To express interest in this assignment, email: Maria Figueroa at maria.figueroa@crs.org

Farmer to Farmer

Volunteer Assignment Scope of Work

Summary Information	
Assignment Code	UG257
Country	Uganda
Country Project	Agribusiness Country Project
Host Organization	Mahyoro Commercial Farmers Association (MACOFA)
Type of Volunteer Assistance:	**Technology Transfer (T)**
Type of Value Chain Activity:	**On Farm Production (F)**
Assignment Title	Application of climate Smart Agricultural practices for improved crop production
Assignment preferred dates	March – April, 2021
Assignment objective	Training on practical Climate Smart Agricultural practices that will help address (mitigate and adapt) the effects of climate change to increase resilience of farmers to climate shocks
Desired volunteer skills/ expertise	This assignment will be accomplished through pairing a US volunteer with a local volunteer both having: • Extensive experience in agriculture development and knowledge on diversified techniques/adaptation measures to managing effects of climate change. • Experience working with small holder subsistence farmers in developing countries. • Good interpersonal communication and presentation skills (adult education skills)
PERSUAP classification	Type II

A. BACKGROUND

CRS Farmer -to-Farmer program (F2F) is a USAID funded program that will be implemented for five years (2019- 2023) with a primary goal of reducing hunger, malnutrition, and poverty across six countries: Benin, East Timor, Ethiopia, Nepal, Rwanda and Uganda. The program aims at achieving this goal through advancing inclusive and sustainable agriculture led growth aimed at generating sustainable, broad-based economic growth in the agricultural sector. The program's secondary goal is to increase US public understanding of international development issues and programs and share the knowledge back in the US. To achieve its goals, F2F program provides volunteer technical assistance to farmers and farmer groups (associations and cooperatives), private agribusinesses, agriculture education institutions in developing countries like Uganda to address host identified technical needs in selected agricultural value chains. F2F volunteers are pooled from a broad range of US agricultural expertise, from private farmers with varied experience, University professors, bankers/certified accountants, animal health and nutrition specialists, soil scientists, agronomists who support local host organisations F2F program introduces innovation and develops local organisations capacity for more productive, profitable, sustainable and equitable agricultural systems while providing an opportunity for people- to-people interactions within the agricultural sector. In Uganda F2F program focuses its technical interventions in the livestock and agribusiness value chains

Mahyoro commercial farmers association (MACOFA) is a group of 30 core member farmers set up to addressed challenges that are experienced due to climate change. MACOFA have three community member groups that are its affiliates, comprising of 100 farmers. MACOFA has a vision of empowering farmers in agribusiness and production value chain and a mission of proper management best practices among others using farmer ownership model. MACOFA members are farmers engaged in production of various crops on individual basis. Member farmers grow crop trees as means of climate change mitigation including coffee, mangoes, oranges and forest cover trees for both sheds and woodlots. Food crops are also grown including maize, rice, beans and vegetables for food security and nutrition.

B. ISSUE DESCRIPTION

Agriculture is a crucial sector for Uganda; accounting for approximately 21.9 percent of Uganda's GDP, 85 percent of its export earnings, 68 percent of total employment and all food requirements. More than 80% of Uganda rural population, most of them small holder farmers, rely on subsistence agricultural production. The sector is central to food security, contributes to livelihoods and employment, and is a driver of economic growth. The contribution to the agricultural GDP by different sub-sectors includes crops (67%), livestock (16%); fisheries (12%) and forestry (4%). In addition, agriculture also contributes 100% of all material resources for agro-based industries and food crop production. Given the pivotal role of rural women in Uganda's food production systems, agriculture also empowers women and guarantees that they feed their families, including children.

Therefore, stable agricultural systems foster a cohesive rural society and contribute to balanced urban-rural dynamic, stemming migration and ensuring political and national stability (National Adaptation planning for agriculture, 2018).

The agriculture sector in Uganda is experiencing climate change effects that are threatening its contribution to economic development of the country. Such effects are manifested through, frequent intense and prolonged dry spells, floods due to excessive rainfall, increase in temperatures and higher incidence of pests and diseases. Hence a heavy dependence on rain-fed agriculture and natural resources means that production is particularly vulnerable to climate variability and change, more especially the occurrence of droughts and floods. Such climate effects have resulted into shifts in farming seasons, which has led to loss and damages, and ultimately contributed to the low agriculture performance. These effects are predicted to increase in magnitude and intensity, thus, further constraining agricultural production and threatening people's livelihoods. Therefore, sustainable agricultural production in the future will highly depend on a climate resilient agriculture sector. As part of its contribution to Uganda's vision 2040, and national development plan II, the sector has developed the National Adaptation Plan for the agriculture sector (NAP-Ag) to contribute to NDPII priority of strengthening ecologically sound agricultural research and climate change resilient technologies and practices. Human activities such as: burning fossil fuels contributing to GHGs without building carbon sinks, deforestation mostly for charcoal burning, over cultivation, bush clearing through burning which has adversely affected soil biodiversity, have greatly contributed to climate change effects which has resulted into reduced crop and livestock productivity. All these activities contribute to soil degradation, increase in greenhouse gas emissions- rise in temperature, frequent droughts and flooding, unpredictable rainfall patterns and a reduction in the amounts and uneven distribution of rainfall. These climate changes cause considerable damage to crop production and the agricultural sector in general.

