

FEED THE FUTURE KENYA INNOVATION ENGINE QUARTERLY PROGRESS REPORT (FY2016 QII)



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FEED THE FUTURE KENYA INNOVATION ENGINE

FY 2016 QII PROGRESS REPORT

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ACRONYMS AND ABBREVIATIONS

ANDE Aspen Network of Development Entrepreneurs

ASK Agricultural Society of Kenya

ALIN Arid Lands Information Network
CBOs Community-Based Organizations

CLIN Contract Line Item Number

COR Contracting Officer's Representative

FARMIS Farm Records Management Information Systems

FOG Fixed Obligation Grant

FTF Feed the Future

FTFMS Feed the Future Monitoring System

GOK Government of Kenya HCD Human-Centered Design

HR1 High Rainfall Zone 1

IAC Investment Advisory Committee

ICIPE International Center of Insect Physiology and Ecology

IMS Innovation Measurement Scale

INTENSE Innovative Inclusive Training & Extension for Production of Sustainable Safe Food

IST Innovation Screening Team

KEMRI Kenya Medical Research Institute

KEPHIS Kenya Plant Health Inspectorate Service

KHCP Kenya Horticulture Competitiveness Program

KIE Feed the Future Kenya Innovation Engine

KLMC Kenya Livestock Marketing Council

M&E Monitoring and Evaluation

NGOs Non-Governmental Organizations

PCPB Pest Control Products Board
PMP Performance Monitoring Plan

RFA Request for Applications

SA2 Semi-Arid Zone 2

SPFR Stage Progression Final Report STTA Short-Term Technical Assistance

USAID United States Agency for International Development

USG United States Government

I. FEED THE FUTURE KENYA INNOVATION ENGINE EXECUTIVE SUMMARY

Land O'Lakes, Inc. - International Development is implementing the Feed the Future Kenya Innovation Engine (KIE) under a hybrid fixed-price contract with the United States Agency for International Development (USAID) Kenya Mission, awarded in May 2012 for an initial three-year period. USAID has since exercised an Option Years 1 and 2 leading to a scheduled project close out in May 2017. This quarterly report describes implementation progress during the quarter period (1st January 2016 to 31st March 2016).

KIE supports competitively-selected innovations through a combination of catalytic grant funding and short-term technical assistance (STTA) at various stages from "proof of concept" (Stage 1) through "pilot roll-out" (Stage 2) to "transition to scale" (Stage 3). Rigorous assessment is undertaken at each stage in the process to determine innovation stage progression. The Innovation Engine also leverages other public and private resources to grow innovations to scale, with local institutions benefiting through cultivation and broad dissemination of innovative practices.

Since March 2013, through a series of open and competitive calls, KIE has received over 670 applications, from both within and outside Kenya, relating to innovations in agriculture and nutrition. A total of 65 shortlisted finalists have pitched their innovations to KIE's Investment Advisory Committee (IAC) resulting in a total of 20 innovations recommended for funding, 18 of which have been issued with grant funding, with two additional Stage 2 awards to be issued in the subsequent quarter.

Within the quarter, KIE received contract modification six from USAID, which provided additional scope and budget to the KIE contract, including the mandate for KIE to issue and manage Stage 2 and Stage 3 grants to innovations. Contract modification six increased KIE's budget across contract line items to also include additional budget for short term technical assistance and operational costs associated with coaching, mentoring and managing an increased grant portfolio.

Within the quarter, KIE prepared and submitted five Stage 2 award pacakages to USAID for Contracting Officer approval and received approval of all five Stage 2 awards in March 2016. KIE issued Stage 2 grants to Wanda Organic, ALIN and Takaful for innovation pilot roll out and plan to issue Stage 2 grants to Value Farms and Indicus early next quarter.

KIE continued to oversee activity implementation and milestone achievement of on-going grants and contined coaching and mentoring of innovations through KIE portfolio managers and short term technical assistance. For recently closed out grantees, KIE conducted end line rigorous assessments and finalized reports for KEMRI, KLMC and Amtech. As a result of rigorous assessment, KLMC and Amtech were recommended for stage progression to pilot roll out. KIE intends to submit Stage 2 award packages for KLMC and Amtech to USAID for approval early next quarter. In addition, KIE continued to explore collaboration with other USAID and USG projects, co-investing opportunities from the private sector and partnership with the public sector. KIE held a consultative meeting with the heads of cooperatives working in Meru County and participated in the Hombay International Investment Conference during the quarter.

Qualitative Impact

Within the quarter University of Nairobi II, Maseno University and Kenya Biologics successfully completed their grant implementation periods. KIE completed and shared final rigorous assessment reports for KEMRI, KLMC and Amtech Technologies with the respective awardees. In March, KIE held rigorous assessment end line meetings with Maseno University, University of Nairobi II and iProcure with support from Dalberg. Rigorous assessment end line reports for Maseno University, University of Nairobi II and iProcure will be submitted to USAID early next quarter.

With regard to Monitoring and Evaluation, KIE conducted the semi annual productivity survey for six innovations – Wanda Organic, Amtech Technologies, ALIN, Lachlan, iProcure, Kenya Biologics, and Maseno in the quarter. The survey focused on farm level impact indicators, particularly area under improved technology or management practices, gross margins and incremental sales. Results from the survey have been used to update indicator values in the report. KIE in addition submitted a revised Performance Monitoring Plan with proposed custom indicators and is awaiting USAID approval of the custom indicators.

Quantitative Impact

Table 1 on the subsequent page summarizes progress towards the achievement of select key Performance Monitoring Plan (PMP) targets during the reporting period. More details on the performance of the 14 indicators are provided in Section III of this report.

It is worth noting that even though five Stage II innovations were approved in the reporting period, the number of farmers recruited, trained and applying these innovations has not increased as expected. This is mainly due to the fact that Stage 2 approvals came in March, and therefore the innovators could not take advantage of the entire long rain season. All innovators have used the month of March to set up operations. Some innovations, for instance Index Based Livestock Insurance (IBLI), had closed its first window of farmer recruitment, which happens in January and February. While a number of innovations such as Wanda Organic's Plantmate Organic Fertilizer nd ALIN's record keeping application will record uptake in the course of the season (Quarter III),, a the rest of the Stage 2 innovations will record uptake in Quarter IV.

Table 1: KIE FY 2016 Q2 Key Indicators Results against Annual Targets

S/No	Indicator	FY 2016 Annual Target	Target FY2016 Q2	Achieved FY2016 Q2	% achieved	Total Cumulative Actual
1	Number of rural households benefiting directly from USG interventions ¹	90,130	22,533	28842	128	57,069
2	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation ¹²	785,309	196,327	\$468,431	239	\$1,389,957
	Number of technologies or management practices in one of the following phases of development:	17	Ш	14	127	24
33	Phase I: under research as a result of USG assistance	8	4	8	200	20
3°	Phase II: under field testing as a result of USG assistance	8	7	6	86	6
	Phase III: made available for transfer as a result of USG assistance	I	0	0	0	0
4	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) that applied new technologies or management practices as a result of USG assistance ⁴	58	15	33	220	832
5	Number of public-private partnerships formed as a result of FTF assistance ^{ii 5}	20	10	10	100	23
6	Value of incremental sales (collected at farm-level) attributed to FTF implementation (RiA) ⁶	19,296,385	4,587,956	5,728,233.56	125	6,757,631.15
7	Number of farmers trained on the use of the innovation ⁷	49,000	12,250	928	8	18,878
8	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance	58,673	23,700	20,292	86	30,666

-

Indicator 8: 28,842 farmers applied improved technologies or management practices in the reporting period. Majority of these farmers are dairy farmers, who benefitted from Amtech's innovation in the period.

¹ **Indicator 1:** During Q2, KIE reached out to 28,842 rural households against the quarter target of 22,533. There were an additional 20,292 new beneficiary households. This huge increase was contributed by Amtech technologies, where all farmers delivering milk to the two cooperatives Amtech tested their concept with now use the system.

² Indicator 2: During the reporting period, KIE partners leveraged \$468,431 from various sources, including from financial institutions, equity injection, grants from both private and public sources.

³ **Indicator 3:** Overall, KIE had 14 running innovations – 6 of which are in Stage II. Maseno University contributed four Proof of Concept innovations in the reporting period. These include Maseno EH 10, 12 and 14; Maseno Sukari and Maseno 1501.

⁴ Indicator 4: During Q2, 33 food security private enterprises received USG-KIE assistance.

⁵ **Indicator 5**: During Q2, ten public-private partnerships were formed as a result of FTF assistance between. Kenya Biologics Limited signed MoUs with four distributors and the county Government of Kericho. iProcure signed agreements with three entities including Meru Greens and Uplands Processors to supply production inputs to their farmers.

⁶ Indicator 6: This indicator is estimated using productivity survey data conducted in the reporting period. Milk sales make the bulk of the reported number

⁷ **Indicator 7:** During the reporting period, the number of farmers trained on the use of innovations was 928, against the quarter target of 12,250. This is about 8% achievement and may have been a result of the quarter being mainly a crop harvesting period and a bit of land preparation for planting. It was also a reflection of the fact that most innovations were progressing towards close out.

Subsequent Quarter's Work Plan

With only one year left on the KIE contract, KIE doesn't envision any further solicitation waves under the current contract.

In the coming quarter, KIE will;

Continue working with the current Stage 1 innovations, these are; KENDAT, Kenya Biologics and Caytree to prove their concepts, achieve award milestones, and provide on-going coaching and mentoring from KIE portfolio managers. KENDAT's and Caytree's innovations were scheduled to end in the current quarter, but the respective innovation champions requested no cost extensions to enable them fully proof their innovations based on the rain cycles and new partnerships.

Secondly, KIE will, with support from subcontractor Dalberg, manage the rigorous assessment process for closed out innovations, namely; UON1 –Optical sorting Machine, UON 2- Coolbot, Kenya Biologics, iProcure, and Maseno University.

KIE will award and manage Pilot Roll Out innovation implementation for ALIN, Wanda, Takaful and fully execute grants for Indicus and Value Farms. KIE has already begun working on activity and M&E plans with the innovation champions and will work closely to push for adoption within the identified FtF counties.

KIE will continue to explore private and public sector partnerships in the next quarter. The key objective is to identify strategic leveraging opportunities and more importantly identify co-investing opportunities for debt and equity to assist innovators in accessing the required amount of funding that will pave the way for them to achieve sustainable growth.

II. KEY ACHIEVEMENTS (QUALITATIVE IMPACT)

SELECTION OF PROMISING INNOVATIONS

Since its inception, KIE has held four solicitation waves that have resulted in over 600 applications, 60 of which were recommended to pitch to an Investment Advisory Committee (IAC). The IAC then selected 20 innovations to forward to USAID for award, and USAID ultimately approved 20 awards. KIE has fully utilized the grants under contract component across the 20 innovations and does not foresee any more solicitation waves.

Stage 2 innovations approval and award

During the quarter, KIE resubmitted packages for three Stage II innovations recommended by IAC and two innovations recommended for stage progression for approval. All the five innovations were approved by USAID for award in March. They included Indicus EA. Ltd, Takaful Insurance of Africa, Value Farms Ltd., Wanda Organic and Arid Lands Information Network (ALIN).

Subsequent to the approvals by USAID, three innovations have fully executed their award agreements and received disbursements for their first milestones. These are ALIN, Wanda and Takaful who are already carrying out mobilization activities to get their innovation projects rolling. KIE is following up with Value Farms and Indicus for the execution of their agreement and finalization of their activity plans and M&E plans which are the deliverables for their first milestone payment.

Grant modifications and close-out

During the quarter, two modifications to ongoing grants were formally approved and fully executed. They include:

- Amendments to Caytree Partners' innovation;
- Amendments to KENDAT's innovation.

The amendments related to grant end-date extension.

The following four awardees successfully completed their innovation project implementation and were formally closed through a fully executed closeout letter:

- Amtech Technologies Ltd.
- Kenya Medical Research Institute (KEMRI)
- iProcure Ltd
- Kenya Livestock Marketing Council (KLMC)

In addition, the following four awardees also successfully completed their proof of concept grant implementation and KIE is finalizing pre-closeout processes including making final milestone payments:

- University of Nairobi I
- University of Nairobi II
- Maseno University
- Kenya Biologics

During the quarter, in partnership with Dalberg, KIE conducted end-line meetings for the following innovations:

- University of Nairobi II
- Maseno University

KIE will conduct end-line meetings for University of Nairobi I and Kenya Biologics in the next quarter. The end-line meetings are part of a rigorous assessment process carried out to determine if innovations whose implementation periods under the program have ended are good candidates for stage progression. The emerging rigorous assessments reports will be shared with USAID once they have been finalized and reviewed internally.

Below is a table that gives a snap-shot of the current status of all the 20 innovators under KIE since inception.

