





VOLUNTEER REPORT FORMAT

To be submitted to CRS at the end of volunteer assignment and shared with the Host

- 1.1 Assignment information
 - a) Volunteer Name: Jock (Joost) Brandis
 - b) Host Organization: Iganga District Farmers Association, Bukawa Agricultural Marketing Cooperation
 - c) Assignment: Assess ground nut and ground nut oil for aflatoxin contamination and train farmers for better practices.
 - d) Dates of Assignment: Oct. 29 Nov 16, 2016
 - e) Number of days worked 14
- 1.2.1 Objective 1 in your SOW: Recommendation on simple, cost effective storage/processing facilities for reducing aflatoxin infestation and treatment of aflatoxin infested oil seeds
 - a)Progress with the objective: Ground nut testing proved that they were safe in the village and toxic in markets and processed products in town. Teaching co-ops about emerging aflatoxin issues and introducing technologies to reduce aflatoxin in groundnuts and groundnut oil. Training in local building of groundnut sheller. Training in using the reader for aflatoxin testing. These trainings were achieved through working with Host staff and later with different farmer groups especially for testing the ground nut sheller and water pump for irrigation.
 - b) Expected impacts/results: Aflatoxin in food creates a wide range of health issues. There is widespread awareness in both town and country on the safety issues creating a depressed market for a potentially very nutritious food.
 Preparing co-ops for the possibility of re-establishing groundnut products with high enough health standards to enter the export market, thereby increasing product demand and value at the farm gate. Its anticipated that this assignment was an eye opener for the cooperatives to think about the possibilities of marketing aflatoxin safe/ free ground nuts which will create an export market translating into higher incomes for the farmers.
 - c) Recommendations: With the co-ops as a base, set up a procedure to create 'Aflatoxin Safe Certification' using the tools introduced in this trip.
- 1.2.2 Objective 2 in your SOW: Basic understanding of how field infestations of moulds contribute to storage losses; aflatoxin development in the field and in storage, and how this can be minimized;
 - a)Progress with the objective Increase farm efficiency with locally made ground nut shellers. This will reduce the time taken by village women to remove ground nuts from the shells as this is a point of aflatoxin infestation. Late season drought increases toxic fungi. So economical foot operated water pumps that could be used on an emergency basis, were demonstrated.
 - b) Expected impacts/results Faster nut shelling increases food safety and allows more product from the same time input. If a stable Uganda peanut industry is to be developed, then a reliable ground nut source, immune to climate change has to have access to quickly accessed irrigation.
 - c) Recommendations We trained 3 IDFA staff to build the machine (ground nut sheller) with local materials. They need some funds to set up a small factory. Great interest in the villages when we did demonstrations and the fact that machines could be shared by many farmers, suggests that a







shop could be self-sustaining. The same local shop that would build shellers could build water pumps. Some startup funding should be sourced. IDFA staff were trained on how to build the water pump.

1.3 Recommended future volunteer assignment There should be a return volunteer trip when the first 'Aflatoxin Safe Certified' products are going to happen.

1.4 Action Plan

Recommendation	Specific Action	Responsible person	By when
The best way to improve farmers profits from groundnuts is to improve the quality of the product and the efficiency of processing. But the drudgery of hand shelling limits the opportunity of farmers to expand their production for the expanded market that we hope to create. Groundnut shellers available for purchase or at a communal site allow shelling to happen at 50x the rate.	They need some funds to set up a small factory. Great interest in the villages when we did demonstrations and the fact that machines could be shared by many farmers, suggests that a shop could be self-sustaining. The same local shop that would build shellers could build water pumps. Some startup funding should be sourced.	Paul and Hakim (Coordinator IDFA and Manager ACE respectively) write a concept and lobby for funding from CRS or any other Donor resources	December 2016
The dangers of aflatoxin in peanut products in the market are well known but unregulated. Farm coops are the only starting possible point to create a 'Aflatoxin Safe Certification' which would restore confidence in the buyer, open the products to export and pressure the government to refuse imports of toxic products. In my opinion, the IDFA is prepared to insure quality control from its members and make direct contact with a ground nut processor to by-pass the traders who are the biggest reason for current high toxin levels. They would then issue the Aflatoxin Safe Certification seals to be affixed to each product container. Central to this is the by-pass of traders who store nuts badly and for a long time.	With the co-ops as a base, set up a procedure to create 'Aflatoxin Safe Certification' using the tools introduced in this trip.	IDFA coordinator and ACE manager in collaboration with CRS	When an opportunity for funding is realized







Speedy harvesting and processing			
and control of product along the			
way is key to make this happen			
	Encourage farmers to		
Any project that encourages legume	plough back ground nut		
growth has a positive effect on soil	residues after harvest		
quality. However, groundnut	and shelling or as a	A CE - N A	Immediately (After
residues are now simply burned	material for making	ACE Manager and	second season
after harvest. Higher financial	compost. This will	IDFA coordinator	harvest)
returns might allow the	contribute towards		·
encouragement of composting	improvement in soil		
	fertility		

