



Trip Report

Mali, Senegal

7 – 27 January 2011

IPM CRSP

USAID/EGAT Leader with Associate Agreement No. EPP-A-00-04-00016-00

IPM CRSP Associate Awards:

Mali: Building Local Capacity in IPM Solutions

USAID/Mali Associate Cooperative Agreement No. 688-A-00-10-00015-00

**Development and Promotion of Integrated
Management of Mango Pests in Senegal**

USAID/Senegal Associate Cooperative Agreement No. 685-A-00-08-00065-00

**IPM CRSP Africa Food Security Initiative (IPM
CRSP AFSI)**

USAID/EGAT Associate Cooperative Agreement No. EDH-A-00-08-00015-00

Education and Research in Agriculture (ERA)

USAID/Senegal Cooperative agreement No. 685-A-00-10-00194-00

Prepared by Larry Vaughan
Office of International Research, Education, and Development (OIRE)
International Affairs Offices
526 Prices Fork Road (0378)
Virginia Tech
Blacksburg, VA 24061 USA

Country(s) Visited/Dates of Travel: Mali, Senegal

Traveler Name and Affiliations: Larry Vaughan, IPM CRSP Associate Program Director, Virginia Tech. Darrell Bosch, Professor of Agricultural and Applied Economics, Virginia Tech

Purpose of Trip:

Food Security Associate award – Field visit and discussion regarding activities being planned for tomato virus management and rice production in Senegal.

Mali IPM – feasibility study for seed potato sector

Mango IPM – plan orderly close-out of project

W. Africa Regional Program – make contacts for research and capacity-building activities.

Sites Visited: Mali – Bamako, Kati, Katibougou. Senegal – Dakar, Dagana, St. Louis, Thies.

Description of Activities/Observations:

Saturday 7 January – Wednesday 12 January

Due to a late departure from Roanoke, I missed my connection in Atlanta and was subsequently stuck for three nights as an ice storm caused two subsequent flight cancellations. I arrived in Bamako Wednesday night, having lost three days of work in Mali. Darrell Bosch has similar problems. His flight from Roanoke on Saturday 7 January was cancelled, requiring him to drive to Greensboro, North Carolina for a flight the following day. That flight was also cancelled resulting in Darrell arriving in Bamako Tuesday evening, two days later than expected.

On Wednesday 12 January, Darrell and Penda Sissoko of IER/Sotuba discussed the feasibility study for the seed potato sector, which was the principal objective of Darrell's trip.

Thursday 13 January

The first part of the morning was spent at IER/Sotuba. I met Madame Gamby briefly, but spent more time with Aminata Dioucourou discussing the gender study. Penda, Darrell, Mama Diarra, and I then went to IICEM to speak with

Aissata Thera Traoré about seed potato. Aissata did considerable work on seed potato when she was a researcher at IER. I also met Djiguiba Kouyaté who coordinates the agricultural activities of IICEM. I spoke with him and Aissata about the pest evaluations we want to do in cooperation with IICEM in March. Afterwards, Penda, Mama, Darrell and I went to Kati to talk with a seed potato importer. He told us about his business, the seed potato supply coming from Ivory Coast to Sikasso, where he buys in the first part of the season, and the supply coming from Dakar later in the season. We visited the OHVN office and met the *chef de secteur* M'amousa Soumaoro. OHVN/Kati lacks an internet connection, making communication with the office difficult. Afterwards we went to a farm in Komitan where potato was one of the principal crops. We obtained varietal information and talked about the purchase of seed potato. IER had placed two potato tuber moth pheromone traps at this farm as part of the PTM monitoring activity with George Mbata. I checked the traps. There were no PTM.
Kati – potato importer, potato grower

Friday 14 December

Darrell, Penda, and I went to the *Institut Polytechnique Rural de Formation et de Recherche Appliquée* de Katibougou to talk with Adama Berthé, one of the technicians of the micro-tubercle production unit. He gave us an overview of the two methods used to produce seedling potato plants for outplanting. We discussed the means by which the cost of production was calculated, production capacity, and potential for increasing production capacity.

In the afternoon we returned to IER/Sotuba. I worked with Madame Gamby. Darrell and Penda worked on the seed potato study.

Saturday 15 January

Madame Gamby took me to Baguineda to see the tomato and cabbage trials being undertaken as part of the W. Africa regional program. We were accompanied by Abdoulaye Camara, one of her research technicians. There were three trials with cabbage:

- a varietal trial
- treatment trial against diamondback moth including interplanting with tomato and row covers
- trial on diamondback moth testing the level of infestation based on three different planting dates.

There were two trials on potato:

- a test of seed pieces to sensibility to bacterial wilt
- a varietal trial with five varieties

A single tomato trial was underway testing 65 varieties.

We met Sidiki Traoré in the field in Baguineda transplanting tomatoes for the trial. I demonstrated for him and Abdoulaye Camara how the blister beetle light traps I had brought on this trip functioned. These traps were brought for the blister beetle research that Sidiki, Madame Gamby, Carlyle Brewster, and I are doing as part of the AFSI associate award.