KEY ACHIEVEMENTS PER INNOVATOR

Table 2: Overivew of KIE Innovation Portfolio and Implementation Status

	Innovation	Innovation Description	Stage	Status
1	Indicus EA Ltd	Establishment of a High Tech Artificial Insemination Training Centre	Two	Executing award agreement
2	Value Farms Ltd	Land Consolidation through Public- Private Partnership for Commercial Agriculture	Two	Executing award agreement
3	Wanda Organic Ltd.	Plantmate Organic Fertilizer	Two	Ongoing
4	ALIN	Farm Records Management Information System (FARMIS) Mobile Application	Two	Ongoing
5	Takaful Insurance of Africa	Index-Based Livestock Insurance	Two	Ongoing
6	Lachlan	Fusion Farming for Potato Production	Two	Ongoing
7	Caytree Partners	Financial Empowerment and Loan Mobile Application	One	Ongoing
8	Kenya Network for Dissemination of Agricultural Technologies (KENDAT)	Agricultural Mechanization Hubs - Youth-Attractive Commercial Farming Ventures	One	Ongoing
9	Kenya Biologics Limited	Combating 'Tuta absoluta' in Tomatoes	One	Pre-closeout processes ongoing

10	Maseno University	Enhancing capacity of Maseno University Seed Unit to Deliver to Market Resilient New Maize Varieties in Western Kenya.	One	Pre-closeout processes ongoing
11	University of Nairobi (UoN)	Optical Sorting Machine	One	Pre-closeout processes ongoing
12	University of Nairobi (UoN)	Innovative Cold Storage Option For Smallholder Farmers	One	Pre-closeout processes ongoing
13	Kenya Medical Research Institute (KEMRI)	Design and Clinical Evaluation of a School Meal with Deworming Properties	One	Closed Out
14	Kenya Livestock Marketing Committee (KLMC)	Strengthening the Dryland Economy for Pastoralist Communities through Livestock Identification and Traceability Mechanisms	One	Closed Out
15	iProcure	Last-Mile Distribution of Farming Inputs	One	Closed Out
16	Amtech Technologies Limited	Scaling up EASYMA for Dairy Farming Sustainability	One	Closed Out
17	Real IPM Company (K) Ltd.	Biological Control of the Fruit Fly	One	Closed out
18	Virtual City	Initiative to Transform Horticulture Supply Chain	One	Closed out
19	Quest Agriculture	Innovative and Inclusive Training and Extension Services for Production of Sustainable Safe Food in Kenya	One	Closed out
20	M-Farm	Wholesale Market Access Using Mobile Technology	One	Closed out

COACHING AND CULTIVATING SELECTED INNOVATIONS

Technical Assistance is the cornerstone of KIE's support to each innovation's potential for successful stage progression. Assignments are carefully designed to address gaps identified during initial stage progression scoring.

- KIE deployed and completed one assignment on business planning and partnership strategy for Kenya Biologics.
- Five STTA orders (two Field Advisors and three Monitoring and Evaluation Capacity Building consultants) were approved by USAID. The field-based consultants provide business development, capacity building and implementation coordination support to awardees.
- Additionally, KIE worked on creating a pool of STTA consultants to help stage 2 innovations during the pilot roll
 out with technical assistance as and when required. STTA task orders for this support will be developed and sent
 to USAID in the next quarter.

BENEFITTING KENYAN AND REGIONAL INSTITUTIONS BY CULTIVATING AND BROADLY DISSEMINATING INNOVATIVE PRACTICES

Participation in sector events

In January 27th four KIE awardees participated in the Nest's and Kenya Climate Innovation Centre Whats Next AgTech event. The event that drew players in the agricultural and technology sector aimed at appreciating the great strides made in agricultural technology, what could be made better as well as what's next when it comes to the AgTech sector. Here are the projections the KIE awardees feel will be important in the Ag tech agenda; Marion Moon (Wanda Organic): Partnerships both with and for smallholder farmers as well as investors; Stefanjo Carcoforo (iProcure): Traceability of farm produce for both local and international consumption; Chris Kolenberg (Kenya Biologics): Farm Specialization where farmers focus on growing only a certain crop to help maximize on yields and productivity; Linda Kwaboka (Mfarm): Partnerships and communication flow between farmer, suppliers and markets.

From February 18th -20th , program staff, Maseno University and Value Farms participated as exhibitors in the Homabay International Investment Conference. The event, a collaborative effort between the County Government of Homa Bay, USAID/FIRM, KenInvest Authority and Kenya National Chamber of Commerce and Industry (KNCCI), drew players from the private and public sectors, including county departments. More than 200 local and International Investors, economic and investment scholars attended the two-day event where more than thirty local and international companies and NGOs also pitched exhibition booths to showcase various initiatives. The innovators' stands drew high interest from Conference participants and industry stakeholders, most notably officials from the county government. USAID FIRM, Homa Bay County government, USAID KAVES, among others also exhibited their work at the Conference. Find a blogpost on the event here.



The What's Next AgTech Event panelists: L-R Zeynab Wandati, Stefano Carcoforo, Grant Brooke, Marion Moon, Charles Odida, Linda Kwaboka and Chris Kolenberg. Photo courtesy Adam Changani

From February 25th-26th, the Innovation Engine joined almost 1,000 entrepreneurs, innovators, investors, development partners and industry stakeholders from 250 countries at what is considered by some as the fastest-growing and most inclusive development platform for entrepreneurs, investors, innovators, donors and corporations in the world. Innovation Engine Chief of Party Titianne Donde-Ommes and three innovators affiliated to the program - Value Farms Ltd CEO Peter Waga, Wanda Organic MD Marion Moon, and Caytree Partners Managing Partner Karibu Nyaggah participated in the third Sankalp Africa Summit held in Nairobi under the theme Spurring the Entrepreneurship Economy. Wanda Organic showcased its Plantmate innovation at the Climate Innovation Center stand.

From March 1st -3rd, Maseno University Innovation Champion Prof. Mathews Dida attended the <u>African Seed Trade Association Congress</u> in Nairobi. The annual event aimed at providing a platform for seed stakeholders to discuss climate change and seed regulation, as well as other issues affecting seed production in Africa. Prof. Dida also showcased his innovative Striga-tolerant and highland maize varieties at the event. Additionally, on March 17th, the Innovation Engine held a consultative meeting with stakeholders in Meru County. The meeting provided the KIE team and nine innovators working in the county with a valuable

opportunity to network with county officials from the Ministry of Agriculture, Livestock and Fisheries (MOALF) and the Kenya Agricultural Productivity and Agribusiness Program (KAPAP) as well as farmers' cooperatives/value chain representatives. Participants, who included the County Director of Agriculture, Director of Livestock and Liaison Officer in the office of County Chief Officer, charted action plans for collaboration going forward.

From March 20th – 23rd, ALIN's manager Mr. Martin Muraguri attended the <u>Connected2016</u> Summit in Diani Kenya. The annual event, a flagship of the ICT Authority, provides a platform for collaboration, capacity building and knowledge sharing between government and the ICT sector with a view of linking and hastening implementation of government IT projects to world-class standards. The event culminated in the <u>Microsoft awards</u> for



Value Farms MD Peter Waga (left) and Innovation Engine Chief of Party Titianne Donde-Ommes (right) explain the Value Farms innovation to Homahay Governor Hon. Cyprian Owiti (right), and Kisii County Governor Hon. James Ongwae.

entrepreneurs in Kenya working to solve various challenges in the country using ICT. ALIN's FARMIS innovation was awarded as the best innovation in the agricultural category. Read a blogpost on the event here.

Online media dissemination of innovative practices

During the reporting period, KIE released the fifteenth edition of *The Innovator* e-bulletin. The January/February 2016 issue of the Innovator Bulletin issue, titled "New Year, New Innovations!" provides updates on developments at the Innovation Engine and expected new initiatives in 2016. The issue also provided updates on KIE activities from the quarter. Launched in March 2014, the e-bulletin is currently in its fifteenth issue with a mailing list of over 1,500 subscribers including members of staff from USAID, and representatives of other international development organizations, local and international innovators, potential investors, media, Land O'Lakes International Development staff, representatives of other USAID-funded programs, and other implementers in Kenya and across Africa. KIE continues to receive subscription requests and expects to publish at least two more issues in the coming quarter.

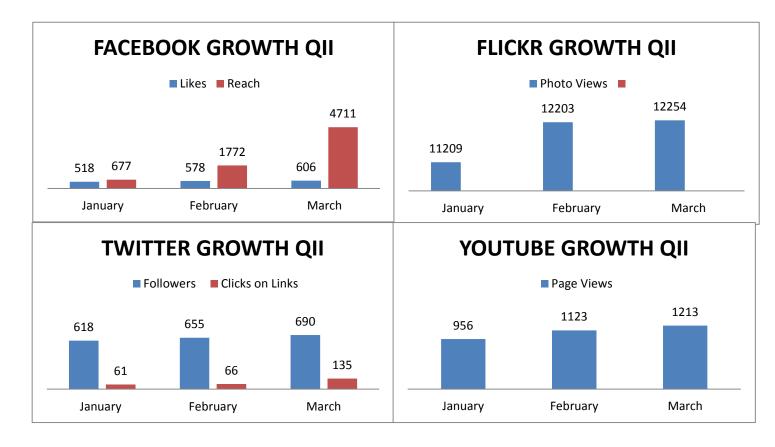
Social media engagement

In this quarter, the Innovation Engine continued to build its online constituency and engage with various audiences via Twitter, Facebook and Flickr as depicted in the graphs below. During the reporting period, the Innovation Engine continued to document activities, particularly innovators' work in the field, in various multi-media formats for repackaging and dissemination via a variety of channels, including social media.

Media coverage

During this quarter, Innovation Engine program awardees, nominees and finalists continued to receive positive local, regional and international news coverage. ALIN's Innovation emerged the winner in the ICT Authority Microsoft innovation Awards in the Best Agriculture Category. This and other news items related to the program are highlighted Annex I.

Graph 1: Social Media Engagement via Twitter, Facebook, Flickr and YouTube



KEY ACHIEVEMENTS PER INNOVATOR

Wanda Organic Limited - Plantmate Organic fertilizer

Wanda successfully completed implementation of its Stage 1 innovation award in May 2015

Progress highlights this quarter.

- Wanda Organic received approval for stage 2 pilot roll out from USAID during the quarter. Wanda signed their stage 2 grant agreement and have already completed milestone 1, invoiced and received the first disbursement. Wanda Organic participated at the Village Capital Hardware Africa forum held in Nairobi to celebrate past beneficiaries and welcome new beneficiaries into the program. Wanda organic had benefited from a USD 15,000 debt facility from Village Capital in 2014.
- Wanda Organic also participated in Sankalp Africa Summit 2016, an Intellecap initiative that aims to influence the global inclusive development discourse through its work with business sector stakeholders. This event took place in March 2016 in Nairobi.
- Wanda Organic participated in a farmers/Cooperative/County government forum that was held at Alba Hotel in Meru in March 2016. The meeting was organized by KIE and was aimed at linking the over 23,000 Kenya Agricultural Productivity and Agribusiness Project (KAPAP) sponsored farmers and had representations from Meru County. In attendance was County Director of Agriculture: Mrs Deonicia M'Eruaki, Director of Agriculture; Mr. Manene, Liaison Officer in the office of County Chief Officer, KAPAP formed cooperatives and the KIE team.
- There have been no new developments regarding discussions with COPIA GLOBAL (a consumer
 goods catalog and delivery service for Base of the Pyramid consumers in the developing world).
 Wanda Organic is exploring the possibility of engaging the firm to deliver consignments of the
 innovator's product to various destinations on an order basis. KIE will be providing updates as they
 arise.

Kenya Livestock Marketing Council (KLMC) - Strengthening the dry land economy for pastoralist communities through livestock identification and traceability mechanisms

KLMC successfully completed implementation of its Stage 1 innovation award in November 2015

Progress highlights this quarter:

- KIE and Dalberg finalized rigorous assessment of the innovation during the quarter. The end-line report was also finalized and submitted to USAID in March 2016.
- KIE supported KLMC in preparing a stage two proposal for submission to USAID following their recommendation for progression to stage two. This is still on-going and KIE will be submitting the stage 2 award package to USAID for approval in the coming quarter.

Amtech Technologies - Scaling up EASYMA for Dairy Farming Sustainability

Amtech successfully completed implementation of its Stage 1 innovation award in November 2015

- KIE supported Amtech in preparing a stage two proposal for submission to USAID following their recommendation for progression to stage two. This is still on-going.
- Amtech also participated in a farmers/Cooperative/County government forum that was held at Alba Hotel in Meru during the month of March 2016. The meeting was aimed at linking the over 23,000 Kenya Agricultural Productivity and Agribusiness Project (KAPAP) sponsored farmers had

- representations from Ministry of Agriculture Meru County, County Director of Agriculture; Mrs Deonicia M'Eruaki, Director of Agriculture; Mr Manene, Liaison Officer in the office of County Chief Officer, KAPAP formed cooperatives and KIE team.
- Amtech has yet to make a commitment toward the growth strategy proposal with IDEV (An
 American business strategy and advisory firm that works with global corporations, investors and
 development organizations to scale high-impact businesses in emerging markets). KIE will continue
 monitor and report on the progress.

The Real IPM Company Limited - Biological control of fruit fly in mango using Metarbizium ICIPE 69

Real IPM's Stage 1 award implementation period came to an end in April 2015.

Progress highlights this quarter:

- While rigorous assessment recommended Real IPM for stage progression. Real IPM's stage 2 award is currently held up pending resolution of environmental compliance and certification issues.
- KIE will continue to communicate with Real IPM regarding their stage 2 grant application.

University of Nairobi 2 – Low-cost optical sorting to remove mycotoxins from Maize in local Kenyan mills

Progress highlights this quarter:

- KIE held a meeting with the innovation champion and discussed candidly the status of the optical sorting machine, and the possibilities going forward. The champion admitted that it's not possible for the machine to operate commercially within the implementation period, and may take much longer to be ready for the market. The champion and KIE agreed that the innovation be closed out after the implementation period, which ended on February 14, 2016
- KIE held an end-line meeting for UoN's rigorous assessment in collaboration with Dalberg. Initial results indicate that UoN II did not prove the concept and will likely not be recommended to proceed to Stage 2. However, the Innovation Champion expressed commitment to continue working on the innovation in collaboration with the University of Illinois in the US, supported by the University of Nairobi. UoN II will also maintain contact with stakeholders on the ground such as the county governments and provide progressive updates. The final rigorous assessment report is expected to be completed in the next quarter.

