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Trip Report: Bamako and Katibougou, Mali

January 24---February 10, 2014

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Tuskegee University

Acronyms:

AET Agricultural Education and Training

CAA Centre d'Apprentissage Agricole

CAR Centre d'Animation Rurale

CFP-PAS Centre de Formation Professionnelle-Promotion de l'Agriculture au Sahel de Gao

CEFITEX Centre de Recherche et de Formation pour l'Industrie Textile

ETFS Ecole Technique de Formation Sankoré de Tombouctou

IER Institut d'Economie Rurale

IFAB Institut de Formation Agro-sylvo Pastorale de Bamako

IFASP Institut de Formation Agro-sylvo Pastorale de Mopti

IFDC International Fertilizer and Development Center

IPR/FRA Institut Polytechnique Rural de Formation et de Recherche Appliquée

TOKTEN Transfer of Knowledge through Expatriate Nationals

TU Tuskegee University

USAID United States Agency for International Development

ULSHB Université des Lettres et des Sciences Humaines de Bamako

US Université de Ségou

VT Virginia Tech

Purpose of the Trip:

Assess the impact of the 2011-2013 Crisis on the agricultural education and training (AET) system in Mali. The focus was on the ability of AETs to function; disruption of the academic calendar, teaching and financial flows; change in the composition of student body; prospects of hiring and securing resources; the importance of the gender issue and the regional (North) factor; etc.

Sites/Organizations Visited:

- 1. Ministère du Developpement Rural, Bamako
- Ministère de l'Education, de l'Alphabetisation et de la Promotion des Langues Nationales, Bamako, Direction Nationale de l'Enseignement Technique et Professionnel, Bamako
- 3. Université des Lettres et des Sciences Humaines de Bamako (ULSHB), Bamako
- 4. Swiss Embassy (Confederation Suisse), Formation Professionnelle & Artisanat, Bamako
- 5. Ministère de l'Agriculture/Direction Nationale de l'Agriculture, Bamako
- 6. Ministère de l'Agriculture/Direction Nationale de Pêche, Bamako
- 7. Ministère de l'Agriculture/Direction Nationale de l'Elevage, Bamako
- 8. Ministère de l'Agriculture/Direction Nationale des Productions et Industries Animales, Bamako
- 9. Ministère de l'Agriculture/Cellule de Plannification et de Statistique, Bamako

- Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/FRA),
 Annexe de Bamako, Bamako
- 11. Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/FRA), Katibougou
- 12. Institut de Formation Agro-sylvo Pastorale de Bamako (IFAB), Bamako
- 13. Institut de Formation Agro-sylvo Pastorale de Mopti (IFASP) (*visit in Bamako)
- 14. International Fertilizer Development Center, Bamako
- 15. Ministère de l'Enseignement Supérieur et de la Recherche Scientifique
- 16. Ministère de L'Education, de l'Alphabetisation et de la Promotion des Langues
 - a. Nationales, Direction Nationale, Bamako
- 17. Ministère du Developpement Rural, Bamako
- 18. IPR/FRA Centre de Formation Continue, Koulikoro
- 19. Centre de Formation Professionnelle-Promotion de l'Agriculture au Sahel (CFP- PAS) de Gao (*visit in Bamako)
- 20. Université de Ségou (*visit in Bamako)
- 21. Wetlands International, Bamako
- 22. Tetra Tech, Burlington, VT (*visit in Bamako)
- 23. USAID Mali, Bamako

Description of Activities/Observations (a brief summary of accomplishments):

- Conducted interviews with more than 30 individuals at 11 Ministry or Direction Nationale levels
- Conducted extensive interviews with administrators of IPR/FRA in Bamako
- Conducted focus groups with students and with faculty and administrators of IPR/FRA in Katibougou
- Conducted extensive interviews in Bamako and continued communication with Director of IFAB
- Conducted extensive interviews in Bamako and continued communication with Director of IFASP de Mopti (same as Director of IFAB)
- Conducted focus groups with students and with faculty and administrators of IFAB in Bamako
- Conducted extensive interviews in Bamako and continued communication with General Director of CFP-PAS de Gao
- Conducted extensive interviews in Bamako and continued communication with Vice- Rector of Université de Ségou
- Conducted extensive interviews with Rector and with Director of "Scholarité et Orientation" at ULSHB
- Conducted interviews with key representatives of 2 NGOs and relief organizations that are knowledgeable about education in the north and the displacement of people during and after the crisis
- Conducted interviews with 4 representatives of international organizations on

- bilateral and multiple assistance on Malian AET
- Gathered and received more than 10 documents pertaining to Malian AETs, the impact of the 2011-2013 Crisis, and background information
- Provided a brief debriefing to USAID Mali representatives

