

Sustainable Agriculture and Natural Resource Management Collaborative Research Support Program

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Trip Report: Kenya and Uganda

12-24 March, 2012

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Purpose of Trip:

- 1. Follow up with collaborators and farmers at each study site;
- 2. Provide assistance to graduate student Judith Odhiambo in collecting trace gas samples from Trans-Nzoia and Bungoma on-station plots;
- 3. Introduce, test, and conduct co-innovation meetings about the multifunction implement (MFI) for reduced disturbance tillage operations at the Trans-Nzoia and Kapchorwa sites;
- 4. Also planned to attend USAID-Uganda all-CRSP meeting in Kampala, but the meeting was cancelled.

Sites Visited:

Sixteen of our twenty research sites, including one on-station site and four on-farm sites in each of our four areas: Trans-Nzoia and Bungoma, Kenya, and Kapchorwa and Tororo, Uganda.

Description of Activities

Summary: This trip came just prior to planting for the long rains in our second year of cropping experiments. We met with most of our partners and farmer participants and it became clear that the problem-solving mission by Emmanuel and Dominic last fall was very successful. Everyone expressed confidence about managing crops and weeds for the coming year and optimism for a very successful season. The rains were delayed and conditions were very dry, but people were not yet very concerned. We tested our multi-function implement (MFI) for shallow tillage and subsoiling at the on-station and certain on-farm sites in Trans-Nzoia and Kapchorwa. Joshua Ouko, the draft animal instructor from MHAC, accompanied us to all the research sites to assist with testing the MFI. It worked very well and farmers were excited about making use of it, even though soil conditions were extremely hard and this was not the time of year it would typically be used. Actual use in a farming system will require some conceptual shift in the purpose of tillage. We plan to facilitate farmers in scaling up the CA practices in ways that may make use of the MFI.





March 14-16 Trans Nzoia.

- Tested MFI at Manor House with students; provided short lecture on CA;
- Tested MFI at field of cooperating farmer Michael Cheboit with participation by eight local farmers;
- Tested MFI at farm of MHAC board member Polly Noyce;
- Collected trace-gas samples from on-farm field at MHAC.

March 17 Bungoma.

 Visited on-station site at Mabanga research station. Weeds had been slashed and farmer practice plots had been tilled with hand hoe. Recommend spraying all plots with Touchdown ASAP for couch grass control.

March 18 Tororo.

• Visited on-station plot at DATIC. Plots are tilled and slashed in prep for planting. Picked up Susan (AT Uganda SANREM field technician), Rita, and Grace Tino from ATU and continued to Kapchorwa;

March 19-20 Kapchorwa.

- Tested MFI at cooperating farmer Chris Kaptekin's farm. ATU lead reflection discussion of the MFI and the SANREM project with 20 people attending.
- Tested MFI at Keere research station. 40 people attended.
- Tested MFI at Kwosir on-farm research area. 57 people attended.
- Management/data meeting with Dominic and Emmanuel. We went over preliminary results from year 1 yields and discussed issues about weeding, transport, etc. that were addressed during reflection workshops and Emmanuel's December visit.
- Team meeting with Rita, Urszula, Grace, Dominic, Ketty, James Sr., Susan, Emmanuel, Joshua, others. Discussed general operations and progress and agreed there are no major issues and things were going very well by the end of the first production year. Everyone has high hopes for year 2. Discussed enlisting farmers to scale up one or more of the treatments, building on their interest in doing so.

March 21, Molo, Kisoko on-farm sites.

• Met with Molo farmers Adrian and Mrs. Owori and visited Kisoko sites with Dina Twinomugishe. Farmers are pleased with Mucuna's ability to suppress weeds and improve soil at each site. I showed them small video of MFI and they are very interested in making use of one. Light soils here may be favorable for its use. Oxen are available at each of the sites apparently.

March 23, Kampala.

 Met with Bashaasha, Rita, and Grace. Bashaasha had to let MS student Isaac go and is in the process of hiring a replacement. He has several ideas for analyses and we discussed advantages of having MS student for 2nd half of project to overlap with UW student Moses Owori. Also discussed possibilities for economic analysis of MFI tiller.

Recommendations and/or Suggestions

Farmers at Tororo research area are enthusiastic about the MFI tiller and would likely provide a good test, as would those at Bungoma. We will attempt to raise funds to provide prototypes to these locations ASAP. Use of the machine will require a mindset change toward conservation agriculture and minimum tillage in particular. This may require scaling up some of our treatments by cooperating farmers. We plan to facilitate that during the next planting season at each location.

Training Activities Conducted

Program type (workshop, seminar, field day, short course, etc.)	Date	Audience	Number of Participants		Training Provider (US university, host country	Training Objective
			Men	Wo men	institution, etc.)	
Field Day	14 March 2012	Manor House students and staff	10	8	University of Wyoming, Manor House	Introduce and test the MFI to MHAC staff and students; teach students about CA.
Field Day	15 March 2012	Naisambu Farmers	8	1	University of Wyoming, Manor House	Introduce the MFI to the farmers, test how it works and it's effectiveness compared to the common ox plough
Field Day	19 March 2012	Kaplak Farmers	14	13	University of Wyoming, Manor House & AT Uganda Ltd	Introduce the MFI to the farmers, test how it works and it's effectiveness compared to the common ox plough
Field Day	20 March 2012	Keere Farmers	23	11	University of Wyoming, Manor House & AT Uganda Ltd	Introduce the MFI to the farmers, test how it works and it's effectiveness compared to the common ox plough
Field Day	20 March 2012	Kwosir farmers	30	14	University of Wyoming, Manor House & AT Uganda Ltd	Introduce the MFI to the farmers, test how it works and it's effectiveness compared to the common ox plough

List of Contacts Made:

Name	Title/Organization		
Rita Laker-Ojok	Director, AT Uganda, and Co-PI		
Grace Tino	Technical Advisor, AT Uganda		
Nicodemus Nyongesa	Director, Manor House Agricultural Centre		
Polly Noyce	Board of Trustees, Manor House Agricultural Centre		
Joshua Ouko	Manor House draft animal instructor		
Dennis Ashiende	Manor House instructor/Kitale area SANREM coordinator		
David Chemusto	ATU-Kapchorwa local contact		
Dinah Twinomugishe	Kisoko farmers' group chairwoman		
Obbo Moses Owori	Molo farmer		
Jackson M	Kwosir farmer		
Dominic Sikuku	SANREM E. Africa research associate/field coordinator		
Bernard Steven	Kwosir farmer		
Patricia	Kwosir farmers' group chairwoman		
Florence Maunya	Atari River farmer		
Chris	Atari River farmer		
Patrick Oluko	MSc student, Moi University		
Eusebius Mukhwana	SANREM research associate, SACRED Africa		
Judith Odhiambo	PhD Student, University of Wyoming		
Susan	ATU-Tororo local contact		
Ketty Nambozo	AT Uganda field coordinator for Kapchorwa & Tororo		