Arid Land Information Network (ALIN) – Farm Records Management Information Systems

ALIN's Stage 1 award implementation period came to an end in April 2015

- ALIN received USAID approval for their stage two award during the quarter. They signed their grant
 agreement, completed their first milestone (activity plan and M&E plan) and submitted an invoice
 for payment.
- During the quarter March 2016; ALIN were crowned the winners of Kenya ICT authority Connected2016 Awards; Agricultural category. The Connected Summit is the brainchild of the ICT Authority in consultation with ICT industry players and key government decision makers. The

Connected Summit, first held in 2009, aims at establishing a platform for collaboration, capacity building and knowledge sharing between government and the ICT sector with a view of linking and hastening implementation of government IT projects to world-class standards.

- ALIN also participated in a farmers/Cooperative/County government forum that was held at Alba Hotel in Meru during the month of March 2016.
- Talks with Juhudi Kilimo a micro-finance institution that provides wealth-creating financial solutions for agribusiness – are still ongoing. There was no new progress



Left: Mr.Martin Muraguri of SokoPepe receives the ICT Innovation Award in Agriculture category. Photo courtesy ICT Authority

experienced during the quarter. The aim of the partnership is to enable farmers to access microfinance products/loans. It will be targeting farmers using the FARMIS platform.

iProcure – Last Mile Distribution of Farming Inputs

iProcure's Stage 1 award implementation period came to an end in December 2015.

Progress highlights the quarter:

- The implementation period for the proof of concept grant for iProcure ended December 14, 2015 and the total number of farmers recruited was 2,009 against a target of 2,000. KIE team visited the project site and received positive feedback from farmers, agents, and the exporter of fresh produce regarding the services offered by iProcure. The farm inputs are now readily available locally and at lower prices, resulting in timely application and cost saving on inputs and transport cost to and from the town center. iProcure continues to roll-out the innovation on its own, especially in the high potential areas.
- The end-line meeting for the iProcure Rigourous Assessment was held during the quarter by KIE and Dalberg. The assessment revealed some good progress made by iProcure. The scoring of the stage progression criteria and finalization of the report will be done in the next quarter.
- iProcure signed a memorandum of agreement with K-SALES during the quarter where iProcure will work with agro-dealers under the K_SALES program in Meru County to implement the last mile distribution of inputs. K-SALES will hire one staff to support roll-out for the first three months, with a possibility to extending to six months. The roll-out is expected to commence in the next quarter.

University of Nairobi 1 - Innovative cold storage option (CoolBot) to reduce postharvest losses

- During the last quarter the University procured a solar power backup from Davis and Shirtliff Ltd, and installed it at the cold storage facility located at Kawala in Makueni County. Further, the innovation champion, Dr. Jane Ambuko, hired a Project Manager.
- After sensitization of the local farmers at Kawala by the innovation champion on the use of the cold storage facility, and to get their commitment to use the CoolBot a total of 100



KIE team members visit with the Kawala Smallholders Self Help group to for an update on their experiences with the CoolBot innovation

crates of mangoes were received from farmers and stored at a fee in the facility. The produce was later sold in Nairobi and farmers were paid KES 23 per mango; a price which was about five times higher than the prevailing market prices in March.

• The innovation grant implementation concluded on 31st March 2016.

Maseno University - Enhancing capacity of Maseno University Seed Unit to deliver to market resilient new maize varieties in western Kenya

Progress highlights this quarter:

- Harvesting of the six demonstration sites in Kisumu and Siaya counties and the University farm was completed and the seed processed, graded and packed in 250g sachets. The seed was subsequently distributed among more than 500 farmers for planting during the long rain season of March to May 2016.
- The Kenya Plant Health Inspectorate Services (KEPHIS) released the results of the national performance trials (NPT) for Maseno Sukari and Maseno 1501 varieties. The varieties achieved averages of 11.3 and 10.2 tonnes per hectare respectively, compared with 9.3 tonnes per hectare for commercial checks. The varieties are expected to be entered into the second and third seasons of the NPT respectively in 2016.
- The Kenya Plant Health Inspectorate Services (KEPHIS) (the Kenyan regulator on plant varieties) released for commercialization Maseno EH12 and Maseno EH14 maize varieties.
- Under the auspices of the Alliance among Maseno University, Syngenta Foundation for Sustainable Agriculture (SFSA) and the Innovation Engine, Maseno University held two meetings with Agri Seed Co Ltd and discussed the possibility of the latter being the commercial partner of the University. Agri Seed Co Ltd has expressed interest in commercializing Maseno EH14 and Maseno Sukari varieties. The two parties agreed that the draft non-disclosure agreement is satisfactory and would be signed by the parties before the end of April after review by their respective legal officers. The licence agreement, on the other hand, requires further refining.
- The innovation implementation concluded on 29th February 2016.

Kenya Medical Research Institute - Design and clinical evaluation of a school meal with deworming properties

KEMRI's Stage 1 award implementation period came to an end in November 2015.

- Following the conclusion of the implementation of the innovation in November 2015, the Champion submitted the final report for the clinical and nutritional studies in January 2016.
- The Innovation Champion attended the Grand Challenges Africa Community Meeting held from 21st to 26th February 2016 in Nairobi. During the conference he held discussions with representatives of the Grand Challenges Canada on the possibility of bridge funding to enable the innovation to move to transition to scale. The discussions relied heavily on the recommendations of the recently concluded rigorous assessment report.

Kenya Biologics - Combating Tuta absoluta in Tomatoes for Smallholders

Progress highlights this quarter:

- A total of 370 farmers (Bungoma 112, Migori 170 and Kericho 88) were recruited and 417 (Bungoma 112, Migori 207 and Kericho 88) were trained.
- There were 103 adoptions of the innovation (Bungoma 30, Migori 29, Kericho 37, Bomet 5 and Nyamira 1 and Homabay 1).
- A total of 77 lures were reported to have been sold across Bungoma, Migori and Kericho counties.

Caytree Partner Limited - Financial Empowerment and Loan Assistance Program

Progress highlights the quarter:

 During the quarter, KENDAT carried out refresher training on the mobile application in record keeping and in the market place; all the 556 farmers recruited have now been trained. The KIE team visited the sites and noted good progress in the understanding of the record keeping mobile application by the farmers.



Victor, a farmer in Kericho County (center) explains how Tuta absoluta burrows beneath the leaf epidermis during a field visit in February. The pest's leaf mining makes elimination using conventional chemical pesticides ineffective.

- Caytree finalized the development of the loan application module and made a presentation to KIE staff. The next step is to train Caytree staff who will then train farmers for adoption. The exploration of potential borrowers was also commenced during the quarter.
- Caytree signed a memorandum of agreement with Barclays Bank of Kenya Ltd in the deployment of
 the loan application module in four counties. In that connection, Caytree has been developing the
 platform further to suit the project requirements and there are strong possibilities of testing the loan
 application module with Barclays Bank.
- Caytree sent a request to KIE for an extension of the grant implementation period from March 31st to August 31, 2016. This will allow time for testing of the loan application module. Caytree has also notified KIE of the inclusion of Bomet County as an additional area of implementation where the company will start testing the application with Barclays Bank of Kenya Ltd.
- KIE introduced Caytree to Equity bank for possible partnership in the roll-out of the loan application module. Caytree proposed a joint pilot with Equity bank for the loan application module. However, this partnership has stalled because Equity Bank has not given a response but Caytree and KIE will continue to make follow-up.
- KIE introduced Caytree to Centenary SACCO to explore partnership in rolling out the loan application module. Centenary SACCO agreed to introduce its loan products to farmers under Caytree, and requested Caytree to identify the potential farmers. However, farmers are required to save for a period of time before they are considered for a loan, and this might delay the roll-out of the loan application module hence this likely a partnership scheduled to occur after the proof of conpt phase.

• Caytree held discussions with Eclof Microfinance for a partnership to roll-out of the loan application module. A draft MOU is ready and is awaiting formal execution once Eclof's gives the go ahead.

KENDAT - Agricultural mechanization hubs to boost youth-attractive commercial farming ventures

Progress highlights the quarter:

- During the quarter, KENDAT made cash purchases of one 4-Wheeled tractor, two 2-wheeled tractors, plough, sub-soiler, harrow and a trailer from a local dealer to add to the other equipment at the mechanization hub. This is in addition to existing equipment which includes two-wheeled tractors (two machines), seven planters, one boom sprayer and a multipurpose threshing and feed processing machine.
- The operations of the mechanization hub commenced late in the month of March 2016 after the acquisition of the 4-wheeled tractor. 30 farmers have so far been provided with services in a total of 40 hectares of land. Services have been provided include the use of the four wheeled tractor, together with the accessories. The services that are in high demand include ploughing, harrowing, sub-soiling and planting. An interview with farmers indicated that the services are needed and they have requested KENDAT to increase the number of four wheeled tractors to meet the high demand on the ground.
- KENDAT is still awaiting feedback from NIC Bank and Chase Bank regarding the leasing of tractors to KENDAT. The possibility of the leasing option does not look promising, particularly given that by the time of writing this report (April 2016), Chase Bank had been placed under receivership by the Central Bank of Kenya. However, in the event that the banks provide positive feedback, KENDAT will choose the best offer and proceed with the leasing of 4-wheeled tractors to increase capacity to provide services to farmers.
- KENDAT, in collaboration with Hand-in-Hand East Africa (HiH EA), trained a total of 20 service providers in microfinance. The trainees were drawn from four business clusters with each cluster providing five trainees. The business clusters are groupings of farmers based on routes in the area. These enable KENDAT to aggregate demand for services per cluster and provide the services in one area at a go for efficiency. Service providers will be engaged once the microfinance fund is set up. A module on a microfinance scheme is being finalized.
- KENDAT trained service providers in the operations of the four wheeler tractor and engaged three
 of the four trained service providers in service provision to farmers on a full-time basis.
- KENDAT and Meru Greens Ltd signed an MoU providing KENDAT with the opportunity to work with over 20,000 farmers affiliated to the produce exporter
- The launch of the mechanization hub is scheduled to take place in mid-April 2016, with a firm date to be communicated as soon as possible.
- KENDAT requested KIE for an extension of the implementation period from 31st March to 30th November 2016. The amendment was approved by KIE to allow KENDAT time to complete proof of concept stage during the September land preparation season.

Stage 2 Innovation - Pilot Rollout:

Lachlan Kenya Limited – Viazi Power fusion farming technology to enhance quality and yield of potato harvests

- A total of 66 farmers were recruited and trained in Bomet County and 10 in Meru County. Further there were seven adopters in Bomet County and 24 in Meru.
- A total 48 packs of Viazi Power were sold in Bomet County.
- Farmers in both counties were predominantly involved in land preparation in time for planting at the start of the long rains expected at the end of March.

Indicus EA Ltd. - Establishment of a high tech artificial insemination training center

Progress highlights this quarter:

• During the quarter, USAID approved Indicus' Stage 2 pilot roll out implementation award. The innovator has been invited to sign the contract but has sought some clarifications in the contract before signing. The activity plan is ready and the innovator is currently working on the M&E plan.

Takaful Insurance of East Africa – Index Based Livestock Insurance

Progress highlights this quarter:

• In March, USAID approved Takaful's Stage 2 pilot roll out implementation award. The innovator signed the grant agreement, and developing the activity plan as well as the M&E plan in readiness for roll-out.

Value Farms – Land Consolidation through Public-Private Partnership for Commercial Agriculture

Progress highlights this quarter:

• During the quarter, USAID approved Value Farms' Stage 2 pilot roll out award. KIE anticipates that an award will be fully executed next quarter.

LESSONS LEARNED

In gleaning lessons learned, examining failures can often be more instructive than analyzing successes. Of the three rigorous assessment reports submitted to USAID this past quarter, only the rigorous assessment conducted for KEMRI did not result in a recommendation for stage progression.

During theStage One proof of concept (POC) grant, KEMRI was given funding to test the efficacy of UjiPlus®, a porridge flour fortified with pawpaw extracts. Pawpaw has been reported to have antihelminthic properties, acting against soil transmitted helminths (STH), otherwise known as worms. This trial was on the premise that large-scale mass drug administration (MDA) of antihelminthic drugs to deworm children in developing countries might not be sustainable over extended periods due to the cost of drugs, the large size of population to be covered, and the frequency of dosing required. KEMRI's innovation was piloted through scientific clinical and nutritional trials among three primary schools in Nandi County, with one school serving as the treatment (with UjiPlus®) and the other two as the positive (comparison with albendazole) and negative (plain porridge) controls. Early results suggest that children who take UjiPlus® have fewer roundworm eggs (Ascaris lumbricoides) and increased levels of hemoglobin relative to the negative control group. In addition, and unexpectedly, this trial showed that children who eat UjiPlus® have a reduced incidence of ringworms (Tinea capitis) relative to children given albendazole, and children given plain porridge.

However, despite the success of this trial, rigorous assessment ultimately determined that there is no evidence that UjiPlus® is a desirable product with market potential. This is due to the following reasons. First, the current evidence base for the efficacy of UjiPlus® against STH is limited to a single study, with relatively small numbers of pupils, in a single context. This is not sufficient to change procurement decisions in government, or in foundation currently funding school based deworming. Second, in the trial, children were given Ujiplus® every day and at no cost. This has much greater administrative and logistical challenges than the model for albendazole-based deworming, which requires children to be given one pill, 1-2 times per year.

