





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: Jeff Knowles
 - b) Host Organization: Sebeta Gethsemane Nunnery
 - c) Assignment: Soil Fertility
 - d) Dates of Assignment: 1/20-2/2/2016
 - e)Number of days worked: 10 days,
 - a)1.2.1 Objective 1 in your SOW Provide training and technical assistance on integrated soil fertility

management techniques.

Progress with the objective- Completed

- b) Expected impacts/results: Improved soil quality and increased yields
- c) Recommendations¹ See below
- 1.2.2 Objective 2 in your SOW-Demonstrate the different techniques of improving soil organic matter

content.

- a) Progress with the objective-Completed
- b) Expected impacts/results: Improved soil quality and increased yields
- c) Recommendations See below

1.2.3 Objective 3 in your SOW Only two objectives

- a)Progress with the objective
- b) Expected impacts/results
- c) Recommendations

1.3 Action Plan

Recommendation	Specific Action	Responsible person	By when
1.Begin to use cover crops	Begin to experiment with cover crops, especially legume crops such as clovers or perineal peanuts. Non legume crops such as oats would be acceptable. The intent is not to harvest these legumes or small grains, but to improve soil quality by providing habitat for soil organisms by increasing organic matter. Upon completion of harvest of the teff or other crops, plant a legume crop such as clover or perennial peanut, oats or other small grains	Mother Superior	ASAP

¹*Note:*Only make not more than 6 recommendations. The most useful recommendations for hosts are ones that they can implement themselves with minimal expense. For example, a cooperative might change its financial reporting procedures or hold more regular meetings of its board. Broad recommendations on tax or credit reform, changes in government policy, or investment in large-scale equipment, are usually not within the host organization's reach.







2. Training	Weletemariam should become proficient with the material in the folder entitled, "Unlock the secrets of the soil". Weletemariam should train the appropriate nuns on the contents of the material within the folder with particular attention focused on four basic principles of improving soil quality. <u>A) Keep the soil</u> <u>covered as much as possible,</u> <u>B) Disturb the soil as little as possible, C) Keep plants growing throughout the year to feed the soil, D) Diversify as much as possible using <u>crop rotation and cover</u> <u>crops.</u></u>	Weletemariam, Mother Superior	Immediately
3. No-tillage	Begin to experiment with no tillage on small vegetable plots within the vegetable fields. One way this can be done is to cover a vegetable plot with 4-5 inches of mulch. When ready to plant the crop poke holes through the mulch and keep the parcel covered with mulch, adding if necessary. This piece should remain undisturbed year after year. Over time the insect life will increase dramatically and the soil quality will improve.	Mother Superior	ASAP
4. Composting	Increase the existing compost material 10 fold over the existing amount currently being produced. Food	Mother Superior	ASAP

SCREPES, wood ash and					
	scrapes, wood ash and biochar are currently being used for composting. Increase the variety of dead organic matter to include; weeds, crop residues, banana leafs, leaves, etc. Ideally, their would be one compost pile for each field. The nunnery is currently turning the compost which helps in the breakdown, however, the nuns expressed concern with the odor. To avoid turning and reduce labor, layer compost material and cover the pile with a thin layer of soil or manure. If the piles get above three feet, put a thin layer of soil or manure every foot				
5. Current application of manure and composting	Continue with the existing application of manure and compost. It should be recognized the nunnery is doing a very good job utilizing the manure produced on the farm.	Mother Superior	ASAP		
6. Protect the fruit trees	Currently the apples trees and other fruit trees are not producing fruit. Plowing is occurring within inches of every tree trunk and feeder roots are being destroyed. It is recommend that a one meter band around each tree not be plowed and 4-6 inch layer of mulch always cover the soil surface.	Mother Superior	ASAP		

1.4 Number of people Assisted

- a) Through formal training
- b) Through direct technical assistance (Do not double count)
- c) Out of these above, number of host staffs
- d) Training/assistance by field

Category	Total	Males	Females
Members/ owners	14		14
Employees			
Clients/ Suppliers			
Family Members			
Total	14		14