Description of Activities/Selected AET-Related Key Points or Observations:

Monday, January 27, 2014

- Mr. Bourema Cisse, the associate director of Cellule de Planification et de la Statistique du Secteur du Development Rural (CPS/SDR)
- Mr. Bakary Kone, the director of Wetlands International in Mali
- Mr. Oumar Yacouba Maiga, director, "Direction Nationale de l'Enseignment Technique et Professionnel/Technical and Vocational Education
- Prof. Mamadou Moussa Diarra, associate director of the "Direction Nationale de la Pêche",
- Dr. Lassine Soumano, director of the research and director of the studies of the IPR/FRA
- *Set up key meetings, including with the associate director of the "Direction Nationale de l'Elevage" and Mr. Bathily the director of the privately owned "agropastoral" school in Mopti
- *Secured meetings with Dr. Kouyate Souleymane the vice-rector of the University of Segou and also with Dr. Moumine Traore, the director of the CEFITEX, administrators and faculty members at educational institutions such as IPR/IFRA in Katibougou, the University of Bamako, etc.
- *Revised agenda accordingly

Tuesday, January 28, 2014

- -Dr. Mamadou N'Bare Coulibaly, Director of Research and General Secretary, Ministry of Rural Development.
- -Mr. Bourema Cisse, Associate Director, Office of Planning and Statistics of the Rural Development Unit (CPS-SDR)
- -Met at the Hotel "Le Loft" with Dr. Bathily, the owner and Director of IFAB and IFASP

Impacted reported by Director Bathily:

- *45 students (24 girls and 21 boys) from ETFS of Tombouctou moved to IFASP buildings of Sévaré for a while, then were not heard from
- *IFAB in Bamako welcomed 26 students (8 girls and 18 boys) from Tombouctou and Gao regions

*The cost to IFAB and IFASP was estimated at 13,135,000 CFA

Focus group with students at the IFAB in Bamako; emphasis on Strengths and Weaknesses of IFAB and impact of Malian Crisis:

Strengths: IFAB is the only silvo-pastoral school in Bamako which admits students with the certificate at the end of 9th grade.

Weaknesses: too much theory no practice, no intense internship; internship almost inexistent, no lab works, no equipment, no practice

Impact reported: student stipends not paid on time, worries about fellow students from the North

Focus group with faculty

- *Influx of students from the North
- *Student stipends not paid on time, thus students went on strike and the academic calendar was affected
- *Faculty adjusted to the conditions and showed flexibility in organizing exams later
- *Belief that the multidisciplinary aspect of the curriculum is a plus and produces graduates who can make it out there in the real world
- *The multidisciplinary aspect does not allow for depth in subject matters and the curriculum needs to be revised
- *Not enough lab/practice work for practical skills
- *Not enough support from the government for teaching materials
- *Teaching materials on CDs could help
- *Basic posters ("fiches") could enhance teaching and learning
- *No use of syllabi
- *No wifi or online connectivity
- *Transportation of students and teachers is needed to go to training sites
- *Classrooms and lab areas are insufficient and in poor conditions

Wednesday, January 29, 2014

Prof. Mamadou Moussa Diarra, Research Director, Rural Polytechnic Institute of Formation and Applied Research (IPR/IFRA), Katibougou

Dr. Lassine Soumano, Director of Studies of the IPR/IFRA. Rural Polytechnic Institute of

Formation and Applied Research (IPR/FRA), Katibougou

Thursday, January 30, 2014

- -Mr. Moustapha Dicko, Minister of Higher Education and Scientific Research
- -Mrs. Kone Salimata Berthe, Deputy Director of the Ministry of Livestock and Animal Production and Mr. Bernard Sissoko, Director of Training and Documentation.
- -Meeting with Dr. Macki Samake, Rector/ Vice Chancellor, University of Letters and Human Sciences of Bamako (ULSHB)

Impact of the war on ULSHB:

- *Virginia Commonwealth University stopped its program of sending professors. The University was supposed to receive Fulbright professors. The program was stopped because of the military coup and the university even tried to get Peace Corps Volunteers from Guinea to come and teach English, but to no avail.
- *Students from the North followed their parents to Burkina Faso and to Mauritania. Everything stopped. Therefore, they did not take the national exam.
- *Students were delayed in taking the exam and had to relocate to take the exam in neighboring countries: Burkina Faso, Mauritania. Among the students who took the special exam, 119 students passed the exam, 97 were admitted into the University. University rules state that students over 25 years of age are not eligible for free tuition. Tuition is \$5,000 CFA around \$15

USD) annually. Among the students admitted, 80% received a stipend from the government.

