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FOOD AND ENTERPRISE DEVELOPMENT (FED) PROGRAM FOR LIBERIA

MONTHLY REPORT: JULY 2015



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Photo Caption: *Cutting of the ribbon at the youth entrepreneur power tiller distribution ceremony by USAID Deputy Mission Director, USAID FED Chief of Party and the Chairman, Lower House Committee on Agriculture Hon. Fofi Biamba, in Suakoko, Bong County.*

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Acronyms

ACC	Agriculture Coordination Committee
AEDE	Agency for Economic Development and Empowerment
APDRA	Association Pisciculture et Développement Rural en Afrique
AVTP	Accelerated Vocational Training Program
AYP	Advancing Youth Project
BSTVSE	Bureau of Science, Technical, Vocational and Special Education
BWI	Booker Washington Institute
CARI	Center of Agriculture Research Institute
CAHW	Community Animal Health Worker
CBF	County Based Facilitator
CBL	Central Bank of Liberia
CILSS	Permanent Interstates Committee for Drought Control in the Sahel
CoE	Center of Excellence
CYNP	Community Youth Network Program
DAI	Development Alternatives Inc.
DCOP	Deputy Chief of Party
ECOWAS	Economic Community of West African States
ECREP	Evangelical Children Rehabilitation Program
EMMP	Environmental Mitigation and Monitoring Plan
ENA	Essential Nutrition Action
EO	Extension Officer
FtF	Feed the Future
FGD	Focus Group Discussion
FUN	Farmer Union Network
GAP	Good Agriculture Practices
GBCC	Grand Bassa Community College
G-CAP	Green Coast Agricultural Program
GoL	Government of Liberia
GPS	Global Positioning Systems
IBEX	Investing in Business Expansion Liberia
IFAD	International Foundation for Agriculture Development
IFDC	International Fertilizer Developmental Center
IITA	International Institute for Tropical Agriculture
IP	Implementing Partner
IPM	Integrated Pests Management

IQC	Indefinite Quantity Contract
ISFM	Integrated Soil Fertility Management
IREX	International Research and Exchanges Board
KRTTI	Kakata Rural Teachers Training Institute
LABEE IPG	Liberia Agriculture Business Enabling Environment Inter-Agency Policy Group
LAUNCH	Liberia Agriculture, Upgrading Nutrition & Child Health
LCCC	Lofa County Community College
LIFE	Livelihood Improvement for Farming Enterprises
LIPAS	Liberia Integrated Professional Agriculture Service
LISGIS	Liberia Institute of Statistics & Geo-Information Services (LISGIS)
LMEP	Liberia Monitoring and Evaluation Program
LNGO	Local Non-Governmental Organization
MFI	Micro Finance Institution
MIS	Market Information Systems
MoA	Ministry of Agriculture
MoCI	Ministry of Commerce and Industry
MoE	Ministry of Education
MoHSW	Ministry of Health and Social Welfare
MoP	Muriate of Potash
MoU	Memorandum of Understanding
MSME	Micro, Small and Medium Enterprise
NDA	National Diploma in Agriculture
NCCC	Nimba County Community College
NIC	National Investment Commission
NSL	National Standards Laboratory
PERSUAP	Pesticide Evaluation Report and Safer Use Action Plan
PIDS	Performance Indicator Database System
PMP	Performance Management Plan
PUA	Peri-Urban Agriculture
R&RF	Rights & Rice Foundation
RFTOP	Requests for Task Order Proposals
RRA	Rapid Rural Appraisal
SRI	System of Rice Intensification
TAMIS	Technical Administrative Management Information System
TSP	Triple Super-Phosphate
TVET	Technical, Vocational Education and Training
UDP	Urea Deep Placement

UL	University of Liberia
USADF	United States African Development Foundation
USAID	United States Agency for International Development
VET GOV	Veterinary Governance in Africa
WAAPP	West Africa Agriculture Productivity Program
WAFP	West Africa Fertilizer Project
WASP	West Africa Seed Project
WFP	World Food Programme

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Background

The USAID Food and Enterprise Development (FED) Program is a flagship Feed the Future (FtF) Initiative, USAID-funded development program in Liberia that was launched in September 2011. USAID FED uses an all-inclusive strategy incorporating MSME farmers, processors, suppliers, women, and youth while partnering with the Government of Liberia and local civil society to achieve food security.

The goal of USAID FED is to increase food availability, utilization, and accessibility by building an indigenous incentive structure that assists agricultural stakeholders in adopting commercial approaches.

This incentive structure is built upon:

- Improved technology for productivity and profitability
- Expanded and modernized input supply and extension systems
- Commercial production, marketing, and processing
- Enterprise services
- Workforce development

USAID FED works with the Ministry of Agriculture (MoA), civil society and the private sector in providing communities access to agricultural inputs, extension services, nutrition messages, processing services, market information, transportation, credit, agro-business education, training, and business development services.

In five years, USAID FED's thrust to expand market linkages is expected to lead to substantial increases in income and job opportunities. USAID FED aims to significantly boost the production, processing, marketing and nutritional utilization of rice, cassava and vegetables, and to enhance the productivity of goat farming in the counties covered by the program.

These initiatives are being carried out in Bong, Lofa, Nimba, Grand Bassa, Montserrado, and Margibi counties. USAID FED focuses on these counties because they are situated along regional development corridors that are crucial in promoting intra and inter-county commerce. These growth corridors are expected to improve food availability and access for all Liberians.

USAID FED's methodology is market-led and value chain-driven; it is committed to developing indigenous capacity building, with a specific focus on Liberia's women and youth.

USAID FED is implemented by five partners: Development Alternatives, Inc. (DAI), Winrock International, International Fertilizer Developmental Center (IFDC), Louisiana State University (LSU), and The Cadmus Group.

Executive Summary

On July 16, 2015 in Suakoko, Bong County, USAID FED and the Ministry of Agriculture (MoA) distributed 30 power tillers worth US\$189,000 to Liberian youth entrepreneurs under a cost share arrangement. Youth entrepreneurs in Lofa received 9 power tillers, while those in Nimba and Bong County each received 10 power tillers, and a youth entrepreneur in Grand Bassa received 1 power tiller. A power tiller is used for plowing the soil before planting. The use of power tillers reduces the cost of producing rice, and allows farmers to cultivate a bigger area during the main cropping season. The youth beneficiaries will provide the power tiller service for a fee to ensure sustainability. USAID FED will provide training on business management and also help these youth enterprises access loans for the expansion of their power tiller businesses.



Figure 1: Youth demonstrate power tiller use at the USAID FED distribution ceremony.

On July 15, USAID FED presented the benefits of Urea Deep Placement (UDP) versus urea broadcast and zero fertilization to the Agriculture Coordination Committee (ACC). The comparative cost-to-benefit analysis was based on yield data collected from USAID FED supported FY14 trial sites, and considered the cost of inputs, labor and tools required for land preparation, planting, and maintenance and harvesting. The result from the trials showed that the use of UDP in lowland rice is 347% more profitable than the broadcast method of fertilization, and 780% more profitable compared to zero fertilization.

From July 9-10, a workshop was held at the MoA to validate the implementing regulation for Liberia of the ECOWAS Seed Regulation that was gazetted in September 2014. These implementing guidelines were drafted by the USAID FED-supported Seed Policy Expert, Mr. Josiah Wobil. Key stakeholders such as USAID FED, USAID, MoA, CARI, the West Africa Seed Program (WASP), the West and Central African Council for Agricultural Research and Development (CORAF/WE CARD) and Africa Rice all participated in the workshop.

During the reporting period, Component 3 organized a workshop with Booker Washington Institute (BWI), Grand Bassa Community College (GBCC), Lofa County Community College (LCCC), and Nimba County Community College (NCCC) to develop the year two syllabi and lesson plans of the National Diploma in Agriculture (NDA). This workshop was held at the Nimba County Community College campus library from July 12-24. A total of 29 participants were drawn from the four CoE's, University of Liberia, Cuttington University, Ministry of Education (MoE), MoA as well as USAID FED. As a result of this workshop, 16 lesson plans and syllabi have been developed.

Component One: Increase Agricultural Productivity and Profitability

Task 1A: Increased Productivity and Profitability of the Rice Value Chain

Rice Sales from FY14:

During July, 165.4MT of FY14 rice crop was sold at a value of US\$108,160. In total, 3,506MT of FY14 rice crop has been sold at a value of US\$1,639,790 year to date (Table 1).

