

IPM CRSP Trip Reports

Country Visited: Uganda
 Dates of Travel: May 16-20
 Traveler Name and Affiliation: David Kraybill, Ohio State University, Dept. of Agricultural, Environmental, and Development Economics

Purpose of Trip: To assess viability of a new, proposed IPM CRSP research site.

Sites Visited: Faculty of Agriculture, Makerere University, Kampala and Mubuku Irrigation Scheme in Kasese.

Description of Activities/Observations:

A Participatory Rural Appraisal (PRA), conducted with 40 participants at Mubuku Irrigation Scheme in Kasese, generated information about local farming activities and problems. Key crops grown at the scheme are hot peppers (for export), rice (for seed), maize (for seed), onions, beans, groundnuts, fruit, okra (for export), and tomatoes. Production and processing of hot peppers and okra for export is coordinated by the Abasaija Kweyamba Cooperative Society. The fresh product is aggregated by the coop in Kasese and transported several times per weeks by lorry to the Entebbe airport, where it is flown to Europe. The Project Manager, Mr. Deo Munyazikwiye, reported that demand for peppers in Europe is high. They can sell all the peppers they produce at a good price. Currently, there are 37 farmers in the Kasese area producing for the European market.

Pepper production has declined greatly at Mubuku in the past several years due to plant diseases. One of the diseases is Phytophthora blight (the pathogen is *Phytophthora capsici*). This disease has had catastrophic effects on output and profit and has led farmers to reduce the acreage devoted to hot peppers. During the PRA, the farmers implored us to do research that would generate solutions to the problem. Dr. Geoffrey Tusuiime, a member of our research team, has just begun to conduct trials on hot peppers at Mubuku. According to Dr. Tusuiime, planting peppers on ridges is likely to mitigate blight by reducing moisture in the root zone. One focus of the trials will be to identify the optimal ridge height. However, the underlying cause of the blight, according to Drs. Tusuiime and Kyamwanya, is contamination of the pepper seed, which the farmers produce themselves. An important IPM CRSP training activity will be to teach the Mubuku farmers how to produce seed without blight.

Training Activities Conducted:

Program type (workshop, seminar, field day, short course, etc.)	Date	Audience	Number of Participants		Training Provider (US university, host country institution, etc.)	Training Objective
			Men	Women		
Participatory Rural Appraisal (PRA)	May 18, 2010	Members of Abasaija Kweyamba Cooperative	28	12	PRA was led by Dr. Jackeline Bonabana, Makerere University with assistance from Dr. Sam	To identify key crops and key crop constraints by farmers in the

		Society at the Mubuku Irrigation Scheme in Kasese			Kyanmwanya, Dr. Geoffrey Tusuiime, Ms. Rosemary Emegu, and Dr. David Kraybill	Mubuku Irrigation Scheme

Suggestions, Recommendations, and/or Follow-up Items:

Our team attempted to identify an appropriate study design for assessing the impact of reducing blight in hot peppers at Mubuku. The tentative design would involve an initial baseline survey of all 37 Mubuku farmers producing peppers for export. This survey will be carried out by Rosemary Emegu from Makerere in July and August, 2010. Dr. Tusuiime estimates he will have developed recommendations on ridge height by December 2010. The tentative impact assessment design is for each of the pepper-producing farmers to plant two plots, a treatment plot and a control plot. On the treatment plot on each farm, peppers will be planted on ridges of the recommended height; on the control plot on each farm, peppers will be planted either without ridges or with ridges smaller than the recommended ones. To measure impact, it would be ideal for there to be no ridges on the control plots. However, team members felt that after learning that ridges reduce blight, farmers may refuse to plant without ridges. If so, the experimental design can still be implemented as long as ridges on the control plots are of a different height than the ridges on the treatment plots.

Dr. Tusuiime will be traveling to Mubuku frequently during the next year and has offered to supervise the treatment and control plots on farmers' field. Ms. Emegu will return to Mubuku during the period July-September 2011 to gather impact data. An impact analysis, using a method called difference-in-differences, will be conducted to assess the effects of ridges on pepper yields and profits.

List of Contacts Made:

Name	Title/Organization	Contact Info (address, phone, email)
Mr. Deo Munyazikwiye, Project Manager (for export production)	Abasaija Kweyamba Cooperative Society, Mubuku Irrigation Scheme, Kasese	Mobile: +256-772481599 Email: deomunya@yahoo.com
Mr. Frank Twinamatsiko, Chairman	Abasaija Kweyamba Cooperative Society, Mubuku Irrigation Scheme, Kasese	Mobile: +256-772557654 Email: Abasaija2007@yahoo.com