Friday, January 31, 2014

-Met with Mr. Ismaila Alassane Maiga (Cooperation Suisse)

Cooperation Suisse intervenes in Mopti, Timbuktu, Sikasso, and collaborates with Denmark, Finland, USAID, World Bank, etc.

- a. Cooperation Suisse pays directly NGOs working directly with rural populations
- b. Cooperation Suisse working with consultants mainly on the specific tasks
- c. Cooperation Suisse worked on fish farming (Danish program)

Impact reported:

- *Northerners moved to the more secure South afraid of the danger in the north.
- *Therefore the crisis has had an impact on the entire system of the life of the Malian
- *Cooperation Suisse never stopped, they are only active in Timbuktu

^{*}The World Bank stopped its support to Universities.

- *Need to strengthen capacity of the training centers for trainers with training modules and equipment (computer, cameras, modules with the thermal baths specific etc...)
- *These centers have been affected because the students and farmers have moved
- *All partners have stopped their Cooperation (USA and Others)
- *The Cooperation Suisse has moved from Yawarou to Sévaré
- *The supports were well monitored to not fall into the hands of the rebels

Donor Assistance Working Group includes other than education from Denmark, Luxemburg, Agence Francaise de Developpement (AFD), Netherlands, USAID, etc. The objective of the group is to exchange and coordinate efforts in order to avoid duplication of work and also to cover the entire territory.

*During the crisis the Donor Assistance Working Group did not meet because all partners never returned due to concern of safety. Still now all partners have not resumed work, but their full return is requested. Canada doesn't have a program yet but is developing one.

Saturday, February 01, 2014

Meeting at the IPR/FRA of Katibougou

Mrs. Assetou Kanoute, Coordinator of the center, Center of Continued Training, IPR/FRA, Katibougou

Focus group with administrators, faculty and staff at the IPR /FRA of Katibougou:

- *The newly formed department of economics Sciences has been impacted the most
- *Field practice: It is a custom of IPR/FAR to have students returned to their areas to do their required practicum with a report at the end. Students could not go to the North where there are from or want to conduct experiment because of the war.
- *Interruption of field research because practicum/research work is carried out in communities of origin (specially the professionals who became students!). The practicum is a participative diagnosis on the field.
- *Interruption of the Master's program in agricultural economics (for the bachelor program and the master program for the professionals). The program was with Michigan State University.
- *USAID has also all its programs with the school put on hold.
- *The crisis has affected the capability of conducting research because it was primarily financed by countries that stopped their contribution.

- *The partners interrupted their projects, even those that were running.
- *Meetings that were scheduled in Katibougou were transferred to Bamako
- *With the State of emergency: open days were suspended
- *Impacted on the mobility of students who were forced to do their internship in the South even if they wanted to do it in their areas, in the North.
- *The modern poultry with the University of Georgia that was to take place in Mopti was cancelled
- *The results of the research that had been kept in cold rooms were all rotten due to the fact that the financing of cold rooms has stopped.
- *Breeding Lab: a number of equipment has arrived and the rest never came, lab products stopped because the project stopped.
- *A German project: after 8 months of delay in financing, many components have been canceled.
- *Professors who were coming from the USA and Canada ("Tokten" Initiaitve) to help reduce the teaching load never came.
- *A doctoral training also stopped, and relocated to Ghana
- *Reduction of school budget
- *Recruitment stopped, too

Urgent Needs and Opportunities:

- Acquire didactic material that is relevant and better conceptualized
- Secure school propriety
- Re instate courses and training that were suspended
- Re-assess the 3 abandoned agricultural projects, cold room for samples, and other projects that completely failed because funding stopped

Continued Education at the IPR/IFRA

- *Training was not directly impacted that much, but via lack of related funds for research (the State and the international community)
- *Mobility of students who were forced to do their internship in the South even if they wanted to do it in their areas, in the North

Focus group with IPR/FRA students:

- *The shuttle carrying the professors from Bamako was no longer available because of the state of emergency
- *Students from the North whose parents were paying could not pay anymore. The administration decided to accept them free of charge.
- *Students whose parents were working in the projects could no longer pay because the project stopped
- *Legally, parents were not authorized to send money to children
- *Classes stopped sometimes at the Annex (Bamako campus) because of the state of emergency.

