FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

QUARTERLY REPORT

FEED THE FUTURE ASIA INNOVATIVE FARMERS ACTIVITY

YEAR 1 QUARTER 2 (JANUARY 1, 2016 – MARCH 31, 2016)

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ACRONYMS

AIFA	Feed the Future Asia Innovative Farmers Activity
B2B	Business to Business
EMMP	Environmental Mitigation and Monitoring Plan
FTF	Feed the Future
KU	Kasetsart University
LEAF	Lowering Emissions in Asian Forests Project
LMI	Lower Mekong Initiative
MOU	Memorandum of Understanding
PEN	Pest Exclusion Nets
RIH	Regional Innovation Hub
STIP	Science, Technology, Information and Partnerships
WFLO	World Food Logistics Organization
Y1Q2	Year 1 Quarter 2

INTRODUCTION

This report covers the Feed the Future Asia Innovative Farmers Activity (AIFA) for Year 1 Quarter 2 (Y1Q2) activities implemented between January 1, 2016 and March 31, 2016.

AIFA is a regional project working to facilitate the scaling of critical agricultural technologies through regional partnership and technology transfer. The project works with a range of agricultural technology stakeholders on a regional basis (private sector, research institutions, governments, networks, etc.) to increase food security, reduce poverty, and improve environmental sustainability by facilitating agricultural innovation and technology diffusion in the Asia region.

AIFA is comprised of four components, as follows:

Component 1: Horticulture-focused package of interventions

Component 2: Aquaculture-focused package of interventions

Component 3: Regional demand-driven packages of interventions to address food security

Component 4: Technology transfer to support USAID bilateral mission-oriented interventions

I. QUARTERLY HIGHLIGHTS

Much effort this quarter has been devoted to revising the planned activities of the project. Reviews at USAID and extensive consultations with partners and stakeholders around the region have led to a refined approach which better capitalizes on the project's regional scope and better aligns with USAID's division between bi-lateral and regional activities. Through close and effective collaboration with the AOR and RDMA agriculture team, the project has been able to both revise and make significant progress on new approaches and initiatives this quarter.

To take full advantage of the project's regional scope and to create stronger synergies between the project's technology support and regional integration goals, AIFA will launch a regional challenge that will solicit commercially-viable solutions for critical small holder agricultural constraints. The project has also revised its technology support approach, focusing on supportive research and testing of "Technology, Market and Model" to support evidence-based decision making among the private, government and research sectors.

Importantly, the project continued to make practical progress toward objectives during this revision as well. Highlights from this quarter include:

- Design and organization of the **Asia Regional Agricultural Innovation Summit**
- Development of a **5 year regional exchange partnership** with Syngenta and agricultural universities across the region
- **MOU's** developed with university partners in Feed the Future focal countries

- Preparations for **summer season testing of net technology** in all three Feed the Future focal countries

II. AIFA Y1Q2 Activities

Following the stakeholder mapping activity in the previous quarter, the project recognized that it was not making optimal use of its regional scope or partner network in the identification and selection of technologies for support. To address this, the project has adopted an open innovation "challenge" approach which will more cost-effectively identify technology producers who are ready for and motivated to expand. This approach will also better integrate and directly engage the regional stakeholder network which the project is developing. This quarter, the project has worked diligently on the organization of the Asia Regional Agricultural Innovation Summit which will serve to launch the AIFA regional challenges and directly engage critical private sector, government, research and donor organizations from across South and South East Asia.

The project has also significantly revised its technology support activities to ensure that regional funding is focused on the development and sharing of information which will enable evidence-based decision making (by regional technology producers, agri-businesses, researchers, governments and other stakeholders) rather than bilateral activities like technology promotion and training. The project will support collaborative "proof of concept" research and testing for challenge winners. This support will cover the critical areas of technology, market and commercial models, providing the necessary information and linkages to make informed decisions about the commercial feasibility and potential scale of the technology.

A. Component 1: Horticulture-focused package of interventions

Across all three focal countries, the project has made excellent progress in the implementation of activities for the "technology, market and model" research into pest exclusion nets. This technology was pre-identified at the proposal stage and provides the project the opportunity to refine approaches and to demonstrate the support model prior to the award of challenges.