Crop productivity growth has been on a downward trend; averaging only around 1% per year over the last decade, as compared to around 6% per year in better-performing countries in the region. Moreover, the increase in agricultural production in Uganda is attributed to area expansion rather than increase in productivity. For instance, in 2012 total area planted of food crops increased by 2 percent to 5,729,000 ha. Historically, Uganda was relatively sparsely populated and land for agriculture was therefore abundant. As a result, traditional farming practices have been characterized by the extensive use and rapid depletion of land and the limited use of other inputs. This agricultural system is not sustainable in light of the rapid population growth. For example, the area of agricultural land has grown at around 1% a year over the last decade and if this trend continues, more than 90% of Uganda's land will be used for agriculture by 2040, which would essentially eradicate the country's forest cover and wetlands. To avoid such an environmental and ultimately economic catastrophe, Uganda's agricultural systems must shift from using land extensively to using land intensively. Without such a turnaround in agricultural performance, the

economy will not be able to support a large population, the non-agricultural workforce and foster socioeconomic transformation as targeted by Vision 2040.

The frequency and magnitude of the environmental shocks increase the risks for smallholder farmers, affecting already-fragile ecosystems and the livelihoods of most rural households in the developing world. Based on challenges faced on farm, production yields at farm level are still very low, partly attributed to changing weather vagaries e.g. prolonged dry spells, unpredictable rainfall patterns, and emergence of new pests and diseases. This is largely attributed to climate change impacts on the agriculture sector – specifically crop production. The host has therefore requested for CRS F2F technical support to train farmers, extension agents in climate smart agriculture practices with special focus on soil and water conservation techniques, use of improved seeds such as: drought resistant maize varieties, early maturing, disease resistant, and drought resistant varieties; soil water conservation techniques, soil health management such as intercropping, soil cover, composting, soil erosion control, etc.

C. OBJECTIVES OF THE ASSIGNMENT

The objective of this volunteer assignment is to train the extension staff, village agents and farmers that supply maize to the processing in climate smart agriculture practices as one of the climate adaptation/mitigation measures for improved farm productivity and increase resilience to climate shocks.

Specific training topics will include but not limited to:

- Soil fertility management – introducing components of composting, mulching, crop rotation, inter -cropping to achieve maximum benefits such as weed suppression, rejuvenating soil fertility, introducing/re-emphasising the use of cover crops for certain benefits such as soil nutrient fixation, weed suppression, minimising surface water run off and evaporation, minimum tillage, on farm crop residue management and recycling of nutrients. Reinforce or introduce concepts of soil erosion control
- Water conservation measures- such as simple techniques of rainwater retention on farm, or on farm soil water conservation techniques
- Train extension agents in setting up demonstrations emphasising use of improved seeds, early maturing and drought resistant maize varieties with different cooperatives.

Using the identified constraints, during the first 1-2 days of her/his assignment, the volunteer will further assess existing challenges and make changes on relevant topics for training. S/he will also refine the prepared materials for a successful delivery of information and skills. The host participants are semi-illiterate, and majority are illiterate- the volunteer should prepare less of written materials and concentrate more on field practical demonstrations, and pictorials.

Host contribution–

MACOFA has committed to mobilize its staff, village agents and partner farmer cooperatives to the trainings to be conducted by the volunteer. Participants selected will be those with the capacity to share information with other groups rest not reached through the volunteer training. The host will also arrange for training venues with close by fields for practical demonstrations. Translation services will be provided by the host.

Working relationship between US volunteer and local volunteer

Both the US and local volunteers review the scope of work and understand the assignment objectives. During the first connection call, the two volunteers are virtually introduced by a member from the Uganda F2F team, jointly they agree on modalities/approaches of executing the assignment, including the frequency of check in calls.

Next, the US volunteer pre-designs a step-by-step approach with appropriate tools/templates that are discussed and finalized with input from the Local volunteer. The Local volunteer executes each step, shares results, and together they determine how to execute the next step, adjusting the tools/templates as required. The Local volunteer should be willing to listen to and accept input/guidance from the US counterpart who is off site and share decision making.

On site, the local volunteer will capture a snapshot of the host situation on ground in line with the assignment and building on the scope of work information and share this with the US counterpart. The US volunteer reviews relevant data/observation/information collected by local volunteer, clarifies findings through email/skype/zoom or whatsapp, together they determine appropriate/needed/doable intervention(s). US volunteer revises interventions steps accordingly and submits to local volunteer and the intervention plan is discussed and finalized. The assignment commences with local volunteer taking lead on ground following the agreed intervention plan and with an agreed periodic check-in for the entire duration of the assignment. Based on emerging ground situation, the local volunteer together with the US volunteer will develop materials/tools/templates to address the host needs being careful not to divulge from the scope of work objectives and deliverables.