Sunday, February 02, 2014

-Met with Mamadou MAIGA Ousmane, Director, CFP-PAS, Gao

CFP-PAS has existed for 15 years with the agro-silvo pastoral focus as an AET; 1st agro- silvopastoral school

Students come from: Gao, Mopti, Tombouctou, Kidal

Impact on CFP-PAS:

- *The academic calendar was disrupted from 1 to 4 months depending on the school in the northern region.
- *Some young people are suspected to have fuelled the Jihadists. At the occupation there were 60 students.
- *The Jihadists separated girls from boys, therefore preventing them to take classes together.
- *The crisis extended the school year by one month and a half
- *Girls had to be fully covered according to Islamic culture
- *Cases of rape were reported
- *Reports of forced marriage without the women consent
- *This year again we are lagging behind other schools in the South.
- *The delay may persist for a long time
- *The center of Timbuktu is closed and students are being trained in Sévaré; for those who had relatives in Sévaré.
- *Students who are from villages, nomadic fractions have not started school yet. Students are

expected to return only when their parents return, which is not any time soon. Some students will be kicked off the school if they continue to be absent.

*Practice at the slaughterhouse was impossible; and the school's vegetable garden (about 4 km from the town) was destroyed.

Needs and Opportunities:

- -The Gao agricultural teachers lack educational support, materials etc...
- -Need for experimentation field
- -Alongside trained auxiliaries to fill the lack of framework for livestock in the North
- -Without government support, they will have to close.
- -A manufacturing unit of cheese (lack of equipment at this level also) will be an excellent opportunity for value chains in animal production.

Monday, February 03, 2014

Dr. Amadou Gakou, Representant IFDC Prof. Dasse Togola, Ministry of Agriculture, National Direction of Agriculture

Meeting with Dr. Souleymane Kouyaté, Vice-Rector, University of Ségou *Dr. KOUYATÉ stated that after the education forum in 2008, the decision was made to open a university in Ségou with three faculties: agricultural economics, agricultural hydraulic, health and animal production. He also mentioned that the crisis has not affected students at the University of Ségou and that the impact was on the consulting faculty who were supposed to come and teach and did not come after the military coup.

Tuesday, February 04, 2014

Debriefing USAID

Ntam travel back to USA

Wednesday, February 05, 2014

Second meeting with Dr. Bathily, the owner/director of IFAB in Bamako

Second meeting with Mr. Mamadou MAIGA Ousmane Director of CFP–PAS, Gao. They both expressed the needs of their centers and said that they will be glad to participate or develop any collaboration with InnovATE in order to strengthen human capacity and skills needed in Malian agribusiness sectors.

Thursday, February 06, 2014

Met with Mr. Bourema Cisse, the associate director of the "Cellule de Planification de de Statistique du Secteur du Development Rural (CPS/SDR)". Mr. Cisse promised to give us a copy of the report by the World Bank on the impact of the war in Mali.

-Met with Dr. Moumine Traore, director of Centre de recherche et de formation pour l'industrie textile (CEFITEX). CEFITEX is a textile school in Ségou, created in 1987 for all the cotton producing countries in West Africa. It offers a bachelor degree in electrical and computer engineering industrial, textile technology, the BT in textile mechanics, industrial maintenance and applied chemistry technician, and the CAP in textile technology. Now, the institution will issue a master degree in textile technology, a bachelor in applied chemistry, industrial engineering and maintenance.

*The director mentioned that on the first days and week of the military coup and when the Islamists were trying to take Mopti, students and professors left for security measures and moved to Bamako. Nothing happened to anyone (students and faculty) at the School and classes restarted without a problem. He would like for InnovATE to help with securing some faculty from US universities through the TOKTEN (Transfer of Knowledge Through Expatriate Nationals) program.

*The center needs additional equipment and new labs, recruitment and the training of trainers because over 75% of the instructors of the center are from the ENI (School of Engineering) or universities. According to Dr. Traore, the CERFITEX is in the process of diversifying its service offering and its ambition to be the regional reference training center. The center needs a specialist of high level in applied chemistry, microbiology and weaving. The center is also planning a series of training courses for the benefit of producers of the African Cotton Association and cotton textiles of the UEMOA Member States stakeholders. The center has now exceeded its capacity and for the next academic year 2014-2015, it needs four additional classrooms, a lab, a 500-seat amphitheater and a bus. The Center also faces the dilapidation of the industrial equipment of educational type.

Friday, February 07, 2014

Met with Adama Coulibaly and Mrs. Maiga Souhata Haidara, independent consultant in agriculture and agricultural development and staff analyst at the Department of Forestry, respectively. Both are graduates of Tuskegee University knowledgeable about AET in Mali. Mr. Coulibaly worked at the ministry of Agriculture before his retirement. Mr. Coulibaly explained the genesis of creation of the agricultural training centers. He explained that the IPR/IFRA always trained engineers in agriculture, animal sciences, and forestry and that there was a need to train agricultural agents (with a 10th grade level) who could communicate directly with the producers.

Mrs. Maiga Souhata Haidara explained that the forestry training school was created to satisfy the demand of the forestry agents the country needed and still needs.