Third, at the moment, UjiPlus® is more expensive than both albendazole and plain uji porridge. Fourth, KEMRI has not conducted any form of formal or informal research to understand demand for Ujiplus®.

Therefore, the lesson to be learned from KEMRI's stage one proof of concept grant is that even if though an innovative concept may be successfully proven from the standpoint of scientific trials, it does not necessarily follow that it will be proven successful from a business standpoint. UjiPlus as a method of school based deworming is still too expensive and logistically challenging than the current options available to schools. In end line scoring, using the 22 stage progession indicators, KEMRI scored lower on desirablility and feasibility. Even with regard to viability, the challenge remains regarding the likelihood of profit for UjiPlus. A possible primary customer for UjiPlus has not been identified or envisioned by KEMRI.

RIGOROUS ASSESSMENT (RA)

As previously mentioned, rigorous assessment reports for KEMRI, KLMC and Amtech were completed and submitted to USAID with recommendations for stage progression for KLMC and Amtech, but not for KEMRI. Endline rigorous assessment meetings were held with Maseno University, University of Nairobi -1, and iProcure. The rigorous assessment reports are expected to be ready for submission to USAID by the end of April 2016.

II.ACTIVITY PROGRESS (QUANTITATIVE IMPACT)

KIE is designed to follow a facilitative approach and promote system-wide change in agriculture. Because of this and the early stage commercial nature of the innovations it supports, the majority of the impact of KIE's innovators is likely to be realized after the end of the project. In addition, Stage 1 proof-of-concept grants are by design only able to reach hundreds of farmers and test the market and business potential of the innovations. Table 3 below provides indicator performance data during the reporting period and shows progress towards the achievement of KIE indicator targets.

Table 3: KIE FY2016 Q2 Indicators Performance Data

#	Indicator	Indicator Source	Units	Baseline Value	FY 2016 Target	FY2016 Q2 Target	FY2016 Q2 Achieved	Cumulative actuals
I	Number of jobs attributed to FTF implementation (RiA)	FTF 4.5 (2)	Full Time Equivalent		104	50	1381	1,458.1
	Location			0	104	50	1381	1,458.1
	Urban			0	49	10	9.7	34.7
	Rural			0	55	40	1371	1,423.1
	Disaggregates Not Available			0			0	0.0
	New/Continuing			0	104	50	1381	1,458.1
	New			0	54	35	1371	1,425.2
	Continuing			0	50	15	9.7	32.6
	Disaggregates Not Available			0			0	0.0
	Sex of job-holder			0	104	50	1381	1,458.0
	Male			0	61	40	763.9	814.9
	Female			0	43	10	617.04	643.0
2	Total increase in installed storage capacity (m3) (S)	FTF 4.5(10)	M³		0	NA	NA	2.83
	Dry storage			0	N/A	0	NA	NA
	Cold storage			0	0	0	NA	2.83

	Disaggregates Not Available			0	N/A	0	NA	NA
3	Gross margin per hectare, animal	FTF	USD/Ha	FTFMS	TBD	NA	NA	NA
<u> </u>	or cage of selected product (RiA) Banana	4.5(16,17,18)		data 0	2200	1144		NA
	Cabbage			0	2333	1200	<u> </u>	NA NA
	Green Beans			0	3755	2478	2220	NA
	Maize			0	500	280	1084	NA
	Mango			0	NA	NA	-	NA
	Milk			0	1120	689	523	NA
<u> </u>	Potatoes Tomatoes			0	1914 6649	478 2194	1621 5175	NA NA
4	Number of hectares under	FTF 4.5.2(2)	На	0	7198	4,800	3485.6	5103
	improved technologies or management practices as a result of USG assistance (RiA) (WOG)				7170	1,000	3 103.0	3.03
	Technology type			0	7198	4800	3485.6	5,103
	crop genetics			0	325	217	36.1	56
	Cultural practices			0	0	0	0	0
	pest management			0	0	0	271.7	393
	disease management			0	1,757	1172	92.5	118
	soil-related fertility and conservation			0	1,709	1140	110.8	305
	Irrigation			0	541	361	0	11
	water management (non-irrigation)			0	0	0	0	0
	climate mitigation or adaptation			0	0	0	61.5	62
	Other (ICT related)			0	0	0	3066.6	4,310
	total w/one or more improved technology			0	2,866	1911	3485.6	5,103
	Sex			0	7,198	4800	3485.6	3,486
	Male			0	3383	2544	2124.6	3,741.60
	Female			0	3815	2256	1361	2,234
_	Association-applied			0	0	0	0	2,104
_	Disaggregates Not Available		h	-	0	0	0	0
5	Number of public-private partnerships formed as a result of FTF assistance (S)	FTF 4.5.2(12)	Number	0	20	0	10	23
	Agricultural production			0	19	5	9	11
	Agricultural post-harvest transformation			0	0	5	0	0
	Nutrition			0	I	0	0	I
	Multi-focus			0	0	0	0	10
_	Other			0	0	0	I	I
_	Disaggregates Not Available	FTF	Nime	0	0	0	0	0
6	Number of rural households benefiting directly from USG interventions (S)	FTF 4.5.2(13)	Number		90,130	22,533	28842	57,069
	New/Continuing			0	90130	22533	28842	57,069

ı	[N/			T 0	70 500	45054	20202	47.047
	New			0	70,500	15654	20292	17,917
	Continuing			0	19,630	7849	8550	39,152
	Gendered Household Type					22533	28842	57,069
	Male and Female Adults (M&F)				14,505	16650	14930	41,989
	Adult Male no Adult Female (MNF)				2,686	3084	2913	8,192
	Adult Female no Adult Male (FNM)				2,434	2794	2446	6,880
	Child No Adults (CNA)				5	5	3	8
	Disaggregate Not Available				0	0	0	0
7	Value of incremental sales (collected at farm-level) attributed to FTF implementation (RiA)	FTF 4.5.2(23)	USD	114,623	14,276,097		5,728,233.56	6,757,631.15
	Banana			0	2,463,600	896,387	-	208,787.66
	Cabbage			0	0	0	-	-
	Green Beans			0	145,032	38185	38,517.10	52,300.00
	Mango			0	1,278,696	16050	-	12,786.96
	Potato			0	7,603,360	2023421	115,787.85	527,880.74
L	Tomato	<u> </u>	<u></u>	0	399,351	199676	36,446.60	67,583.49
	Maize			0	912,500	332918	1,446,305.28	1,759,144.73
	Milk			0	1,473,558	1081320	4,091,176.73	4,129,147.57
8	Value of new private sector investment in the agriculture sector or food chain leveraged by	FTF 4.5.2(38)	USD	0	785,309.00	196,327	468431	1389957
9	FTF implementation (RiA) Number of technologies or	FTF	Number	0	17	- 11	14	24
,	management practices in one of the following phases of development: (Phase I/II/III) (S)	4.5.2(39)	Number		17	"	14	24
	Phase 1: Under research			0	8	4	8	20
	Phase 2: Under field testing			0	8	7	6	6
	Phase 3: Made available for transfer			0	I	0	0	0
10	Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and CBOs that applied improved technologies or management practices as a result of USG assistance (RiA) (WOG)	4.5.2(11)	Number	0	14	15	33	832
	Private enterprises (for profit)			0	8	8	3	11
	Producers organizations			0	6	6	27	593
	Water users associations			0	-		0	17
	Women's groups			0	-		2	105
	Trade and business associations						0	I
	Community-based organizations (CBOs)			0	-		I	105
П	Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance ((RiA) (WOG)	4.5.2(5)	Number	0	58,673	23700	20,292	30,666

	Male			0	31,097	12562	10,791	14,358
	Female			0	27,576	11138	9501	16,303
	Number of farmers and others recruited and registered for the innovation	Custom Indicator	Number	0	70,000	17,500	653	23,289
	Male			0	36400	9,100	293	11,691
	Female			0	33600	8,400	360	11,598
_	Number of farmers trained on the use of the innovation	Custom Indicator	Number	0	TBD	TBD	963	18,878
	Male			0	As reported	As reported	553	9443
	Female			0	As reported	As reported	375	9435

Indicator Explanatory Notes

NB. The annual and quarterly targets were set with the expectation that approvals for Stage 2 innovations in the pipeline would be done in Quarter one of the 2015/16 period. All Stage II innovations were however approved in March, well after preparations for the long rain season had begun. Most innovators did not therefore take advantage of the season. A case in point is Takaful whose first sales window – January to February, had passed by the time they received the grant approval. The reported numbers thus reflect the achievements of Stage 1 innovations and Lachlan.

Indicator 1: During the quarter, the number of full-time equivalents (FTE) jobs achieved was1381. These are jobs held by grantee employees either working as field agents or in other capacities in the innovation and farm level jobs estimated using the productivity survey. Amtech Limited's innovation, recommended for graduation to Stage II contributed the bulk of the jobs since dairy is a labor intensive enterprise. KIE has not reported farm level jobs in the past.

Indicator 2: The innovation did not realize any additional storage. During the quarter, the innovator finalized tests on the existing *CoolBot* innovation, and confirmed its viability. 124 farmers (53 female and 71 males) participated by storing mangoes in the *CoolBot*, eventually selling them off without experiencing any losses.

Indicators 3, 4 and 7: The results reported for Q2 for this indicator come from the short rains season (October- December 2015) crop productivity survey that was undertaken in March 2016. Gross margin and Incremental sales for cabbage, banana and mango were not calculated. Only two farmers (supported by Wanda Organic) had planted cabbage for a site in Machakos, while Real IPM, the innovation supporting mango production, is yet to be certified by PCPB.

Indicator 5: Ten public-private partnerships were formed as a result of FTF assistance. The partnerships are between Kenya Biologics and The county Government of Kericho; Kenya biologics and four Agro dealers, for the distribution for distribution of TuTrack. The other partnerships are between iProcure and three entities, including Meru Greens and Uplands Processors limited.

Indicator 6: 20,292 new rural households benefited from the innovations implementation in various counties. Amtech Technologies contributed the bulk of these households. All dairy farmers selling their milk through the two Cooperatives that Amtech is working with in Nandi and Bomet counties currently use the innovation.

Indicator 11: 28,788 farmers applied the new technologies and management practices. As in Indicator 6, dairy farmers form the bulk of the new farmers applying improved technologies and management practices.

Indicator 12: Only 644 new farmers were recruited by innovations during the reporting period. This is about 4% of the quarter's target of 17,500, formulated inclusive of Stage 2 innovation targets.

Indicators 13: 963 farmers were trained on the use of innovations.

PERFORMANCE DATA TABLE

Annex IV presents the performance data tables with one completed separately for each indicator.

IV. CONSTRAINTS AND OPPORTUNITIES

Constraints and Critical Issues

Critical issues

In March 2016, KIE received approvals for 5 Stage 2 innovations, namely ALIN, Wanda Organic, Takaful, Value Farms and Indicus. KIE was able to fully execute grant agreements with Wanda Organic, ALIN and Takaful, with Value Farms and Indicus expected to be signed during the next quarter. Also, KIE expects to submit additional Stage 2 Award packages to USAID for approval early next quarter. While these are positive developments that demonstrate KIE's willingness to swiftly act on its new mandate per modification six, KIE is running up against a major time constraint as the KIE contract is due to end on May 17, 2017. KIE originally envisioned Stage 2 grants to have periods of performance of 2 years. However, due to the longer than anticipated cost extension modification process, KIE is constrained by the remaining time left to implement Stage 2 awards, most of which will have periods of performance of less than one year. This may affect KIE's ability to create impact within the contract timeline as pilot roll out innovations will only be able to take advantage of the two rainy seasons (March – June 2016 and October – December 2016).

Opportunity - Contract Modifications

On the 11th of February 2016, USAID fully executed KIE contract modification number six. The modification increased KIE's mandate enabling the project to award and manage Stage 2 grants. The contract modification increased the overall KIE contract value by an additional \$4,559,309, resulting in a total contract value of \$17,724,729. KIE now has the opportunity to issue and mange grants to Stage 2 innovations who are at the pilot roll out stage.

V. PERFORMANCE MONITORING

Application of evidence-based testing to determine progression of innovation from one stage to another

As per their respective M&E and activity plans, routine monitoring and evaluation processes for Wave II and Wave IV innovations continued for the active innovations during the reporting period.

Crop productivity survey. KIE collected data on crop and dairy productivity for the short-rain season (October 2015-February 2016) in the quarter. The data collection exercise targeted active and closed grants. KIE surveyed over 500 farmers applying innovations promoted by iProcure, Amtech Technologies, Maseno University, Lachlan, Kenya Biologics, and ALIN. The findings of the survey have been used to update the outcome/impact indicator reporting in the reporting period.

M&E Training, Review and Planning

KIE conducted an on boarding training for the M&E capacity building consultants and Project Field Advisors in the period. The session emphasized the changing focus of a number of grantees from proof of

concept to pilot roll out, and the shift in monitoring approach, given the large number of farmers KIE intends to reach.

Revised Monitoring and Evaluation Plan (PMP)

KIE submitted to USAID, an updated PMP with suggested custom Indicators in the quarter. The proposed Custom Indicators will assist KIE with information to enable progress monitoring of two unique inovations (Indicus and takaful) that target the livestock value chain. In addition, KIE responded to queries on gender and youth, program achievements to date on numbers reached and trained, those applying KIE supported innovations, and the results accrued to women and youth through participation in KIE activities. KIE further contributed to USAID's portfolio review exercise and disaggregated annual indicator targets which were presented as quarterly targets as requested by USAID.

