

To express interest in this assignment please email [maria.figueroa@crs.org](mailto:maria.figueroa@crs.org)

**CRS Farmer to Farmer Program  
Volunteer Assignment Scope of Work**

<b>Summary Information</b>	
Assignment code	ET229
Country	Ethiopia
Country Project	Crop
Host Organization	Wolkite University
Assignment Title	Geographic Information System (GIS) and Remote Sensing
Assignment Preferred Dates	Flexible
Assignment Objectives	Provide training on GIS and Remote Sensing with focus on <ul style="list-style-type: none"> <li>• Concepts and tools of GIS and remote sensing</li> <li>• Application of GIS and Remote sensing to agriculture and natural resource management</li> <li>• Provide technical assistance to host on geographic Information system (GIS)</li> </ul>
Desired Volunteer' Skill/Expertise	<ul style="list-style-type: none"> <li>• Academic background in GIS and Remote Sensing (RS) technologies</li> <li>• Proficiency in application of GIS and RS in natural resource management/agriculture,</li> <li>• Experience in providing technical assistance in developing country context preferably Africa</li> </ul>
Type of Volunteer Assistance	Technology Transfer = T
Type of Value Chain Activity	Information and Input Support Services (S)
PERSUAP Classification	Type III

**A. BACKGROUND**

CRS Farmer -to-Farmer program (F2F) is a five-year(2019-2023) USAID funded program implemented 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 Ethiopia 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 organizations. F2F program introduces innovation and develops local organizations capacity for more productive, profitable, sustainable and equitable agricultural systems while providing an opportunity for people-to-people interactions within the agricultural sector. The Ethiopia, F2F program interventions focus on the livestock and grain value chains.

Wolkite University (WU) is one of the new generation universities in Ethiopia. In November 2001 E.C foundation stone of the University was laid at Gubrye sub-city, 15 km away from Wolkite town. Operational since 2004 E.C, WU covers about 246 hectares of land and provides services via three campuses (i.e., Gubreye - Main Campus, Wolkite Campus and Butajira Campus). The university provides academic services through the Colleges of Agriculture and Natural Resource Management, Computing Informatics, Engineering & Technology, Natural Science, Social Science and Humanities College. The programs are given via undergraduate regular; post graduate programs; summer in service program, weekend programs and night programs. The college of Agriculture and Natural Resource Management has seven undergraduate programs and one MSc program. Departments under the college are: Agribusiness and Value Chain Management, Plant science, Ecotourism and wildlife Management, Animal Production and Technology, Agricultural Economics, Natural Resources and Management, Horticulture. Please visit the host website <https://www.wku.edu.et>.

## **B. ISSUE DESCRIPTION**

It is well known that Geographic Information Science (GIS) and Remote Sensing (RS) provide a powerful means of understanding the world and tools for solving complex problems. It also plays a vital role in scientific research, with a broad array of applications for spatial data and visualizations in earth science. The use of these methods to gather, analyze, manipulate and visualize data has become crucial for academia and research.

Being a young but upcoming university, Wolkite University faces several challenges when it comes to meeting its mission of providing quality education, research and community outreach. Among identified gaps, significant shortage of technically qualified and experienced academic staff is the main one. Therefore, realizing the importance of GIS and Remote Sensing for academia and research, the university has requested F2F support in this area. The staffs are facing challenge mainly during area mapping and geo referencing when doing research. They also need training on analysis software and experience of recent software.

Having such on-the-job training opportunities for the college staff is crucial for building capacity and introducing the young staff to cutting-edge technology and enhancing their problem-solving skills.

### **C. OBJECTIVES OF THE ASSIGNMENT**

Recognizing the importance of GIS and remote sensing agriculture, urban and transportation plan Wolkite University needs its staff to be trained in science and applications of t GIS and remote sensing technology. This should be done in a way that allows trainees to apply the knowledge in practice to teach and solve problems. Therefore, the objective of this technical assistance is to;

1. to facilitate training on GIS and remote sensing to the host staff with focus on
  - Area mapping
  - Geo reference
  - Concepts and tools of GIS
  - Application of GIS and remote sensing agricultural and to natural resource management problems.
2. to provide onsite technical assistance on GIS and remote sensing.

Areas to be covered in this assignment may include, the different data types and sources, analysis, application to mapping and monitoring natural resources for e.g., land cover and use, biodiversity, water bodies, disaster management, air quality, spatial planning etc.

This assignment will directly contribute to equipping the graduate assistants, researchers, and instructors with technical knowledge on GIS and RS. The expected number of target beneficiaries of this training and technical assistance is 40 host staff.

### **D. ANTICIPATED RESULTS FROM THE ASSIGNMENT**

It is anticipated that this volunteer's technical assistance and training will transfer key skills and knowledge that will improve the host's performance and competitiveness in research and academia.

Anticipated results of the assignment are:

- 40 staff knowledge and skills on GIS and RS concepts and applications enhanced
- Access to GIS reference materials for the host staff created.
- Linkage between the volunteers and host institution created
- Practical demonstration of GIS to field situation/real world/problem solving.

### **E. HOST CONTRIBUTION**

The host has committed to mobilize the staff, stakeholders, students, and local farmers to receive the volunteer's technical and practical assistance. The host will also avail key personnel to work

closely with the volunteer, assisting her/him during training and practical demonstration sessions, ensuring translation to the local language and advising on the culture of the area. CRS will cover lodging costs against receipts and other related costs. In coordination with the host and the volunteer, CRS will also arrange and pay for transport services for daily use to and from the University.

