To express interest in this assignment please email priyanka.subba@crs.org

CRS Farmer to Farmer Program

Volunteer Assignment Scope of Work

Summary Information			
Assignment Code	**NE2106**		
Country:	Nepal		
Country Project:	Livestock Country Project		
Host Organization:	Galyang Municipality - Livestock Unit, Syangja, Nepal		
Partner:	November- December 2022		
Date of baseline data collection:	March 2022		
Date of host agreement signing:	Nov 7, 2022		
The number of previous volunteer assignments	1		
Volunteer recommendations are given (Total):	5	Volunteer recommendations applied (Total):	2
Assignment Title:	Training on Artificial Insemination (AI) in Dairy Cattle		
Objectives of the assignment:	Provide hands-on knowledge and skills on cattle AI technologies to the government and private sector veterinary service providers in the Galyang Municipality		
Assignment preferred dates:	As soon as possible		
Desired volunteer skill/expertise	An animal breeder with practical and theoretical knowledge and experience in Artificial Insemination for dairy cattle and buffaloes		
Type of Volunteer Assistance	Technology Transfer = **T**		
Type of Value Chain Activity	Information and Input Support Services (S)		
PERSUAP Classification[1]	Type III		
Number of people to be trained	Men	Women	Youths
	35	15	15
Will the assignment address gender gaps? (Yes/No) If yes, please include these in the description of the issue			No
Will the assignment address climate change? (Yes/No) If yes, please include this in the description of the issue			No

[1] USAID precisely classifies PERSUAP in four categories; **PERSUAP Type I** assignments directly related to pesticides recommendations, **Type II** as assignments with indirectly related with pesticides, **Type III** assignments related to curriculum review and designing, business plan development and strategies development and **Type IV** as assignments associated with other USAID projects and collaborators.

A. BACKGROUND

About the CRS Farmer-To-Farmer Program

The CRS Farmer-to-Farmer program (F2F) is a five-year (2019-2023) USAID-funded program implemented with the primary goal of reducing hunger, malnutrition, and poverty across six countries: Benin, Timor-Leste, Ethiopia, Nepal, Rwanda, and Uganda. The program aims to achieve this goal by advancing inclusive and sustainable agriculture-led growth aimed at generating sustainable and broad-based economic growth in the agricultural sector. The program's secondary goal is to increase US public's understanding of international development issues and programs and share the knowledge back in the US. To achieve these goals, F2F provides volunteer technical assistance to farmers and farmer groups (associations and cooperatives), private agribusinesses, and agricultural education institutions to address key technical and institutional issues identified by the hosts in selected agricultural value chains. F2F volunteers are pooled from a broad range of US agricultural expertise including private farmers, university professors, bankers/certified accountants, animal health and nutrition specialists, soil scientists, and agronomists who can provide technical assistance to the local host organizations. The program introduces new innovations and skills to develop local organizations' capacity to participate in more productive, profitable, sustainable, and equitable agricultural systems while providing an opportunity for people-to-people exchange within the agricultural sector.

When the COVID-19 global pandemic emerged, CRS F2F introduced a paired remote volunteer (PRV) model whereby a US volunteer who does not travel provides remote support to a local/national volunteer who carries out the assignment in person. This model is sometimes still used in some cases. Watch this short video to learn more about the PRV model.

The CRS F2F program in Nepal has identified crops and livestock as the topics of its assignments. These are known within F2F as projects. The crops project includes the vegetable, maize, orange, coffee, and apple sub-sectors. The livestock project includes the dairy, goat, honeybee, and poultry sub-sectors. CRS F2F's working geographic zones are Bagmati, Lumbini, Karnali, and Sudurpaschhim Provinces. Requests from other provinces and outside-country projects are sometimes considered but are seen as exceptions.

About the host organization

Galyang municipality was established in 2017 after Nepal adopted the federal democratic republic governance system in 2015. The Galyang municipality, which is located in in the Syangja district of Gandaki Province, covers an area of 123 square kilometers and has a total population of 36,967. The municipality is well-recognized for agriculture and livestock production, and it is evolving as a major commercial production hub for milk, fresh vegetables, and ginger within Gandaki Province. Considering this, the municipal office has increased investment in the sustainable commercialization of dairy production. In 2022, the municipality was acknowledged for allocating its highest ever amount of

budget to the agriculture and livestock sectors and has a vision of achieving the 'White Revolution' in agriculture through increased production and diversification of milk and milk-based products. To realize this vision, the municipality has been successfully implementing Minimum Support Price (MSP) and buy-back guarantee systems in milk and ginger to promote market-led production and encourage smallholders' participation in commercial agriculture. The municipality has provided NRs 12 million to a cooperative called Tulasi Bhanjyang Small Farmer Cooperative Ltd. to establish and run milk collection centers at Galyang Bazar. The Cooperative has invested three million Rupees in this venture and has opened 10 branches in different locations within the municipality. The cooperative possesses a milk analyzer to measure the quality of milk and determine the price. The average milk collection of the cooperative is currently around 1000 liters per day which it sells to dealers based in Pokhara and Butwal, the headquarters of Gandaki and Lumbini provinces, respectively.