Developing M&E Plans for graduating partners and incoming Stage two innovations

KIE worked with the two graduating partners (Wanda Organic and ALIN) and three in coming stage two partners (Value Farms, Takaful and Indicus) to prepare and finalize their M&E Plans. These plans, which detail the indicators they contribute to and their reporting schedules will be used to monitor progress going forward.

Wave IV Baseline Survey

Bayesian Consulting Group submitted the final baseline report for all Wave IV innovations - Takaful (Wajir and Garissa Counties); Indicus East Africa Limited (Bomet and Nandi Counties); Value Farms (Bondo and Homabay Counties), Catree (Meru County); KENDAT (Meru County) and Kenya Biologics (Kericho and Migori Counties).

VI. PROGRESS ON GENDER STRATEGY

The Innovation Engine's gender and youth strategy identifies the active participation of smallholder farmers as a critical feature of our ultimate success. Women often have limited access and control over resources which impedes their ability to participate in and contribute to competitive agricultural production. Women comprise the vast majority of smallholder farmers and food producers. They provide significant labour, - are involved in the various production activities and in addition are usually responsible for protecting the safety and nutritional value of food in their households. It is KIE's belief that to achieve dramatic and sustainable improvements in the lives and well-being of the smallholder farmers, KIE's initiatives must offer innovative approaches at the different levels of the agricultural value chain that engage, empower and invest in women for the long term. However, it is important that KIE considers the needs of *all program* beneficiaries—men, women, and the youth—in order to achieve impact and project success. The Innovation Engine gender mainstreaming approach will thus focus on integrating gender aspects into project activities rather than through its grants under contract mechanism, KIE seeks to identify and provide opportunities for all, with special emphasis on encouraging women and young girls to champion innovations.

Innovations by enterprises such as M-Farm Ltd., Wanda Organic Ltd., Real IPM Ltd. and the University of Nairobi (Wave I) are all women-led. Overall, women hold 44.6% of Full Time Equivalent (FTE) jobs created.

To date, women have carried out a total of 44% of STTA assignments designed to build the awardees' capacity to implement and scale up the respective innovations.

During the quarter:

• KENDAT provided mechanization services to a total of 54 farmers (35% women) mainly in the form of land preparation and planting. A total of 76.25 hectares (16.5 ha for women) were provided with the services.

- Caytree made follow-up training to a total of 108 farmers (49% women). The refresher training was mainly on record keeping using the mobile application.
- Agriculture activities in the Lake Victoria region are predominantly headed by women, many of who are
 widows. Maize production is the main crop and therefore the technologies under the Maseno University
 innovation will impact positively many of the women across the Lake Victoria region in terms of their
 livelihoods.

Gender and Youth Assessment from Stage 2 Award Packages

This quarter, as part of the five award packages submitted to USAID for Wanda, ALIN, Value Farms, Indicus and Takaful, KIE included gender and youth assessments for each innovation. Each assessment provided an analysis of relevant gender and youth content outlined in innovation activities, identified critical gender and youth issues that have been presented and discussed by grantees, identified clear gaps related to gender and youth, and provided recommendations for how innovations (through KIE mentoring) can enhance gender and youth integration into innovation activities.

VII. PROGRESS ON YOUTH STRATEGY

KIE also believes that youth inclusion is paramount to the sustainability of innovations and that the youth are indeed the future of entrepreneurship and economic development in Kenya. All KIE innovations support youth inclusion in agriculture and agribusiness and target youth across respective value chain nodes, through employment creation or directly benefiting from the innovation.

- **Kenya Medical Research Institute (KEMRI)** Design and clinical evaluation of a school meal with deworming properties is an innovation that directly targets youth as it seeks to develop and test the feasibility of porridge (*uji*) flour fortified with local fruit extracts that have demonstrated anthelminthic properties.
- Kenya Network for Dissemination of Agricultural Technologies (KENDAT) KENDAT's
 mechanization hubs are specifically targeted to the youth who will provide the necessary operational
 and business vibrancy.
- Arid Lands Information Network's (ALIN): The mobile record keeping innovation will be very instrumental for youth as it assist them develop an income statement for their micro-enterprises. This will not only be valuable to them as they verify the financial status of their entities but will also be instrumental in enabling the youth access to finance.
- Amtech Technologies: The EASYMA innovation enables smallholders to weigh their milk within a 45Km radius of the cooperative. This innovation has seen the cooperative employ youth as the agents who weigh milk at designated points and deliver to the cooperatives.
- Kenya Livestock Marketing Council (KLMC): Implementation of the Livestock and traceability system saw the employment of 12 youth (10 male and 2 female) to assist in tagging of livestock.
- **Kenya Biologics Ltd:** This innovation (*Combating Tuta absoluta in Tomatoes for Smallholders*) seeks to control the tomato leaf miner (*Tuta absoluta*) among smallholder farmers by use of a pheromone aided trap. During the last quarter of implementation, the innovation managed to employ at least 22 young people directly in the management of the innovation activities in the field.

VIII. PROGRESS ON ENVIRONMENTAL MITIGATION AND MONITORING

KIE portfolio managers assist with guidance to innovation champions on appropriate pesticide use, management and disposal for the safety of the farmers, their families and the environment. However, there is a recognition that this process can be further strengthened using external resources.

Therefore, during the Quarter, KIE developed a Scope of Work for a planned training of trainers (TOT) on Safe Use of Pesticides for Indicus East Africa Ltd, Wanda Organics Ltd, Value Farms Ltd and Kenya Network for Draft Animal Technology (KENDAT) staff together with KIE Field Advisors and M&E consultants. KIE requested USAID approval of a STTA Order for consultant, Evelyn Lusenaka, to conduct this training in May 2016.

IX. COLLABORATION WITH USAID AND OTHER DONOR PROJECTS

Collaboration with USAID, other donor projects as well as private sector institutions conrinued in Q2. The table in Annex V summarizes these well. Overall:

- KIE introduced Caytree to Equity bank for possible partnership in the roll-out of their loan application module. Caytree proposed a joint pilot with Equity Bank for the module which Equity Bank is reviewing.
- KIE also introduced Caytree to Centenary SACCO to explore a possible partnership in rolling out the loan application module. Centenary SACCO is agreeable to introducing its loan products to farmers under Caytree, and requested Caytree to identify the potential farmers. Farmers will be required to accumulate savings before they are considered for a loan, and this is therefore seen as a potential partnership beyond Caytree's implementation period under the KIE award.
- Caytree held a meeting with ECLOF Kenya, a microfinance company, and agreed to partner in the roll-out of the loan application module.
- During the quarter, under the auspices of the Alliance between Maseno, Syngenta Foundation for Sustainable Agriculture and the Innovation Engine, Maseno University met with officials from Agri Seed Co. Ltd a Kenyan subsidiary of Seed Co Limited, a publicly listed company incorporated in Zimbabwe, and a producer and marketer of certified crop seeds in Southern Africa. The parties agreed to enter into a non-disclosure agreement and a memorandum of understanding (MoU) for Agri Seed Co. to commercialize Maseno EH14 and Maseno Sukari, developed by Maseno University under the KIE award. Drafts of the NDA and MoU have been circulated to members of the Alliance for review and are scheduled for signing in March 2016. MOU and licensing agreements are being drafted by Syngenta Foundation
- KIE held a meeting with Intellecap on a possible partnership on match making. Intellecap has sent through its proposal and it is being reviewed.
- Caytree signed an MOU with Barclays Bank Kenya (BBK). The partnership will see BBK utilize Caytree's financial module to get smallholder financial records so as to use them in decision making.
- iProcure signed an MOU with K-SALES (Kenya Semi-Arid Livestock Enhancement Support a USDA funded project helping create a more inclusive, competitive and efficient livestock sector by reducing drought-related losses, building the technical capacity of value chain actors and reducing

marketing inefficiencies in six semi-arid counties in Kenya.) This will enable iProcure to leverage K-SALES' agro-dealer network.

- KIE introduced ALIN to Grameen Foundation. Grameen is exploring use of the ALIN application for their partners in the microfinance space.
- Amtech and IDEV (an American business strategy and advisory firm that works with global
 corporations, investors and development organizations to scale high-impact businesses in emerging
 markets) held discussions on the development of a growth strategy for Amtech. The two have not
 agreed on the format and cost implications. KIE will continue to report on any developments.
- Amtech and Meru Cooperative Farmers Union (MCFU) are in discussions to have Amtech deploy its innovation (EASYMA 6.0) and benefit its over 40,000 farmers. These discussions are still on-going.
- KIE introduced Wanda Organic to <u>Root Capital</u>, a non-profit social investment fund that lends
 capital, delivers financial training, and strengthens market connections for small and growing
 agricultural businesses. The two organizations will be engaged in discussions over the next couple of
 months to explore the possibility of the innovator accessing additional finances. KIE will continue to
 report on the progress of the partnership.
- KENDAT initiated discussions with <u>Brazagro Ltd</u>, a leading supplier of farm machinery and equipment, on areas of possible partnership. Brazagro is aligned with smallholder mechanization and has developed a smallholder mechanization kit, as well as a new development model, which the company intends to incorporate in the KENDAT agribusiness hub. The initiative is designed to start from the basics by including items that are absolutely necessary for day-to-day use at the farm level. KENDAT has previously bought equipment from Brazagro and discussed a franchise arrangement. The two companies have scheduled a meeting for next month to firm up discussions.
- During the quarter, KENDAT also continued following up on a MOU with Meru Greens Ltd. Meru
 Greens supports mechanization in the French beans value chain and has constructed a new factory at
 the Export Processing Zone for canning the beans for export. Mechanizing bean planting and
 harvesting are real possibilities and good business for KENDAT and this link to market is a prime
 ingredient in the agribusiness hub model of services to farmers. KIE will continue to report on the
 progress.

Partnerships

Caytree Partners signed a memorandum of agreement (MoU) with Barclays Bank Kenya Ltd (BBK) to deploy the loan application module. This partnership calls for Caytree to further develop the platform to meet the lenders and borrowers' requirements. The partnership involves training smallholder farmers and deploying the loan application module in a bid to have BBK advance loans.

iProcure

iProcure signed a memorandum of agreement with Meru Greens Ltd., a fresh produce marketing company. In this agreement, Meru Greens will purchase high-quality inputs through iProcure and benefit from the usage of iProcure's technology platform to bring discounted inputs to farmers and out growers. On the other hand, iProcure will offer bulk order technology solution, produce collection, quality monitoring and aggregation systems, as well as input order processing for Meru Greens and its collection centers in the areas of operation. The implementation of the MOU has already begun; piloting is underway with 300 farmers before rolling out to over 20,000 farmers working with Meru Greens.

As mentioned, iProcure signed a memorandum of agreement with the USDA-funded Kenya Semi-Arid Livestock Enhancement Support Program (K-SALES), under which iProcure will work with agro-dealers under the K-SALES program to implement its last mile distribution of inputs innovation. K-SALES will hire

one staff to support the roll-out for an initial three months with a possibility of extension to six months. The roll-out is expected to commence in April 2016.

iProcure also signed memorandum of agreements with Uplands Premium Dairies & Foods Ltd for supply of inputs to the company.

Meru County partnerships:

Since 2015, KIE has been in discussions with the Kenya Agriculture Productivity and Agribusiness Program (KAPAP) in Meru regarding linking up the cooperatives with the KIE innovators. As a follow-up to a meeting held in December 2015 between KIE, KAPAP and the County Department of Agriculture, in March 2016, KIE organized a one-day stakeholders' consultative meeting in Meru County that brought together innovators, farmer cooperatives representatives, marketing organizations and government officers from the Agriculture Department. The cooperative representatives and marketing organizations presented the activities of their respective cooperatives which deal in several value chains including potatoes, dairy, bananas and cereals, with a total membership of over 45,000 farmers. Nine KIE-supported innovators presented the work and benefits of their innovations to farmers in Meru County and developed joint work plans with the cooperatives on the way forward in areas of interest. Subsequently, at the end of March, Amtech Technologies held initial meetings with Meru Dairy Union and Nyambene Arimi Cooperative society and discussed uptake of the innovations. The Meru Dairy Union requested Amtech Technologies to develop a partnership proposal for consideration in the next quarter.

X. PROGRESS ON LINKS WITH GOK AGENCIES

During the quarter, KIE through its cohort of innovators, continued to explore collaboration opportunities at both the National and County levels.

KIE, working closely with Kenya Agricultural Productivity and Agribusiness Program (KAPAP); and Meru County to organize a stakeholder's forum at Alba Hotel in Meru during the month of March 2016. The meeting was aimed at linking the over 23,000 KAPAP sponsored farmers to KIE innovators, and was attended by representatives from Meru County government, KAPAP formed cooperatives and KIE team (Innovators and staff).

The output of the meeting was a work plan on the way forward for the KIE partners and the various farmer organizations in attendance. KIE will be following up with the innovators to ensure MOUs and agreements are signed up with potential partners where feasible. KIE are also keen to ensure that innovators work with the relevant partners in the coming quarter.

XI. PROGRESS ON USAID FORWARD

The Innovation Engine's programmatic objectives and measurements of success are closely aligned with USAID Forward's vision of building capacity of local organizations. Through March 31, 2015, KIE has awarded \$2,340,418 in fixed obligations grants to local businesses and institutions for the purposes of scaling up innovations in the Kenyan agriculture sector, enterprise acceleration and capacity building.

Through March 31, 2015, KIE has provided 47 STTA orders to 17 innovations (through specific consulting assignments) in the areas of financial management and systems development, business planning and modeling, staffing and governance structures, pest control products trials and safe use of pesticides training among others. All but three assignments were by Kenyan experts. Thus far, in total KIE has a pool of 31 high

caliber professional consultants for 13 different consulting categories, who have supported the innovation engine in offering technical assistance in the past, which KIE will draw upon during the cost extension period, and in furtherance of USAID Forward.