In the early evening Mamadou Traoré of the pesticide residue laboratory at the *Laboratoire Central Vétérinaire* and Moussa Noussourou of IER/Sotuba visited. Darrell Bosch departed for the United States.

Sunday 16 January

I had a brief meeting with Issoufou Kollo, UC Davis research associate assigned to IER/Sotuba before departing for the airport. I arrived in Dakar, Senegal in the late afternoon

Monday 17 January

I went to ISRA/CDH for a meeting with Emile Coly. I learned that ISRA was still awaiting payment of an invoice. We discussed the priority activities for the AFSI associate award and the logistics of my field trip with Samba Diaw to St. Louis. I visited the laboratory and met several members of CDH including the pathologist Papa Demba Kane, and entomologist Dieynaba Sall Sy. Dieynaba and I talked about pairing her with Doug Pfeiffer to undertake IPM package development for cabbage

In the afternoon I went to DPV to meet Kemo Badji and discuss the impending end of the fruit fly associate award.

Tuesday 18 January

I left with Samba Diaw for St. Louis. The national tomato committee had sent a vehicle down to Dakar to pick up Papa Demba Kane. He was going to look at a tomato disease in Dagana that was of concern to the tomato committee. Instead of going directly to St. Louis to be dropped off, Samba and I decided to go directly to Dagana. That saved time for Papa and it allowed me to take photos of the diseased plants as Papa took samples. ISRA/CDH did not have a digital camera available for Papa to use to document disease symptoms in the field. I made note of this with respect to IPDN capacity building for ISRA. We took samples, photos, talked to farmers, and went back to St. Louis in the evening. Through the photos evaluated by Bob Gilbertson at UC Davis and a quick field test, the plants were diagnosed with bacterial wilt. We proposed to do some spot training of farmers during the pest assessment planned in March to help them slow the spread of the disease, which seems to be limited to patches within a few kilometers of each other.

Wednesday 19 January

Samba and I met with Aminata Ba Sow, ISRA sociologist at St. Louis to discuss the tomato and rice grower surveys. I also met ISRA's scientific Director Alioune Fall, who was in St. Louis for the installation of the new station chief. Souleymane Diallo gave us a summary of the rice work he did during the last season. Samba, Papa, and I left St. Louis in the afternoon. I was let off in Thies. In the evening I met with Assa Balayara to review her data on female fruit fly fecundity in the field.

Thursday 20 January

I met with Saliou Ndiaye to work on close-out issues of the fruit fly project. Among them were an amendment to release unused money and estimating costs for the remainder of the project. I also met with Marie Dieng the project's IT/database program and Bineta Mbengue Dieye. Bineta, who is now a research coordinator at ANCAR/Diourbel, came to Thies for the meeting. She is one of two students supported for a DEA degree through the project. She received a computer purchased for the use of graduate students through ENSA's fruit fly subaward. Kemo Badji, the national coordinator for the fruit fly associate award joined us for the meetings, as also did Elhadji Dieng, a DPV technician who is completing his DEA memoire on fruit bagging to protect mangoes from fruit flies.

Friday 21 January

I went to USAID to meet with the new USDA team, Connie Bacon, Joani Dong, and Russell Knight. Fana Sylla, the local USDA team member, and Jennifer Harte, the AOTR for USDA's phytosanitary project, also attended. Representing the IPM CRSP fruit fly project was Kemo Badji, Aminata Badiane, the AOTR, and I. We discussed the USDA phytosanitary project and its relationship with the fruit fly associate award. Kemo and I summarized the results of the most recent field season. Not knowing if Virginia Tech would receive a second phase of the fruit fly associate award, the discussion was oriented to the potential for continued collaboration and explaining the IPM CRSP associate award to the USDA team. Afterwards Kemo and I met with Aminata separately to talk about project-specific items. Kemo and I also briefly met Peter Trenchard.

In the afternoon I dropped by the ERA project office and met Demba Farba Mbaye, former coordinator of ISRA's AFSI activities, now the ERA research coordinator. I then went to the office of the *Projet Croissance Economique* (PCE) to meet with Mamadou Dabo to present options for PCE to help DPV carry some of the fruit fly work forward if the associate award is not renewed. Mamadou introduced me to Jean Michel Voisard, the agricultural coordinator for PCE. We talked about PCE's activities for mango in Casamance. PCE had

not yet chosen the growers with whom it would work, so I suggested that it first meet the growers with whom we have been working.

Amhet Diallo, director of ENSA, met me in the evening. We discussed the close-out of the fruit fly project, specifically the budget amendment de-obligating some funds for re-programming by the management entity.

Saturday 22 January and Sunday 23 January

I worked on project correspondence, travel reimbursement, and some experimental design for the graduate student research on the fruit fly project.