B. ISSUE DESCRIPTION

Despite the opportunities for the development of the dairy industry at the local level, one of the major constraints is the limited supply of fresh milk, which is caused by genetic deterioration and the dominance of low-yielding and poor-quality cattle breeds in the area. Among other technologies and approaches to increase milk production sustainably, introducing the semen of high-yielding males to female cows through Artificial insemination (AI) is considered a cheap, efficient, and successful approach. The greatest advantage of AI is that the technology enables farmers to access the best bull (male) genetics from across the globe. Therefore, AI has become one of the most important techniques ever devised for the genetic improvement of farm animals and it is widely used for breeding dairy cattle.

The AI technique requires highly specialized and adequate knowledge, experience, and skills for successful fertilization in cows. Therefore, improper AI techniques can negate all other efforts to obtain conception, resulting in a significant economic loss to the farmers. In the municipality, there are about 15 government and private sector technicians who are providing AI services to the farmers at the local level. Current estimates suggest that the success rate of AI is only about 60% in cows and even lower in the case of buffalo. The municipality has requested F2F's support through technical assistance to train veterinary practitioners and lead dairy farmers on proper AI procedures and techniques.

C. OBJECTIVES OF THE ASSIGNMENT

The main objective of this assignment is to train veterinary practitioners from the government and private sector and lead farmers on artificial insemination. The specific objectives are as follows.

- To train veterinary technicians and lead farmers on AI techniques with an emphasis on addressing the problems that lead to a decrease in pregnancy rates after insemination.
- To develop standard operating procedures for AI in cows and buffalo for use by local technicians and farmers on a regular basis.

D. HOST CONTRIBUTION

The Livestock Service Section under the Galyang municipality will play a key role in facilitating the volunteer assignment and will pay for food and logistics for the participants, materials required for the training and demonstration courses, and office space in which to complete the task. The host will also pay for the materials and equipment required for conducting experiments and practical sessions.

E. ANTICIPATED RESULTS (Outcome/impact) FROM THE ASSIGNMENT

The following are the anticipated results of this assignment.

- Local technicians and farmers have acquired new knowledge and skills on AI procedures and techniques.
- The success rate of AI in cows and buffalo has increased, resulting in increased milk supply and farmer incomes.
- Outreach events have been conducted both in-country and in the US.

F. DELIVERABLES

The anticipated deliverables accomplished by the volunteer also include:

a. A simple training module developed for AI
b. Host recommendations action plan
c. Trip report submitted before exit meeting

G. SCHEDULE OF VOLUNTEER ACTIVITIES IN COUNTRY (DRAFT)

Day	Activity
Days 1	Welcome meeting; Introduction and meeting with CRS management, and briefing meeting (security, general orientation, logistic, reporting formats, etc) at CRS office. Discuss anticipated outcomes and work plan.
Day 2	Travel to the host site
Day 3	Travel to the assignment site. Introduction and assignment briefing with host representatives
Days 4 – 11	Complete assignment-related activities at the host location
Day 12-13	Activity close out, host action plan preparation for implementing recommendations
Day 14	Debrief including CRS country Office and local USAID mission
Day 15	Travel to Kathmandu

H. DESIRABLE VOLUNTEERS SKILLS

The volunteer will have the following qualifications and competencies:

- livestock development expertise, with experience in Artificial Insemination (AI) of dairy cattle and buffaloes
- Communication and training skills for adult audiences

I. ACCOMMODATION AND OTHER IN-COUNTRY LOGISTICS

- CRS client hotel, the Hotel Kutumba (www.hotelkutumba.com), or another hotel will be booked and confirmed before the volunteer's arrival. The hotel provides airport pickup and drop-off services, breakfast, wireless internet, etc. The hotel or CRS will arrange a vehicle for the short journey to and from the CRS office while in Kathmandu.
- All required materials will be prepared ahead of time and will be provided to the volunteer. CRS Nepal will provide the volunteer with a laptop computer (if s/he needs one), a local internet dongle (modem/EVDO), and a mobile phone with charged local SIM card. Any other required logistics and facilities can also be requested by the volunteer during her/his stay in Kathmandu. CRS will provide a vehicle and accompany the volunteer to the place of the assignment.
- For the duration of the assignment, the volunteer will be booked into a hotel at the project site, to be confirmed prior to the volunteer's arrival. CRS Nepal will cover the costs of lodging against receipts. CRS HQ will provide the volunteer with a per-diem advance to cover meals and incidentals.
- Security information will be provided by the CRS Nepal security focal person at the CRS Kathmandu office.

J. RECOMMENDED ASSIGNMENT PREPARATIONS

- Prior to travel, the volunteer is advised to prepare all necessary training and demonstration aids and written handouts. Electronic copies of these handouts and any other printed materials can be printed for immediate use at the CRS office in Kathmandu on request by the volunteer.
- If the volunteer requires the use of simple training aids like flip charts, markers or tape s/he should make the request and collect from the CRS office in Kathmandu prior to traveling to the assignment site.
- Translation of handouts to the local language can be done at the assignment location if required.
- If the meeting place has electric power and an LCD projector, the volunteer may use a laptop and projector for PowerPoint presentations. This information will be provided to the volunteer during the pre-departure call.
- Weather Appropriate Clothing: https://www.accuweather.com/en/np/nepal-weather

L. KEY CONTACTS

CRS Baltimore

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Host Organization (Primary contact)

Host Organization (Secondary contact)

Primary focal person:

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