

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: Jim Fawcett
- b) State of Origin: Iowa
- c) Host Organization: ECC-Social and Development Coordination Office of Hossana
- d) Assignment: ET-62 Integrated Pest Management (IPM) in grain value chain (maize, wheat and other grains)
- e) Dates of Assignment: 3/24/16-4/12/16
- f) Number of days worked: 20

1.2.1 Objective 1 in your SOW: Farmers and staff will understand the advantages of IPM and understand the major components of IPM including pest identification, scouting, and decision making, and will understand why IPM is important.

- a) Progress with the objective: A total of 270 farmers and workers at cooperatives and 12 agricultural professionals were given instruction on the 5 major components of IPM: 1) identification and understanding the life cycle of pests, 2) scouting, 3) knowing available control methods, 4) making a decision, and 5) evaluation of the results. Scores for the ag professionals improved from 44% correct to 96% correct from a pre-test to a post-test indicated all the ag professionals understood the major components of IPM after the instruction and learned a lot in the session.
- b) Expected impacts/results: Grain crop productivity will increase due to more attention to preventing pest problems and reducing crop losses.
- c) Recommendations¹: More effort needs to go towards providing training to ag professionals on the specific pest problems that they are seeing in the field. More time was spent on the basics of IPM and not enough time on specific management practices for the pests in the region because of a shortage of time.

1.2.2 Objective 2 in your SOW: Farmers and staff will understand the interaction between pests, the enemies of pests, and crops and what control methods are available, including pest prevention through cultural control.

- a) Progress with the objective: A total of 270 farmers and workers at cooperatives and 12 agricultural professionals were given instruction on the 4 types of pest control methods; 1) cultural, 2) mechanical, 3) biological, and 4) chemical. Cultural and mechanical control are common with Ethiopian farmers and many also use chemical control. There was much interest among farmers and ag professionals about biological control and the importance of minimizing disturbing natural control by using insecticides only when other control methods are not effective.
- b) Expected impacts/results: By integrating a combination of pest management techniques, farmers will be able to manage pests without an over-reliance on pesticides.
- c) Recommendations: 1. A new maize disease, maize lethal necrotic disease, has recently spread to Ethiopia from Kenya. Yield losses up to 80% have been reported. I saw this disease in one field,

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.

but based on my discussion with pest specialists in the region I do not believe the disease is common yet, but it does pose a major threat to maize production if it is allowed to spread. The viral disease is spread mainly by aphids and thrips. Research in Kenya has indicated that 3-4 insecticide applications may be necessary to manage the disease by killing the insect vectors. Fortunately soapy water (2% solution of liquid dish soap) is an economical and safe alternative to insecticides for controlling aphids and thrips. This control technique should be demonstrated in the field to see how effective it is.

2. The major insect pest of maize in the region is the African maize stalk borer. Farmers and ag professionals agree that the insecticides needed to control this pest are too expensive for most farmers. Ag professionals would like the government to make pesticides more affordable for farmers so more farmers could use them. There is a possible alternative to the use of synthetic insecticides. Research has shown that two applications of NEEM, a natural oil from the neem tree, made at 30 and 45 days after maize emergence can manage the pest. The neem tree is native to India but also grows in west Africa, so may also be adaptive to east Africa. It should be investigated whether it would be possible for local farmers to grow this tree and use it as a source of a natural insecticide.

3. The question I received the most from farmers concerned a problem they are having with ensete (false banana). From my observations I believe that the plants have a disease that is being spread by leafhoppers. Ag professionals are also aware of the problem and think it is a disease spread by insects. I suspect it is a viral disease because leafhoppers are known to spread viral diseases and there are similar diseases in banana and plantain. Soapy water is also effective on leafhoppers (especially on the young nymphs). This practice of soapy water to kill the leafhoppers should be investigated to see if it slows the spread of the disease.

1.2.3 Objective 3 in your SOW: Farmers and staff will understand the importance of the responsible and safe use of pesticides, including protecting beneficial insects and bees, and using personal protective equipment including chemically resistant gloves.

