Agricultural Leaders of Tomorrow (ALOFT) Farmer-to-Farmer Program for Southeast Asia
Volunteer Scope of Work

Assignment Summary Information			
Identification Number:	KH_018		
Country:	Cambodia		
Host Organization:	ATP-KTH		
Assignment Title:	Integrated Farming Systems		
Assignment Dates:	Sep 2024		
Type of Assignment	In-person		
Area of ALOFT Technical Assistance:	climate-smart agriculture		
Associated Area(s) of Technical Assistance	extension and advisory services		
Target Value Chain:	horticulture, livestock, aquaculture		
Objectives of the assignment:	• Identify areas of growth in creating and managing an IFS at ATP-KTH • Equip ATP-KTH with knowledge and skills in farm waste recycling for efficient and sustainable use in IFS management • Provide fundamental knowledge on how to incorporate broiler production into IFS • Develop a training materials on IFS for youth and farmers		
Desired volunteer skill/expertise	• Expertise in integrated farming system practices and methods • Understanding of horticulture, broiler production, and aquaculture • Proficiency in diverse farming practices		
PERSUAP Classification[1[1]]	III		
Anticipated number of people to be trained	Men	Women	Youth (15-29)
	3	3	4
Will the assignment address gender gaps? (Yes/No) If yes, please describe in assignment background & rationale			No
Will the assignment address climate change? (Yes/No) If yes, please describe in assignment background & rationale			Yes

[1[1]] USAID precisely classifies PERSUAP in four categories; **PERSUAP Type I** assignments directly related to pesticides recommendations, **Type II** as assignments indirectly related with pesticides, **Type III** assignments are not expected to be involved in pesticide issues and **Type IV** as assignments associated with other USAID projects and collaborators.

A. Project Overview

Country Strategy Overview

The University of Tennessee's (UT) "Agricultural Leaders of Tomorrow" (ALOFT) regional Farmer-to-Farmer (F2F) program for Southeast Asia supports youth-led and youth-serving institutions to build more resilient and inclusive food systems. Through F2F, U.S. specialists spend two to three weeks on specific technical assignments, working directly with counterparts in the region to address local needs. ALOFT's demand-driven voluntary technical assistance will be delivered in four primary areas: 1) climate-smart agriculture; 2) agricultural entrepreneurship and agribusinesses; 3) agricultural education; and 4) extension and advisory services. Locally appropriate technical assistance will be provided to a range of host-organizations, including farmer cooperatives, vocational training centers, extension services, and agribusinesses. The University of Tennessee, country ALOFT teams, and established host-organizations will provide the necessary logistical, technical, and material assistance to position volunteers to successfully carry out the exchange of knowledge with communities.

Through demand-driven technical assistance, the ALOFT Cambodia project seeks to strengthen the fruit, vegetables, small livestock, and aquaculture value chains. ALOFT Cambodia will collaborate closely with the Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) at the Royal University of Agriculture (RUA) to deliver impactful and locally appropriate voluntary technical assistance. ALOFT Cambodia will deliver impactful and locally appropriate voluntary technical assistance to a range of host-organizations, including farmer cooperatives, vocational training centers, extension services, and agribusinesses. Technical assistance will promote the adoption of climate-smart agriculture (CSA) by smallholders, strengthen extension services and agricultural education, expand access to financial services, particularly youth and women, and support agricultural entrepreneurship and small-business growth.

Host Organization Background

The Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) – housed in Cambodia's Royal University of Agriculture (RUA) – helps improve food and nutritional security in Cambodia by supporting agricultural research, education, and extension. CE SAIN works closely with the Royal University of Agriculture (RUA) to improve the skills and knowledge of public and private sector agricultural workers.

