

**Midterm Performance Evaluation Report
FY 13 Food for Progress Livelihood Improvement for Farming Enterprises (LIFE) Phase III
Liberia**

**Midterm Performance Evaluation Report
Livelihood Improvement for Farming Enterprises (LIFE)
Phase III Project**

**Monrovia, Liberia
June 7, 2016**

Midterm Performance Evaluation of the FY 13 Food for Progress Livelihood Improvement for Farming Enterprise (LIFE) Phase III Project in Liberia

Midterm Evaluation Report

Authors:

Abraham Billy
Emmanuel Johnson Nimbuen
Thomas B. Kanneh
B. Yourfee Kamara
Decontee Peters
Bernard D. Togba, Jr.
Programme Management Solutions

Submitted by:

Programme Management Solutions
Ashmun Street, Monrovia
Liberia

Evaluation Director:

Bernard D. Togba, Jr.

Submitted to:

David Parker, MBE
Chief of Party/LIFE III
ACDI/VOCA
Monrovia, Liberia

Evaluation Manager:

Vekeh L. Donzo

Project Managers:

Augusttine Laveleh
Deputy Chief of Party/LIFE III
ACDI/VOCA

This study was conducted under RFP Number: ACDI/VOCA-LIFE-005/2016 with ACDI/VOCA Liberia. The study was funded under United States Department of Agriculture (USDA) FCC-669-2013/040-00-A.

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Cover photo: LIFE III Cocoa nursery in Gorbo Wrogba, Grand Gedeh County, Liberia by Decontee Peters, PMS.

ACKNOWLEDGEMENTS

The midterm evaluation of the Livelihood Improvement for Farming Enterprises (LIFE) III was conducted under the direction of the Monitoring and Evaluation Team of ACDI/VOCA.

We would like to thank the M&E Team, Vekeh L. Donzo, Mawata Kenneh, Emmanuel Isaiah, Bahnavileh Jones, Macklin Korvah and Alex Rotchi, for their guidance and support throughout the study. We would also like to thank Mr. David Parker (COP), Mr. Michael Tioe, Augustine S. Laveleh, CWAP, Catalayst, Rural Agriculture Alternative, and WIENCO for their valuable contributions to the study.

We are grateful and appreciative for the help and support from all survey participants and key informants as well as the ACDI/VOCA staff.

The entire PMS worked on this survey from inception to completion and our thanks goes to them.

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ACRONYMS

ADS	Automated Directives System
CAC	County Agriculture Coordinator
CARI	Central Agriculture Research Institute
CDA	Cooperative Development Agency
CWAP	Center for Women Agriculture Program
DQA	Data Quality Assessment
FAAB	Farming as a Business
FAD	Food Assistance Division
FAS	Foreign Agriculture Service
FFS	Farmer Field School
FOB	Free on Board
FFP	Food for Progress
FGD	Focus Group Discussion
GIS	Geographic Information System
GOL	Government of Liberia
GPS	Global Positioning System
IDQA	Internal Data Quality Assessment
IP	Implementing Partner
IPS	Improved Production System
KII	Key Informant Interview
LBA	Local Buying Agents
LIFE	Livelihood Improvement of Farming Enterprise
LOP	Life of Project
MELP	Monitoring Evaluation and Learning Plan
M&E	Monitoring and Evaluation
MOA	Ministry of Agriculture
MT	Metric Ton
NGO	Non-governmental Organization
OCBD	Office of Capacity Building and Development
PMP	Performance Management Plan
PMS	Program Management Solutions
PRA	Participatory Rural Appraisal
ROM	Result Oriented Management
SOCODEVI	Société de Coopération pour le Développement International
TPS	Traditional Production System
USDA	United States Department of Agriculture

EXECUTIVE SUMMARY

With funding from the United States Department of Agriculture (USDA), ACDI/VOCA implements the LIFE III project in Bong, Nimba, Lofa, Gbarpolu, Grand Gedeh, and River Gee counties. Specifically, ACDI/VOCA empowers 10,000 smallholder cocoa farmers, farmer organizations, and suppliers in these six counties to improve livelihoods by increasing the productivity, profitability, quality, and marketability of Liberian cocoa. The project is being implemented through the following five components:

1. Training: Improved Farm Management
2. Capacity Building: Producer Groups/Cooperatives
3. Financial Services: Facilitate Agricultural Lending
4. Inputs: Develop Agro-dealers
5. Market Access: Improved Market Information

ACDI/VOCA monetized 11,900 metric tons of rice and use the proceeds from the sale to implement the third and final phase of the LIFE interventions. Challenges faced in monetizing the commodity donated by the USDA delayed the implementation of the project by at least nine months. In addition to the delay in monetizing the commodity, the Ebola outbreak also affected the start of the LIFE III project. The Ebola outbreak in 2014 diverted the national agenda from post-war development to the fight against Ebola. These uncontrolled situations caused the project to delay for more than a year before it commenced implementation.

