CLINARD'S COTTON UPDATE

21ST, MARCH 2012

Major Ugandan Cotton Stakeholders

Before leaving Uganda, I made sure to meet with key stakeholders of not just organic cotton, but the cotton sector as a whole. This included the Cotton Development Organization (CDO), a semiautonomous agency mandated by the government to promote the cotton sector. The CDO aims to make cotton profitable for the approximately 400,000 cotton farmers, and to increase exports of not just cotton lint, but also textiles. The umbrella organization hovers over the liberalized cotton sector and seems to be struggling to cover all the farmers in sufficient inputs.

Various schemes have tried and failed to bolster the yields of Ugandan farmers that have been cited as some of the lowest in the world. Some of these farmers who are supposedly receiving subsidized pesticides from ginneries in actuality purchase full-price pesticides from local agrodealers enough for a few sprays. Fertilizers are not even part of the discussion yet, as credit is not available. Meanwhile the CDO is critical of the organic cotton projects, insisting that there were no benefits to farmers, yields were low, research was insufficient, and that bluntly, the country will not be ready for certified organic cotton production in the near future.

On the other hand, (to be expected) my meeting with NOGAMU (National Organic Agriculture Movement of Uganda) cast a different light on organic cotton production. Our discussion focused on not just organic vs. conventional, but issues of farmer empowerment and participatory development. As far as the major debate and all of the politics surrounding organic cotton, the view was that farmers will decide what works for them and that, in the long run, we will see what production methods bring the greatest reward to smallholder farmers. Smallholder group certification as it exists today was seen not as top-down and excessively regulated, but instead, as a platform for farmer discussion, innovation dissemination, and overall development.

Lastly, a meeting with a USAID representative focused on the need to analyze every technology for its merit both in research and farmer plots. There is no silver bullet for smallholder farmer issues, and the hope is that every proposed solution whether from chemical corporations, government agencies, or farmer organizations - be given adequate and equal attention before appropriate dissemination.

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PROGRESS:

- Toured textile mill in Kampala
- Met with CDO, USAID representatives
- Attended USAID stakeholder conference
- Met stakeholders in Dar es Salaam
- Discussed research at Sokoine University of Agriculture (SUA), Morogoro



From field to fashionable T's: Phenix Logistics, Kampala

Traveling south to the capital, Kampala, I could not wait to tour one of the two operational textile mills in the country—and the only one processing organic fibers. After harvesting organic cotton and touring a ginnery, I needed to see the next step of the process. How does cotton lint become a T-shirt?

Lucky for me, Phenix Logistics is a very vertically-integrated textile mill where the cotton lint passes through many processes to the final stage of printing and labeling. It was a bit overwhelming, and quite clear that substantial capital was required for this operation. The factory rooms are impressive. First workers painstakingly go through the raw lint cotton to remove any remaining debris (even a few rats can be found!). From here, some major machines from Germany, Switzerland, India and Japan take over: combing, twisting, winding, sewing, cutting, dying and drying machines are all manned by watchful workers as the T-Shirts take form. (cont pg 2)



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Phenix Logistics (cont. from pg. 1)

(cont. from pg. 1)



SAMPLE OF PHENIX GARMENTS

GOTS (global organic textile standards) approved chemicals.

We then discussed the

My first question was-

where does this cotton come

from? The answer was surprising

- in 2008 Phenix purchased in

bulk from a Lira based company,

during the peak of Ugandan or-

ganic cotton production. Appar-

ently, lint cotton stores very well!

The company must decide, however, if they are going to continue

working with organic cotton or

opt for conventional, as organic

production in the country has

waned. Either way, the processes

are quite the same at this stage

besides the certification process

and regulations including using

company's major challenges: namely working in a land-locked, electricity- challenged country... that now has a shortage of organic cotton lint. The market is there, however, and domestic orders sometimes outnumber international orders. Phenix is looking more into regional opportunities, as rising international transport costs cut into profits.