Due to delays in the signing of the sub-agreement with Kasetsart University (see "challenges" below), country coordinators have had to assume a greater role in the management of component one activities than anticipated. Although the project has only one employee in each country, broadly experienced professionals with management experience were chosen. The quality of this team has been critical to achieving progress despite activity revisions and administrative delays. Project management wants to note that the significant progress this quarter under this component is due largely to the work, experience and commitment of the country coordinators.

The following key milestones were achieved this quarter:

MOU's Developed with University Partners: These basic agreements lay the foundation not only for component one testing of pest net technology, but also for testing of future technologies, convening and support of "national innovation hubs" and regional engagement through other project activities. These relationships will be critical to the value which the project offers to challenge winners and ultimately to the success and sustainability of our regional integration and technology expansion goals.

Our university partners are: The Germ Plasm Centre of the Bangladesh Agricultural University in Bangladesh (BAU); The Royal Agriculture University in Cambodia (RUA); The Agriculture and Forestry University in Nepal (AFU).

Crops and Test Locations Determined: This milestone is a critical step for preparing sound protocols and training requirements and also has important implications for the market and model segments of our technology testing and the selection of service providers in each country. The following table details initial crops and test locations.

Country	Locations	Crops
Bangladesh	Mymensingh, Rangpur, Bogra, Jessore	Tomato, Eggplant, Okra, Leafy Green Vegetables
Cambodia	Cham Kar Dong, Khan Dong Kor; Phnom Slar Ko, Tram Kok; Siem Reap	Brassicas, Eggplant, Cucumber, Leafy Green Vegetables
Nepal	Banke, Surkhet, Dang, Palpa (KISAN project) Kavre and Makwanpur	Tomato, Bell Pepper, Cucumber and Leafy Green Vegetables

In Bangladesh, testing has already started, in Cambodia and Nepal testing is scheduled to begin in August and will run for a year to incorporate the different growing seasons. However, one important potential value of the net is in increasing the growing season – particularly in the rainy season.

SOW's Developed and Procurement Underway: The project has completed SOW's for testing support in all three countries and has started to receive and review responses. Partner universities will conduct all controlled testing, but the project is particularly soliciting interested private sector partners for farmer testing.

Local Pest Net Partnerships Identified: Beyond contracted support in technology testing, the project has identified local partners that will be critical to the testing, analysis and eventual scaling of pest nets. These partners will participate in various roles based on their commercial and developmental interests, but importantly, they participate based on their interest in the technology and without compensation.

In Cambodia, Project Alba (www.project-alba.com), a social enterprise with a focus on vegetable production and marketing, will cooperate with the project to test the technology in its own operations and with member farmers. In Nepal, the project will cooperate with a Nepalese commercial farmer, who is a pioneer in utilizing net technology in Nepal, Mr. Rajendrajung Rayamajhi, to test the feasibility of a small holder out-grower model using the technology. The USAID funded KISAN project will co-invest in four testing sites within the Feed the Future zone of influence. In Bangladesh, the project will cooperate with the Bangladesh Women's Empowerment Activity in Jesore to identify women farmers and business people for cooperation. The project will also cooperate with the Syngenta Foundation which shares an interest in pest exclusion technology regionally.

Test Design and Training of Trainers: The project has scheduled a residential training of trainers (ToT) at Kasetsart University in early June after the end of term. By holding the ToT at Kasetsart's training facility at the Kamphaeng Saen campus, the project will benefit from cost efficiencies in travel, standard training equipment and access for associated training from Bangkok staff (e.g. gender, youth and M&E). The project expects to follow this approach where possible for all technologies.

Challenges

Revisions to the project approach had an impact this quarter on the completion of tasks under this component. Over the course of this period the project initiated discussions with partners on the basis of the original design, then consulted on revisions and then re-engaged on the basis of the revised approach. Despite this, the delay to planned activities has not been great and the expected gains to efficiency, coordination and sustainability far out-weigh temporary challenges. The delay, however, will put us very close to the summer planting season in some areas and the project is developing contingency plans to ensure results from this season.

The continued delay in signing of the Kasetsart sub-agreement has also been a challenge, but in this period the effect was largely mitigated through a re-organization of responsibilities across the project team. With the upcoming requirement for direct technical assistance and training services from Kasetsart, the requirement for this agreement becomes more critical.

