



# FEED <sup>THE</sup> FUTURE

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



## FOOD AND ENTERPRISE DEVELOPMENT (FED) ACTIVITY FOR LIBERIA

### MONTHLY REPORT

AUGUST 2016



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FROM THE AMERICAN PEOPLE

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A FED-supported Village Savings and Loans Association in Karnplay, Nimba County celebrates the successful completion of an action audit, share-out and graduation.

**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

AEDE	Agency for Economic Development and Empowerment
AIIC	Agriculture Infrastructure and Investment Company
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
CGCYWEP	Church Group Children Women Youths Empowerment Program
CILSS	Permanent Interstates Committee for Drought Control in the Sahel
CoE	Center of Excellence
CSO	Civil Society Organization
CSWG	Cassava Sector Working Group
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
EIA	Environmental Impact Assessment
EMMP	Environmental Mitigation and Monitoring Plan
EO	Extension Officer
EPA	Environmental Protection Agency
FtF	Feed the Future
FGD	Focus Group Discussion
FUN	Farmer Union Network
GAP	Good Agriculture Practices
GBCC	Grand Bassa Community College
GCAP	Green Coast Agricultural Program
GCMC	Global Construction & Mechanical Company
GDA	Global Development Alliance
GPS	Global Positioning Systems
IBEX	Investing in Business Expansion Liberia
IFDC	International Fertilizer Developmental Center
IITA	International Institute for Tropical Agriculture
IP	Implementing Partner
IPM	Integrated Pest Management
IQC	Indefinite Quantity Contract
ISFM	Integrated Soil Fertility Management
KRTTI	Kakata Rural Teachers Training Institute
LABEE IPG	Liberia Agriculture Business Enabling Environment Inter-Agency Policy Group
LADA	Liberia Agribusiness Development Activity
LATA	Liberia Agricultural Transformation Agenda
LAUNCH	Liberia Agriculture, Upgrading Nutrition & Child Health
LCCC	Lofa County Community College
LIFE	Livelihood Improvement for Farming Enterprises
LINA	Liberia News Agency

LIPAS	Liberia Integrated Professional Agriculture Service
LMEP	Liberia Monitoring and Evaluation Program
LNGO	Local Non-Governmental Organization
LRC	Law Reform Commission
LSU	Louisiana State University
LWDR	Liberian Women Democracy Radio
MFDP	Ministry of Finance and Development Planning
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
NAPEX	National Apex of VSLAs
NDA	National Diploma in Agriculture
NCCC	Nimba County Community College
NIC	National Investment Commission
NSB	National Seed Board
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
RSM	Rice Seed Multiplication
SDCA	Seed Development and Certification Agency
SPSS	Statistical Package of Social Sciences
SWF	Stakeholder Working Forum
TAMIS	Technical Administrative Management Information System
TCi	Top Consulting, Inc.
ToT	Training of Trainers
TSP	Triple Super-Phosphate
TVET	Technical, Vocational Education and Training
UDP	Urea Deep Placement
UEM	Universal Empowerment Mission
UL	University of Liberia
USADF	United States African Development Foundation
USAID	United States Agency for International Development
VET GOV	Veterinary Governance in Africa
VSLA	Village Savings and Loans Associations
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 Food and Enterprise Development (FED) Activity is USAID's flagship Feed the Future Initiative in Liberia. The project was launched in September 2011. USAID FED uses an all-inclusive strategy incorporating micro, small and medium enterprises (MSME), farmers, processors, suppliers, women, and youth, while partnering with the Government of Liberia (GoL) and local civil society to achieve food security.

FED is increasing food availability, utilization, and accessibility by building an indigenous incentive structure to assist agricultural stakeholders in adopting commercial approaches.

This incentive structure is built upon:

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

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 the latter stages of its fifth and final year of operation, FED is expanding market linkages designed to substantially increase incomes and job opportunities. FED is also significantly boosting the production, processing, marketing and nutritional utilization of rice, cassava and vegetables, as well as enhancing the productivity of goat farming.

These activities are implemented in Bong, Lofa, Nimba, Grand Bassa, Montserrado, and Margibi counties. FED has focused on these counties because they are situated along regional development corridors crucial to promoting intra- and inter-county commerce. These growth corridors are improving food availability and access for all Liberians.

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

FED is implemented by a consortium led by Development Alternatives, Inc., along with Winrock International, International Fertilizer Developmental Center (IFDC), Louisiana State University (LSU), and The Cadmus Group.

# COMPONENT ONE: INCREASE AGRICULTURAL PRODUCTIVITY AND PROFITABILITY

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

### Improving productivity and profitability of upland and lowland rice

#### **Provide continuing technical support to new and continuing upland and lowland rice groups**

FED continued to provide technical assistance to the FY16 upland and lowland rice beneficiaries through its field extension staff in Bong, Nimba, Lofa and Grand Bassa counties. Technical assistance primarily focused on weeding processes. To date, FED has supported 7,000 lowland farmers and 5,250 upland farmers in FY16.