Table 1: FY14 Rice crop sales

County	Sales volume Q1 (MT)	Sales value Q1 (US\$)	Sales volume Q2 (MT)	Sales value Q2 (US\$)	Sales volume Q3 (MT)	Sales value Q3 (US\$)	Sales volume July (MT)	Sales value July (US\$)	Sales Volume YTD (MT)	Sales value YTD (US\$)
Lofa	122	\$47,938	1,703	\$681,652	192	\$75,355	89	\$82,320	2,106	\$887,265
Nimba	0	\$0	36	\$17,216	0	\$0	0	\$0	36	\$17,216
Bong	96	\$38,979	477	\$255,633	676	\$400,359	76	\$25,840	1,325	\$720,811
Grand Bassa	18	\$7,080	14	\$5,078	7	\$2,340	0	\$0	39	\$14,498
Total	236	\$93,997	2230	\$959,579	875	\$478,054	165.4	\$108,160	3,506	\$1,639,790

Improving productivity and profitability of upland rice

During July, a total of 442 hectares of upland rice was planted. In total, all of the 2,965 targeted hectares of upland have been planted year to date.

During July, 112 hectares of upland demonstration area were planted, which completes the targeted 297 hectares to be used as a demonstration area.

During July, USAID FED distributed 334 liters of herbicides for upland demonstration sites to the four counties. These herbicides will support farmers in minimizing weed pressure in the rice crops.

Activity 1.A.2 Expanding lowland rice production

During July, a total of 168 hectares were cleared, which completes the 3,546 targeted hectares for cultivation in FY15.

In July, 814 hectares were planted, bringing the FY15 total for new area planted to 1,347 hectares. This represents 40% of the total target of 3,546 hectares of new lowland areas to be cultivated in FY15.

During July, USAID FED distributed 301 liters of herbicides for lowland demonstration sites to the four counties. These herbicides will support farmers in minimizing weed pressure in the lowland rice crops.

During July, USAID FED distributed 92 liters of pesticides for use in the FY15 lowland demonstration sites to the four counties. These pesticides will support farmers in fighting against insects attack on the rice especially during the vegetative stage.

Activity 1.A.3 Enhancing mechanization for lowland rice production

During July, 30 youth entrepreneurs received the 30 power tillers from USAID FED. An official ceremony to hand over the power tiller equipment to the 30 youth entrepreneurs took place on July 16 in Suakoko, Bong County. The ceremony was officiated by Hon. Fofi Bimba, Chair of the Liberia House Committee on Agriculture and by USAID's Deputy Mission Director, Ms. Barbara Dickerson.



Figure 2: Paddy drum seeder distributed to the Counties.

Distribution of 20 paddy drum seeders for demonstration:

During July, USAID FED received and distributed 12 paddy drum seeders. A total of 20 paddy drum seeders will be provided to the FY14 and FY15 rice business hubs to demonstrate labor saving technology in lowland rice planting through direct seeding.

Activity 1.A.6 Promoting 2 rice crops per years

During July, Tallobenku Construction completed an additional four spillway sites in Bong County. In total, 17 spillways have been completed across the four counties. It is anticipated that the other 13 pending spillways will be completed before the end of FY15.

During the quarter three reporting period, six hectares out of 15 hectares double cropped in the 12 FY14 spillways sites were harvested (Table 2). It is anticipated that the remaining 9 hectares will be harvested by August.

Table 2: Hectares under double cropping that have been harvested.

County	Hectares under double cropping	Number of hectares harvested Q3	Volume of harvest (MT)	Number of hectares to be harvested
Bong	4	4	14	0
Lofa	6	2	5	4
Nimba	5	0	0	5
TOTAL	15	6	20	9

Activity 1.A.7 Enhancing post-harvest management practices

FY14 Rice business hubs

During July, two rice business hubs established in FY14 processed a total of 52MT of paddy rice valued at US\$41,320. In total, eight rice business hubs established in FY14 have processed 128MT of paddy rice and generated revenues of US\$95,580 through the sale of milled rice to community markets and the World Food Programme (Table 3).

Table 3: RBHs inventory and sales

County	RBH location	Sales volume in Q3(MT)	Sales Value in Q3 (US\$)	Sales Volume in July	Sales Value in July	Sales volume YTD (MT)	Sales value YTD (US\$)
Lofa	Serkonedu	46	\$33,000	13	\$9,000	59	\$42,000
	David Selma Town	7	\$5,000	0	\$0	7	\$5,000
	Foya town	6	\$4,260	39	\$32,320	45	\$36,580

	Sub Total	59	\$42,260	52	\$41,320	111	\$83,580
Nimba	Dumpa	5	\$3,600	0	\$0	5	\$3,600
	Payee	2	\$1,400	0	\$0	2	\$1,400
	Boweh	2	\$1,400	0	\$0	2	\$1,400
	Sub Total	9	\$6,400	0	\$0	9	\$6,400
Grand Bassa	Kpelle Town	0	\$0	0	\$0	0	\$0
	Sub Total	0	\$0	0	\$0	0	\$0
Bong	Garmue	5	\$3,500	0	\$0	5	\$3,500
	Bongmines	3	\$2,100	0	\$0	3	\$2,100
	Sub Total	8	\$5,600	0	\$0	8	\$5,600
Total		76	\$54,260	52	\$41,320	128	\$95,580

During July, USAID FED finalized the selection of the construction firms to construct the nine rice business hubs planned for FY15. These rice business hubs will be constructed in Bong, Lofa and Nimba counties. It is anticipated that the construction of these nine rice business hubs will commence in August.

Stimulating private sector investment in commercial rice production

During July, Fabrar Liberia Inc. supplied various Government Ministries and other agencies with 42MT of milled rice valued at US\$35,280. The rice was procured by the Government of Liberia (GoL) for distribution to its staff for the Independence Day celebrations.

Task 1B: Increased Productivity and Profitability of the Cassava Value Chain

FY14 cassava crop harvest and sales:

During July, a total of 3,774MT of cassava tubers were harvested from 209 hectares of FY14 USAID FED supported cassava farms. The reported total volume of FY14 cassava crops harvested comes to 15,606MT year to date.

During the reporting period, a total of 3,639MT of FY14 cassava tubers were sold for US\$171,718. In total, 13,591MT cassava tubers have been sold for US\$684,697 year to date.

Cassava procurement by processors

During July, eight microprocessors located in Nimba, Bong and Grand Bassa procured a total of 67.5MT of cassava tuber valued at US\$4,388 from both USAID FED and non-USAID FED supported farmers. Two small processors located in Monrovia (RASA Liberia and FALAMA Inc.) procured a total of 23MT of cassava tuber valued at US\$1,461 from USAID FED and non-USAID FED supported farmers. USAID FED is making arrangements with these processors to monitor procurement from non-FED farmers in order to determine the total number of farmers benefiting from the support to processors.

Enhancing farmers' access to improved cassava varieties

During July, seven USAID FED supported commercial nurseries in Nimba and Lofa counties sold a total of 2871 bundles of cassava cuttings valued at US\$14,355. The commercial nurseries have sold a cumulative total of 8,908 bundles valued at US\$44,540 year to date.

Activity I.B.3 Enhancing knowledge on improved varieties and technologies

During July, a total of 894 hectares of FY15 new areas were planted with cassava for the FY15 cropping season production (Table 4). By the end July, all the 3,564 hectares of targeted new areas for FY15 had been planted.

Table 4: Land preparation and planting for FY15

County	Target area for production (Ha)	Area planted in Q3 (Ha)	Area planted in July (Ha)	Total area planted YTD
Bong	688	617	71	688
Nimba	1,474	1,474	0	1,474
Lofa	413	6	407	413
Grand Bassa	990	574	416	990
TOTAL	3,565	2,671	894	3,565

A total of 8,424 bundles of cassava (Carica 1, Carica 2 and TMS series) from USAID FED were earmarked for distribution to 648 Kuus in FY15. By the end of July, all the 8,424 bundles had been distributed to 648 Kuus.

A total of 495 kg of peanuts were distributed to 71 Kuus to be used for intercropping in order to demonstrate Integrated Soil Fertility Management (ISFM). All of the 648 Kuus, supported only in FY15, have received 4,861 kg of peanuts.

A total of 24 demonstration sites (representing 8% of the total 325) were prepared with mounds and ridges, and planted with improved cassava varieties. Planting on the pending demonstration sites will be completed by the end of August.