Met with Mrs. Ly Rehana Toure (wife of the Prime Minister) for a dinner and introduction of InnovATE.

Saturday, February 08, 2014

Youssouf travel back to USA

Key Findings and Recommendations:

Understanding of the AET System

- The Institut Polytechnique Rural de Formation et de Recherche Appliquée (IPR/FRA) is one of the oldest higher education level AET center in Africa. It is located about 44 miles east of Bamako, but has an annex in the capital city. Its mission includes the education of agricultural engineers and senior technicians, training staff involved in rural development, providing training to rural communities and promoting scientific and technological research. IPR/FAR is still considered as where most government funds are concentrated for human development and research for agricultural and agro-industrial development. Degrees offered include thus (a) agricultural engineers, (b) MS in extension, and (c) senior technicians. IPR/FRA is currently restructuring and finalizing a strategic plan for 2013-2017. A major concern is the employability of its graduates who have difficulties securing jobs. A related process has been initiated to assess the supply and demand of AET skills.
- Other higher education level AETs noticed and/or encountered include the Institut d'Economie Rurale (IER) and the Université de Ségou (US). IER was founded in 1960 and is headquartered in Bamako. It covers the whole country with six regional centers and about 15-20 research stations, conducting all aspects of agricultural research, including all production systems, economics, and livestock research. Most of their new hires come from IPR/FRA.
- The university Ségou (US) was founded in 2008 and offers License, MS, and PhD degrees in 10 priority fields: animal medicine, agroeconomy, hydraulic engineering, food technology, organization, communication, land management, rural sociology, machinery, and civil engineering. US uses a selective application process. US supports an internship program and has internship partners from different value chains and collaborates with IER. There is a desire to create a center to manage research conducted and to seek outside research funding. The World Bank and the Dutch Government are currently supporting the University of Ségou.
- Centres d'Apprentissage Agricole (CAA) and Centres de Formation Pratique en Elevage (CFPE) were created in order to ensure appropriate skills needed in the agriculture sector for rural development. They are accredited by the Ministry of Education, but operated by different units under the Ministry of Agriculture,

Livestock and Fisheries, or by private entities or individuals. Students are admitted to the CAAs or CFPEs on the basis of their grades on the "Concours d'Entrée", an exam still based on traditional French academic criteria. The number of students applying for entry into CAAs or CFPEs is estimated to be as much as ten times the number of openings. The method of selecting students is to offer enrollment to only those who score highest on the exam. Two and four years of training lead to a Certificat d'Aptitude Professionnelle and Brevet de Technicien Agro- pastoral, respectively. There are 35 such centers that are more or less functional, 15 of which are directly under the relevant Ministries, and the rest of them are privately managed. The curriculum has to be approved by the Ministry of Education, and funding is primarily dependent upon tuition and student stipend from the government.

- Centre d'Animation Rurale (CAR). CARs were created for non-formal training of rural youth in basic literacy, agriculture, animal husbandry, arts and crafts, transformation and conservation of agricultural products, nutrition, etc. The targeted age is 18-30, both genders, for those who are not on an educational path after DEF. Recruitment is twice a year, 20 maximum per center. There are about 140 such centers registered at the Ministry of Rural Development.
- "Formation Continue" is a form of outreach associated with several AETs (including IPR/FRA), CARs, and many NGOs for producers and Extension workforce.

Impacts on AETs

Most AETs are located in Bamako and, at first, thought of themselves as not impacted by the 2011-2013 Crisis. However with more probing questions in interviews and focus groups, it was obvious that AETs were impacted differently in function of their location in Bamako versus the North versus other. The impacts on AETs as summarized below are based primarily on interviews, focus groups and other communication with administrators, faculty and students at IFAB and ULSHB for Bamako; extensive interviews and continued communication with administrators at IFASP-Mopti and US, as well as interviews and focus groups with faculty and students at IPR/FRA for Mopti, Ségou and Katibougou; and extensive interview and continued communication with the administrator at CPP-PAS for GAO.