Figure 1: Lead farmer Samuel Kadao and group members at the J.B. Thomas Farm demonstration site in Suakoko.

#### **Support 5,250 new rice farmers to apply improved technologies on 750 ha of upland areas**

750 ha of upland areas were successfully planted by the 175 upland rice groups. In August, farmers were consumed with weeding and bird scaring their plots. Farmers were previously trained on weeding tactics as an important measure to ensure that other crops do not compete for soil nutrients with rice paddies.

#### **Support 7,000 new rice farmers to apply improved technologies on 1,000 ha of lowland areas**

By the end of July, 599 ha of lowlands were successfully planted. In August, an additional 363 ha were planted. To date, 962 ha have been planted representing 96 percent of the targeted area. It is anticipated that all of the pending lowland areas will complete their target planting by the end of September.

On August 16-17, the USAID FED Contracting Officer Representative (COR) Maurice Ogutu and FED Component I Lead visited two lowland rice demonstration sites in Bong County to assess the progress of their weeding process. The two demonstration sites - J.B. Thomas Farm in Suakoko and Mashansue Farmers Group in Salala – were recorded as being on track with their weeding activities. However, some sections of the demonstration plots showed nutrient deficiencies, specifically with regards to Nitrogen. To address this, the FED Bong County office will provide Urea briquettes and applicators – the latter if available – to farmers in order to fertilize the affected areas.

Table 1: Lowland rice areas planted by county

County	Number of Farmers	Target Ha	Ha Planted in May	Ha Planted in June	Ha Planted in July	Ha Planted in August	Ha Planted YTD
Bong	1,400	200	0	157	14	29	200
Nimba	2,100	300	80	64	76	42	262
Lofa	3,500	500	0	111	97	292	500
<b>TOTAL</b>	<b>7,000</b>	<b>1,000</b>	<b>80</b>	<b>332</b>	<b>187</b>	<b>363</b>	<b>962</b>

## Promoting embedded services by the private sector

### **Technical assistance to aggregators, traders, processors and rice business hubs**



Figure 2: Milled rice for the GoL is stacked by Selma Agriculture Corp. staff in Voinjama, Lofa County.

Nine new rice business hubs began operations in July. In August, 45 beneficiaries (35 men and 10 women) in Bong, Lofa and Nimba counties were trained on how to operate and maintain rice mills. Participants were also provided protective gear such as face masks and earplugs.

In Lofa County, three FY15 rice business hubs were reported to have milled a total of 53 MT of paddy, which they sold for US\$37,100. Mohammed Kamara of the Agriculture Infrastructure and Investment Company (AIIC) located in Sarkonedu supplied 12.5MT of milled rice to the World Food Program (WFP) for US\$8,750. John Selma of Selma

Agricultural Corporation located in David Selma Town supplied 37.5MT of milled rice to the GoL for US\$26,250. Teddy Taylor from the rice business hub in Foya supplied 3MT of milled rice to local buyers for US\$2,100.

FED's USAID COR Maurice Ogutu and FED Component I Lead continued their county site tour by visiting two rice business hubs in Bong County on August 16-17. The two rice business hubs – Sumo Farm in Sinyea and Yalafama Farmers Association in Salala - were observed to be on track with their processing activities of milling, de-stoning and packaging of rice. Since beginning operations in July, Sumo Farm has milled 1.6MTS and the Yalafama Farmers Association 1.1 MTS of rice respectively.

### **Support aggregators with trucks on cost-share to support timely and reliable aggregation and transportation of paddy rice**

In July, the Selma Agricultural Corporation reported that 67MT of paddy rice was transported using the truck provided by USAID, generating US\$3,450 in revenue. To date, the aggregator has generated a total of US\$5,150 by hauling 112MT of paddy from 32 farmers. AIIC now employs a total of 15 staff (5 men and 10 women) and Selma Agricultural Corporation has 75 staff (43 men and 32 women). However, FED is advised that this truck is now inoperable due to a broken crankshaft. Per FED'S memorandum of understanding (MoU) with the Selma Agricultural Corporation, the vehicle repair is Selma's responsibility. FED will continue to monitor this situation to ensure it is satisfactorily resolved.



Figure 3: Chairlady of Yalafamah Rice Business Hub mills rice in Salala, Bong County.

## Promoting production of two rice crops per year

### **Support 42 farming groups to plant a second crop of rice in the lowlands using the spillways during the dry season**

In August it was reported that 143 ha under spillways and head dykes were under double cropping with rice. This included 124 ha in Bong County, 13 ha in Lofa County, 0.24 ha in Grand Bassa County and 6 ha in Nimba County. This represents 68 percent of the total potential area. These farmers will begin the

rice harvest in September. Adoption of double cropping was influenced by the farmer's interest in re-investing their own resources into the production of a follow on crop.

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

### **Improve productivity of cassava farmers**

#### ***Provide technical assistance and farming guides to FY13, FY14 and FY15 cassava groups to ensure they continue to apply improved practices and use improved varieties***

FED's field Extension Officers continued to provide technical assistance to farmers (new and continuing) this month. Field Extension Officers monitored the farmers' planting and weeding techniques on both the demonstration farms and their respective plots. The total number of beneficiaries will be confirmed as a result of FED's ongoing small holder survey.