- a) Progress with the objective: A total of 270 farmers and workers at cooperatives and 12 agricultural professionals were given instruction the importance of protecting beneficial insects and bees by not over-relying on the use of pesticides. It was emphasized that if insecticides are used that bees be protected by only using the pesticide early in the morning or late in the evening when bees are less likely to be present. Farmers expressed their appreciation about the education they received about protecting bees. The use of personal protective equipment, including chemically resistant gloves, boots, and goggles was demonstrated in the field. Farmers were especially appreciative of the training on the importance of protecting themselves from being harmed by pesticides, and some commented that they were not aware of the toxicity of pesticides.
- b) Expected impacts/results: Proper personal protective equipment, including chemical resistant gloves will become more available in the area, resulting in more safe use of pesticides and less adverse health effects to farmers. Using insecticides only when necessary will reduce their impact on beneficial insects and bees.
- c) Recommendations: 1. The appropriate government officials and/or chemical suppliers should be encouraged to find ways to make personal protective equipment more available and affordable

to farmers who are applying pesticides and more education should be provided on using pesticides safely.

1.3 Recommended future volunteer assignment

1. An entomologist and/or plant pathologist to focus on economical alternatives to managing maize lethal necrotic disease to try to keep it from spreading in the region.
2. An entomologist and/or plant pathologist to work with specialists in the country to try to learn more about the problem affecting ensete and how to manage it.
3. A volunteer to work with government officials and suppliers to make personal protective equipment (PPE) more available and affordable to farmers and to provide education to farmers on the use of the PPE.
4. A volunteer to focus on pest problems affecting teff, including the new insect pest “red teff worm.” This should be in the rainy season (late August).

1.4 Action Plan

Recommendation	Specific Action	Responsible person	By when
1.			
2.			
3.			
4.			
5.			
6.			

1.5 Number of people Assisted

- a) Through formal training (Classroom setup)
- b) Through direct hands on practical 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 (cooperatives)	23	23	0
Employees (professionals)	12	11	1
Clients/ Suppliers	4	4	0
Family Members	247	151	96
Total			

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 are very involved in farming and were well represented at the farmer



sessions, but perhaps not as well represented as they should have been because there were more men than women. Men were more likely to ask questions than women.

- b) How might CRS or the host organization improve opportunities for the women in this host or host community? Women were well represented among the farm population and attended the educational sessions for farmers. They were not well represented at the presentations to cooperatives and professionals. An effort should be made to encourage women to get the education required to become more involved in the professional agricultural fields.

1.6 Value of volunteer contribution in \$

- a. Hours volunteer spent preparing for assignment 50 hours (I have charged \$100/hour for consulting for commercial companies and charged \$500 per day on my last international assignment).
b. Estimated value of all material contributions volunteer contributed to host during assignment \$5,000 (\$100X50 hours) + \$10,000 (20 days X \$500/day)= \$15,000 for time, but very little for material (\$50)

1.7 Value of hosts' contribution in \$ (Please consult the host as well)

- a) Meals 5 meals @ \$5 = \$25
b) Transportation 987 kg @ \$.30/kg = \$300
c) Lodging
d) Translation \$90
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. No

1.9 Recommendations for CRS: Provide a map of the region so the host can note areas visited, A printed schedule with details on areas visited and the date the train the trainer session was to be held would have been helpful.

1.10 Press Release

FOR IMMEDIATE RELEASE

VOLUNTEER CONTACT: Jim Fawcett

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

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

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

Jim Fawcett, a retired Iowa State University Extension Field Agronomist from Solon, Iowa travelled to **Ethiopia** for 3 weeks to share his technical skills and expertise with local farmers. Dr. Fawcett'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.

"I enjoyed the opportunity to work with farmers and pest management specialists in Ethiopia to provide education on integrated pest management, said Fawcett.

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, Fawcett** worked with **the social and development coordination office in Hossana, Ethiopia** in **Integrated Pest Management in Grain Crops** training and giving technical assistance to **farmers and pest management specialists** to enable them to better manage pests of corn and other grain crops. Over 300 beneficiaries were reached.

Fawcett'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 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 nearly 100 countries, without regard to race, religion or nationality. For more information, please visit crs.org or crsespanol.org.*