AETs in Bamako

- Influx of students who had families in Bamako
- Possibly higher percentage of girls than normal and in gender composition
- Delayed and challenging enrollment one and two years later for returning students whose families moved away to neighboring countries
- Minimal disruption of the academic year
- Bourses d'étude and school fee slightly more irregular (IFASP/Bamako) from the government
- Prior AET challenges are reported, observed and emphasized

AETs in Mopti, Segou and Katibougou

- Occupation/use of IFASP-Mopti by about 40 students and teachers from Tomboctou; difficult conditions reported; then students and all program vanished in 2012/2013
- Minor influx of students at IPR/IFRA
- Concerns by students about safety and finances for students from the North
- Fear expressed by students during military maneuvers at nearby military camp
- Influx of youth in Koulikoroba and in villages near Katibougou suggests increased unemployment and concerns for safety
- Each department at IPR/IFRA reported halt in activities that had donor assistance, thus loss in research and outreach momentum
- Prior institutional, infrastructure, and other academic challenges were reported and observed at Katibougou
- Université de Ségou (US) was ready on paper in 2010, but started in 2012
- No obvious impact of the crisis reported on US
- Vision and strategic plan for an additional and regional university (away from Bamako) with special desired features (meeting labor market needs, land grant aspects, value chain) reportedly not being met
- Prior challenges expressed:
 - Institutional development and viability of CAAs, CARs
 - Limited impact in terms of "rural development" via CARs/Master Program in "Vulgarization" at IPR/FRA
 - Lack of opportunities to acquire practical skills

AETs in the North (Gao)

- Physical destruction
- Academic calendar in essence off
- Financial resources challenges reported and continuing
- Islamist laws and teaching: girls had to dress conservatively and seated separately from the boys; one case of "forced marriage reported"; general fear and social malaise; other social implications, etc.
- Prior weaknesses reported are similar to those in Mopti and Bamako, in addition to being in the north: halt to field work, sustained physical damages to building and other AET infrastructures; etc.

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

Findings suggest that the 2011-2013 Crisis had a negative impact on Malian agricultural education and training system in terms of physical destruction, disturbances in academic calendar and social expectations, unavailability of teachers and reduction of funding in the North; influx of students in Bamako AETs added challenges to the system of selecting and providing stipends to students; follow up to MOUs with different international assistance organizations as well as planning and institutional development processes were and are still suspended with AETs in all regions; etc.

The impacts were exacerbated by pre-existing, observed and documented challenges such as the lack of practical training opportunities, shortage of teaching materials and laboratories, over dependency on the federal government for funding and institutional development, continued migration from rural areas to Bamako, etc.

When briefly and unofficially discussed with USAID, a concept paper is suggested in line with the FtF Mali objectives. Such draft concept paper is being developed to justify a scoping assessment and trip to assist USAID in the identification of opportunities for investment in the appropriate levels of AET in Mali. This perspective is to infuse technology transfer and scaling up of appropriate technology through agricultural training and education.

A case study is also being developed and uses more systematically this trip report and the extensive notes and documents identified before, during and after this trip.

Appendix A: List of Contacts Made:

S/				Phone				
no	Name	Institution	Program/Position	no:	Phone 2	Email	Website	Fax
1	Gaoussou A.	USAID	Program	(223)	(223)	gtraore@usaid.gov		(223) 22-
	Traore		Manager for	223-68-	228-51-			39-
			Production	29 / 222-	09 /			33
			Accelerated	36-02	639-93-			
			Economic Growth		64			
			Team					
2	Baou Diane	USAID/ Mali	Project	(223)	(223)	bdiane@usaid.gov		(223)
			Management	2070-	7475-			2023-
			Specialist	2655	1539			3338
			Irrigation/Land		/6675-			
			Development		8909			
			Accelerated					
			Economic					
			Growth Team					
3	Bernard	Direction	Directeur, (?)	(223)		ballabern@yahoo.fr		
	Sissoko	National e des	Departement de	6691590				
		Productions et	l'Agriculture/Divisi	0				
		des Industries	on Formation et					
		Animales	Documentation,					
				(2.22) 2.2	(222) - 2			
4	Staka DIARRA	Istitut		(223) 66	(223) 76	siaka.diarra	www.ipr- infra.org	
		Polytechnique		97 66 35	48 2992	@ipr- infra.org /		
		Rural de				diasiak@yahoo.fr		
		Formation et de Recherche						
5	Bakary KONE	Appliquee Wetlands	Director	223 2029		bkone@wetlands-africa.org	www.wotands.org	
)	Dakai y KUNE	International	Director	3782		bkone@wetianus-affica.org	www.wetands.org /africa	
		international		3/82			<u>/aiiica</u>	

6	Ousmane MAMADOU	CFP-PAS	Director general	(0023) 21820762		abaousmane@yahoo.fr		(0023) 21820762
7	Mamadou M'Bare Coulibaly	Ministere du Developpement Rural		223 66786325 /73331629	223 21730691 /20725262	mamadoumbacoulibaly @yahoo.fr		
8	Oumar Yacouba Maiga	Ministere de L'Education, de L'Alphabetisation et de la promotion des Langues Nationales	Directeur National	(223) 20290546	720723202	dgdntpemali@gmail.com		20290450
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		Continue	des cours de			
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			Rural			

Appendix B: Trip Log (Activities by Day).