#### ***Support an additional 6,000 new beneficiaries for FY16 cassava production***

By the end of the reporting period, FED was still collecting information on how many fields were planted by individual farmers. This information will be reported in September.

#### ***Train at least 300 lead farmers on GAP, ISFM, harvest, and post-harvest practices and improved technologies on 300 demonstration farms***

All the 300 *Kuu* leaders were trained on improved cassava production practices by the end of June. The training series focused on developing mounds and ridges, planting techniques and ISFM by intercropping with legumes to improve soil nutrition. Four trainings – one in each county – were led by FED Extension Farmers. The *Kuu* leaders are supporting their group members to establish mounds and ridges on their individual plots.

#### ***Establish 300 hectares of demonstration plots showcasing improved cassava varieties and ISFM***

By the end of August, all the 300 ha of the demonstration plots were successfully established in Bong, Nimba, and Grand Bassa counties. To create a demonstration plot, each *Kuu* commits 1 ha to a communal area. FED then provides the cassava cuttings, planting materials and training on mound and ridge planting. The 300 ha of demonstration plots were divided as 60 ha in Bong, 90 ha in Nimba and 150 ha in Grand Bassa counties.

In FY16, FED had expected that the West African Agriculture Productivity Program (WAAP) would provide certified high quality legume seeds imported from neighboring countries. However, WAAP did not honor this obligation and thus the new beneficiaries did not receive cowpeas and peanuts for intercropping. However, some farmers were observed to be intercropping their fields using legumes that they have procured by themselves. Observations were made by Component I team members during county farm visits.

### **Increase access of processors, traders, logistics providers, and integrators to financial and business development services**

#### ***Establish an industrial size processing facility with an investor through cost-share agreement***

In August, Longman Engineering, the consultant contracted by FED, submitted their Environmental Impact Assessment (EIA) report to the Liberian Environmental Protection Agency for approval. Based on the report, which concludes that the site meets environmental consideration, it is anticipated that the EIA certification will be issued in September. FED linked FALAMA to LADA in order to ensure that the processor could access financial assistance to procure the machinery. It is anticipated that FALAMA will receive financing to establish the factory through the LADA project in FY17.

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

### Improving productivity through GAP and IPM

***Provide technical assistance to 300 farmer groups (including 25 agribusinesses) on GAP and IPM and organize them into production units***

In August, FED continued to provide technical assistance to 300 farming groups through its field extension staff in Margibi, Montserrado, Bong, Nimba, Lofa and Grand Bassa counties. Technical assistance primarily focused on good agricultural practices and integrated pest management. The high intensity of rainfall in most of the counties limited the production of vegetables as flooding was a persistent challenge.



Figure 4: A flooded vegetable field at Mensah Farm in Montserrado County.

### ***Vegetable production and sales***

This reporting period, FED faced challenges gathering production and sales data from farmers due to the extreme difficulty in accessing the farmers. At the time of reporting, the complete sales data had not been fully collected and, as such, accurate sales

information will be documented in the September bi-weekly report. Nevertheless, the Careysburg vegetable cluster continues to supply the Royal Grand Hotel and Golden Beach restaurant with high value varieties. The cluster also supplied trial samples of three new lettuce varieties to Stop and Shop Supermarket. Similarly, the Mawah vegetable cluster continues to supply the U.S. Embassy and Life Focus Liberia with vegetables, the latter of which has a vegetable supply contract with the U.N. Mission in Liberia (UNMIL).



Figure 5: Varieties of lettuce supplied to Stop and Shop Supermarket. Left: Corell, Center: Lolla Rosa NBL, Right: Red Romaine

### Reduce harvest and post-harvest losses of vegetables along the value chain

***Provide technical assistance to farmer groups, trade associations, and private firms that have received technologies to optimize utilization***

FED introduced two technologies to farmers in August. One was an improved soil mix to enhance soil structure and fertility. The second new technology was a biocontrol solution based on local materials for pest management. FED also monitored the growth of new improved varieties of lettuce that were planted last month. Samples of three varieties were supplied to Stop and Shop Supermarket.

### ***Soil mix and biocontrol solution***

FED held demonstrations for the Mawah and Careysburg vegetable clusters on how to improve soil structure and



Figure 6: Farmers mix rice hull and charcoal bits at Mawah Cluster in Montserrado County.

fertility using waste materials such as rice hulls, charcoal bits and manure. The continuous use of these mixtures will substantially reduce the use of inorganic fertilizer in the future. FED trained the Mawah and Careysburg vegetable clusters on how to formulate a biocontrol solution using Neem (*Azadirachta indica*) leaves, chili pepper and dissolved laundry soap. These are used as organic pest control applications. The solution is cost effective to prepare since all components are locally available. The resulting solution is very effective in controlling soft-bodied insects such as aphids, white flies, mites and small caterpillars. Furthermore, the solution has very low levels of toxicity and is environment friendly.