Improving access to market information and markets

During July, USAID FED assisted RASA Liberia in sourcing 6MT of CARICA 2 cassava tuber to conduct processing trials at their facility. The trials intend to fine-tune product quality, improve efficiency of their processing operation and determine actual tuber requirements for optimal processing. USAID FED arranged for the delivery of 6MT from Grand Bassa County, which was paid for by RASA Liberia. During August, RASA Liberia will share the results of the trial runs with USAID FED. USAID FED is also facilitating the negotiations between RASA Liberia and Tohnlo Women's Group from Bong County for the supply of raw cassava tubers on a weekly basis.

From July 1-4, 2015, USAID FED facilitated meetings between 16 commercial cassava nursery owners and 196 lead farmers in Nimba County, where both parties discussed requirements for cuttings and pricing. As a result, the nursery owners in Nimba sold a total of 484 bundles of cuttings valued at US\$2,420 to Kuus in July.

Monitor efficiency of operations and profitability of processors

During July, four microprocessors from Lofa and Grand Bassa installed their processing equipment provided by USAID FED. All of the 22 supported processors have fully installed their equipment.

14 machine operators (13 males and one female) from Nimba, Bong and Lofa counties were trained on the operations of cassava processing equipment by USAID FED's Agro-Technician. A similar training exercise will be conducted for 12 machine operators in Grand Bassa County during August. To date, a total of 19

processors (3 microprocessors and 16 small processors) are actively procuring and processing raw cassava tubers from USAID FED and non-USAID FED farmers.

Reducing post- harvest losses in cassava value chain

During July, 280 lead farmers (142 men and 138 women) and four processors were trained on post-harvest management practices. The trainings were conducted by LNGOs contracted by USAID FED in Lofa, Bong, Grand Bassa and Nimba counties.

Task 1C: Increased Productivity and Profitability of the Horticulture Value Chain

During July, a total of 56MT of assorted vegetables were harvested and sold for US\$25,507 from the FY14 clusters in Montserrado, Margibi, Nimba and Grand Bassa. These clusters have harvested a total of 281MT of vegetables which, they sold for US\$192,054 year to date.

During July, a total of 208MT of assorted vegetables were harvested and sold for US\$292,952 from the FY15 clusters in Montserrado, Margibi, Bong, Nimba, Lofa and Grand Bassa. These clusters have harvested a total of 625MT of vegetables which they sold for US\$709,278 year to date.

USAID FED's FY14 and FY15 supported vegetable clusters have sold a total of 906MT of vegetables for a value of US\$901,332 from October 2014 to end of July 2015.

Utilization of rain shelters on FY14 sites:

During July, USAID FED continued to monitor the 19 rain shelters established on FY14 sites in Montserrado, Margibi, Nimba and Grand Bassa counties. These rain shelters had been planted with cabbages, cucumbers, African eggplants and watermelon. In order to ensure that these shelters are optimally utilized for high value vegetable production in the coming months, USAID FED will conduct an assessment in August to determine whether the shelters can be contracted out to the private sector, in this case ROSNA, for the production of okra for export.

Promoting Integrated Pests Management Practices

During July, a total of 57 hectares of the 188 demonstration sites have been planted with watermelons, cucumbers, cabbages, chili pepper, black beauty eggplant and African eggplant.

In quarter three, USAID FED provided improved seeds, fertilizer and pesticides to the 188 demonstration sites to demonstrate Integrated Pest Management (IPM). USAID FED continued to monitor production and sales on these sites through its field extension staff and contracted LNGOs during July.

From June 26 to July 3, USAID FED trained a total of 169 lead farmers (150 men and 19 women) on Good Agricultural Practices (GAP) and IPM. This field based practical training was conducted in Montserrado, Margibi, Bong, Nimba and Lofa Counties by USAID FED's Field Extension staff (Table 5).

Table 5: Lead farmers trained on GAP and IPM.

County	Number of lead farmer participants	Male	Female
Montserrado	51	47	4
Margibi	38	38	0
Bong	27	23	4
Nimba	28	22	6

Lofa	25	20	5
Grand Bassa	0	0	0
Total	169	150	19

On July 3, USAID FED's Senior Horticulture Specialist, Mr. Emmanuel Owusu, gave his exit presentation to USAID Liberia and USAID FED. Mr. Owusu's presentation provided an overview of the progress and technical challenges experienced in the horticulture sector during the implementation of his five month assignment period which ended on July 3. Mr. Owusu highlighted the challenge of pests and diseases, and the lack of access to resistant varieties and appropriate chemical control, as well as the need for farmers to be more diligent in the implementation of good agricultural practices. Mr. Owusu was redeployed to Liberia on July 22 to continue providing technical assistance to USAID FED's vegetable clusters. This will include pest and disease identification and control, production of vegetables for export, as well as supervision the construction and testing of low cost cooling technologies (zero energy and charcoal coolers).

Reducing harvesting and post-harvest losses

During July, USAID FED trained a total of eight carpenters (all men) from Bong, Nimba, Lofa and Grand Bassa Counties on how to construct zero energy and charcoal coolers. The carpenters were trained to ensure that construction of the technologies could be completed across the Counties simultaneously. The training was conducted from July 9 -10 in Kakata, Margibi, County by a master carpenter contracted by USAID FED. These carpenters began construction of the pending four zero energy coolers and 14 charcoal coolers during the third week of July. By the end of July, two zero energy coolers (Table 6 & 7) and six charcoal coolers had been completed.

Table 6: Constructed Zero Energy Coolers.

County	Number of Zero energy coolers to be installed	Number of Zero energy coolers installed in Q3	Number of Zero energy coolers installed in July	Number of charcoal coolers pending installation
Montserrado	1	1	0	0
Margibi	1	1	0	0
Bong	1	0	0	1
Nimba	1	0	0	1
Lofa	1	0	0	1
Grand Bassa	1	0	0	1
TOTAL	6	2	0	4



Figure 3: Lead farmer inspecting a cabbage field for pests and diseases during the training in Mensah Farm, Montserrado County



Figures 4 and 5: Carpenters being trained on charcoal cooler construction in Kakata, Margibi.

Table 7: Constructed charcoal coolers.

County	Number of charcoal coolers to be installed	Number of charcoal coolers installed in Q3	Number of Charcoal coolers installed in July	Number of charcoal coolers pending installation
Montserrado	3	3	0	0
Margibi	3	1	2	0
Bong	3	0	0	3
Nimba	3	0	0	3
Lofa	3	0	0	3
Grand Bassa	3	0	0	3
TOTAL	18	4	2	12

During quarter three, the contracted vendor Greenfield informed USAID FED that the three refrigerated containers would arrive in Liberia during August. ROSNA has committed to cost share 50% of value of two containers. Grain Coast Inc. was to receive a refrigerated container, however, the firm is currently experiencing financial difficulties and may not be in a position to meet its cost share obligations. USAID FED anticipates that these technologies will be installed by the end of August. Further, discussions between USAID FED, Brussels Airlines and ROSNA have not yet concluded whether one of these refrigerated containers can be installed at the Roberts International Airport to support the commercial export of vegetables. This is after the planned trial shipment that was scheduled for July was deferred to September.

Farmers produced vegetables for the markets during the dry and wet seasons

During July, USAID FED trained a total of 15 lead farmers (10 men and five women) in Lofa and Bong Counties on how to install and use drip irrigation kits. The trainings were conducted from July 13-15 in Lofa County and from July 16 - 17 in Bong County. These drip irrigation kits will be utilized for dry season vegetable production from October to December.

During July, the contracted vendor AIM Global completed the installation of the five pending rain shelters. By the end of July, a total of 18 rain shelters had been installed and tomatoes had been planted in them. These rain shelters are of a superior design when compared to the FY14 rain shelters, as they allow for better ventilation and cooler conditions.



Figure 7: Rain shelter planted with tomatoes and cabbages at Mensah Farm, Montserrado County.

Pilot Vegetable Export Program

In June, USAID FED, ROSNA and Brussels Airlines agreed to pilot a trial shipment to VS.CO in July. Under this agreement, USAID FED was to provide 10 kg of okra and 5 kg of chilies to be shipped, ROSNA was to provide the shipping boxes and Brussels Airlines would ship the samples to Paris via Brussels at no cost to USAID FED and ROSNA. Unfortunately, the okra plants were affected by heavy rains thus adequate volumes of okra could not be obtained. It is anticipated that the trial shipment will be conducted in late August or early September when the rains have tapered off. USAID FED will also provide technical assistance to beneficiaries with the FY14 rain shelters in order to assist them in growing okra under sheltered conditions. USAID FED will facilitate contracts between these beneficiaries and ROSNA.