1.5 Gender

- a) What gender roles did you recognize in your host community? Did these roles play a part in your assignment? How? Obviously all the host community was a nunnery, so only women were present.
- b) How might CRS or the host organization improve opportunities for the women in this host or host community? Not applicable

1.6 Value of volunteer contribution in \$

- a. Hours volunteer spent preparing for assignment,40
- b. Estimated value of all material contributions volunteer contributed to host during assignment \$10,000 US
- 1.7 Value of hosts' contribution in \$ (Please consult the host as well)
- a) Meals \$35 US
- b) Transportation \$100 US
- c) Lodging \$700 US
- d) Translation \$1500 US
- e) Other (Specify)
- 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. Yes, identified that soil fertility is not the problem. The problem is how the land is being managed.

1.9 Recommendations for CRS:

1) CRS did a poor job in coordinating this assignment with the nuns. My arrival took the nuns by surprise as the two weeks here was a very busy time of the year (examinations). As a result only one nun benefited from the training except for the last day. This was frustrating for the volunteer and the Mother Superior. CRS needs to coordinate very closely with the nunnery on any future assignment to ensure as many nuns and students as possible can benefit from the training. According to the Mother Superior, this is not the first time this has happened.

2) It is highly recommended that CRS take a leadership role in the promotion of biochar. Biochar is simply charcoal made from wood. Biochar has tremendous potential to serve a drought mitigation measure by holding water in the soil. In addition, biochar serves as a catalyst that allows for the rapid absorption of nutrients by plants. Biochar quickly absorbs atmospheric carbon and absorbs carbon in the soil. Biochar has tremendous potential to serve as a tool to reduce atmospheric carbon and may be part of the solution to climate change. Individuals such as Peter Jenson have been teaching Peace Corps volunteers about the potential of Biochar. The United States Department of Agriculture is just now beginning to teach American farms about the benefits of biochar.

3) It is further recommended that CRS review and promote the information in the folder, "Unlock the secrets of the soil." The information in this folder has great potential to improve yields for the poor farmers of Ethiopia and East Africa.

1.10 Press Release- I did not complete the press release.







FOR IMMEDIATE RELEASE

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Kealakekua Area Volunteer Travels to Ethiopia to Share Skills with Local Farmers

Farmer to Farmer program promotes economic growth and Agricultural development in East Africa

Jeff Knowles, a **retired USDA employee** from **Kealakekua**, **HI** travelled **to Ethiopia** for **3** weeks to share his technical skills and expertise with a local nunnery/orphanage. Knowles's assignment is part of Catholic Relief Services' Farmer-to-Farmer (FTF) program that promotes economic growth, food security, and agricultural development in East Africa.

Working with farmers in East Africa is very rewarding and the impacts on people's lives can be quite profound said Knowles.

Funded by the U.S. Agency for International Development (USAID), the five-year program matches the technical assistance of U.S. farmers, agribusinesses, cooperatives, and universities to help farmers in developing countries improve agricultural productivity, access new markets, and increase their incomes.

In Ethiopia Knowles worked with the Sebata Nunnery on soil fertility and soil conservation training and giving technical assistance to the 85 nuns and 160 orphan girls to enable them to maintain high production of vegetables and grain crops. Up to 245 beneficiaries were reached. One of the most important things a volunteer going to East Africa needs to do is to remain flexible. Preconceived ideas on what is needed does not always meet the actual needs of East African farms, said Knowles. Farming in East Africa is completely different than farming in the USA as no mechanized farm equipment is available. In addition, Knowles said little commercial fertilizer or chemicals are available and often not wanted by the farmers.







Knowles's volunteer assignment is one of nearly 500 assignments that focus on agriculture, food security and nutrition in Ethiopia, Tanzania, Kenya and Uganda. This is the first time CRS has been involved in the 28-year-old Farmer-to-Farmer Program funded by the U.S. government.

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 U.S. volunteers will travel to East Africa for anywhere from one to six weeks, their expenses covered by USAID.

"One thing we are certain of is 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 for everyone involved."

For more information, visit <u>farmertofarmer.crs.org</u>

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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 nearly 100 countries, without regard to race, religion or nationality. For more information, please visit <u>crs.org</u> or <u>crsespanol.org</u>.