Figure 7: Farmers are trained on vertical planting methods at Mawah Cluster in Montserrado County.

These technologies will be demonstrated to other FED farmers in Margibi and Montserrado counties through a field demonstration-training activity at Mawah in early September.

### **Vertical planting**

The Mawah and Careysburg vegetable clusters were trained by FED on the vertical planting process as a means to optimize the utilization of rain shelters. The vertical planting process allows farmers to grow more vegetables per unit area thereby increasing the density of plants and

volume of production. Approximately 23 lettuce plants can be planted in one plastic tube 1 meter tall. The soil medium used was a rice hull-charcoal bits-chicken dung soil mix.

### **Production in rain shelters**

In August, five rain shelters that were not being properly used or were left idle by farming clusters were reallocated to existing groups in Montserrado and Margibi counties. The groups that received the new shelters were those that have shown good performance. Gbomai Farm, an integrator with cold storage facilities supported by FED, is also slated to receive one of the rain shelters. The re-installation of the five rain shelters will be completed by the end of August.

### **Access to clean water**

In August, FED assisted the Careysburg vegetable cluster to construct a deep well. The cluster provided labor while FED provided the concrete culverts, a hand pump and a motor pump. The availability of a clean source of water for irrigation and post-harvest handling to comply with food sanitation regulations is critical to meet the quality standards required by institutional buyers.



Figure 8: Careysburg vegetable cluster and its newly constructed deep well.

## **Set-up contract-growing schemes under the export program and supply to institutional buyers**

### **Provide technical assistance to support export of high-value vegetables (okra, chili peppers etc.) to European Union markets**

FED continued discussions with Mr. Jean Louis Gruter of the VS Compagnie in Paris and Mr. Reinout Puissant of Brussels Airlines on the planned visit by vegetable importers to Liberia in September. This visit is tentatively scheduled for the second week of September. Mr. Jean Louise will meet with potential export firms and visit selected sites such as the Mawah, Careysburg, Mensah and White Plains vegetables clusters while in Liberia.

Brussels Airlines has agreed to facilitate a market matchmaking event in Brussels during September. This event will enable potential vegetable exporters to network and establish business relationships with European importers. Brussels Airlines will cover the cost of air fare for Liberian agribusiness companies interested in participating. The Liberian Agribusiness Development Activity (LADA) has also expressed interest in supporting this initiative once the FED activity ends.

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

### **Promote improved herd management practices**

#### ***Technical assistance to new and continuing farmers***

In August, FED Field Extension and Monrovia-based technical staff continued to provide technical assistance to new and continuing goat groups. Technical assistance - such as goat shelter construction, diseases diagnosis and monitoring of mortality rates - was provided to ensure that FY16 farmers construct goat shelters with locally available materials and fabricate mineral salt licks for better herd management. The shelters provided by FED on demonstration sites cost US\$4,000 per site. Using locally available materials, farmers are able to spend less than US\$1,000 per site by constructing simpler and smaller shelters.

#### ***Train 3,928 new beneficiaries on herd management practices and mineral salt lick fabrication***

By the end of the reporting period, a total of 78 lead farmers representing 78 new beneficiary groups in Bong, Nimba, Lofa and Grand Bassa counties were trained on how to fabricate mineral salt lick. Each group received ingredients to create salt licks. Four training sessions – one per county - were provided by FED's Goat Officers between May and August. Following the training, each lead farmer returned to their respective clusters and led a workshop for their group members. Based on the information to date, it is likely that FED met its target of 3,928 beneficiaries trained on herd management practices and mineral salt lick fabrication. This assumption will be verified during the next reporting cycle once the small holder survey results are finalized.

#### ***Construction of goat shelters***

By the end of August, 34 goat producer groups constructed 57 goat shelters using locally available materials. Farmers have noted that a number of goat shelters are still under construction. As FED does not have an annual target for this activity, the number of goat shelters ultimately constructed will depend on the will and needs of the farmers. These shelters have been constructed by farmers at their own cost. Goat shelters allow farmers to contain their animals so that they can treat, feed and care for them. The shelters are especially critical when monitoring pregnant does thereby reducing the rate of kid mortality.

#### ***Kidding and mortality rates***

A total of 186 new kids (64 male and 122 female) were born in August, of which four were reported to have died due to diarrhea. An additional 115 animals were sold. After mortality and sales, the total herd size by the end of August in FED-supported goat production intensification sites was 19,086 animals (11,437 does, 5112 bucks and 2,537 kids). In total, 2,747 kids have been born in FED-supported goat production intensification sites since October 2015.

### **Establish Nucleus Breeding Herd Center at CARI**

#### ***Renovate the quarantine facility at CARI for housing the Nucleus Breeding Herd Center***



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*Figure 9: Nucleus Breeding Herd Center established by FED and CARI in Bong County.*

In July, Tallobenku Engineering completed its conversion of the quarantine facility at the Center of Agriculture Research Institute (CARI) into a goat nucleus breeding herd center, under contract from FED. The facility is now under the “defects and liability period,” which will last for three months. Once the “defects and liability period” comes to a close and the quality standards have been confirmed, final payment to the contractor will be issued.