As KIE has now received a contract modification to implement and provide STTA to additional Stage 2 grants, KIE will continue growing the USAID forward agenda, and is already in the processes of drafting SOWs and selecting consultants for Stage 2 awards.

XII. SUSTAINABILITY AND EXIT STRATEGY

The Innovation Engine's primary approach to sustainability is through initial investments in nascent innovations in the Kenyan agricultural sector, through catalytic grant funding, coupled with targeted technical assistance aimed at assisting an organization advance their innovation needs as well as technical assistance aimed at addressing organizational, financial and business related needs. KIE is in essentially developing the capacity of local organizations and paving the way for their sustainability so they can thrive and be profitable long past the finite duration of KIE's intervention.

In addition to capacity-building, as part of its sustainability strategy, KIE seeks to link innovations to private sector investment that will continue to help innovations grow beyond the life of the KIE program. KIE will explore debt and equity co-investing opportunities that will support innovation scale and sustainability. KIE's strategy is to expose the innovators to investors, preceded by assisting the innovation champions develop a business pitch and business model based on their financials, business environment and facts from the rigorous assessment.

KIE appreciates the role the private sector will play in helping to ensure the sustainability of the innovations and is working with the innovators to establish strategic partnerships in this regard. Strategic partnership identification this quarter included:

- Working closely under the Tripartite agreement with Maseno University and Syngenta Foundation, KIE continued to assist Maseno University Seed Unit work on the Non-Disclosure Agreement and licensing documentation, in its commercialization agreement with Agri-Seed Company Ltd, the Seed Cos registered business in Kenya. Seed Co, is one of the leading seed companies in Africa and is interested in commercializing Maseno's EH14 and Maseno Sukari breeds.
- With Caytree Ltd, KIE oversaw the testing of the financial module on the Caytree platform. The
 module, designed to track income and expenses at personal level, will be of benefit to financial
 institutions interested in lending to individual, especially those in self-employed sectors. Caytree has
 signed an MOU with Barclay Bank Kenya (BBK), under this partnership BBK will rely on Caytree
 data to on lend to smallholder farmers.
- KIE held a consultative meeting with Meru smallholders under the Kenya Agriculture Productivity and Agribusiness Programme (KAPAP). KIE innovators were given the opportunity to pitch their innovations to 30 smallholder group leaders representing over 23,000 smallholders. KIE within the quarter has held follow on meetings especially on the Amtech innovation where 1 cooperatives and 1 union are already working on MOUs.
- Wanda Organic, through GES connections, has begun having adoption discussion with some of the largest out-grower schemes in Kenya such as British American Tobacco, FRIGOKEN and FINLAYS.

XIII. SUBSEQUENT QUARTER'S WORK PLAN

With only one year left on the KIE contract, KIE doesn't envision any further solicitation waves under the current contract.

In the coming quarter, KIE will;

Continue working with the current Stage 1 innovations, these are; KENDAT, Kenya Biologics and Caytree to prove their concepts, achieve award milestones, and provide on-going coaching and mentoring from KIE portfolio managers. These innovations were scheduled to end in the current quarter, but the innovations requested no cost extensions to enable them to fully proof their innovations based on the rain cycles and new partnerships.

Secondly, KIE will, with support from subcontractor Dalberg, manage the rigorous assessment process for closed out innovations, namely; UON1 –Optical sorting Machine, UON 2- Coolbot, Kenya Biologics, iProcure, and Maseno University.

KIE will award and manage Pilot Roll Out innovation implementation for ALIN, Wanda, Takaful and fully execute grants for Indicus and Value Farms. KIE has already begun working on activity and M&E plans with the innovation champions and will work closely to push for adoption within the identified FtF counties.

KIE will continue to explore private and public sector partnerships in the next quarter. The key objective is to identify strategic leveraging opportunities and more importantly identify co-investing opportunities for debt and equity to assist innovators in accessing the required amount of funding that will pave the way for them to achieve sustainable growth.

XIV. FINANCIAL INFORMATION

Fiscal Year Billing Summary - Previous, Current and Project Billing

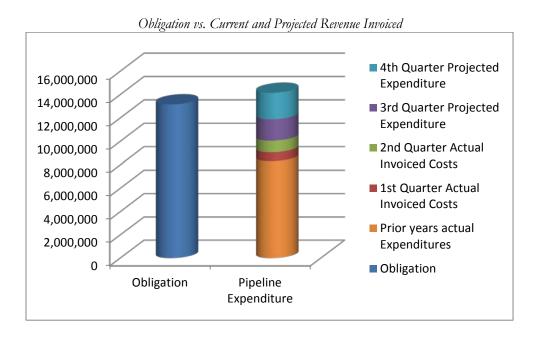
Current Obligation \$ \$13,165,4 Cumulative Billing \$ \$10,067,3		
	Previously Billed	Projected Billing
Contract Line Item Numbers (CLINs)	To 31March 2016	FY2016 – Q3
CLIN 001: Core Services	7,130,001	638,091
CLIN 002: Incentive Fee	75,000	75,000
CLIN 003: Short-term Technical Assistance	1,741,364	316,250
CLIN 004: Grants under Contract	1,120,951	791,011

Total	10,067,316	1,820,352

Cash Flow Report and Financial Projections (Pipeline Burn-Rate)

The cash flow chart below is derived from the budget details table, also provided in this section of the report. The chart and budget table provide visual representation of the "burn rate" of the project - both actual and projected. The main categories include:

- **Obligation** the funds authorized to date for expenditure on the project; this is not the Total Estimated Ceiling, but the amount already obligated up to the time of writing of this report;
- Actual revenue billed through the current reporting period, and
- Pipeline projection anticipated revenue to be invoiced, by quarter, for the coming three quarters.



Budget Details

Total Estimated Cost: \$17,724,792 Cumulative Obligation: \$13,165,483 Cumulative Revenue Invoiced (by end of 31st March 2016): \$10,067,316

Obligation	Ist Quarter Actual Invoiced Costs	2nd Quarter Actual Invoiced Costs	3rd Quarter Projected Expenditure	4th Quarter Projected Expenditure	Prior Year Actual Invoiced Costs
13,165,483	760,860	989,949	1,820,352	2,271,570	8,316,509
CLIN 001	433,797	546,511	638,091	638,091	6,149,693
CLIN 002	75,000	-	75,000		-
CLIN 003	151,966	238,531	316,250	431,010	1,350,868
CLIN 004	100,097	204,907	791,011	1,202,469	815,948

Budget Notes	s					
(assumptions,	(assumptions, major changes, estimations, or issues intended to provide a better understanding of the					
numbers)						
CLIN 001	These are core services costs that support the overall project. It Includes key staff plus other local personnel, travel, office, equipment, vehicles, training, sub-contractor budgets and overheads. The invoiced amounts have been consistent throughout the program.					
CLIN 002	FTF KIE billed USAID for incentive fees during the first quarter of FY2016 and expect to bill more incentive fees during the 3 rd quarter.					
CLIN 003	USAID has approved up to \$1,700,000 in committed STTA costs under the base period. \$569,069 remains uncommitted from CLIN 103/203 under Option Year 1 and 2. As per the contract, Land O'Lakes will bill costs associated with STTA Orders upon completion of the LOE. Land O'Lakes anticipates the completion of several STTA Orders in the next quarter which will appear in subsequent invoices to USAID. Land O'Lakes will continue submission of STTA orders to USAID for several additional wave #4 and stage progressions awardees.					
CLIN 004	By the end of this quarter, Nineteen grants under contract (GUCs) have been made amounting to \$2,317,974. These are fixed obligation grants with associated payment disbursements are expected to significantly increase over the coming periods as the awardees accomplish various milestones in accordance with their grant agreements.					

New Grants Under Contract (GUCs) Details

Total amount in the approved budget for sub-awards: \$4,559,356

Total value of committed costs to grants under contract to date: \$2,317,974

New grants under contract made during this quarter:

• Wanda Organic) - \$342,625

- Arid Land Information Network (ALIN) \$343,180
- Takaful Insurance of Africa (TIA) \$439,604

Anticipated grants under contract to be awarded in the forthcoming quarter:

- Indicus EA Ltd \$379,431
- Value Farms Ltd \$445,348
- TBD Stage 2 Grants (from stage progression) \$1,416,603

XV. ACTIVITY ADMINISTRATION

Contract Modifications and Amendments

During the Period, USAID approved KIE contract modification #6 which broadened the program's scope to include management of Stage 2 (pilot roll-out) innovations. The modification also incrementally funded the contract by an additional US \$4,559,309 hence increasing the total contract amount from US \$13,165,484 to US \$17,724,792. The various CLINS were increased as follows:

- CLIN 1 was increased by \$930,954 from \$9,085,484 to \$10,016,438
- CLIN 2 remained unchanged amounting to \$418,000
- CLIN 3 was increased by \$268,999 from \$2,462,000 to \$2,730,999
- CLIN 4 was increased by \$3,359,356 from \$1,200,000 to \$4,559,356.

Personnel

During the period, KIE advertised, shortlisted and interviewed for the positions of two additional Portfolio Managers. The selected candidates are expected to join in the next quarter. The new Portfolio Managers will be responsible for supporting innovations implementation towards meeting set goals and contributing to the success of the awardees. The two new Portfolio Managers will work as the relationship managers between KIE and the awardees and verify milestone achievements for the fixed obligation grants (FOGs). The additional staff will bring to three the total number of Portfolio Managers in the program. Due to the cost extension modification and significant increase in the scope of work related to the management of Stage 2 and Stage 3 awards, KIE has also increased operational support to the program. Dimitri Obolensky, based in Land O'Lakes HQ in Minnesota, now has an expanded role as Deputy Chief of Party (Operations) and is dedicated to KIE.

XVII. GPS INFORMATION

Attachment A: KIE FY2016 Q2 GPS Information

Please note the Excel worksheet for the GPS coordinates is an extremely large spreadsheet and cannot fit in this report. Land O'Lakes is therefore submitting it separately as an email attachment together with this report.

XVIII. SUCCESS STORY

Success Stories/Lessons Learned Template

- * Program Element: Livelihoods, Food Security
- * **Key Issues:** tomato farming, pest management, biological control of pests, *Tuta absoluta*, innovation, technology, bio-technology

*Headline (Maximum 300 characters):

Victor's Story: How a Timely Innovation Saved my Young Tomato Farm from Deadly Pest

*Body Copy (maximum 5,000 characters):

In 2014, the most devastating pest on tomatoes was discovered in Kenya. Just like its name suggests, *Tuta absoluta* completely obliterates the crop causing untold losses to farmers and acute produce shortages in the market.

Tomato is one of the most widely grown and consumed vegetables in Kenya. At least 21% percent of the total value of all vegetables grown in Kenya is derived from tomatoes grown by an estimated 250,000 farmers, majority of who are smallholders. This destruction has far-reaching effects on consumers as well who are forced to pay high prices for the vegetable due to market shortages, or do without tomatoes altogether, thus compromising their nutrition.

Victor Kipkorir is a tomato farmer in Kenya's green and picturesque Kericho County. Despite the very real threat presented by *Tuta absoluta*, Victor's farming venture is bearing impressive



Victor Kipkorir poses next to a smallholder water trap in his greenhouse in Kericho County. The water trap consists of a pheromone-based lure (the green plastic device) suspended over a basin of soapy water, which traps the moths. Numerous moths are already trapped here. Photo: Innovation Engine/Sylvia Maina

fruit. At just 35 years old, Victor is a leading tomato farmer in Seretut Ward, Belgut Constituency, where his expertise is fast earning him a reputation as an opinion leader in the area. Watching him work fervently in his greenhouses, one would hardly guess that Victor has only been a farmer for

less than two years. Yet, thanks to his careful use of Kenya Biologics Ltd.'s Tutrack ® innovation to combat *Tuta absoluta*, Victor has all but wiped out the pest from his crop.

Tutrack® is a pheromone-based mass-trapping system for *Tuta absoluta* consisting of a lure and a trap. From early 2015, with seed funding and technical assistance from the USAID-funded Feed the Future Kenya Innovation Engine program, Kenya Biologics Ltd. developed and successfully tested the innovation in Kenya's Bungoma, Migori and Kericho Counties. Tutrack® is the first *Tuta absoluta* control product to be registered in Kenya.

An electronics engineer by training, Victor is a self-taught farmer and manages his three-acre farm with Nicolette, his wife. The two met in the United Arab Emirates (U.A.E) where he had worked in the airline industry for seven years. When they discovered a mutual love for farming, Victor and Nicolette returned to Kenya to set up an enterprise. After spending months clearing bush and rehabilitating the family farm house, Victor set up a greenhouse and began growing tomatoes.

Fully expecting to reap the rewards of a rather hefty investment, Victor got a rude shock when he lost more than half of his first produce in 2015.

"I did not even break even. Low water pressure, poor ventilation and, finally, invasion by *Tuta absoluta* destroyed my crop," Victor said.

"I also made losses due to poor agronomical support, never mind that this advice was very pricey," he added.

Not one to give up easily, Victor took to the internet to find a solution. Here, he came across Kenya Biologics' Tutrack® solution and made contact to purchase the trap. Still smarting from the loss of his crop, and determined to create awareness of a possible solution in the area, Victor and his wife made door-to-door visits to farmers as far as 10 kilometres away to invite them for a meeting with Kenya Biologics. Even though the turnout was low, the 10 or so farmers who attended the meeting learned about the pest's origin and life stages, and how to trap it using the innovation.