The Center of Excellence on Sustainable Agricultural Intensification and Nutrition (CE SAIN) is housed at the Royal University of Agriculture (RUA) in Phnom Penh, Cambodia. CE SAIN's goal is "to create a Centre of Excellence that will foster private sector innovation, agricultural research, education and training, and public-sector capacity building through improved collaboration and knowledge sharing

focused on improving food and nutritional security in Cambodia." The center's three main objectives are to:

1. Coordinate and leverage Feed the Future Innovation Labs and other sustainable agricultural intensification and nutrition (SAIN) activities;
2. Build human and institutional capacity development of the RUA and implementing partners
3. Establish agricultural technology parks (ATPs) to showcase high-potential technologies and strategies to sustainably intensify smallholders farming systems.

Under objective 3, CE SAIN has already established and coordinated 7 ATPs. One of these ATPs, the Agricultural Technology Park-Kampong Thom (ATP-KTH), is situated within a high school where a mini-ATP (school garden) has been set up. This allows the students to engage in agricultural activities following their classes, facilitated by the ATP technical staff. The purpose of ATP is to demonstrate technologies and strategies that are profitable to smallholder farmers and stakeholders in the area, serving as a research farm, an internship venue, a private sector engagement, and a synergy program with partners. ATP-KTH's land size is 0.337ha to implement 15 technologies such as cover crops, IPM, mulching, wild food plants, companion planting, etc. The value chain activities of ATP-KTH are horticulture, with focus on vegetable production, and livestock, with focus on broiler chickens.

Assignment Background and Rationale

ATP-KH plays a role in demonstrating technologies and strategies that are profitable to smallholder farmers and stakeholders in the area. ATP-KTH has several technologies being demonstrated at their site focused on horticulture and livestock (specifically broiler chickens). They supplement water for irrigation from their two on-site ponds: 1) a school pond on the school campus and 2) a pond from an associated aquaculture project). Additionally, ATP-KTH provides some agricultural inputs and builds the capacity of the students and teachers at Mini-ATP through knowledge sharing and field practice at the school garden.

ATP-KTH seeks to link the technologies they implement across value chains to produce an integrated farming system involving horticulture, livestock and aquaculture. These three value chains complement each other in purpose of improving soil fertility, reducing inputs cost (especially fertilizer), and increasing farm waste for purposes such as using water in fish ponds for irrigation, poultry waste for composting, and crop residue for composting and animal feed.

Integrated farming systems can produce significant improvements in production across value chains.. However, ATP staff still have limited knowledge on effective recycling of farm waste, broiler chicken production, and monitoring the quality of irrigated water from the pond for long-term sustainability. Once learned, this knowledge can be used to train farmers and students in appropriate integrated farming systems practices

Therefore, the ATP-KTH has requested an assignment on the Integrated farming system (IFS) to improve the knowledge of the use of agricultural resources to the fullest extent possible for long term sustainability.

B. Desired Qualifications of Volunteer

The U.S. volunteer should have the following qualifications, skills, and competencies:

- Expertise in integrated farming system practices and methods
- Understanding of horticulture, broiler production, and aquaculture
- Knowledge of farm waste management and recycling practices
- Proficiency in diverse farming practices
- Ability to work effectively across culture
- Experience in adult learning and instruction
- Strong communications/interpersonal skills

C. Objectives and Expected Results

Objectives of the Assignment

- To identify areas of growth in creating and managing an IFS at ATP-KTH
- To equip ATP-KTH with knowledge and skills in farm waste recycling for efficient and sustainable use in IFS management
- To provide fundamental knowledge on how to incorporate broiler production into IFS
- To develop a training curriculum and materials on IFS for youth and farmers

Anticipated Results

After F2F volunteer support, the following results are anticipated:

- Development of a list of actionable steps ATP staff can take to enhance IFS activities at ATP-KTH
- ATP-KTH has acquired knowledge and skills in farm waste recycling that they can readily apply
- ATP-KTH staff have acquired fundamental knowledge on how to incorporate broiler chickens in to IFS
- A training curriculum and materials on IFS for youth and farmers has been developed

Expected Deliverables

- Volunteer end-of-assignment report with recommendations to the host organization

- Final debriefing with the host organization (plus key stakeholders) and the Smith Center
- Conduct in-country outreach events in Cambodia (print, radio, TV, group presentation, social media, etc.)
- Training curriculum and materials on IFS for youth and farmers

D. Resources to be Contributed by Host and Local Partners

ATP-KTH will mobilize the staff to support the volunteers to implement proposed SOW activities. The host will also assign a focal person to work closely with the volunteer to coordinate engagement with potential host organizations and other volunteer activities. ATP-KTH will provide an office space with access to Wi-Fi for the volunteer to use during the assignment.