### ***Provide assistance to MoA in the control of Peste des Petits Ruminants (PPR)***

In July, BRAC Liberia submitted a final report of the post-vaccination test results for the PPR vaccination campaign, during which 103,249 goats and sheep were vaccinated. Furthermore, 200 samples were collected and tested using the ELISA Plate Reader provided to the MoA by FED. The test result indicated that the animals vaccinated during the campaign were able to build immunity against the PPR disease. In August, technical experts from the Food and Agriculture Organization of the United Nations (FAO) conducted sample tests using the ELISA reader and validated that the equipment was functioning properly and that the results were credible.

## **Establish nucleus formalizing livestock marketing**

### ***Goat sales***

By the end of August, a total of 135 goats (87 bucks and 48 does) were sold for US\$7,175. Since October 2015, 1,820 goats have been sold for a total of US\$174,739. The current sales achievements represent 57 percent of the annual sales target of US\$305,074.



*Figure 10: Traders at a goat marketing event with goats procured from farmers in Voinjama, Lofa County.*

On August 18, FED held a goat marketing event in Voinjama, Lofa County. A total of 15 FED-supported goat producers and five traders attended. During the event, 20 goats (8 does and 12 bucks) were sold for a total value of US\$1,005. The average price offered was US\$50 per animal, which is an increase from the US\$40 price that goats were sold for prior to FED intervention. During the event, the goat farmers were able to establish contacts with the traders, who committed to source more animals from the clusters in the future.

## **Subtask 1.2 Improved Access to Agricultural Inputs**

### **Increase access to improved seed and good planting material**

#### ***Support to commercial production and marketing of cassava cuttings***

Throughout July and August, FED's Input Supply team visited commercial cassava nurseries in Bong, Nimba, Lofa and Grand Bassa counties to assess the status of planting and survival rates of improved cassava cuttings varieties distributed to the 80 commercial cassava nurseries. The initial assessment demonstrates that the survival rates may be affected by farmers' delayed planting. Cuttings must be properly stored and planted within three to seven days of preparation to ensure their survival. Some farmers were observed to store plant cuttings well beyond the recommended storage time. In some sites, cuttings were planted a few days before the visits and had yet to germinate. As such, FED was

forced to delay the final analysis and will provide a complete analysis on the survival rates after receiving updated information in September. Since FED is concluding field activities at the end of this reporting period, we will discuss with LADA regarding its interest in providing any follow-up training on these topics.

On August 16-17, the USAID FED COR Maurice Ogutu and FED Component I Lead visited two cassava nurseries in Bong County to assess the progress of ongoing multiplication of cuttings. The two nurseries - Vision Change Farmers Group in Massaquoi Town and Kwapagei Farmers Group in Balamah Town – were recorded as being on track with their multiplication of cuttings and weeding processes. The Vision Change Farmers Group continues to work on multiplying improved cassava cuttings, provided by FED, on a 1.5 ha plot. Once they harvest, Vision Change Farmers Group will provide the multiplied cuttings to their members for further production and sell the remaining cuttings to nearby farmers. They also have 3 ha of land under cassava crop which will be harvested in September. Based on the success thus far, these producers have begun the process of clearing an additional 10 ha to expand their cassava production. Similarly, Kwapagei Farmers Group continues to work on multiplying improved cassava cuttings, provided by FED, on a 1.5 ha plot under cuttings multiplication. When they received improved cuttings from FED, some of the cuttings were already dry and thus could not be planted. However, they sourced cuttings from other suppliers to have enough to plant. They are also planning to intercrop their farm with legumes and expand cassava production across 5 ha.



Figure 11: Lead farmer James Sumo at Vision Change Farmer's Association cassava nursery in Massaquoi Town, Suakoko.

## **Increase access to improved seed and good planting material**



Figure 12: Lead farmer Elizabeth Smith at the cassava nursery in Balamah Town, Suakoko.

### ***Promote embedded financing for inputs through agro-dealers and aggregators***

In August, FED met with LADA to discuss next steps for the ongoing agro-dealer and aggregator awareness campaign. The awareness campaign seeks to inform farmers about services provided by agro-dealers in their counties as well as results from soils analysis services provided by community colleges. It was agreed that both activities will collaborate to implement a three week awareness campaign (August – September) through targeted messaging that will be broadcasted on community radio stations in Bong, Nimba, Lofa, Margibi and Montserrado counties.

## **Promote Organic Fertilizer mix and efficient use of Inorganic Fertilizer**

### ***Provide Technical assistance to farmer groups to adopt composting at farm level***

The Mawah Vegetable Cluster in Mount Barclay expressed interest in cost-sharing the purchase of a compost shredder. The Mawah vegetable cluster is one of the clusters participating in the vegetables-for-export initiative. By the end of the reporting period, the group had yet to deposit the required 50

percent cost share of US\$620. FED is now seeking other alternative clusters that may be ready to pay the cost share to acquire the equipment.