1.5 Number of people Assisted

- a) Through formal training (Classroom setup)
- b) Through direct hands on practical assistance: 150
- c) Out of these above, number of host staffs 7
- d) Training/assistance by field

Category	Total	Males	Females
Members/ owners	143	74	69
Employees	7	7	
Clients/ Suppliers			
Family Members			
Total	153	81	69

1.6 Gender

- a) What gender roles did you recognize in your host community? Did these roles play a part in your assignment? How? Women seem to do most of the ground nut work in the villages. Most of it is drudgery.
- b) How might CRS or the host organization improve opportunities for the women in this host or host community? Simple tools can ease that. Hand held devices to allow faster planting while standing up are already available. Women asked me for a tool to help harvesting without having to bend over. Shellers are available. Sorting efficiency and quality is greatly increased by issuing reading glasses, especially to older women who tend to be far sighted. If a test project could combine all three, it would be interesting to see the increased productivity.

1.6 Value of volunteer contribution in \$ 3,350

- a. Hours volunteer spent preparing for assignment 40 hours
- b. Estimated value of all material contributions volunteer contributed to host during assignment Water pump and Peanut sheller factory \$1,000USD

1.7 Value of hosts' contribution in \$ 299.77







a) Meals none

b) Transportation for participants: \$ 133.23

c) Lodging: None

d) Translation: \$83.27

e) Other (Specify): Training venue: \$55.51, Farmer mobilization: \$27.76

1 USD = Ushs 3,602.88

1.8 Host Profile Data:

Did you obtain any data that supplements or corrects the data in the existing host information as detailed in the SOW? Please list it. None

1.9 Recommendations for CRS: Find funding to support the recommendations above.

1.10 Press Release

FOR IMMEDIATE RELEASE







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Wilmington Area Agricultural Engineer Works with Counterparts in Uganda to introduce new Aflatoxin testing Technology

Farmer-to-Farmer program promotes economic growth and agricultural development in East Africa

October 31, 2016: Wilmington, NC, Jock Brandis, an Agricultural Engineer from Wilmington, who is a Director for Research and Development for the Full Belly project travelled to Uganda for one and half weeks to share his technical skills and expertise with local farmers. Jock's assignment is part of Catholic Relief Services' Farmer-to-Farmer program that promotes economic growth, enhanced nutrition through access to healthy food, and agricultural development in East Africa.

Jock Brandis worked with two farmer organisations- IDFA and Bukawa ACE in Iganga and introduced Mobile Assay's breakthrough technology that allows cheap, fast aflatoxin test quite literally on the tailgate of a truck. It was all part of a Catholic Relief Services project funded by USAID through their Farmer to Farmer program.

Mr. Brandis tested groundnut fresh from the ground and off the grocery store shelves to find the source of toxic contamination. Aflatoxin is a major health issue, causing immune suppression that leads to increased cases of tuberculosis, pneumonia, malaria and many other diseases. It causes mental and physical stunting in children and is the number one cause of liver and pancreatic cancer.

Tests showed that fresh nuts at the village level were safe, but poor storage was where the problem started. Also of concern was that grocery store ground nut paste imported from India and Kenya was more than twice the safe level. He did find safe made in Uganda paste.

Mr. Brandis hopes his findings can lead to a better way to process ground nuts and a process where buyers can look for a 'Aflatoxin Safe Certification' on all the ground nut products they buy.

Farmer-to-Farmer matches the technical expertise of U.S. famers and professionals in agribusinesses, farming cooperatives, and universities with farmers in developing countries to assist them in improving agricultural productivity, accessing new markets, and increasing their *Version Nov 24th 2016*







incomes. Farmer-to-Farmer is funded by the U.S Agency for International Development (USAID).

In a world where 80% of food is produced by farmers working on small farms or fisheries, the movement to share proven farming and business skills can improve the quality and quantity of the world's food supply. For communities in the developing world who often struggle to produce enough food, this can improve access to a reliable source of food and better nutrition. For the farmers, it can strengthen their path to prosperity.

CRS is partnering with five U.S. institutions to tap into the rich diversity of the U.S. agriculture community: the National Catholic Rural Life Conference, Foods Resource Bank, National Association of Agricultural Educators, American Agri-Women, and the University of Illinois' College of Agricultural, Consumer and Environmental Sciences.

The volunteers travel to East Africa for anywhere from one to six weeks.

"We are certain that this program will be beneficial not just to the farmers in East Africa but also to the volunteers from America," said Bruce White, CRS' director for the program. "It's going to make the world a little bit smaller and a whole lot better for everyone involved."

For more information, visit farmertofarmer.crs.org

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Catholic Relief Services is the official international humanitarian agency of the Catholic community in the United States. The agency alleviates suffering and provides assistance to people in need in more than 100 countries, without regard to race, religion or nationality. CRS' relief and development work is accomplished through programs of emergency response, HIV, health, agriculture, education, microfinance and peacebuilding. For more information, visit www.crsespanol.org and follow Catholic Relief Services on social media: Facebook, Twitter at @CatholicRelief, @CRSnews and @CRSnoticias, Instagram, Pinterest and YouTube.

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