Task 1D: Increased Productivity and Profitability of the Goat Value Chain

FY14 Goat production sites - kidding and mortality rates

During July, a total of 218 new kids (126 male and 92 female) were born in the FY14 goat production intensification sites. The total herd size in FY14 goat production intensification sites stands at 8,088 goats (5,165 does, 1,698 bucks and 1,225 kids). By the end of July, all 412 kids born during February 2015 reached maturity (i.e., 100% survival rate) and were added to the does and bucks statistics.

FY15 Goat production sites - kidding and mortality rates

During July, a total of 183 new kids (155 male and 28 female) were born in the FY15 goat production intensification sites. The total herd size in FY15 goat production intensification sites stands at 5,789 goats (2,472 does, 1,021 bucks and 2,296 kids).

Goat Mortality in FY14 and FY15 USAID FED sites

During July, a total of seven goats were reported dead in USAID FED supported FY14 goat production intensification sites in Bong and Nimba counties. The cause of death in Nimba County was attributed to the consumption of plastic bags. In Bong County, the cause of death was attributed to pneumonia and diarrhea. In total, a total of 144 goats or 1.7% of the FY14 herds have died year to date.

In the USAID FED supported FY15 goat production intensification sites, a total of 22 goats were reported dead in Bong, Nimba, and Grand Bassa counties. In Nimba County, the cause of death was attributed to diarrhea, pneumonia, and consumption of plastic. In Grand Bassa County, the cause of death was attributed to diarrhea. In Bong County, the cause of death was attributed to diarrhea and pneumonia. In total, a total of 215 goats or 4% of the FY15 herds have died year to date.

FY14 goat production sites - Access to veterinary care

During July, a total of 193 animals received veterinary treatment from Community Animal Health Workers (CAHWs) in Lofa and Grand Bassa counties (Table 8).

Table 8: Veterinary treatment by CAHWS

County	Number of animals treated in Q2	Number of animals treated in Q3	Number of animal treated in July	Total number of animals treated YTD
Nimba	144	1,027	0	1,171
Bong	375	247	0	622
Lofa	29	406	75	510
Grand Bassa	254	847	118	1,219
Total	802	2527	193	3522

Promoting Goat Shelters

During July, a total of 35 sawyers (all men) produced 3,458 pieces of wood required for the construction of goat shelters. The wood produced will be enough for the construction of 68 shelters.

During July, Organized Community for Reconstruction and Rehabilitation (OCRAR) Company completed the water well at the Blagbah site. This means that the two water wells at the two FY 14 goat production intensification sites (Neorpeh and Blaygbah) in Grand Bassa County have been completed.

During July, a total of 26 goat shelters were completed. In total, 54 shelters have been completed across the four counties. It is anticipated that the 23 pending shelters will be completed by the end of August. (Table 9).

Table 9: Number of shelters constructed in FY15 goat production intensification sites.

County	Number of carpenters recruited	Number of shelters required	Number of shelters built in Q3	Number of shelters built in July	Total Number of shelters built YTD	Shelters outstanding for completion
Nimba	14	26	9	6	15	11
Bong	11	22	7	12	19	3
Grand Bassa	10	10	3	3	6	4
Lofa	10	19	9	5	14	5
Total	45	77	28	26	54	23

National PPR Campaign

On July 22, the MoA officially informed USAID FED that the Ministry had scheduled the commencement of the PPR vaccination for September-October 2015. Taking into consideration the PPR disease outbreak in Lofa and Nimba counties, the MoA proposed that the vaccination campaign be conducted in unaffected surrounding counties and supportive treatment be conducted in Lofa and Nimba counties. A decision will be made in August by USAID FED and discussed with the MoA to agree on a cost-effective approach to the vaccination campaign.

Establishment of nucleus breeding herd

During July, the USDA informed USAID FED that Land O' Lakes (LOL) implemented Food for Progress project in Liberia will resume its activities in quarter four. Once LOL/FFP resumes operation, new timelines with respect to the proposed establishment of the nucleus breeding herd at CARL will be developed jointly among FED, CARL and LOL.

Formalizing livestock market

During July, USAID FED identified two sites where marketing events could be held in Nimba and Grand Bassa counties.

During July, USAID FED facilitated two goat marketing events at Sanniquellie Mah Cluster in Ganta, Nimba County and District #4 Cluster in Gio Town, Grand Bassa County. In Nimba County, 21 goat farmers and three traders participated in the event. A total of 41 goats (39 Bucks, and two Does) were sold at a total value of US\$3,085. This translated to an average of US\$75 per animal. In Grand Bassa County, 23 goat farmers and three traders participated in the event. A total of 53 goats (48 Bucks, and five Does) were sold for a total value of US\$4,050. This translated to an average of US\$76 per animal. In total, 94 goats (seven Does and 87 Bucks) were sold at the marketing events for a total value of US\$7,135.

Goat sales

During July, a total of 422 goats from FY14 and FY15 goat production intensification supported by USAID FED were sold for US\$28,884. In total, 5,131 goats have been sold for US\$287,636 year to date.



Figure 7: Abraham Jallo, (trader) pays for goats in Gio Town, Grand Bassa County during the goat marketing event.

Improving nutrition for higher livestock value

During the quarter three reporting period, USAID FED deployed the Forage Production Expert to train goat farmers on how to select and cultivate suitable nutritious forages for their herds. The Forage Production Expert trained a total of 34 goat farmers (23 men and 11 women) during that period. USAID FED was to provide the goat production sites with the three identified forages for cultivation during the months of June and July. However, due to the ill health of Forage Production Expert, the planned distribution could not take place in July. It is anticipated that planting materials of the selected forage species will be distributed before the end of September.

Sub Task 1.1 Special Studies and MoA Data Collection System Development

Program Indicators Surveys Conducted

During July 2015, USAID FED Special Studies Advisor STTA's Justice Djokoto and Asnakew Negash designed questionnaires, that were reviewed by the M&E team under the supervision of the COP. Some specific technical questions and issues were also shared with the designated technical staff for their inputs. Together, the Special Studies Advisors conducted a two-day training workshop for enumerators and supervisors in Gbarnga Bong County from July 23-24, 2015 with technical assistance from the M&E team. The field data collection began in the last week of July, and will continue to the third week of August 2015.



Figure 8: Training of USAID FED Extension Officers, NGOs and Enumerators for Special Studies Implementation.

Several surveys will be conducted jointly for cost-effectiveness. Processing of data and analysis of findings will be done separately based on thematic areas, divided between the two Special Studies Advisors.

Mr. Justice Djokoto, Special Studies Advisor I, is responsible for processing, analysis, presentation and writing up of the following studies:

1. Post-harvest losses for rice and vegetable without USAID FED intervention and with FED intervention
2. Impact of increase in rice production to the economies of the HH (savings, consumption)
3. Impact of USAID FED intervention on household diet diversity
4. Adoption rate of USAID FED and non-FED farmers of technologies introduced by USAID FED

Mr. Asnakew Negash, Special Studies Advisor II, is responsible for the following studies:

5. Study on the effectiveness of USAID FED's Extension Delivery
6. WAEI three years after USAID FED
7. Impact of FED supported shelters in goat production
8. Effectiveness of FED-supported Community Animal Health Workers
9. Determining market and demand for rice seeds in Lofa, Nimba, Bong and Grand Bassa counties
10. Impact of rice business hubs in the communities

Data collection and information gathering exercises began in the last week of July 2015. Both Special Studies Advisors are expected to complete these studies and surveys by the end of September 2015.

Equipment and materials procured for the MoA Offices in Nimba, Lofa and Grand Bassa Counties

The MoA Extension Officers in Bong County, who were trained to perform M&E roles in the pilot MoA M&E strengthening initiative, began gathering baseline data in June 2015 for several indicators outlined in the LASIP. They have also started profiling the various stakeholders and partners who are working in the agriculture sector within Bong County, specifically focusing on “who is doing what and where”. This will eventually ease the issue of data collection and information sharing, since the staff capacity of the MoA to cover all these areas is low. At the same time, USAID FED Bong County team has held a series of working sessions with the MoA Extension Office to develop a work plan for data collection and county level coordination and reporting.