***Provide Technical Assistance to Centers of Excellence to promote fee-based soil testing using the science laboratories***

In August, FED Project Manager Emmanuel Lincoln trained soils lab technicians from Booker Washington Institute (BWI) and Grand Bassa Community College (GBCC) on how to conduct analysis using laboratory equipment in the soils laboratories. One supervisor and two laboratory technicians were trained from each institution.

**Subtask 1.3: Agricultural Extension Support**

**Create access to and availability of standardized extension material**

***Print and disseminate extension materials and farmer guides***

By the end of the reporting period, copy-editing and proof reading of all the rice and vegetable extension materials was completed. The cassava and goat extension materials were still being reviewed and are anticipated to be ready for publication by the end of August. In September, a total of 28 different extension materials are expected to be distributed in electronic format to the MoA, lead farmers, extension officers, local NGOs, the private sector and other development partners who express interest. A limited number of printed copies will be made available to the MoA.

**Subtask 1.4: Youth in Agribusiness**

**Provide technical assistance to 25 youth agribusinesses enterprises towards production of high value vegetables and cassava tuber**

***Provide 25 peri-urban agribusiness enterprises with technical assistance, extension services and access to pesticides and chemicals for Integrated Pest Management through agro-dealers***

In August, the 25 peri-urban agribusiness enterprises were reported to have harvested 1.9MT of vegetables from 24 ha, which they sold for US\$2,175. Since October 2015, these enterprises have sold a total of 43.4MT of vegetables for US\$63,727.

***Train 25 peri-urban agribusiness enterprises on improved cassava production methods and practices***

In August, FED Extension Officers conducted inspections on 70 ha of individual farmer fields and 25 ha of demonstration sites. Youth groups continued to weed and maintain their individual cassava fields under the supervision of lead farmers. The lead farmers also started intercropping the demonstration farms with legumes provided by FED. In total, 3.4 ha were intercropped with cowpeas and peanuts during this reporting period.



Figure 13: Lab technicians are trained on how to collect (left) and analyze (right) soil samples at BWI in Kakata, Margibi County.

## Support the development of sustainable operations of 126 youth agro-enterprises

### **Supporting job creation through youth enterprises as transport service providers**

In August, 37 *Tuk-tuk* operators generated a total of US\$4,320 in revenue from the transportation of agricultural products and other commodities. These enterprises have generated a total of US\$194,073 since the establishment of the enterprises in 2015.

## Subtask 1.5: Improving Human Nutrition

### Implement diet behavior change strategy

By the end of the reporting period, a total of 721 copies of nutrition teaching aides were distributed to lead farmers and FED extension staff in Bong, Nimba, Lofa and Grand Bassa counties. The nutrition teaching aides are simplified guides that lead farmers use when disseminating nutrition messaging to group members. The remaining 80 copies will be distributed to lead farmers in Montserrado and Margibi counties by the end of September.

Table 2: Distribution of nutrition teaching aids by county.

County	Number of Lead Farmers	Number of Extension Officers	Nutrition Teaching Aid Target Distribution	Nutrition Teaching Aid Distribution To-Date	Remaining Nutrition Teaching Aids to Distribute
Bong	149	3	152	152	0
Nimba	216	3	219	219	0
Lofa	173	3	176	176	0
Grand Bassa	171	3	174	174	0
Montserrado	56	2	58	0	58
Margibi	20	2	22	0	22
<b>TOTAL</b>			<b>801</b>	<b>721</b>	<b>80</b>

## COMPONENT TWO: STIMULATE PRIVATE SECTOR GROWTH AND INVESTMENT

### Task 2: Policy Enabling Environment for Private Sector Growth

#### Policy Reform Activities via Technical Working Groups and 10% Cassava Composite Flour Policy Development

During the reporting period, the Law Reform Commission (LRC) continued its review of three draft acts which were previously endorsed by the MoA on June 30. FED Agriculture Policy Expert, Dr. Roland Massaquoi, met with the membership of the LRC several times to address technical questions regarding the draft legislations. Since seeds are specifically addressed in the legislation proposed by MoA, particular attention was given to the draft act that harmonizes the ECOWAS Seed Policy with Liberian domestic policy. After conclusion of the consultation with LRC, FED anticipates that the body will approve the draft legislation so that the MoA can formally propose legislative action to the Cabinet and Legislature.

## Subtask 2.1 Access to Finance

### Village Savings and Loan Associations

In August, 20 Village Savings and Loan Associations (VSLA) groups in Lofa, Nimba, Margibi, Montserrado, and Grand Bassa counties successfully completed action audits, cash distribution and graduated. A total of US\$62,118 was disbursed among the 599 members. The Women Organization for Peace and Development (WOPFD) of Lofa County was especially successful as they deposited US\$3,400 in their account at the Central Bank of Liberia local branch in savings following the share out.



Figure 14: VSLA members after they receive their shares.