"This pest is very difficult to manage. The caterpillar hides inside leaves and develops resistance very fast in hot climates. So, chemical sprays don't work since the pest is buried under the surface of the leaf," Victor said.

The Tutrack® has a lure which attracts moths to the trap; they then get trapped on a sticky surface and die. The trap is available in a delta version, which costs about Sh.900 (approximately \$9) and uses sticky paper to trap the moth, and in a water-based version, which is improvised for affordability. This costs about Sh. 300 and uses soapy water in a container to trap the pest.

By the time he was planting his second crop in October 2015, Victor was armed with several Tutrack® traps for each of his greenhouses.

Victor's current crop is a far cry from his first attempt. Since January 2016, Victor has been harvesting three to four crates per week, each weighing 30kg, from each of his two 240 square meter greenhouses. Harvesting was still in high gear in April with healthy, attractive produce available for sale at the farm gate. Each crate sells for about KSh 2,000 (approximately \$22). Customers are intrigued because tomatoes from Victor's farm last up to two weeks in the open

before getting spoiled, thanks to the meticulous care provided in the greenhouses.

"This innovation really works," Victors says confidently.

Every week, Victor receives visitors on his farm who want to learn about effective tomato greenhouse farming. Many of these are referred by government agencies. Victor credits much of his knowledge to avid internet research, technical support from Kenya Biologics, as well as a recent training on tomato, as well as poultry and dairy farming, from the Ministry of Agriculture through its Agriculture Sector



A delta version of Tutrack in a greenhouse in Kericho County. Several moths are already trapped on the sticky paper in the gadget after being attracted to the trap by the pheromones in the lure. Photo: Innovation Engine/Bernard Mumo

Development Support Program. Victor works closely with the county government and other farmers, carrying out training workshops and seminars, and contributing knowledge to online forums for farmers here.

"I am becoming more of an expert every day," Victor adds.

Victor also keeps improved indigenous chicken and grows other high-value produce such as broccoli, mushrooms and lettuce.

"My dream is to have a fully-automated greenhouse on ten-acres of land," Victors says, as he proudly displays a photo from the internet.

*Pullout Quote (Optional, 1,000 characters): Please provide a quote that represents and summarizes the story.

Victor Kipkorir is a tomato farmer in Kenya's green and picturesque Kericho County. After suffering losses in his first planting season and despite the very real threat presented by the formidable *Tuta absoluta* tomato pest, Victor's farming venture is bearing impressive fruit. This is thanks to his diligent use of the Tutrack® trap to control *Tuta absoluta*, and his meticulous farming methods.

Tutrack® is a cutting edge, pheromone-based mass-trapping system consisting of a lure and a trap. From early 2015, with seed funding and technical assistance from the USAID-funded Feed the Future Kenya Innovation Engine program, Kenya Biologics Ltd. developed and successfully tested the innovation in Kenya's Bungoma, Migori and Kericho Counties. Tutrack® is the first Tuta absoluta control product to be registered in Kenya.

At just 35 years old, and barely two years into his farming career, Victor is now a leading tomato farmer in Seretut Ward, Belgut Constituency. His expertise is fast earning him a reputation as an opinion leader in the area. An electronics engineer by training, Victor is a self-taught farmer and

manages his three-acre farm with Nicolette, his wife. He looks forward to growing his enterprise substantially in the coming years.

*Background Information (3,000 characters):

In 2014, the most devastating pest on tomatoes was discovered in Kenya. *Tuta absoluta* completely obliterates the tomato crop causing untold losses to farmers and acute produce shortages in the market.

From April 2015 - March 2016, Kenya Biologics Ltd. - one of 20 enterprises awarded seed funding and technical assistance from USAID via Feed the Future Kenya Innovation Engine - worked with the program to test the efficacy of its unique Tutrack® innovation in managing *Tuta absoluta*.

Feed the Future Kenya Innovation Engine is a five-year program that identifies, fosters and brings to scale innovative market-driven solutions to persistent food insecurity, under-nutrition and poverty. The program also strives to partner people who design new concepts, products and services with investors who can maximize their commercial potential. A presidential initiative, Feed the Future is working to transform lives toward a world where people no longer face the agony and injustice of extreme poverty, undernutrition and hunger. To achieve this, at the proof-of-concept stage. Feed the Future agencies work hand-in-hand with partner countries to develop their agriculture sectors and break the vicious cycle of poverty and hunger.

Even at this proof-of concept (testing) stage, the Tutrack® has proven effective at managing this destructive pest. By working with farmers in Migori, Kericho and Bungoma Counties to wipe out *Tuta absoluta* at the moth stage, Kenya Biologics is helping to significantly improve farmers' livelihoods and contributing to nutrition and food security.

*Contact Information (300 characters): Please list the name of the person submitting along with their contact information (email and phone number).

Ms. Titianne Donde,

Chief of Party, Feed the Future Kenya Innovation Engine

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Email: titianne.donde@idd.landolakes.com

Website: www.kfie.net

Success Stories/Lessons Learned Template

- * Program Element: Livelihoods, Food Security
- * **Key Issues:** mango farming, post-harvest storage, post-harvest handling, CoolBot, innovation, technology

*Headline (Maximum 300 characters):

A Cool Way to Raise Mango Farmers' Earnings

*Body Copy (maximum 5,000 characters):

For as long as they can remember, mango farmers in Makueni County have been a frustrated lot. After toiling for months tending to their orchards, they are often forced to sell their produce at very low prices. This is because, during the mango season, oversupply in the market tends to push prices down.

Like other horticultural produce, mangoes are highly perishable and smallholder farmers typically lack the capital required to invest in refrigeration equipment and cold storage rooms. They therefore face the dilemma of either selling the fruit to unscrupulous middlemen at throwaway prices, or letting it rot on their farms in a futile wait for better prices. This not only results in waste, but also translates to lost income, labor, inputs, and natural resources for smallholder farmers, who form the majority of mango farmers in Kenya.

For the farmers of Kawala Horticulture Small Scale Farmers' Self-Help group in Makueni County, this bleak scenario is changing. As the mango season came to a close in early 2016, members of the group were optimistic that the CoolBot, a new cold storage innovation recently launched in the area, presents a viable solution to these storage and market challenges.

The CoolBot is a controller that enables a standard air conditioner unit to cool rooms down to 0°C - 15°C, without ice accumulating on the evaporator coils. Developed in the U.S.,



Teresia Benjamin shows off an off-peak mango on her farm during an innovation awareness-creation visit in May 2014. Due to lack of proper storage facilities, farmers here miss out on lucrative marketing opportunities, even when this commodity is otherwise scarce in the market and would therefore fetch a high price.

the CoolBot enables an air conditioner to maintain a steady, low temperature of 10°C, which is ideal for maintaining the freshness of mangoes in readiness for market. With seed funding and technical assistance from the United States Agency for International Development (USAID) through the Feed the Future Kenya Innovation Engine program, the University of Nairobi (UoN) has adapted and tested this technology for local conditions. The aim is to provide affordable post-harvest storage for horticulture farmers, starting with this semi-arid area of Kenya.

"In 2014, staff from the University visited us to talk about the CoolBot idea. At the time, the possibility of having an affordable cold storage option for our fruits seemed too good to be true," said Teresia Benjamin, the Chairperson of the farmers' group.

Step by step, the idea came to fruition in subsequent months as UoN Head of Horticulture Unit

Dr. Jane Ambuko led the innovation implementation team in identifying a suitable site to construct a small, insulated structure from local materials to serve as a cold room. The UoN project team also trained farmers on good harvest and postharvest handling practices and other low-cost cold storage technologies. Farmers' hopes continued to rise as construction of the cold room was completed and an air conditioner and the CoolBot gadget installed, ready for preliminary trials. They were not disappointed; the trials confirmed that the CoolBot could effectively turn an AC-fitted insulated room



Crates of mangoes stacked in the CoolBot cold room in Makueni County awaiting dispatch for sale in identified markets earlier this year.

into a walk-in cold room. Despite the frequent power outages – typical in this rural area, the fruits stored under the CoolBot cold room had a significantly longer shelf life than those stored at ambient room conditions.

The big moment came at the height of the mango season in January 2016 when farmers bulked about 100 crates of the fruit to test its efficacy for storage in the cold room in readiness for sale. A couple of weeks later, the mangoes were sold in the capital city Nairobi, almost 200km away (124 miles), and farmers paid Sh23 per mango (approximately \$2) - roughly five times the prevailing market price at that time of the year.

"Since we started growing mangoes, we have never sold mangoes for as high as Sh23. Especially at this time of the year, the best we can get is Sh5 to Sh7 per piece," said Teresia.

Members of the group were particularly encouraged when the UoN project team organized for the installation of a solar power backup to ensure consistent operation of the cold room.

So far, at least 120 farmers have tested the innovation. Now, with the evident results of having access to affordable cold storage facilities, demand is high to pilot the innovation by way of a bigger cold room, or several in the area, to enable farmers to maximize on the benefits offered by storing many more crates of mangoes at a small fee, especially during the mango season.

"With the kind of produce we grow, we should be very rich by now! The CoolBot is helping to make a way out of poverty for us," said Wilfred Mailu, the group's Secretary.

Farmers here are also keen to use the facilities to store other produce such as oranges, paw paws and tomatoes, all of which members of the group grow.

By the close of the innovation testing period at the end of March 2016, Teresia and other members of the Kawala Horticulture Small Scale Farmers' Self-Help group could finally see light at the end of the tunnel; a sweet and long-awaited reward for their diligent farming efforts.

*Pullout Quote (Optional, 1,000 characters): Please provide a quote that represents and summarizes the story.

Like other horticultural produce, mangoes are highly perishable and smallholder farmers in Kenya typically lack the capital required to invest in refrigeration equipment and cold storage rooms. They therefore face the dilemma of either selling the fruit to unscrupulous middlemen at throwaway prices, or letting it rot on their farms in a futile wait for better prices. This leads to waste and also translates to lost income, labor, inputs, and natural resources for smallholder farmers, who form the majority of mango farmers in Kenya.

Farmers of Kawala Horticulture Small Scale Farmers' Self-Help group in Makueni County are hopeful of a change in fortunes after the introduction of the *CoolBot* - a new and affordable post-harvest technology by the University of Nairobi (UoN). The *CoolBot* is a controller that enables a standard air conditioner unit to cool rooms down to 0°C to 15°C, without ice accumulating on the evaporator coils. It enables an air conditioner to maintain a steady, low temperature of 10°C, which is ideal for keeping mangoes fresh in readiness for sale.

In 2015, UoN constructed the first-ever *CoolBot* cold room in Kenya at a shopping centre in Kawala area. As the mango season came to a close in early 2016, members of the group tested the facility for mango storage and were very impressed by the extended shelf-life achieved. The farmers later earned Sh23 per mango (approximately \$2) - roughly five times the prevailing market price at that time of the year, from selling the mangoes in Nairobi, the capital city. They look forward to the replication of the innovation across the county for greater benefits in the near future.

*Background Information (3,000 characters):

Like other horticultural produce, mangoes are highly perishable and smallholder farmers typically lack the capital required to invest in refrigeration equipment and cold storage rooms. They therefore face the dilemma of either selling the fruit to unscrupulous middlemen at throwaway prices, or letting it rot on their farms in a futile wait for better prices. This not only results in waste, but also translates to lost income, labor, inputs, and natural resources for smallholder farmers, who

form the majority of mango farmers in Kenya.

From January 2014 - March 2016, the University of Nairobi - one of 20 enterprises awarded seed funding and technical assistance from USAID via Feed the Future Kenya Innovation Engine - worked with the program to test the efficacy of its unique *CoolBot* innovation for affordable post-harvest storage.

Feed the Future Kenya Innovation Engine is a five-year program that identifies, fosters and brings to scale innovative market-driven solutions to persistent food insecurity, under-nutrition and poverty. The program also strives to partner people who design new concepts, products and services with investors who can maximize their commercial potential. A presidential initiative, Feed the Future is working to transform lives toward a world where people no longer face the agony and injustice of extreme poverty, undernutrition and hunger. To achieve this, at the proof-of-concept stage. Feed the Future agencies work hand-in-hand with partner countries to develop their agriculture sectors and break the vicious cycle of poverty and hunger.

By testing the potential for bringing cooling power to rural communities using the *CoolBot* technology, UoN has demonstrated the potential for reducing postharvest losses and increasing incomes for smallholder farmers through increased access to affordable cold storage. Farmers here have benefitted from education on good postharvest practices as part of the innovator's efforts towards improving access to high quality and quantity of horticultural products for consumers in Kenya.

*Contact Information (300 characters): Please list the name of the person submitting along with their contact information (email and phone number).