B. COMPONENT 2: AQUACULTURE-FOCUSED PACKAGE OF INTERVENTIONS

Component two has also undergone significant revisions in this quarter. Originally, the technology focus of the component was alternative protein sources to replace fish meal in aquaculture feed. After careful review, it was determined that this technology allowed little scope for regional commercial support, and that the original focus on alternative formulations (using domestically produced plant proteins) was essentially a bilateral activity. There are alternative technologies being worked on regionally, but it is generally a sophisticated, regulated area with high-volume, high-investment requirements. The project may be able to work in this area through subsequent challenges, but as a fast-track challenge, alternative proteins are not well suited to AIFA resources and requirements.

As a replacement technology, the project has chosen sensor-based aquaculture management technologies. This is an area with a great deal of start-up activity across the region and will provide a diverse group of solutions for project review and support. Sensor hardware is diversifying quickly and prices are falling. In this environment start-ups are developing a number of web-enabled applications to exploit these lower-cost sensors and provide farmers with real-time information on pond conditions. These tools are developing for agriculture as well, but regular monitoring of small holder agriculture plots is much easier than for aquaculture. And therefore the requirement is greater.

The project will focus initial support on sensor-based technologies in hatcheries in Bangladesh to improve the quality and volume of inputs available to small holder farmers.

Two sensor-based technologies (E-Fishery from Indonesia and MimosaTEK from Vietnam) will be showcased at the Summit in May. The project has already begun discussions with hatchery operators and national feed producers in Bangladesh. There is significant interest in the technologies and larger companies have signaled interest to explore embedded service and service provider models to make the technology available. The project will arrange a separate meeting of aquaculture sensor-based companies and aquaculture reps from Feed the Future focal countries at the Summit.

C. COMPONENT 3: REGIONAL DEMAND-DRIVEN PACKAGES OF INTERVENTIONS TO ADDRESS FOOD SECURITY

As a result of the revisions made this quarter, the team has made real progress in strengthening the regional integration aspects of the project. Importantly, these activities have been intimately linked with and directly support the more concrete technology goals of the project. These changes have resulted in an approach which takes better advantage of the project's regional scope to bring value to Feed the Future focal countries.

Under this component, the project worked primarily on the following major activities:

Asia Regional Agricultural Innovation Summit

This event will bring a broad range of stakeholders (including regional corporates, national and sub-national SMEs, governments, research institutes and universities, NGOs and donors) from South and South East Asia together to prioritize critical regional constraints in agriculture and aquaculture and to directly engage in guiding and supporting the AIFA regional agricultural challenges. This interactive summit design is intended to improve the challenges through better constraint identification and improve regional integration and engagement by providing stakeholders with an immediate, visible and practical object of cooperation.

An event of this scale with such ambitious goals is a major programmatic and administrative undertaking. The project team has been enormously helped by Winrock International's direct, cost-share investment in the event. Winrock International purchased the services of Chris Wayne Associates (CWA) to provide event design and management services to the project and Winrock HQ staff have provided significant time to event design, speaker recruitment and event communications. In addition, the project has worked closely with the RDMA agriculture team which has provided important critical support in linkages with donor organizations and speaker recruitment. As of this writing, confirmed speakers and panelists include: representatives from USAID, the Food and Agriculture Organization, CP feeds, Syngenta, Kasetsart University, the Thailand Agricultural Research Council, Intel, C-ASEAN, IDEO, Unitus Capital and Ideas42. In addition, the Summit will showcase innovative technology from the region, including: E-Fishery from Indonesia (sensor-based automated fish feeding); Mimosatek from Vietnam (web-enabled sensor technology for agriculture and aquaculture); Rhino Research from Thailand (clay-based, "rechargeable" drying beads); SunFarmer from Nepal (rent-to-own solar irrigation model) and TCT from Thailand (pest exclusion nets).

The event will be held on May 25 and 26 in Bangkok, Thailand at the Plaza Athenee hotel.

Syngenta Regional Exchange Program

This quarter the project has developed a cooperative program with Syngenta which integrates AIFA's objectives around small holder technology, youth engagement and regional integration. This partnership will expand an existing Syngenta program (Syngenta Connections) which brings Australian agriculture students to Asian countries to work with small holder communities and learn about Syngenta's business in developing markets. AIFA's involvement will expand student participation to seven additional countries which consist of Bangladesh, Cambodia, Nepal and Myanmar from Feed the Future and Laos, Thailand and Vietnam utilizing funding from the Lower Mekong Initiative (LMI). In addition to expanding participation to developing countries, AIFA's involvement will focus the content of the program on to working with small holder communities to explore the cost/benefit and barriers to adoption of AIFA supported technologies.