In preparation for the upcoming Agribusiness Expo, the Component Two team met with FED VSLA and Enterprise Service Center (ESC) partners for their presentations at the event, slated for September 13 and 14. Two NGOs that FED has worked with to implement its VSLA program since 2013, EDUCARE & UEM, will jointly present a workshop on the 723 VSLA groups supported by FED. Additionally, a total of 8 VSLA members from Lofa, Nimba, Bong and Grand Bassa counties will travel to Monrovia to demonstrate VSLA methodology to participants at the expo. The eight presenters currently hold leadership positions within their local VSLAs, such as chairlady or record-keeper.

## Subtask 2.2: Access to Business Development Support (BDS) Services and Enterprise Service Centers & Promotion of Public-Private Partnership (PPP) to Benefit Feed the Future Objectives

### Supporting BSPs to establish ESCs



Figure 15: TCi's Chief Executive Officer Wilson Idahor presents on TCi's concluding activities at FED's office in Monrovia.

Top Consultants, Inc. (TCi), a FED-contracted consulting firm providing technical assistance to FED-supported business service providers (BSP), successfully concluded the ESCs awareness campaign in July. The campaign was part of TCi's efforts to build the capacity of the BSPs as they transition to fee-for-service ESCs. The awareness campaign included radio jingles, banners, t-shirts, appearances on radio talk shows, as well as traveling road shows to communities, towns and districts of Margibi, Bong, Lofa, Nimba and Grand Bassa counties. On August 5, TCi delivered its final report and exit presentation at the FED Offices in Monrovia for a group of 40 participants (36 men and 4 women) that included representatives from USAID, the MoA, FED partners and other NGOs (local and

international).

The concluding documents highlighted TCi's efforts to build capacity of the five BSPs and graduate them to full-fledged ESCs. The presentation concluded a multi-year effort to build capacity of these organizations to provide essential agribusiness support services at the county level. TCi confirmed that all five of the BSPs qualified as ESCs. The criteria for achieving this status included building a client base, development of business plans for a fee-for-service business model, and demonstrated capacity to

generate revenue and add value to agriculture chains across their respective counties. FED plans to formally recognize the ESC achievements at the Agribusiness Expo in September.

In advance of next month's Agribusiness Expo, FED's Component Two team continues to work with six groups – TCI's four partners as well as TCI itself - that have successfully transitioned from BSPs to ESC on their exposition materials. TCI will be certified by FED as a Monrovia-based ESC because of its capacity to function as an agribusiness hub in Liberia's capital. The materials, created in collaboration with FED, will showcase their businesses and help them to create external linkages.

## **COMPONENT THREE: BUILD LOCAL TECHNICAL AND MANAGERIAL HUMAN RESOURCE CAPABILITIES**

### **Activity 3.1: Roll Out the National Diploma in Agriculture (NDA) in All Four CoEs**

FED continued the implementation of capacity building trainings to empower the four Centers of Excellence (COE) at BWI and the three community colleges of Lofa, Nimba, and Grand Bassa counties. The objective of these activities is to ensure that the COEs become self-sustaining after the project phases out in December 2016.

Between August 2 and August 16, FED Consultants Thomas Kanneh and Emanuel Lincoln concluded separate training sessions at BWI in Margibi County and the Grand Bassa County Community College (GBCC). In total, 12 participants – 9 grant proposal writers and 3 lab technicians – attended the BWI training while 14 participants – 11 grant proposal writers and 3 lab technicians – were present for the GBCC session. Thomas Kanneh facilitated sessions on grants proposal writing for faculty and administrative staff of the institutions, while Emmanuel Lincoln led refresher sessions on soil testing for laboratory technicians. These two sessions conclude the training series which began in July at Lofa County Community College and Nimba County Community College.

### **Activity 3.4: Enhancing Availability of Textbooks and Reference Materials for the NDA**

#### **Task 3.4.1: Procure additional textbooks**

In August, FED distributed recently-procured textbooks and reference materials to the four CoEs at BWI and the three community colleges of Lofa, Nimba and Grand Bassa counties. FED provided textbooks and other reference materials to support faculty and students of the National Diploma in Agriculture (NDA) program. In total, 144 books were distributed to the COE's newly renovated libraries. The collection includes 12 textbook titles and eight reference guides.



*Figure 16: Boxes of textbooks handed over to the COEs in support of the NDA program.*

## **COMPONENT FOUR: CROSS-CUTTING ACTIVITIES**

### **Task 4.1: Communications and Knowledge Management**

#### **Strengthening Media Relationship**

In August, FED's Communications team paid courtesy visits to five partner media institutions. The media outlets included the Daily Observer, New Democrat, Truth FM, Liberia News Agency, and the Liberia

Women Democracy Radio. The objectives of the visit were to deliver letters of appreciation for their participation in FED's recent press tour in Bong and Nimba counties, deliver invitations to the upcoming Agribusiness Expo and introduce the new FED Communications Specialist, Leanne Blanchette.

### **Articles published/aired on FED's activities in August 2016**

The following news items about FED were published during the month of August.

Table 3: FED news publications in August 2016.