E. Assignment Logistics and Itinerary*

Accommodations and Logistics

Volunteers should review the country orientation manual and video series for extensive logistics information including pre-departure planning, expense reimbursements, health management, safety & security, and emergency protocols.

Key Points:

- Hotels and airfare will be booked by ALOFT Smith Center and reservation details will be provided to the volunteer before arrival in Cambodia. Hotels will offer air-conditioning, wireless internet, and proximity to local food options.
- ALOFT Smith Center will reimburse all assignment-related travel expenses
- The ALOFT Cambodia and/or the host organization will provide transport to assignment site
- All assignment sites will have access to local restaurants and rickshaw/taxi transportation
- Any logistic concerns can be addressed to ALOFT Smith Center using the contact information located in Section F.

Recommended Preparation

- Complete volunteer orientation series
- Review volunteer orientation manual
- Complete volunteer pre-departure checklist
- Bring any videos, posters, PowerPoints, or other materials that are important to your training and activities. If they are in English, please send them to the field staff at least 2 weeks before

your assignment to be translated. We recommend you bring these materials on both a USB flash drive and hardcopy.

- Please bring any specialized tools/equipment with you as there may be limited options for acquiring them at the assignment site.
- The ALOFT country office has laptops, Microsoft Office, a projector, flash drives, and other materials that can be used for training and workshops.
- Download Telegram, the messenger app, to maintain contact with volunteer partner

General Itinerary

*subject to change based on the needs of the host.

Day(s)	Activity	Location
Day 1&2	Travel to Cambodia	
Day 3	Meet with the ALOFT project team for an overview of the assignment's itinerary, outputs, and purpose. Travel to Kampong Thom	CE SAIN, head office Accommodation: Stoung City, Kampong Thom
Day 4	Visit ATP-KTH for observation of the current situation and meet with PAC/AEO at ATP-KTH for a discussion	ATP-KTH
Day 5, 6, 7	**3 days training** (morning to focus on theory and afternoon to focus on hand-on practice) Participants: Less than 10 people (ATP-KTH staff, focal teacher, potential others such as Samsomlop Prey) Topics to include, but not limited to: ● Concept, importance, and determinants of integrated farming system ● Integrated farming systems for different agro-ecosystems ● Integrated Farming system design/model ● Farm waste and resource recycling process (composting, animal feed, water for vegetable irrigation ect.) ● Poultry production management in IFS ● Water use and pond management in IFS ● Hands-on session	ATP-KTH

Day 8&9	Weekend free schedule	
Day 10, 11, 12	Work with the ATP to develop the training curriculum and materials on IFS for youth and farmers. It should be specifically tailored to ATP-KTH and the surrounding agro-ecological zone.	ATP-KTH
Day 13	Travel back to Phnom Penh	
Day 14	Work with ALOFT team for trip and recommendation report	
Day 15 and 16	Travel back to USA	

E. USAID Classification of Volunteer Assistance and Activities

Primary classification for volunteer assistance (select one)

☐ Technology Transfer

✓Organizational Development

☐ Business/Enterprise Development
☐ Financial Services
☐ Environmental Conservation
☐ Administrative

The primary classification of the type of value chain activity (select one)

☐ Information and Input Support Services (extension services, education program, input supplies, veterinary services, etc.)

✓On-Farm Production

☐ Processing (primary and final product transformation, storage, transportation, etc.)
☐ Marketing (branding, advertising, promotion, distribution, sales, etc.)