**F. ASSIGNMENT DELIVERABLES**

The major anticipated outputs of this assignment include, but not limited to:

- Work plan and training materials in appropriate formats in collaboration with the host and training participants
- Training lists with people trained and subject areas as per the training reporting formats
- Volunteer end of assignment report with recommendations to the host organization action plan and recommendations to CRS
- A bibliography or a list of key resources in the subject matter
- Conduct a final debriefing (PowerPoint presentation) with the host organization (plus key stakeholders) and CRS/USAID
- Conduct outreach events upon return to the US

**G. SCHEDULE OF VOLUNTEER ACTIVITIES IN ETHIOPIA**

Day	Activity
Day 1	Arrival in Addis at Bole Airport. The volunteer will be met by CRS’s client hotel Eliana Hotel ( <a href="https://www.booking.com/hotel/et/eliana">https://www.booking.com/hotel/et/eliana</a> .; Phone: +25111 126 2600).The volunteer will locate the hotel kiosk and use pre-arranged shuttle
Day 2	<b>Rest Day (Sunday)</b>
Day 3	<ul style="list-style-type: none"> <li>• Take hotel shuttle to come to CRS office (CRS working days are Monday to Friday from 8:00AM to 5:00 PM East Africa Time)</li> <li>• Welcoming by CRS, and briefing meeting on security, general orientation, MEAL (attendance sheet, reporting and PPT templates), and logistic.</li> <li>• Discuss anticipated outcomes and work plan</li> <li>• Travel to assignment place Wolkite which is 150 Km from Addis Ababa</li> <li>• S/he will be introduced to the host</li> <li>• General orientation with the host, first-hand briefing on the main objectives and modality of the assignment and adjustment of the agenda for the coming days (work planning session).</li> </ul>
Day 4	<ul style="list-style-type: none"> <li>• Conduct further assessment of skills and knowledge gaps with training participants</li> <li>• Based on information gathered and gaps identified, enrich the prepared training materials incorporating hands-on practices.</li> </ul>

Day	Activity
	<ul style="list-style-type: none"> <li>Develop 10 days (2 weeks training) curriculum covering key knowledge and skills Gaps</li> </ul>
Day 5-19	Train participants on among other topics
Day 20	Briefing / exit meeting with the host in the presence of CRS staff
Day 15	<ul style="list-style-type: none"> <li>Debriefing with CRS staff and/or USAID Mission</li> <li>Finalize reimbursement expenditures and liquidations (if any) with finance.</li> <li>Submit volunteer reports, training attendance sheet, assignment report, PPT presentation and any reference materials to CRS F2F team.</li> <li>Depart for USA</li> </ul>
TBD	Outreach event when back in the USA

#### **H. DESIRABLE VOLUNTEER SKILLS**

The volunteer will have the following skills, qualifications and competencies:

- Minimum a Bachelor of science degree in in GIS and remote sensing(a minimum five-year experience is required)
- Extensive experience in GIS and remote sensing application and training
- Experience and skill in adult teaching
- Good communicator and interpersonal skills
- Willingness and flexibility to train and technically assist whenever required
- Respect for the cultural and religious norms of the rural people.

#### **I. ACCOMMODATION AND ANOTHER IN-COUNTRY LOGISTICS**

- Before travelling to the assignment place, the volunteer will stay in Addis Ababa at one of the CRS's client hotels, Eliana or another hotel that will be booked and confirmed before the volunteer arrival date. The hotel will have rooms that include services such as airport pickup and drop-off, breakfast, wireless internet etc.
- The hotel or CRS will arrange a vehicle for short travel from the hotel to CRS and vice versa while in Addis Ababa.
- All required materials will be prepared ahead of time and provided to the volunteer. CRS Ethiopia will provide the volunteer with a laptop computer (if s/he needs), local internet dongle and mobile phone with a charged local SIM-card. Any other required logistics and facilities can also be requested by the volunteer during her/his stay in Addis Ababa.
- CRS will provide a vehicle and accompany the volunteer to the place of assignment.
- During the assignment period, the volunteer will stay at Elina Hotel Addis Ababa
- CRS Ethiopia will arrange hotel accommodations and cover the lodging bills against receipts.
- CRS HQ will provide the volunteer with a per-diem advance to cater meals and incidentals.
- CRS Ethiopia will also reimburse the volunteer with laundry costs against receipts.

- For more information, please refer to country information that will be provided.

#### **J. RECOMMENDED ASSIGNMENT PREPARATIONS**

- Although CRS F2F has developed such hinting SOW, the volunteer can fine-tune through her/his professional qualifications to successfully carry out this assignment.
- Although the assignment place Addis Ababa is a highland where malaria may not be a problem, the volunteer is advised to take pills or vaccination for malaria and (maybe also for cholera) as per medical recommendations by her/his doctors/health professionals in US before departing from US.
- Prior to the assignment, the volunteer is advised to prepare necessary training and demonstration aids and written handouts. Softcopies of the handouts and any other paper materials can be printed for immediate use at the CRS office in Addis Ababa on request by the volunteer.
- If the volunteer requires simple training aids like flip charts, markers or tape s/he should make the request and collect from the CRS office in Addis Ababa prior to the assignment.
- Translation of handouts to the local language can be done in the locality of the assignment, if required.
- Depending on the meeting places and availability of electric power and LCD projector, the volunteer may use a laptop and projector for power point presentations.

#### **K. KEY CONTACTS**

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