The Monthly County Agriculture Coordination Meeting is being used as the platform for triangulating, consolidating and reporting data and other information within the agriculture sector among the different stakeholders and partners. USAID FED Bong County Office and M&E staff are working with the Bong County MoA team to build relevant reporting templates and databases to ensure that data and reports are being captured, stored and channeled to the MoA M&E office in Monrovia. This system is anticipated to be fully functional by end of September 2015. An assessment to determine the merits of scaling up this pilot activity to Nimba, Lofa and Grand Bassa counties will be carried out in September.

Recruitment of data repository system consulting firm

HAK Technology conducted a final presentation on July 17, 2015 of the system design to USAID FED Management for their approval, and also for USAID FED Management to ensure that the design meets all of the requirements and specifications for an effective and efficient online database. The FED IT Department is currently working on the procurement of a server that will host this online database system.



Figure 9: USAID FED online data repository login page.

Piloting/quality assurance of the database system design

A user's training manual will be developed, and HAK Technology will train USAID FED staff and the MoA Central and County staff on the system.

To date, the online database system is undergoing completion and will be tested in August/September by USAID FED.

The recruitment of the MoA M&E Project Manager is expected to be completed by August 2015. The MoA M&E Project Manager will manage the implementation of the pilot MoA M&E Strengthening Activity, and its subsequent scaling up should this be deemed appropriate. They will also manage all of the human capacity building activities, including the training of Senior Managers, Project Management Unit (PMU) Staff, Assistant Minister and other MoA stakeholders contributing to the collection of agriculture data for the MoA.

Sub Task 1.2 Improved access to Agricultural Inputs

Support the establishment of commercial production and marketing of rice seed

During July, USAID FED completed planting of the 12 upland Rice Seed Multiplication (RSM) sites in Bong, Nimba, Lofa and Grand Bassa counties. Planting commenced in June and was completed by July 5. (Table 10). The variety planted was Nerica 8 at a seeding rate of 50 kg per hectare.

Table 10: Planting on Upland RSM Sites.

County	Target RSM seed distribution for FY15 (MT)	Number of sites	Total area targeted for Planting (Ha)	Area planted in June (ha)	Area planted in July (ha)	Total area planted (ha)
Bong	4.5	9	90	90	0	90
Nimba	0.5	1	10	10	0	10
Lofa	0.5	1	10	5	5	10
Grand Bassa	0.5	1	10	10	0	10
TOTAL	6.0	12	120	115	5	120

During July, seedlings of Nerica L-19 foundation seeds have been transplanted in 28 hectares out of 315 hectares of lowland RSM sites (Table 11). Planting of the 315 hectares will be completed in August.

Table 11: Planting on Lowland RSM Sites.

County	Target RSM seed distribution for FY15 (MT)	Number of Sites	Total area targeted for planting (Ha)	Area planted in June (Ha)	Area planted in July (Ha)	Total area planted (Ha)
Bong	3.93	20	124.5	0	12.0	4.6
Nimba	1.92	9	59.5	0	1.2	1.2
Lofa	3.42	25	108.5	0	8.0	2.7
Grand Bassa	.73	4	23.5	0	7.0	7.0
TOTAL	10	58	315	0	28.2	28.2

During July, 12 of the 15 Rice Seed Inspectors conducted their first inspection in the uplands RSM sites, and seven submitted their first inspection reports to USAID FED. Each of the 15 Rice Seed Inspectors will conduct a minimum of six inspections per site between the periods from June 2015 to January 2016. While it was mutually agreed that Africa Rice would conduct at least three inspections on USAID FED supported

RSM sites during the FY15 and FY16 periods, no visits have been conducted yet. FED has been following up Africa Rice on this.

Support to commercial production and marketing of cassava cuttings

During July, an additional 380 bundles of the cassava varieties imported from IITA were harvested and distributed to the counties (Table 16). It is anticipated that all of the cuttings will be delivered to the counties and planting completed across the 40 nurseries by the end of August.

Table 12: Cuttings distribution by County.

County	Number of cuttings required (bundles)	Number of cutting distributed in June (bundles)	Number of cuttings distributed in July (bundles)	Total number of cuttings distributed year to date (bundles)
Bong	144	20	124	144
Nimba	288	288	0	288
Lofa	72	32	40	72
Grand Bassa	216	0	216	216
TOTAL	720	340	380	720

Promote UDP, MoP and TSP use in rice based on soil analysis

On July 15, USAID FED presented the cost benefit analysis of UDP application versus urea broadcast and zero fertilization to the Agriculture Coordination Committee (ACC). The analysis was based on yield data collected from USAID FED supported FY14 trial sites, and took into consideration the cost of inputs, labor and tools required for land preparation, planting, and maintenance and harvesting.

Profitability was calculated on a farm gate sale price of US\$12 per 50 kg of paddy rice. The conclusion from the cost benefit analysis is that the use of UDP in lowland rice delivers a 32% increase in yield, and is 347% more profitable than the broadcast method of fertilization (Table 13).

Table 13: Cost benefit analysis summary for UDP versus broadcast and zero fertilization.

SUMMARY			
	UDP	Broadcast	Zero
Costs/ha	\$ 551.74	\$ 621.94	\$ 244.33
Yield kg/ha	3900	2950	1200
Cost US\$/50kg	\$ 7.07	\$ 10.54	\$ 10.18
Selling price at Farm Gate Price (FGP)(\$12/50kg)	\$ 12.00	\$ 12.00	\$ 12.00
Income US\$/ha	\$ 936.00	\$ 708.00	\$ 288.00
Gross Profit US\$/ha	\$ 384.26	\$ 86.06	\$ 43.67
	Input Cost/ha	Yield/ha	Gross Profit/ha
Lowland UDP vs Broadcast	-12.7%	32.2%	346.5%
Lowland UDP vs Zero Fertilizer	125.8%	225.0%	779.9%

During July, USAID FED began the process of contracting two technicians from the University of Liberia soil laboratory to assist with the testing and analysis of 164 soils samples prepared in June. The two technicians will be supervised by USAID FED's Soil Scientist Emmanuel Lincoln, and are expected to complete this task in August. This will provide all of the data required to complete the soil fertilizer recommendation mapping

under this task. Through the assistance of the Liberia Institute of Statistics & Geo-Information Services (LISGIS), maps will be produced for the four counties where the soil samples were taken.

UDP+SRI research

Harvesting on all the UDP+SRI trial sites was completed in July. A final report on results of the UDP+SRI trials will be submitted by USAID FED's UDP+SRI Project Manager in August, and a presentation will be delivered to the ACC on August 27.

Adoption of UDP to old sites

On July 9, USAID FED aired the first of six daily advertisements promoting UDP adoption through the local radio stations in Lofa and Bong counties. These advertisements were scheduled to run every Monday to Friday until mid-August to coincide with the anticipated end of transplanting in the lowlands for FY15. Three farmers engaged in the FY14 use of UDP provided testimonials on the significant benefits they have obtained with the use of UDP. These testimonials will be aired by the community radio stations in August.

USAID FED is currently targeting county based agro-dealers by offering them a 50% discount on UDP if they are willing to stock and market the product at the county level. The Agro Dealers are encouraged to pass on a part of that discount to the farmers who purchase UDP for cash or through an embedded financing system. By the end of July, four agro-dealers (John Selma and Mohamed Kamara from Lofa County, and Jackson Quenesiah and Zulu Zeze from Bong County) had been identified as potential suppliers of UDP to farmers.

In spite of all of the efforts at raising awareness on the benefits of UDP use, USAID FED experienced poor response from the farmers. Some of the issues observed are: 1) the continuing expectation that donors will provide the inputs free of charge, and 2) the lack of motivation to produce more because of the perceived lack of market due to their insistence to sell at the MoA announced price of \$20 per 50 kg bag of paddy rice.

Piloting use of ICT in soils testing and analysis for rice

During July, USAID FED completed the recruitment process for the Project Manager, Emmanuel Lincoln, for the pilot activity on the use of ICT in soils testing and analysis. The Project Manager will commence his assignment in August. The ICT will be used in communicating soils test results and fertilizer recommendation from the laboratory to the agro dealer, and from the agro-dealer to the farmer.

Sub Task 1.3 Agricultural Extension Support

Development of extension material and information access points

During July, USAID FED developed a guide on "*Fertilizer Management for Lowland Rice Production*" and a farmer guide on "*Major Pests of Rice*".

During the same reporting period, USAID FED produced video content on the effectiveness of UDP technology application in lowland rice production. The content was captured from selected farmers in Bong County who have been exposed to UDP technology. These materials will be used during the promotion of UDP adoption in Bong, Nimba and Lofa counties. A jingle encouraging farmers to adopt UDP technology was also produced and aired in Bong and Lofa counties by radio stations Super Bongese and Tamba Taikor.