Monday 24 January

I went to the University of Dakar Cheikh Anta Diop and met Cheikh Tidiane Ba, head of the zoology department. We discussed graduate school candidacies of Assa Balayara and Ousmane Ndiaye. I then went to the Hotel Fleurs de Lys for an afternoon meeting of the ERA project team with US counterparts from Tuskegee University, Michigan State University, the University of Connecticut, and Virginia Tech. At 4pm I went to Peace Corps to meet the agroforestry program director, Demba Sidibé. Kemo Badji had given a presentation on mango fruit flies to Peace Corps trainees in January. It was well received and Demba wanted Kemo to come back for additional presentations to the agroforestry volunteers.

Tuesday 25 January

I attended the kick-off meeting of the ERA project. I received final word that there would not be a renewal of the fruit fly associate award because there was no available funding. In the afternoon Kemo Badji picked me up. We went to ANCAR to meet Mour Gueye. He signed an amendment to de-obligate unused funds of the fruit fly project. We discussed the final ANCAR activity – the grower evaluation of the large-scale field trials – and the close-out of the project in March. Simon Ndené joined us for the discussion about the field work.

Wednesday 26 January

My return flight to direct to the US from Dakar had been cancelled, so I had an extra day for work. I attended the first day of USAID/Senegal's two-day Feed the Future meeting. The meeting brought together all of the implementing partners contributing to the Feed the Future Initiative in Senegal. Mangoes were not included in the FTF plan, so the fruit fly work does not count as contributing to FTF. I departed at 11:30 pm.

Thursday 27 January Return home.

Abbreviations:

AFSI African Food Security Initiative. (IPM CRSP associate award)
ANCAR *Agence Nationale de Conseil Agricole et Rural* (Senegal)
AOTR Agreement Officer Technical Representative
LCV *Laboratoire Central Vétérinaire* (Mali)
DPV *Direction de la Protection Végétaux*, Senegal.
ENSA *Ecole Nationale Supérieure d'Agriculture*. University of Thies (Senegal)
ERA *Education et Recherche en Agriculture*
IER *Institut d'Economie Rurale* (Mali)
IICEM *Initiative Intégrée pour la Croissance Economique au Mali*
IPDN International Plant Diagnostics Network (IPM CRSP global theme program)
IPR *Institut Polytechnique Rural de Formation et de Recherche Appliquée* (Mali)
ISRA *Institut Sénégalais des Recherches Agricoles*. Dakar (Senegal)
ISRA/CDH – ISRA *Centre de Développement Horticole*
LCV *Laboratoire Central Vétérinaire*
LTCQE *Laboratoire de Toxicologie et du Contrôle de Qualité Environnementale* (LTCQE)
OIREED Office of International Research, Education, and Development. Virginia Tech
PCE *Projet Croissance Economique* (Senegal)
NRM natural resources management
USAID United States Agency for International Development
ToT training of trainers
VT Virginia Tech. Blacksburg, Virginia USA

Contact List:

First Name	Last Name	Institution
Cheikh Tidiane	Ba	University of Dakar
Aminata	Badiane	AOTR, Mango IPM associate award. USAID/Senegal
Kemo	Badji	DPV
Assa	Balayara	UCAD
Adama	Berthé	IPR Katibougou
Abdoulaye	Camara	IER/Sotuba
Emile Victor	Coly	Director, ISRA/CDH
Mamadou	Dabo	PCE
Ahmet	Diallo	ENSA Director
Souleymane	Diallo	ISRA/St. Louis
Allihoun	Diarra	IER/Sotuba
Aminata	Diarra	Env. & NRM Specialist. USAID/Mali
Mama	Diarra	IER/Sotuba
Samba	Diaw	ISRA/CDH
Elhadji	Dieng	DPV
Marie	Dieng	ENSA
Joani	Dong	USDA/Senegal Agricultural Attaché
Aminata	Doucouré	IER/Sotuba sociologist
Alione	Fall	ISRA Scientific Director
Kadidiatou	Gamby	Chief of the Vegetable and Fruit Research Laboratory. IER/Sotuba
Mour	Gueye	ANCAR
Jennifer	Harte	USAID/Senegal
Russell	Knight	USDA/Senegal
Issoufou	Kollo	UC Davis/IER
Djiguiba	Kouyaté	IICEM
Demba Farba	Mbaye	ISRA
Simon	Ndené	ANCAR
Saliou	Ndiaye	ENSA
Moussa	Noussourou	IER
Demba	Sidibe	Peace Corps Senegal Associate Director for Agroforestry
Penda	Sissoko	IER/Sotuba agricultural economist
M'amousa	Soumaoro	OHVN/Kati Chef de Secteur

Aminata Ba	Sow	ISRA/St. Louis
Dieynaba Sall	Sy	ISRA/CDH
Fana	Sylla	USDA/Senegal
Aissata Thera	Traoré	IICEM
Mamadou	Traoré	LCV
Sidiki	Traoré	IER/Sotuba
Peter	Trenchard	Team Leader for Economic Growth. USAID/Senegal
Jean-Michel	Voisard	PCE