Students will be chosen from AIFA partner universities through a competitive process. In the LMI countries where AIFA does not have MOUs, project partner Kasetsart University will facilitate the linkage for student selection. Student selection will be completed in May and the exchange will be occur in July.

The activities and objectives of the exchange program are, in and of themselves, developmentally valuable on a number of levels. From a project perspective, however, the ability this program affords to further link with and directly engage our university and private sector partners and to integrate project supported technologies as well, means that the value to the project is greater than the sum of the parts.

D. COMPONENT 4: TECHNOLOGY TRANSFER TO SUPPORT USAID BILATERAL MISSION-ORIENTED INTERVENTIONS

This quarter AOR Kipp Sutton organized trips to Bangladesh and Nepal where the Project Director, Rob Turner was able to introduce the project to relevant mission staff and the new country coordinators. The project was well received at both missions and the meetings provided an opportunity to discuss mission priorities and explain AIFA resources. In coordination with the RDMA agriculture team, the project has extended invitations to regional USAID staff to attend the Asia Regional Agriculture Innovation Summit on May 25/26 in Bangkok. Bilateral mission input into the challenge issues will be important to ensure that their priorities are addressed.

The project expects that the regional challenges will identify a number of promising technologies which do not meet AIFA requirements, but may be of interest to bi-lateral missions. Through the challenge review process, the project will maintain a list of these promising technologies and present them in a simple menu format to the Feed the Future focal country missions on a quarterly basis.

III. MANAGEMENT AND ADMINISTRATION

This quarter the project brought Ben Amick on as the Regional Innovation Manager. Ben has already made important contributions to the Summit and will be leading activities related to the regional

challenge approach as well. Ben's experience, skills and regional connections provide a critical resource in preparing the team to effectively address the revised project activities.

This quarter the project has revised the project results framework and indicator tables based on the revisions to project activities. This revision was undertaken first in order to ensure that M&E planning and database development, which was started this quarter, is in line with the revised approach and that M&E activities on component one activities can begin with the upcoming vegetable season. In the coming quarter the project will revise the workplan and full PMP as well based on USAID feedback.

AIFA Bangkok staff moved out of the LEAF office at the end of this quarter due to the close-out of the LEAF project. The project will move to new offices at 208 Wireless Road near the USAID offices. Fit-out for the new space is expected to be completed in May. Until fit-out is complete AIFA will occupy temporary space at the Regius serviced office at All Seasons Place.

IV. Partner Analysis

A. Kasetsart University

In the previous quarterly report, the project expected to resolve issues and sign the agreement with Kasetsart in the quarter covered here. Unfortunately that has not happened. The University has had internal staffing challenges related to a legal case which has delayed naming a permanent president and left almost all senior management in acting positions. With the recent conclusion of that case, our point of contact, Dr. Poon Kasemsap is no longer the VP for International Affairs. In this quarter we met with the newly named Assistant to the President for International Affairs, Dr. Buncha Chinnasri and The VP for Research, Dr. Siree Chaiseri. At this meeting, Kasetsart reaffirmed its strong commitment to the project and its alignment with Kasetsart's regional engagement goals. Dr. Siree also committed to getting the agreement signed as soon as possible.

Despite these administrative issues, Kasetsart has been an incredibly supportive and responsive to requests. KU has been instrumental in supporting Summit planning and in linking AIFA with regional partners outside of Feed the Future focal countries. To-date, this level of flexibility and support has allowed the project to meet requirements without a formal agreement in place. As we approach technology testing for pest exclusion nets and sensor-based technologies, however, we will require an agreement in order to make the necessary resources available.

B. World Food Logistics Organization

WFLO is not expected to begin activities until after technologies have been selected. They will be utilized only as relevant based on selected technologies.

V. Integration of STIP, Gender, Resilience, and Youth

The project will integrate STIP, gender, resilience, and youth into the selection of technologies and implementation of scaling. To date, these activities have not started. In the next quarter, the project will develop specific criteria for technology selection.

VI. Environmental Compliance

The project will submit a screening document and EMMP (if required) for all selected technologies.

Annex 1: Success Story

Not Applicable this quarter. The project will still produce at least four success stories over the course of the year.