Passing through the finishing room, clothes of all shapes and sizes reflect the diversity of orders. Even the King of the Buganda recently placed an order here, to commemorate the burning of the Kasubi tombs in 2010. Thankfully, the on-site shop was filled with samples that, of course, I needed to purchase for research.

Status of Bt Cotton in East Africa

Whenever the discussion of organic cotton arises, genetically-modified (GM) cotton is never far behind. While many consider GM a threat to organic and indigenous crops, non-cultivated plants, human health, our future, the planet, life, etc., just as many others believe deep down inside that GM is/can/will feed the world/future. Regardless of your stance or mine (neutral researcher!), I'd like to take this opportunity to give an update on Bt cotton in Uganda and Tanzania.

In Uganda Bt cotton has undergone two years of research trials at one site in Serere, but this past season research was halted. A lead researcher of Bt in the country informed me that results were quite inconclusive; morphologically and chemically the GM plants expressed themselves in unexpected ways. Hence, management became intensive at times, especially due to secondary pests. Recommendations were to undertake more research to determine how to manage Bt effectively at the smallholder farmer scale. My question is whether Bt will prove manageable for Ugandan farmers if it is even slightly unmanageable at the research level. Further, research has shown that if secondary pests (those not affected by the Bt toxin which targets namely bollworms) reach economic threshold levels that pesticide requirements for Bt cotton are not lower than conventional cotton (see Bingen 2008).

GM cotton is much more restricted in Tanzania, where strict liability clauses of environmental protection legislation supported by the office of the Vice President have so far kept Bt out of the research institutes. The country is a member of the Cartagena Protocol, and as such has strong biosafety and biodiversity regulations. However, the office of the Prime Minister, including the Minstry of Agriculture (MOA), is pushing for rapid implementation of GM technology. The MOA sees Bt cotton as a major opportunity to increase cotton yields, which like Uganda, are quite low. For comparison, while GM technology was mentioned frequently in the MOA environmental action plan, organic was not mentioned once. The future of GM technology in Tanzania thereby hangs in the balance of this political debate.

Bingen, J. 2008. Genetically Engineered Cotton: Politics, Science and Power in West Africa. in *Hanging by a Thread: Cotton Globalization, and Poverty in Africa,* eds. Moseley, W.G. and L.C. Gray. Athens, Ohio: Ohio University Press.

"We then discussed the company's major challenges: namely working in a landlocked, electricitychallenged country... that now has a shortage of organic

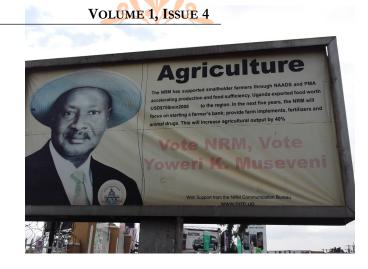
cotton lint."

USAID: Development Business

How does development happen today? A great chunk of "development" seems to be occurring as "private-publicpartnerships" (PPPs) that seek to find "sustainable," "innovative" "solutions" to development priorities (as set by these PPPs). The thinking is that by involving private businesses seeking to make long-term profits in the development process, that these projects will have lasting benefits for residents or biodiversity (ideally both). However, as it appears to me, the status quo of this thinking is that local residents do not have much of a say in the setting of the development priorities or implementation of projects that may have great impacts on their livelihoods.

I have become an advisor of sorts for an agriculture development project in Northern Uganda, and as such at- missing one crucial link: local residents tended a USAID interested-parties conference last month and their input. where private companies were informed of USAID's broad development priorities: nutrition, food security, biodiversity ensure local consent, input, or participaand conservation. Companies then write grant proposals for tion in order to receive funding assistance. at least \$500,000, which they must meet with leverage of at Innovation is indeed important, but what least 1:1. The crowd was a mix of conservation and humani- about taking advantage of indigenous intarian NGOs, for-profit businesses, church groups, etc.- novations and building on what is already development's usual suspects, but perhaps doing business in successful? A representative of a smaller a new wav?

Innovative, profitable, business solutions for develop- able to find half-a-million dollars, and it ment have certainly proved beneficial (micro-finance, cellu- became clear that development is a very lar phone technologies)—but these partnerships may be big business.