During July, USAID FED collected radio content on the benefits of goat farming from Saclepea, Nimba County. USAID FED also collected content on how improved cassava processing is changing the lives of farmers in Bahn, Nimba County. These will be used to produce the third edition of the *On the Farm* radio show which will air on the United Methodist Radio every other Saturday at 7pm.

During the same reporting period, UNMIL RADIO offered USAID FED a 30 minute radio slot to broadcast *On the Farm* at no cost. It is anticipated that USAID FED and UNMIL radio will effect an official agreement in August.

During July, USAID FED renewed MoU's with four community radio stations: Super Bongese in Bong, Radio Kergheamahn in Nimba, Radio Tamba Taikor in Lofa and LACSA in Grand Bassa. These agreements will run up until December 2015. Each of the radio stations is expected to produce and air four radio programs every month as part of the agreement.



Figure 10: Cover page of "Fertilizer Management for Lowland Rice production" guide developed.

Sub Task 1.4 Youth in Agribusiness

Activity 1.4.1 Establishment of 25 agribusiness horticulture pilot sites

During July, Green Coast Agriculture Program (G-CAP), an LNGO contracted by USAID FED, submitted the baseline data collected from the 25 youth agribusiness pilots. The baseline data captured the land size under cultivation as well as production and sales information prior to USAID FED's assistance. This data will be used to determine the impact of USAID FED's assistance at the end of FY15.

By the end of the quarter three reporting period, all the 25 demonstration plots (each 0.25 hectares) had been planted with six vegetables varieties (Okra, Cabbage, Cucumber, Bitter ball, Chili Pepper and African Eggplant) that were provided by USAID FED. By the end of July, the youth groups had planted vegetables on a total of 129 hectares of their own individual plots.

On July 17, USAID FED facilitated a meeting between vegetables trader associations from Montserrado and Margibi counties and youth farmers from the 25 agribusiness pilots towards facilitating linkages with the domestic markets. The meeting was held in Kakata, Margibi County. A total of 15 traders (11 men and four women) and 25 youth farmers (23 men and two women) participated in the business negotiations. During the meeting, volumes, pricing, packaging, logistics, quality and storage requirements were discussed by both parties.

By the end of July, 12 agribusiness pilots had sold a total of 4.9MT of assorted vegetables for US\$9,875.

Supporting job creation through youth extension aides

During July, the 25 youth extension aides completed the onsite training for 25 lead farmers (22 males and three females) representing the 25 agribusiness pilots on Good Agriculture Practices (GAP) and Integrated Pests Management (IPM). It is anticipated that the lead farmers will now



Figure 11: Cabbage field managed by Kaker Agriculture youth group at Todee, Montserrado County.

be in a position to provide extension support to their group members due to this enhanced technical capacity.

Supporting job creation through youth enterprises as transport service providers

During July, USAID FED completed the verification process of 49 youth entrepreneurs (40 male and nine female) from Bong, Nimba, Lofa and Grand Bassa counties. These entrepreneurs were selected based on their ability to cost share on the Tuk-Tuk motorbikes. From these entrepreneurs, 12 will pay 50% of the value of the motorbike in cash, while 37 will receive loans from LEAD in order to meet their expected cost share obligations.

Supporting job creation through youth enterprises as power tiller service providers

On July 16, USAID FED officially handed over 30 power tillers to 30 youth entrepreneurs during a ceremony held in Suakoko, Bong County. This initiative aims at creating self-employment for youth in Liberia's agriculture sector, and to promote sustainable provision of mechanized services for lowland rice farming.

Supporting job creation through training youth as machine operators

During July, USAID FED trained 14 youth (13 males and one female) from seven cassava processing centers in Nimba and Lofa counties on how to operate and maintain cassava processing machines. A similar training exercise will be conducted for 12 youth in Grand Bassa County during August.



Figure 12: Youth entrepreneurs at the power tiller distribution ceremony.

USAID FED also trained in July 24 youth (all males) from 12 rice business hubs in Nimba and Lofa counties on how to operate a rice mill. A similar training exercise will be conducted for four youth in Grand Bassa County during August.

Sub Task 1.5: Improving Human Nutrition

Development of Diet Behavior-Change Communications (DBCC) Strategy

On July 8, USAID FED's Behavior Change Communication (BCC) Specialist and Nutrition Officer presented the initial findings of the barrier analysis survey for diet diversity that was conducted in Nimba County during the month of June to USAID FED, USAID, UNICEF and International Medical Corps (IMC). A summary report of the findings was submitted by the BCC Specialist at the end of July.

During July, the BCC Specialist developed intervention strategies based on the analysis of findings emerging from the barrier analysis survey. A tabulated summary of the proposed interventions was submitted. Based on the proposals, the BCC Specialist developed 12 targeted nutrition messages that will form the basis of a nutrition lesson plan to be used during training of the lead farmers and USAID FED Extension Officers, as well as messaging that will be disseminated through community radio stations. In addition, nine Essential Nutrition Action (ENA) messages were also adapted for this purpose.

From July 13 -17, USAID FED tested customized messages with 53 beneficiaries (five men and 48 women) in Nimba County. The pre-tested messages will be submitted to the Ministry of Health and Social Welfare

(MoHSW) Health Promotion Division, and the Material and Message Development Committee for review and approval in August. USAID FED also developed interactive nutrition education lessons that will be used to train 250 lead farmers and nine USAID FED Extension Officers in Nimba County during the month of August.

Nutrition messaging outreach to more households

During July, USAID FED printed 6,000 copies of the nutrition flyer showing the benefits of the three recommended food groups that were approved by the MoHSW and MoA in Q2. A total of 2,000 copies of the flyers were distributed by USAID FED to 271 USAID FED lead farmers from the cassava, horticulture and goat value chains in Nimba County. In August, the remaining 4,000 flyers will be distributed to the beneficiary groups in Nimba County.

During the same reporting period, a total of 1,170 individuals (807 men and 363 women) received nutrition messages through posters and flyers disseminated by USAID FED and its contracted LNGOs in Nimba, Grand Bassa, Montserrado and Margibi counties. A total of 24,549 beneficiaries (7,110 men and 17,439 women) have received nutrition messaging year to date (Table 14).



Figure 13: A cassava lead farmer in Gbar Tow, Grand Bassa, with a nutrition poster disseminated by USAID FED's contracted LNGO.

Table 14: Beneficiaries who have received nutrition messages.

County	Targeted Individuals for FY15	Total Individuals reached by Q2	Total Individuals reached in Q3	Individuals reached in July	Total Individuals reached YTD	Total Male	Total Female
Bong	10,850	11	6,151	0	6,173	2,523	3,650
Nimba	15,015	11	8,891	271	9,173	2,721	6,452
Lofa	5,480	11	2,211	0	2,222	32	2,190
Grand Bassa	4,990	11	4,282	810	5,103	1,710	3,393
Montserrado	1,638	6	828	51	885	72	813
Margibi	1,638	5	950	38	993	52	941
TOTAL	39,611	55	23,313	1170	24,549	7,110	17,439

Component Two: Stimulate Private Sector Growth and Investment

Task 2: Policy Enabling Environment for Private Sector Growth

Policy Reform Activities via Technical Working Groups

Domesticating the ECOWAS Seed Regulation

During July 2015, the International Seed Policy Expert, Josiah Wobil, conducted two workshops at the Ministry of Agriculture with the participation of USAID FED, USAID, MoA, CARI, the West Africa Seed Program (WASP), the West and Central African Council for Agricultural Research and Development (CORAF/WE CARD) and Africa Rice on the guidelines and implementation regulation of the ECOWAS Seed Regulation in Liberia. The workshop was held from July 9 to July 10, 2015.



Figure 14: Participants at MoA during the ECOWAS Seed Regulation workshop.

On Tuesday July 14, 2015, Mr. Wobil presented the outcomes of the two-day workshop to stakeholders, including a recommendation on the next steps to ensure passage of the seed regulations implementing guidelines by end of September. Mr. Wobil will continue to work remotely in Accra, Ghana and will complete the final draft of the Liberia Seed Regulation by the end of July 2015.

At the end of the presentation, Dr. Roland Massaquoi, former Minister of Agriculture, was appointed as a local consultant from MoA to serve as local focal person and work with Mr. Wobil to ensure the finalization of the regulation. It is important to note that the engagement of Dr. Massaquoi is aimed at building local capacity and ensuring continuity after the international consultant's engagement ends.