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ANNEX I: MEDIA COVERAGE JANUARY 2016 – MARCH 2016

Date	Media	Innovator	Title of Article
January 4	The Standard Newspaper	Indicus E.A Limited	Local farm, Indicus East Africa Limited, sets up lab to offer cheaper and better embryo
January 27	Quartz	Mfarm	I built a mobile app to help Africa's farmers but our countries' infrastructure must work too
February 10	The Horticultural Innovation Lab	University of Nairobi I	How one farmer's invention is reducing food waste around the world
February 12	Daily Nation	Indicus E.A Limited	We get two calves per cow every year
February 22	Unreasonable.is website	Mfarm	Why timing matters for mentorship
March 4	CIO East Africa	Mfarm	M-Farm's founder nominated for New African Woman Awards 2016
March 16	Forbes	Mfarm	Can Silicon Valley's Big Bet On Agriculture Help Small-Scale Farmers In Developing Countries?
March 18	NTV Kenya	University of Nairobi	Food Friday: Cutting down on post- harvest losses
March 27	ONE	Mfarm	How one woman is helping some farmers in Kenya create a path out of poverty
March 2016	ICT Authority	ALIN/Sokopepe	Microsoft Innovations Awards
March 2016	The Smart Farmer Magazine	Indicus E.A Limited	How to get your pedigree cow in nine months

ANNEX II: SCHEDULE OF UPCOMING EVENTS

DATE	LOCATION	ACTIVITY
April 4 th	Nairobi, Kenya	Wanda Organic Press Conference and Local Manufacturing Agreement Signing Event
April 27 th	Tharaka Nithi County, Kenya	Tharaka Nithi Investment International Conference and Consumer Fair
May 19 th	Nairobi, Kenya	ANDE Networking Happy Hour
June 15 th -17 th	Nairobi, Kenya	International Agriculture Exhibition, Nairobi, Kenya
June 29 th	Machakos County, Kenya	Machakos ASK Show

ANNEX III: LIST OF DELIVERABLE PRODUCTS

- 1. 3 monthly reports (January-March 2016) submitted to USAID
- 2. FY2015-FY2016 Revised Work Plan submitted to USAID
- 3. KIE FY2016 Q1 Quarterly Report submitted to USAID

ANNEX IV: PERFORMANCE DATA TABLES

Number of technologies or manage	ment pract	ices in one of the followi	ng phases of develo	pment:			
FTF 4.5.2-39							
Unit	Disaggregat	ed by: Technology Phase, C					
	Geographic	Location	Activity Title			Date	Subtotal
				arch as a result of USG as	sistance		8
			(stage I proof of co				O
Hectares	FTF ZOI			I testing as a result of USC	Jan-March	6	
rectares	111 201		(stage 2 pilot roll o			2016	
				llable for transfer as a resu			0
			assistance (stage 3	transition to scale innovati	ions)		
	Totals						14
Results:	Т	T	1				
	Baseline	Results in Prior Periods	This Reporting Per		2016	Period 30 June	End of Activity 30 May 2017
		Achieved	Target (Q2)	Achieved (FY2016 Q2)	Target (FY2016 Q3)	Target
Phase I: under research as a result of	0	12	4	8		0	21
USG assistance		12					21
Bomet	0	I	0	0		0	l
Bungoma	0	I	ı	l		0	l
Kericho	0	l l	I	l		0	l
Kisumu	0	1	I	4		0	4
Kitui	0	I	0	0		0	l
Machakos	0	I	0	0		0	l
Makueni	0	2	0	0		0	2
Meru	0	3	l	l		0	3
Migori	0	1	l l			0	l
Nandi	0	2	0	0		0	2
Siaya	0	!	!	4		0	l ·
Homabay	0		1	l		0	l
Disaggregates Not Available	0	0	0	0		0	0
Phase II: under field testing as a result of USG assistance	0	I I	7	6		8	П
Homabay	0	0	!	l		1	I
Siaya	0	0	!	l		1	I
Uasin Gishu	0	0	I	I		2	2
Elgeyo	0	0				2	2
Garisa	0	0	I	l l		1	l

Tharaka	0	0	ļ	l	2	2
Wajir	0	0		I	I	I
Isiolo	0	0	I	I	I	I
Trans Nzoia	0	0		I	2	2
Marakwet	0	0		I	I	1
Marsabit	0	0	I	I	I	I
Bomet	0	I	2	I	2	2
Meru	0	I	3	I	I	3
Kericho	0	0	0	0	I	I
Migori	0	0	0	0	I	I
Bungoma	0	0	0	0	I	I
Machakos	0	0	0	0	I	ı
Makueni	0	0	0	0	I	I
Phase III: made available for transfer as a result of USG assistance	0	0	0	0	0	4

NB: One innovation may cover more than one County hence County disaggregates may exceed total number of innovation aggregated under the various phases of development.

Number of food security enterprises (community based organizations (CBO			ns, water users ass	ociations, women's gr	oups, trade and business associ	ations and
FTF 4.5.2-11	s) receivii	ig 030 assistance				
Unit	Disaggreg	ated by: Enterprise, Coun	ty			
	Geograph	ic Location	Activity Title		Date	Subtotal
			Private enterprise	es (for profit)		3
			Producers organi	zations		27
Number	FTF ZOI		Water users asso	ciations	Jan - March 2016	0
TNUTIDEI	1117 201		Women's groups		Jan - March 2016	2
			Trade and busine	ss associations		0
			Community-base	d organizations (CBOs)		I
	Totals		•		•	33
	Baseline	Results in Prior Periods	This Reporting Per	iod 30-March-16	Reporting Period 30 June 2016	End of Activity 30 May 2017
		Achieved	Target (Q2)	Achieved (FY2016 Q2)	Target (FY2016 Q3)	
Total	0	899	15	33	20	100
Private enterprises (for profit)	0	8	8	3	10	20
Disaggregates Not Available	0	0				0
Producers organizations	0	566	6	27	10	80
Water users associations	0	17	0	0	0	0
Women's groups	0	103	0	2	0	0
Trade and business associations	0	1	0	0	0	0
Community-based organizations (CBOs)	0	104	0	I	0	0
Disaggregates Not Available	0	0	0	0	0	0

Number of public-private partnerships	formed as a	result of FTF as	ssistance			
FTF 4.5.2-12						
Unit	Disaggregated	by: County, Agri	iculture sub-sector			
	Geographic L	ocation	Activity Title		Date	Subtotal
			Agricultural production		Oct- Dec	9
Number				2015	I	
	Totals	10				
Results:	•					-
	Baseline	Results in Prior Periods	This Reporting Period 30-Ma	Reporting Period 30 June 2016	End of Activity 30 May 2017	
		Achieved	Target (Q2)	Achieved (FY2016 Q2)	Target (FY2016 Q3)	
Total	0	13	5	10	5	40
Agriculture Production	0	2	5	9	3	30
Agriculture post-harvest transformation	0	0	0	0	0	0
Nutrition	0	1	0	0	0	0
Multi-focus	0	10	0	0	0	0
Disaggregate Not Available	0	0	0	0	0	0
Others (Capacity building, Monitoring and Evaluation, Dairy)	0	0	0	I	2	10

Number of rural hou	seholds	benef	fiting c	lirectly	from	USG	interv	ention	S												
FTF 4.5.2-13																					
Unit	Disaggregated by: Sex, County																				
	Geog	Activity Title					W				М		Subtotal								
Nimahan	CTC -	701			New household benefitting					32	247 17				15			20	292		
Number FTF ZOI Continuing household benefitting 1368 7182											85	550									
Totals 28842																					
Results:	•																	•			
			D	la	This	Repor	ting Pe	riod 30-	March-2	2016									orting	ng End of	
County	Baseline Results in Prior Periods			ior Target -			Continuing			ved-Nev 16 Q1)	v	Achieved-Continuing				red-Cum	ulative	Perio 30- Maro 2015	:h-	Acti 30 N 2017	Yay
	W	М	W	М	W	М	W	М	W	М	Total	W	М	Total	W	М	Total	W	М	W	М
Total	0	0	36	,777	15	654	78	7849			20292			8550			57069	28	842	90),130
Disaggregates Not Available	0	0																			

FTF 4.5.2-13						
Unit	Disaggreg	ated by: Gendered Househ	old Type, Coun	ty		
	Geograph	nic Location	Activity Title		Date	Subtotal
			Male and Fema	ale (M&F)		14930
			Male No Fema	ale (MNF)	1	2913
Number	FTF ZOI		Female No Ma	ale (FNM)	Jan - March 2016	2446
			Child No Adu	lt (CNA)		3
	Totals		1		1	28,842
Results:						
	Baseline	Results in Prior Periods	This Reporting	g Period 30-March-	Reporting Period 30 June 2016	End of Activity 30 May 2017
		Achieved	Target (Q2)	Achieved (FY2016 Q2)	Target (FY2016 Q3)	
Total	0	36,777.00	22,533	28842	22,533	90,130
Male and Female (M&F)	0	27,059.00	3626	14930	3626	14,505
Male No Female (MNF)	0	5,279.00	672	2913	672	2,686
Female No Male (FNM)	0	4,434.00	609	2446	609	2,434
Child No Adult (CNA)	0	5.00	ı	3	I	5
Disaggregates Not Available		0	17625	0	17625	0

Number of jobs attributed to FTF implementation (RiA)																																
FTF 4.5 (2)																																
Unit	Di	isagg	rega	ated	by:	Sex,	Locat	ion, (Cour	nty																						
	G	eogr	aph	ic Lo	ocati	on			Activity Title							Date				М	F	Subto		tal								
Full Time Equivalent	FT	F Z	one	s of	Influ	ence			Urban							_	ct -D	ec).7								
- a = qa a.e				. · ·					Ru	ral													20	15							37 I	
Totals																													13	38 I		
Results:																																
	Baseline Results in Prior				ior	This Reporting Period 30-March-2016										Reporting Period 30-June-2016			End of Activity 30 May 2017		7											
Results	Da	Sem	ie	Periods				Target (Annual)			rget (Annual) Achieved-New (Annual)			New		Achieved- Continuing (FY2016 Q1)								Та	ırget			Target				
	Uı	rban	Rı	ıral	Ur	ban	Rur	al	Ur	ban	Ru	ral	Urb	an	Rur	al	Ur	ban	Ru	ral	Urb	an	Rur	al	Ur	ban	Rur	al	Urban R		Rur	al
	W	′ M	W	/ M	W	М	W	М	W	М	W	М	W	М	W	М	W	М	W	М	W	М	W	М	W	M	W	М	W	М	М	F
Total	0	0	0	0	77				10		40		9.7		137		9.7	'			34.7	7	14	58	10		50					
Male	0	0	0	0	25		52																									
Female	0	0 0 0 0 23 32																														

ANNEX V: KIE INNOVATOR LINKAGES TO INVESTORS AND OTHER USG-FUNDED PROGRAMS

	INNOVATOR	INVESTOR/PARTNER	NATURE OF LINKAGE	STATUS	REMARKS
1.	Amtech Technologiea	IDEV	KIE introduced Amtech to IDEV International to explore opportunities for getting debt and equity funding from external investors	IDEV is to develop a proposal for a growth strategy, which Amtech has expressed willingness to pay for. The two entities are yet to agree on terms of engagement and modalities for the development of the growth strategy	IDEV International is an American business strategy and advisory firm that works with global corporations, investors and development organizations to scale high-impact businesses in emerging markets
		MERU COOPERATIVE FARMERS UNION (MCFU)	MOU that will allow Amtech to deploy its innovation at Meru Union Farmers' Cooperative society and access over 40,000 farmers	Negotiations on-going	MCFU is a farmer cooperative society that collects and processes milk from 27 other farmer cooperatives within Meru.
2.	iProcure	Heifer International, Kenya Fresh Ltd, and USDA-funded Kenya Semi-Arid Livestock Enhancement Support project (K-SALES)	Informal agreements to work with respective organizations'/project farmers	iProcure worked with farmers from the respective organizations/project until the innovator's Stage 1 grant implementation period came to an end in November 2015.	Iprocure signed an MOU with K-SALES during the quarter. It can now leverage on KSALES Agro dealer network in implementing its project.
		KAVES	To tap into the network of agro dealers	Exploring strategic partnerships for sustainability	Potential partnership
3.	Kenya Medial Research Institute (KEMRI)	Villgro	Innovation Champion Prof. Elijah Songok participated in a training forum on business incubation hosted by <u>Villgro</u> . He subsequently made a pitch for incubation before investors under the auspices of Villgro.	Villgro has since expressed interest for an equity stake in Nutraceuticals Kenya Ltd, a spinout from the innovation	Villgro is an impact investment company for global health innovations. There has been no new development on this aspect. KIE will monitor and report as appropriate.

4.	Maseno University	Syngenta Foundation	MoU between Maseno University, KIE and Syngenta Foundation to resource a project manager for the innovation	The innovation project manager, resourced by Syngenta foundation, commenced work in December 2015 under a one-year contract.	Maseno University's Stage 1 innovation implementation period came to a close in Q2 of FY2015- FY2016		
		AGRI SEED COMPANY LTD	The parties agreed to enter into a non-disclosure agreement and a memorandum of understanding (MoU) for Agri Seed Co. to commercialize Maseno seeds; EH14 and Maseno Sukari, developed by Maseno University under the USAID award. Drafts of the NDA and MoU have been circulated to members of the Alliance for review and subsequent signing.		Agri Seed Co. Ltd – is a Kenyan subsidiary of Seed Co Limited, a public listed company incorporated in Zimbabwe and a producer and marketer of certified crop seeds in Southern Africa.		
5.	Kenya Biologics	Amiran Kenya Ltd	Exclusive distribution deal for Amiran to be the sole distributor of the Tutrack traps across Kenya and the region. This partnership is vital and strategic for the innovation's reach.	Deal signed, partnership ongoing	Amiran Kenya Ltd is a leading agrochemical, inputs and extension expertise company		
6.	KENDAT	BIDCO and CGA	To tap into large number of farmers utilizing the mechanization hub	Exploring strategic partnerships for sustainability	Potential partnership		
7.	ALIN	Juhudi Kilimo	Partnership on utilization of smallholder phone data	exploring strategic partnerships for sustainability	Potential partnership		

ANNEX VI. GPS INFORMATION

Attachment A: KIE FY2016 Q2 GPS Information

Please note the Excel worksheet for the GPS coordinates is an extremely large spreadsheet and cannot fit in this report. Land O'Lakes is therefore submitting it separately as an email attachment together with this report.