Advert for Pres. Musevini-

There was no mention of any need to focus on agricultural development NGO asked how on earth they would be

"...development's usual suspects, but perhaps doing business in a new

way?"

WANAENDELEA NA KAZI YA UCHUNGUZI TUMEONA MMEA WA KWANZA HAKUNA UHARIBIFU KWA HIYO TUNAENDELEA. HIVI SASA TUTAKUWA TUNATEMBEA HATUA SABA AU NANE, KUTOKA MMEA MOJA HADI MWINGINE NA KUFANYA UCHUNGUZI.

-from Tanzanian cotton pest control manual: scouting for bollworms

"We see that the first plant has no damage therefore we continue. Now like this, we will walk seven or eight steps, moving one plant until the next to undertake the scouting."









"I love cotton"

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Introduction to TZ

"Nimetembea sana" (Swahili for "I have walked a lot"). Traveling by bus is a great opportunity to see the country and chat for hours with new friends, but sometimes it can be quite tedious. For instance, I will never again board an Akamba bus, and I recommend you do the same. At one point somewhere quite arid, the smoking older-than-Iam bus decided to die conveniently in front of a KenChic chicken factory farm. Not surprisingly, this facility happened to be the only nonhospitable place with a door in East Africa. Twenty hours later, Dar es Salaam was appealing even at 4:45AM.



Luckily, arranging meetings was much smoother than journey to Dar. Stakeholder meetings included the Tanzania Cotton Board (TCB), Tanzanian Organic Agriculture Movement (TOAM) and TanCert (Tanzania Organic Certification Agency). The overarching TCB which promotes and facilitates the cotton sector has this view of organic cotton production: it is difficult, low-yielding, and probably not going to expand – but farmers and companies are free to choose what is best for them. Hence, a clear difference can be established between the level of freedom allocated to cotton farmers in the two countries. However, the numbers of farmers involved with organic cotton production in Tanzania have not increased substantially over the years and it is important to determine why this is the case.

Further, making comparisons between the certification processes utilized by the various organic cotton companies in East Africa will prove useful in illuminating strategies for greater inclusion and success of farmers. The more projects I visit, the opacity of the value of this research diminishes. For instance, during my first days with an organic cotton leader bioRe in Meatu, Shinyanga, I was able to participate in a great exchange of certification strategies owing to my accumulating experiences as well as bioRe's ever-improving group certification system.

TZ cotton research

Heading west from Dar es Salaam I spent some days in Morogoro at an organic agriculture farmer school while meeting with professors from Sokoine University of Agriculture (SUA), the only agriculture university in the country. An Illini alumni, currently a professor of agricultural extension and education, has agreed to advise and facilitate my research in country. My discussions at SUA focused on research methodology and issues of farmer empowerment, as there is little research being done on organic agriculture, let alone organic cotton. I was also fortunate to also meet the director of the llonga Eastern cotton research institute before heading to the main cotton research institute in the country, Ukiriguru.

The western cotton growing region produces more than 90% of the country's cotton, so fittingly the central research station, as well as the new Cotton Development Trust Fund (CDTF), are situated in Mwanza. Ukiriguru has long been the center for cotton seed breeding, as well as agronomy, pathology, entomology and fiber trials. The goals are to produce high-quality, high-yielding varieties resistant to bacterial blight and fusarium wilt—that meet the demands of farmers, ginners, and buyers.

Pesticide and foliar fertilizer trials were visited, but there was no organic cotton research to be seen, nor does the research institute have any relations with the few organic cotton companies. Allocation of inputs, following three years of trials and approval by the Tropical Pesticide Research Institute



(TPRI), may be improving in the coming years with complete adoption of contract farming. With assistance from Technoserve, Tanzania Gatsby Trust, the CDTF and the TCB, every single cotton farmer and ginnery will be required by TCB policy to only buy or sell cotton within a contract (stay tuned...).

View of the Pamba House (Cotton House), Mwanza, TZ