Domesticating the ECOWAS Fertilizer and Pesticide Regulations

In July 2015, USAID FED sent the SOW and the CV of the recommended STTA for Pesticide Regulation to the MoA for review and approval.

For the fertilizer regulation, USAID FED will be partnering with the West Africa Fertilizer Project in moving forward with the “domestication” of the ECOWAS Fertilizer Regulation to Liberia that was gazetted in September 2014.

Assessment of Training Needs and Training for Relevant Government Agencies and Private Sector

USAID FED is currently recruiting an STTA to conduct the capacity gap assessment of the Small Business Bureau of the MoCI. The interview of the short listed candidates will be done in the first week of August 2015.

Support to MoCI through the MSME Annual Conference

For the third annual Micro, Small and Medium Enterprise (MSME) Conference in November 2015, USAID FED, Co-chair on the Policy and Agenda committee, came up with three key policy propositions: The adoption of the Common ECOWAS Tariff (CET)

1. Suspension of tariff on Agricultural equipment, Agricultural seed, fertilizers and pesticides for food and cash crops production and processing.
2. Enforce the use of cassava wheat composite flour, consisting of at least 10% cassava.

These will be submitted to the Policy and Agenda Committee for discussion during the MSME Conference.

National Standards Laboratory (NSL)

USAID FED published an RFP to conduct a gap assessment, market study and business plan for the NSL. USAID FED also contacted a consultant from the DFID-funded GROW project who is also working on strengthening the NSL, and informed him of the RFP. Selection is expected to be finalized in August.

Subtask 2.1 Access to Financing

Village Savings and Loan Expansion

During July 2015, USAID FED issued an RFP to engage a local NGO to implement a VSLA expansion program to add 350 more VSLAs (Lofa 75, Nimba 75, Bong 75, Bassa 75, Margibi 25 and Montserrado 25). The Universal Empowerment Missions (UEM) was awarded the contract that will be implemented in FY15-FY16 in the six counties of USAID FED. The contract performance period is from July 25, 2015 to May 30, 2016. In July, UEM submitted the first deliverable constituting 20% of work done. The deliverable includes: training agenda, training manuals, reporting system and personnel CV's. The 350 VSLA groups will include 5,600 all-female FED beneficiaries, and 45% will be youth.

Saving, Lending, Capacity Building

During July 2015, EDUCARE CFO's trained 9,842 VSLA members on leadership. The women are expected to put the VSLA leadership structure in place for sustainability. The training was conducted at the sites of the groups during the VSLA regular share purchase meetings in the six counties (Table 15).

Table 15: VSLA members received leadership training per county.

No.	County	No. of beneficiaries	Type of training	Comments
1	Lofa	2180	Leadership training	Training was done on sites during VSLA regular share purchase meetings
2	Nimba	2099		
3	Bong	1912		
4	Bassa	1898		
5	Margibi	925		
6	Montserrado	828		
7	Total	9842		

Application to NAPEX and CBL for Loans

The Central Bank of Liberia (CBL) has provided additional loans to two USAID FED supported VSLA groups in Lofa County. These groups, Woama Farmers Association VSLA located in Mbalocahun Town and WOFPD #2 VSLA also located in Halipo Town, received LD\$2000, 000(US\$2,350.00) each to invest in their businesses. The loan term is three years with an interest of 3% added on the total loans. The two groups have a membership total of 60 women, with 30 in each group.

Monitoring and reporting on ALL USAID FED-sponsored VSLA Groups

During July 2015, 9,842 female USAID FED supported farmers actively operated as VSLA members in the six counties. A total of 373 VSLA groups currently exist in the six counties; Lofa 75, Nimba 75, Bong 75, Bassa 75, Margibi 37 and Montserrado 36.

During the share purchase meeting, a total of US\$136,865.70 was invested as share purchase for loan capital in the six counties; Lofa US\$35,766, Nimba US\$30,907, Bong US\$26,911, Grand Bassa US\$24,298, Margibi US\$9,824 and Montserrado US\$9,159.

Out of the US\$136,866, US\$118,259 was loaned to 1,723 active members in all six counties: in Lofa US\$33,114 was loaned to 409 members, in Nimba US\$29,464 was loaned to 327, in Bong US\$20,589 was loaned to 345, in Grand Bassa US\$19,236 was loaned to 277, in Margibi US\$8,514 was loaned to 198 and in Montserrado US\$7,343 was loaned to 167.

During the month of July, a total of US\$28,212 sales were reported by VSLAs covering the four value chains: rice US\$7,230, cassava US\$2,432, vegetables US\$15,637 and Goats US\$2,913.

Pilot Micro-credit Union with VSLAs

USAID FED and Microlead have signed a Memorandum of Understanding (MoU) to establish at least one pilot micro-credit union. In the MoU, the cost of training materials, transportation, lodging and feeding of the 30 volunteer/staff participants will be covered by USAID FED.

USAID FED will also cover the cost of Microlead staff trips in the field including transportation, lodging and meals during the establishment and training of the 30 participants. The overall cost to be covered by FED is US\$12,934.35

Microlead's role will include the following:

1. Provision of technical assistance in the drafting of By Laws & Constitution for the new VSLA credit union(s);
2. Provision of guidance on Business Registration, Certification and Affiliation support;
3. Capacity Building through Credit Union Governance, Leadership, Financial Management, Internal Controls, Marketing & Business Planning Training;
4. Incubation and mentoring through the Microlead's Regional Credit Unions (RCU's);
5. Integration of the pilot VSLA credit union into the mainstream Microlead Program;
6. Market linkage support for value added sales purposes;
7. Establishment of a safe and sound internal control system;
8. Periodic internal control audit based on expressed consent; and
9. Monitoring and Evaluation of expected training outcomes.



Figure 15: USAID FED and Microlead signing the MoU.

Microlead has already developed the training guide and sent it to USAID FED. USAID FED's management is currently reviewing this activity for final approval.

Activity 2.2.3: Extension of Micro Finance to Farmers and Entrepreneurs

Recruitment of Farming Groups / MSME's for Loans

Rice and Food Crops Farming Association of Lofa County has received additional loans from LEAD at a value of US\$5,800 for purchasing farm input materials for the organization, and to buy paddy rice from USAID FED supported farmers in Lofa County and resell to Fabrar Liberia Inc. A total of 75 farmers (33 female and 42 male) are the beneficiaries of this loan. In December 2014, RFC received US\$5,000 loans from LEAD and has repaid this in full.

Subtask 2.2: Access to Business Development Support (BDS) Services and Enterprise Service Centers

In July, the five LNGOs: Liberia Initiatives for Development Services (LIDS), Jacob F. Tomei Enterprise Center, LEAD Inc., Community Youth Network Program (CYNP) and Top Consulting, Inc. (TCI) conducted training with 75% of all the farmers and MSME's on the following topics:

I. Development of a marketing plan:

- Definition the products/services
- Who is/are the market(s)? (To be quantified into potential and current)
- Who are the competitors and partners?
- Who are strategic partners?
- How to develop long-term business relationship

II. Investing in the business:

- Difference between production cost and investment cost?
- What is the investment involved in the business?
- What are the operation costs?
- How much revenue is needed in order for the business to sustain its operation?
- Product/Service pricing
- Establishment of the business and/or the organization
- Formalization of a business



Figure 16: BSP Membership/Coaching training being conducted in Garmue, Bong County.

A total of 19,026 farmers and MSMEs have been provided with business coaching by USAID FED through the BSPs (Table 16).

Table 16: BSP's Mentorship/Coaching Farmers and MSMEs workshop breakdown.

Business Service Provider	County	Target # MSMEs	# MSMEs served	Balance
LEAD	Nimba	6539	6539	0
LIDS	Bong	4411	3399	1012
CYNP	Grand Bassa	3225	3419	58
JFTEC	Lofa	3369	3369	0
TCI	Montserrado/Margibi	3225	2300	925
Total of All		20,769	19,026	1,995

Facilitating Registration of Farmers and Other MSMEs in the Rural Areas

USAID FED met with the Deputy Minister in charge of the Department of Small Business Administration (DSBA) to propose that the MoCI facilitate registration of the farmers and other MSME in the counties by sending staff from the DSBA to the four counties (Nimba, Bong, Lofa and Grand Bassa) to carry out the registration. USAID FED proposed a tour of two days in each county for this activity. The USAID FED subcontracted Business Service Providers are working with the farmers and MSMEs in the preparation of registration documents such as:

- Articles of Incorporation
- By laws and constitution

Currently, 200 groups in Bong, Nimba, Lofa, Grand Bassa, Margibi and Montserrado counties have met all requirements for registration and are expected to be registered in August/September.

