian country.

Timeline: October 2009 – May 2010

Activity 2: Initiate establishment of regional pest diagnostic systems in collaboration with the

Ministries of Agriculture in host countries.

Participating scientists/institutions: N. Saidov, B. Tashpulatova and M. Aitmatov in collaboration with global theme programs in pest diagnostics and viruses (Sally Miller-OSU, Naidu Rayapati-WSU, Sue Tolin-Virginia Tech)

Expected output: Establishment of 1 pest diagnostic facility initiated in each host country.

Timeline: October 2009 – September 2010

Activity 3: Participation in International IPM short courses organized by MSU and ICARDA.

Participating scientists and institutions: Scientists and NGO representatives from Central Asia, MSU and ICARDA

Expected output: Increased knowledge in ecologically-based IPM

Timeline: June 2010 – September 2010

Activity 4: Organize local workshops and training for trainers and farmers on scouting and monitoring for key pests and diseases in wheat, tomato and potatoes during the growing season.

Participating scientists/institutions: local NGOs, Government institutions, IPM CRSP team

Expected output: At least 50 farmers and 5 trainers trained in pest scouting and monitoring.

Timeline: May 2010 – September 2010

Objective 4: Enhance communication, networking and linkages with U.S. institutions, international agricultural research centers, and IPM CRSP regional and global theme programs to access IPM technologies, information and expertise.

Activity 1: Visit of IPM CRSP coordinators from Central Asia to India to interact with South Asia Regional IPM Program researchers and other institutions.

Participating scientists and institutions: N. Saidov, B. Tashpulatova and M. Aitmatov

Expected output: Enhanced linkages and collaborations with IPM CRSP regional programs.

Timeline: February 2010 – April 2010

Objective 5: Create a "Central Asia IPM Knowledge Network" encompassing a cadre of trained IPM specialists, students, IPM packages, information base, and institutional linkages.

Activity 1: Update, expand and enhance the website of the Central Asia regional IPM program in collaboration with project team members. Prepare and distribute success stories from Phase I to the media and IPM news sources. Use social networking and other means to publicize on-going activities of the project.

Participating scientists/institutions: J. Landis, MSU

Expected output: Enhanced communication with stakeholders, expanded access to resources and knowledge developed in other activities, greater publicity for IPM CRSP project impacts.

Timeline: October 2009 – September 2010

Activity 2: Development of field guides or booklets on IPM in wheat, tomato and potato.

Participating scientists and institutions: N. Saidov, B. Tashpulatova and M. Aitmatov in collaboration with local Agriculture Ministries, local NGOs and ICARDA regional program.

Expected output: Field guides/ booklets published and disseminated.

Timeline: October 2009 – September 2010

Activity 3: Booklet and poster on tomato grafting

Participating scientists and institutions: Uzbek Research Institute of Plant Industry (UzRIPI), Tashkent State Agrarian University (TSAU), AVRDC

Expected output: A booklet and poster on tomato grafting will be published

Timeline: January 2010 – March 2010

Activity 4: Publications from phase I research activities

Participating scientists and institutions: N. Saidov, B. Tashpulatova and M. Aitmatov and US and international centers' collaborators.

Expected output: At least 3 new publications from phase I research results with publicity to increase awareness about them.

Timeline: October 2009 – September 2010.