Friday, January 24, 2014, departed Alabama Saturday, January 25, 2014 transited in Paris, arrived in Bamako, Mali.

Day One, Monday, January 27, 2014

Meeting with Mr. Bakary Kone, director of Wetlands International Mali.

Mr. Oumar Yacouba Maiga, Minister of Education, Literacy and the Promotion of the National Languages, National Directorate of Technical and Vocational Education.

Mr. Bourema Cisse, the associate director of "Cellule de Planification et de Statistique du Secteur du Development Rural (CPS/SDR).

Day Two, Tuesday, January 28, 2014

Meeting at the Ministry of Agriculture.

Dr. Mamadou N'Bare Coulibaly, Director of Research and General Secretary, Ministry of Rural Development.

Dr. Bathily the director of the privately owned "agropastoral" school in Mopti and Bamako Mr. Bourema Cisse, Associate Director, Office of Planning and Statistics of the Rural Development Unit, (`CPS-SDR)

Day Three, Wednesday, January 29, 2014

Pr. Mamadou Moussa Diarra, Recherche Director,

Dr. Lassine Soumano, Director of Studies of the IPR/IFRA.

Rural Polytechnic Institute of Formation and applied research (IPR/IFRA), Katibougou

Day Four, Thursday, January 30, 2014

Mr. Moustapha Dicko, Minister of Higher Education and Scientific Research
Mrs. Kone Salimata Berthe, Deputy Director of the Ministry of Livestock and Animal
Production and Mr. Bernard Sissoko, director of training and documentation.
Meeting with Dr. Macki Samake, rector/ Vice Chancellor, University of Letters and Human
Sciences of Bamako

Day Five, Friday, January 31, 2014

Meeting with Mr. Ismaila Alassane Maiga (Cooperation Suisse)

Day Six, Saturday, February 01, 2014

Meeting at the IPR /ISFRA of Katibougou, faculty, staff and students

Day Six, Sunday, February 02, 2014

Meeting with Mr. Mamadou MAIGA Ousmane Director, Vocational training center of agricultural trainings in the Sahel, CFP – PAS, Gao

Day Seven, Monday, February 03, 2014

Dr. Amadou Gakou, Representant IFDC/pi

Pr. Dasse Togola, Ministry of Agriculture, National Direction of Agriculture

Meeting with Dr. Souleymane KOUYATÉ, VICE RECTOR of the University of Ségou

Day Eight, Tuesday, February 04, 2014

Debriefing USAID

Ntam travel back to USA

Day Nine, Wednesday, February 05, 2014

Second meeting with Dr. Bathily, the owner of the agro-silvopastoral school, IFAB and Mr. Mamadou MAIGA Ousmane Director, Vocational training center of agricultural trainings in the Sahel, CFP – PAS, Gao.

Day Ten, Thursday, February 06, 2014

Dr. Moumine Traore, director of the CEFITEX.

Met with Mr. Bourema Cisse, the associate director of "Cellule de Planification et de Statistique du Secteur du Development Rural (CPS/SDR)".

Day Eleven, Friday, February 07, 2014

Met with Adama Coulibaly, Mrs. Maiga Souhata Haidara

Meeting with Mr. Adama Coulibaly who is an independent consultant in agriculture and agricultural development in Mali.

Met also Mrs. Maiga Souhata Haidara, a graduate from Tuskegee University who is working at the forestry department.

Day Twelve, Saturday, February 08, 2014

Met with Mrs. Ly Rehana Toure (wife of the Prime Minister) for a dinner and information exchange on AETs in Mali and InnovATE

Day Thirteen, Sunday, February 09, 2014, Youssouf departed Mali

Day Fourteen, Monday, February 10, Transited Paris, arrived in Atlanta, Alabama

Appendix C: Addendum

Impact of the Malian Crisis on Three Vocational Training Centers, CFP-PAS de Gao, IFAD and IFASP de Bamako

Suchet L. Loois

CFP-PAS (Centre de Formation Professionnelle-Promotion de l'Agriculture au Sahel) of Gao

This is a center of professional training to promote agriculture in the Sahel

- The President of the Association for the Development of Private Schools of Gao, Ousmane Mamadou, wrote to the Governor of the Gao region requesting that the government remove the suspension of paying training costs during the 3rd quarter in the private schools of Gao. The training costs consisted in food allowance, travel subsidies, half scholarships in these technical and professional institutions of the Gao region. In spite of the insecurity and occupation, these schools continued to operate. They organized remedial courses for the students exam classes and special sessions for students of North Mopti. This was done so well that in Agro-pastoral exams the admission rate was 87.1%.
- There were 10 private institutions of secondary and technical education that were touched by the crisis in the Gao region, the rates of loss were as follows:

Teaching personnel: 78%Student enrollment: 32.3%

• The damages were heavy in materials and infrastructure

Impact of the crisis on CFP-PAS of Gao

Teaching Personnel (1) Administrative Staff(2)			Number	Number of Students enrolled			Damages caused by the war	
Before crisis	During crisis	After crisis	Before crisis	During crisis	After crisis	Materials	Infrastructure	
29 8	3	20 (1) 5 (2)	242	68	128	Forages, molasses and urea burned; Stolen were: Moto-cycles; coffers; construction materials; veterinary materials; microscope; insemination and surgery equipment	Wall fences broken; poultry houses & water cistern damaged; storage shed burned; vegetable crops gardens and drip irrigation system destroyed; trees burned; furniture destroyed; books stolen and burned.	

The rates of loss due to the crisis were as follows;

• Teaching personnel: 41.4% and 69.0% during and after crisis respectively

- Administrative staff: 37.5% and 62.5 % during and after crisis respectively
- Student enrolment: 28.1% and 52.89 % during and after crisis respectively

According to Ousmane Mamagou, in spite of the civil war events (March to May, 2012) the Agro-pastoral school (CFPPAS) had a normal school year due to its specificity.

Baharanyi and Youssouf's report also confirmed that the AET institutions in the north of Mali had suffered physical destruction in materials and infrastructure which must have negatively impacted the quality of education on a short and long term, loss in teaching and administrative staff. All of them were are under serious financial difficulties to operate without outside assistance.

IFAD-IFASP (Institut de Formation Agro-sylvo Pastorale) de Bamako (Institut de Formation Agro-sylvo Pastorale) de Sevare

IFAD is a private co-educational technical and professional institution, located in Sogoniko, Commune No 4 of Bamako. The AET is provided in two tracks: 1) Agronomy and Animal Husbandry to students with Fundamental Education diploma and 2) Continuous Education to working agents. 39.1% of the enrollment are women. Special efforts are being made to attract more females at IFAD/ Bamako and IFASP at Sevare. These institutions will introduce new modules in order to train qualified technicians to respond to the work force demands from the producers. The rate of success at IFAD was 77%. After 4 years, the graduates receive a Diploma of Agro-Pastoral Technician. It is a competency-based program with objectives and curricula that enable the students or agents to learn competencies and the institutions to carry out a pedagogic evaluation of them. The training can be continuous, qualifying and on demand. The training is in a) agriculture (vegetable crops, rice, fruit trees); b) animal husbandry (beef cattle, poultry, honey bees, aquaculture; and c) forestry.

Location of a few agro-pastoral institutions approved by the Ministry of Education

Bamako	Segou	Koulikoro	Sikasso	Mopti	Gao	Tombouctou	Mopti
4	4	3	1	1	1	1	1

Impacts of the North Mali crisis on the institutions

Since January 2012 about 115 schools were closed, destroyed, looted or carry explosives. Many teachers have not returned to their schools in the northern region.

Many students (6,895) and teachers (208) were relocated/ reassigned into the southern institutions. In the south, the schools already over-crowded had great difficulty to welcome the displaced students from the Northern region.

In this case, in 2012 IFAD and IFASP also welcomed students gratuitously.

- At IFASP of Sevare: 45 students (24 girls and 21 boys) from Technical School of Sankore, Tombouctou. Many boys gave up school to join the Granda-Iso self-defense armed groups
- At IFAD of Bamako: 26 students (8 girls and 18 boys) from 2 Northern regions (Tombouctou and Gao)
- Enrollment before and after the crisis

Enrollment	Total
At IFAD and IFASP before the crisis	270
At IFAD and IFASP after the crisis (additional)	71
Cost of taking care of one displaced student from the north	CFA Francs 740.000
Total cost of taking care of displaced students from the north incurred by IFAD and IFASP	CFA Francs 13.135.000

These two institutions in Bamako and Sevare have taken the responsibility of re-enrolling 71 students during the 2012-2013 Northern Crisis at the cost of F CFA 13,135,000, without counting the cost of practical internships and of tutoring these displaced students.

Baharanyi and Youssouf has already reported (pages 13 and 14) that the AET institutions located in Bamako or nearby in the South, like IFAD and IFASP, were not directly impacted by the 2012-2013 crisis in the North, but they were indirectly or differently. They had to accept lots of displaced students in crowded class rooms and to support them financially with their meager resources, Although there was minimal obvious disruption of the academic tear, but the quality of the training must have been negatively impacted.

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Appendix D: Focus Group Rosters

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> IPR/FRA Students Group Feb 1, 2014 Polices Group

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Katibougou, le 1er février 2014

Le Secrétaire de séance

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