The Minister enthusiastically received USAID FED's proposal. The registration tour is proposed to commence towards the end of August 2015.

With USAID FED intervention through the BSP in Nimba County, LEAD, two farmers' groups, Zodoar farmers in Karnplay and Payee Kalakeh of Payee Town in Nimba were registered in July.

Subtask 2.3: Women Participation in Agribusiness

Women-owned Business Incubation Program

On July 10, 2015 the Women-owned Enterprise Development Specialist (WEDS) presented the outcome of her three-month engagement under the pilot business incubation project to 22 USAID FED staff and two USAID representatives. The STTA, Donna Rosa, said that after selecting 26 women in the six counties, she worked with them to develop their business plans through group workshops and individual coaching and mentoring. However, the resulting business plans developed by the women need refinements, and she proposed to work on these remotely. The final copies of the business plans will be sent electronically. Ms. Rosa further recommended that a local consultant be hired to mentor these women using the final business plans as guide.

Component Three: Build Local Technical and Managerial Human Resource Capability

NDA curriculum rolled out in the first semester of AY 2014-2015

The assessment conducted by Dr. Samuel Duo, USAID FED Component Three Lead, in collaboration with the CoE's, identified various skills the instructors would need to improve in order for them to effectively deliver the National Diploma in Agriculture (NDA) curriculum. One of the areas the instructors need further development on is effective computer usage. USAID FED has encouraged the instructors to use the free on-line Alison's Training, which includes courses in Microsoft Office. The instructors will also need further training in soil science, crop production, animal production and farm woodland management.

Summary of skills gaps identified for NDA Instructional Staff:

- **Soil Science:** Soil texture, pH, soil nutrients, soil profile analysis, soil classification based on soil order and soil bulk density (field and laboratory analysis)
- **Crop Production:** Fertilizer requirement for plant, calculation and application, pesticide calculation, irrigation practices, and field layout.
- **Animal Production:** Disease diagnosis and treatment, reproduction-cross breeding and feed calculation
- **Farm Woodland Management:** Identification and selection of economic tree species and nursery establishment of economic tree species.

Based on the above skills gaps, scopes of work (SOWs) for Short Term Technical Assistants (STTA) have been developed in July. USAID FED will be recruiting these STTAs locally in Liberia.

A subsequent assessment should be carried out in early 2016 to determine the training needs for year two implementation the syllabi and lesson plans. The Government of Liberia (GoL) through the Ministry of Education (MoE) should also be continually engaged and encouraged to recruit additional faculty for the CoEs, especially NCCC and LCCC, to ensure effective delivery of the NDA curriculum.



Figure 17: Participants during the NDA syllabi and lesson plan workshop at NCCC.

Workshop activities for the completion of the year two syllabi and lesson plans for the National Diploma in Agriculture (NDA) began at the Nimba County Community College campus library on July 12, 2015 and were completed on July 24, 2015. Dr. Sam Duo facilitated the workshop. A total of 29 participants were drawn from the four CoE's, University of Liberia, Cuttington University, MoE and Ministry of Agriculture (MoA) as well as USAID FED. They were divided into four groups to participate in the workshop including data entry and word processing. The workshop participants were drawn from the following institutions as follows (Table 17).

Table 17: NDA Year II lesson planning development participants.

Community/Institution	Number of participants
Grand Bassa Community College (GBCC)	5
Booker Washington Institute (BWI)	5
Nimba County Community College (NCCC)	4
Lofa County Community College (LCCC)	5
Ministry of Education (MOE)	1
Ministry of Agriculture (MOA)	1
Cuttington University (CU)	1
University of Liberia (UL)	2
USAID FED	5
TOTAL	29

The NDA courses designed for Year II syllabi and lesson plans include the following (Table 18):

Table 18: Year II NDA courses.

Year 2 Semester 1	Year 2 Semester 2
2. NDA231 Pasture and Forage Production 3. NDA232 Agro-Climatology 4. NDA233 Introduction to Entrepreneurship 5. NDA234 Leadership 6. NDA235 Industrial Crop Production II 7. NDA236 Soil Fertility and Crop Nutrition 8. NDA237 Farm Soil Management	9. NDA241 Farm Power and Mechanization 10. NDA242 Genetics and Breeding 11. NDA243 Practice of Entrepreneurship 12. NDA244 Beef and Dairy Production 13. NDA245 Poultry Production 14. NDA246 Basic Fisheries Technology 15. NDA247 Agricultural Extension and Rural Sociology 16. NDA248 Farm Management 17. NDA249 Introduction to Animal Health

Development of internship programs with industry players and finalization of MoU's

In July, the CoEs have decided to hold the official launching of the internship programs as follows:

1. GBCC - August 11, 2015,
2. LCCC - September 25, 2015,
3. NCCC - October 22, 2015.

A tentative date for BWI will be communicated later as soon as those arrangements are finalized.

Establish Performance Management System at the CoE's

A SOW has been finalized, and USAID FED HR has begun the recruitment process to hire a Performance Management System Development Specialist to work with the CoE's. This consultant is expected to commence this assignment by August 15, 2015.

Establishment of standardize Agricultural Science Labs and training of instructors and technicians

The renovation activities of the science laboratories at the four CoEs were completed in July. The installation of other furniture and lab equipment is ongoing and is anticipated to be completed in August. The inaugurations are tentatively scheduled to take place in mid-September 2015.

Provision of lab furniture

During July, the four CoE's received the following additional equipment for the science laboratories: computer desks, chairs, overhead fans, whiteboards and cabinets.

Build capacity and provide technical assistance support to the business department of the CoE's

A SOW has been finalized, and USAID FED HR has begun the recruitment process to hire a Proposal & Grant Writing Specialist to work with the CoEs. This consultant, when hired, is expected to commence this assignment in August 2015.

Agricultural Enterprise Development in the CoEs

Grand Bassa Community College

- A total of 1.5 hectares have been planted with mixed vegetables at the GBCC Demo Site
- Tomatoes seedlings have been planted in the rain shelter provided by USAID FED
- Transplanting of bitter ball and pepper seedlings is ongoing at the GBCC Vegetable Enterprise Center
- Over 6,000 ridges and mounds have been developed, but they need more cassava cuttings
- Out of 60 bags of cassava cuttings allotted for GBCC cassava enterprise, USAID FED Buchanan Sub Office provided a total of 20 bags of cassava cuttings. The delivery plan for the remaining 40 bags is underway.



Figure 18: USAID FED installed rain shelter at GBCC with tomatoes

Develop and implement 3-yr strategic plan including priority enterprises to be established at the CoEs

A SOW has been finalized and USAID FED HR has begun the recruitment process to hire a Strategic Plan, Finance, and Enterprise Development Specialist locally to work with the CoEs. When hired, this consultant is expected to work with CoEs for the development of a 3-yr strategic plan including business, HR, institutional and financial plans. This assignment is expected to commence in August 2015.

It is expected that these CoE staff will be trained to engage external sources for the purpose of additional funding to support the optimal operation of the CoEs. Training is expected to commence in August 2015 and run until September 30, 2015

Establishment of advisory committee to provide check and balance to CoEs management

In order to achieve this task, Component Three has scheduled a technical review for the first week in August. USAID FED held discussions with each institution's leadership in order to develop a concept with the CoE's, as well as to fully clarify the functions of the advisory committee. An activity plan is being drafted for review with the CoEs towards the implementation of this activity. Technical review of the activity has been completed, while approval of the activity is pending revision as recommended by the committee.

Component Four: Cross-Cutting Activities

Task 4.1: Communications/Knowledge Management

USAID FED Media Stories

USAID FED was in ten media reports during July 2015:

- Power tiller distribution ceremony to youth entrepreneurs (Front Page Africa, Insight, New Republic, Women Voices, Success Forum, Daily Observer, The Perspective, ELBC Radio, UNMIL Radio, and The Perspective)

Task 4.2: Environmental Compliance

The Environmental Monitoring Assistant, Senior Engineer, and the Irrigation Specialist travelled to Lofa and Bong counties to provide technical support to the construction of ten spillways in Lofa and three in Bong counties, and to ensure compliance to quality standards and environmental requirements. The project was found in compliance of Reg. 216, requiring that no un-degraded lowland or upland landscape is disturbed. Construction is on track as per schedule.