Whenever possible, the local volunteer should use the most suitable communication platform (Zoom/whatsapp/Skype) with the US counterpart to directly engage with key members of the host organisations (Board and management/company owners) on assignment related discussion and evaluation of progress. This collaboration is expected to continue throughout the assignment period and update the host country and HQ recruiter of the progress.

Reporting is jointly done using the provided templates and submitted to CRS. Both US volunteer and local volunteer will be invited for a debrief meeting with USAID local mission. This will mark the end of the joint assignment. However, as always, both volunteers are encouraged to keep in

touch with the host and where necessary post assignment. The field office or HQ office can offer any support for the follow up that may be needed

ANTICIPATED RESULTS FROM THE ASSIGNMENT

Through this volunteer technical assistance- it is anticipated that the staff and member farmer producers will have a better understanding of climate change and how to adapt to the changes and for improved food security. The participants will also be able to replicate some, or all the climate smart practices introduced during the training- for their own improved on farm productivity and more food secure households.

The anticipated deliverables include:

- Trainings conducted and people trained.
- Training guidelines/manual developed.
- Debriefing with USAID and in country group presentations after assignment
- Field trip report and expense report
- Outreach activity press release or a media event back in Uganda and US.

C. Schedule of Volunteer Activities in Uganda

The volunteer will be expected to spend 2-3.5 weeks in country, with a strong preference for the longer duration.

Activity
Both local and US volunteers are virtually connected before the start of the assignment. Both get briefing from George/Robbinah and work out how the assignment will be accomplished and share resources.
The local volunteer arrives at CRS office, gets a briefing from Robbinah or George about the host and then discusses with the team the related logistics and anticipated outcomes. Volunteer may also prepare study materials while still at CRS Office. After briefing, travel to Kamwenge to commence the assignment in the company of Robbinah/George.
In the morning, Robbinah/George introduces the volunteer to the Kamwenge Dairy cooperative management. Later in the day, the management (including representatives of Board of Directors) convenes a meeting for the volunteer to meet the entire core staff to discuss the objectives of the assignment and sketch out a work/action plan. In the afternoon, the volunteer will have a familiarization tour of MACOFA activities, facilities, and discuss about existing market outlets/strategies. The trainings venue will vary from classroom/church/halls or under tree.

Group 1: Training of farmer group members
Group 2: Training of farmer group members
Group 3: Training of farmer group members
Group 4: Training of farmer group members
Group 5: Training representatives from 4 farmer groups (members and leaders)
Group 6: Training of ToTs (dynamic individuals from the teams already trained who can continue with the training to reach out to groups not reached by the volunteer)
Develop a training guide/ manual and guide the ToTs through the manual on how to use it to conduct an effective leadership training
Wrap up meetings, whilst emphasizing key concepts of the assignment. Participants evaluate the training and together with the volunteer discuss final report recommendations. End of assignment presentation.
Travel back to Kampala
Debriefing at CRS office with USAID Mission and CRS staff. Volunteer finalizes his/her reporting at CRS office and fill out all necessary M&E forms as well as finalise liquidations with finance.
Depart for the US
Outreach event in the US

Note: ***This is a draft schedule that will be finalized based on volunteer actual dates of availability, Sundays are typical rest days and working on Saturday is, per the host's request***

D. ACCOMODATION AND OTHER IN-COUNTRY LOGISTICS

In Kampala, the volunteer will stay at Fairway Hotel & Spa (www.fairwayhotel.co.ug). While in Kamwenge, the volunteer will stay at Club Afreka- with the basic amenities such as water and electricity. CRS will pay for hotel accommodation and provide volunteer with per diems to cater for meals and other incidentals. The volunteer may get an advance which has to be cleared before departing Uganda. For more information, please refer to country information that will be provided.

F. RECOMMENDED ASSIGNMENT PREPARATIONS

- CRS-F2F designs assignments with the assumption of some pre-departure preparation by the volunteer. Actual preparation time will vary based on the experience of the volunteer, as well as informational or training resources the volunteer has readily available. CRS relies on the volunteer to assess the tasks outlined in this SOW and to make his or her own judgment about how much and what kind of preparation is needed prior to arriving in Uganda
- The volunteer should prepare materials for hand out which can be printed at CRS office in

Kampala before commencement of the assignment. Flip charts, markers, masking tapes can be obtained at CRS offices.

- CRS strongly recommends that the volunteer become familiar with CRS programs in Uganda, especially the maize country project description and other information in the briefing pack before arrival to Uganda

G. KEY CONTACTS

To express interest in this assignment, please email the CRS Baltimore contact listed below. To find out additional information about the host, issue description or field conditions, please email the country contact provided below, copying the CRS Baltimore contact.

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