ANNEX 11: BASELINES, TARGETS, AND ANTICIPATED MILESTONE INDICATORS *

FTF Ref.	Indicator & Disaggregation	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	LOA
Goal: Increase food security, reduce poverty, and improve environmental sustainability by facilitating agricultural innovation/technology diffusion								
Intermediate Result 1 (FTF IR 1): Improved Agriculture Productivity								
Sub Intermediate Result 1.1: Enhanced Human and Institutional Capacity Development for Increased Sustainable Agriculture Sector Productivity								
1.1.1 FTF 4.5.2(5)	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (tracking only –no targets)	Number	n/a	n/a	n/a	n/a	n/a	n/a
1.1.2 FTF 5.4.2(7)	Number of individuals who have received USG supported short-term agricultural sector productivity or food security training (60% Women)	Number	899 (540)	1574 (944)	1349 (809)	1124 (675)	450 (270)	**5396 (3238)**
1.1.3 FTF 4.5.2(42)	Number of private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and CBOs that applied improved technologies or management practices as a	Number	33	57	49	41	15	**195**
1.1.4 FTF 4.5.2(11)	Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations (CBOs) receiving USG assistance	Number	45	79	68	56	22	**270**
Sub Intermediate Result 1.2: Enhanced Technology Development, Dissemination, Management, and Innovation								
1.2.1 FTF 4.5.2(39)	Number of technologies or management practices in one of the following phases of development: Phase I: under research as a result of USG assistance; Phase II: under field testing as a result of USG assistance; or Phase III: made available for transfer as a result of USG assistance	Number (total unique)	4	3	3	2	0	**12**
		Phase I	0	0	0	0	0	**0**
		Phase II	4	3	3	2	0	**12**
		Phase III	0	4	3	3	2	**12**
1.2.2 Custom	Number of technologies or management practices which are female supportive, youth supportive or designed to reduce risk or	Number (total)	2	2	2	2	0	**8**
		Female	1	1	1	1	0	**4**

FTF Ref.	Indicator & Disaggregation	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	LOA
	improve resilience to climate change in one or more phases of development (The categories are not mutually exclusive; one	Youth	1	1	1	1	0	**4**
		Resilience	1	1	1	1	0	**4**
1.2.3 Custom	Number of technologies or management practices proposed, accepted or incubated through USG supported regional challenge initiative	Applied	20	15	15	10	0	**60**
		Accepted	6	5	5	3	0	**18**
		incubated	4	3	3	2	0	**12**
Intermediate Result 2 (RDMA IR1.2): Regional Integration Strengthened								
Sub Intermediate Result 2.1 (RDMA IR1.2.2): Enhanced Social, Scientific, and Cultural Connectivity								
2.1.1 custom under RDMA IR S.3	Number of innovative approaches identified by RDMA that are funded or adopted by USAID or bilateral missions or private sector enterprises	Number	0	2	2	2	0	**6**
2.1.2 custom	Number of case studies or other materials developed and disseminated to improve learning about the process of technology development, adaptation and transfer to accelerate adoption, replication and scale-up	Number	6	10	9	8	3	**36**
2.1.3 custom	Number of cross border linkages among stakeholders established	Number (total)	48	42	42	35	22	**188**
		Education	22	22	22	22	22	**110**
		Research	18	14	14	9	0	**54**
		Commercial	8	6	6	4	0	**24**
2.1.4 Custom	Number of regional or country level platforms, networks and organizations participating in regional or national hub	Number (total)	58	29	19	9	0	**115**
		Platform/ network	6	3	2	1	0	**12**
		Organizations	52	26	17	8	0	**103**
Intermediate Result 3 (FTF IR 3): Increased Private Investment in Agriculture Activities								

FTF Ref.	Indicator & Disaggregation	Unit	Year 1	Year 2	Year 3	Year 4	Year 5	LOA
3.1.1 FTF 4.5.2(38)	Value of public-private partnerships formed as a result of FTF assistance	USD	$.2M	$.8M	$1M	$1M	$.5M	**$3.5M**
3.1.2 FTF 4.5.3(12)	Number of public-private partnerships formed as a result of FTF assistance	Number	8	6	6	4	0	**24**

*Targets represent figures in the submitted Monitoring and Evaluation Plan, these figures have not been officially approved yet.