Title of article published / aired	Media Institution	Date
USAID FED Addressing Challenges to Food Security in Liberia	New Democrat (newspaper)	2 August 2016
USAID FED Links Farmers to Markets	Daily Observer (newspaper)	14 August 2016

### **Agribusiness Expo**

Planning activities for the September 13-14 Agribusiness Expo remain ongoing. The Agribusiness Expo will focus on the theme of "Building a more food secure future for Liberia" and is designed to showcase progress and products/services of agribusinesses, MSMEs, farming groups and other agriculture service providers supported by FED over the past five years. The Expo will also provide a forum for FED partners to share their challenges to sustainability and opportunity for networking and marketing their products and services. The design of the two-day Expo will include: (a) plenary sessions on macro-level issues pertaining to value chain integration and support services; (b) eight workshops on various elements of FED addressing micro-level value chain matters; and (c) 12 exposition booths for product displays and information sharing among FED partners and beneficiaries.



Figure 17: FED produced materials for the upcoming Agribusiness Expo.

Activity Managers for the rice, goat, cassava and vegetable value chains met with beneficiaries who will attend the Expo and reviewed workshop materials prepared by presenters. FED Deputy Chief of Party Boima Bafaie worked with County Managers to invite participants from key farming groups, aggregators and processors from the field. Dr. Roland Massaquoi will serve as moderator of the two plenary sessions to be presented at the Expo.

## **Task 4.2: Environmental Compliance**

FED's Environmental Consultant, Cadmus Group, submitted its final report on Environmental Sustainability Assessment in early August. The report outlined the existing environmental compliance documentation and processes established for the project. The report also included a review of relevant project documentation, in-country field work and consultations, and offered a detailed look at the primary issues and areas of concerns. Significant emphasis was placed on methods of promoting environmental sustainability during the project close out process. The CADMUS team continues to meet with various members of the technical team by way of remote communications to finalize lessons

learned and recommendations for future actions. Although FED is preparing for closedown, the project is considering the report's recommendations as a strategy for better environmental sustainability.

### Task 4.3: Monitoring and Evaluation

As part of continuous efforts to improve and upgrade the monitoring and evaluation of the project, FED's Monitoring & Evaluation (M&E) Director met with the USAID FED COR and the FED project management during the first week of August. This meeting was followed by another discussion on August 12 with the FED M&E team and the Chief of Party. FED received guidance from the COR on revising the Performance Management Plan (PMP), and clarifications on questions posed – via email - by USAID staff, including the Feed the Future M&E Advisor in Washington DC. As a result of the PMP guidance from the COR, a meeting was convened with the technical staff and county managers to revisit the content of the existing PMP. The PMP is currently under revision for planned for submission to the COR on September 6.

In August, efforts were focused on launching the FED Beneficiary Based Enterprise Survey. FED staff finished compiling an Excel database of MSME beneficiaries, totaling more than 700. This mainly consists of rural entrepreneurs, registered cooperatives and petty traders, as well as 49 registered VSLAs. In order to ensure the utmost data quality, FED decided against using phone based interactive voice recognition technology (IVR) for the Enterprise Survey. Instead, the M&E Director and Team trained Extension Officers to issue the survey in-person, enabling them to visually verify investments, probe for details, and explain definitions of complicated concepts such as investment to rural entrepreneurs. The training sessions were held on August 8-10. The Extension Officers were also trained on indicator definitions and how to administer the survey within the FED context. Learned information was reinforced through quizzes and instructor-led practice exercises. On return to the field, Extension Officers completed pre-tests for which the data is currently being collected and analyzed.

The Senior Survey Advisor completed cleaning of the smallholder beneficiary listing (FY12-15), including checking for, and removing, duplicates. The M&E team, together with the Extension Officers went line by line through the FY 2016 smallholder beneficiary listing to make sure it was complete, accurate, and up-to-date. This data will be entered into the cleaned database being maintained by the Senior Survey Advisor, and it will be used by the Statistical Expert, who is responsible for sampling, data quality and weights, to randomly select the sample for the September smallholder survey of FY 2016 beneficiaries in the rice, cassava, and goat value chains.

Data on FY 2016 results against targets will be ready for presentation in FED's FY16 Annual Report and in time for the annual USAID Feed the Future Monitoring System (FTFMS) and Performance Indicator Database System (PIDS). As assigned by the Mission, FED is reporting on 15 indicators for FY2016. Data for FYs 2012 through 2015 is being collected via an impact assessment conducted by an independent contractor hired by USAID for this purpose. In addition, FED is currently finalizing the PMP governing data collection and management for the 15 indicators which we have been assigned for FY2016. This PMP will be submitted for the Mission's review in early-September.

During the month of August, FED'S Closedown team completed the review of MDF procurement files, HR files, and most operations general procurement files. The team also finalized a review of the project inventory and submitted vehicle disposition and draft NXP disposition requests to USAID. FED staff has been reduced from a high of 130 staff to less than 80. During the month of September, the Closedown team will focus on closing all of the FED county offices. To assist with this task, Pierina Nepote of DAI's Home Office arrived in Liberia and will remain in country for the month of September. All county offices will be closed in September.