The fundamental activity for the LIFE III's intervention was to establish farmer field school that will train smallholder cocoa farmers on good agricultural practices for sustainable cocoa production. The first phase of these FFS began June 2015, approximately one year to the end of the project, while the second phase of the FFS began in March 2016 to August 2016.

ACDI/VOCA commissioned Program Management Solutions (PMS) to conduct a midterm evaluation of the Livelihood Improvement for Farming Enterprises (LIFE) III Project. The purpose of the LIFE III midterm evaluation was to determine the relevance, efficiency, effectiveness of the project as well as the progress made towards sustainability of results. Furthermore, to assess whether the project is on track to meeting its targeted goals and objectives; and to discuss necessary modifications or mid-course corrections that may be necessary to effectively and efficiently meet the stated goals and objectives. This report summarizes findings from the evaluation team.

Key evaluation findings include:

- LIFE III has successfully managed farmer trainings at FFS through which 2,423 cocoa farmers completed the first phase and approximately 3,500 additional cocoa farmers are being trained during the time of data collection for this evaluation. The trainings are intended for farmers to change their farming method from the Traditional Production System (TPS) to the modern Improved Production System (IPS) system; however, data collected from farm observation showed that 59% of the surveyed farmers has adopted and applied good agricultural practices for sustainable cocoa production.

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- Review of the project's database and available source documents showed that 2,461 (1298 men; 1163 women) farmers have received loan through 18 value-chain financing arrangements which is halfway to achieving the LOP target. However, loan disbursement by financial institutions remained a challenge, though the project has overcome some of the hurdles between the lending institutions and the farmers.
- The project has made significant progress on its performance indicators as compared to the baseline values; there are significant achievement on 17 of the 25 indicators while eight of the indicators remain far below the initial LOP targets.
- Smallholder cocoa farmers' access to cocoa market price has been improved significantly as a result of the project activities; however, during FGDs, some farmers reported that due to dishonesty of the leadership of farmers groups, most farmers do not trust the Warehouse Receipt Program (WRP) – a system in which individual farmers keep their produce with the group to sell in bulk for better price. As the result, farmers have begun to sell individually to middle buyers which lead to undermining the market price.
- The project seriously emphasized on gender mainstreaming. The evaluation team finds out from literature review that there was gender assessment conducted to ensure that gender issues are integrated throughout the project cycle. Moreover, the project assigned a Gender Focal Person to encourage women's participation in all project's activities. Besides, sub-grantees were required to register at least 40% women at the FFS; however, women participation has increased to 37% above the baseline value. The team gathered that the low women representation in the overall project beneficiary number is largely due to the male-dominated farmer groups inherited by the LIFE III project. The women represent only 23% of the group membership while 77% are men

Conclusions

This report provides analytical findings on data collected through LIFE III midterm evaluation on cocoa productivity; financial services to producer groups, and availability of agricultural inputs. The results of the evaluation were used to determine the progress made in achieving the LIFE III project's objectives. The evaluation concludes the following based on data collected for the midterm evaluation:

- Knowledge of more than half of project targeted beneficiaries is increased on improved agricultural techniques and technologies; but not all of them is using the knowledge to increase farm productivity.
- The project has successfully increased cocoa farmers' access to value-chain financial services; however, agricultural loan from financial institutions remain a challenge.
- The LIFE III project remains relevant to improving cocoa production in Liberia. The project's objectives align with the Government of Liberia's vision for building the Liberia cocoa sectors. Also, smallholder cocoa farmers find the project useful,

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relevant and necessary for improving the sector and their livelihoods; however, there are need to strengthen the coordination and partnership among the cocoa value chain stakeholders as well as donor – funded projects.

- There is significant progress be made in achieving most of the project targets; however, there remain challenges in reaching initial LOP targets for some of the indicators. The project will have to vigorously engage the activities required for those indicators otherwise would not be able to reach its targets based on the time left for implementation;
- Use of improved farm management practices is slowly increasing even though the project has made significant effort in training smallholder farmers on Farming as a Business concept.
- The commercial nurseries initiative is a sustainable way of ensuring that farmers get access to improve planting materials.
- Smallholder cocoa farmers' knowledge on cocoa price and grading system is increased as the result of LIFE III market information dissemination platform. Up to 60% of the farmers have access to market information.
- The project has cardinal approach to sustain its implementation strategies. The evaluation team confirmed that there was sustainability approach underlying each of the project's components. However, there are needs to strengthen those approaches.

Recommendations

In view of the analyses, contextual and conclusions provided in this report, the evaluation team would make the following recommendation:

- To rapidly increase annual cocoa production of smallholder, there is a significant work required in term of upgrading and rehabilitating the mass of cocoa farms;
- With limited time to project completion, there is serious need for enhancing project activities to meet LOP targets that have not been reached;
- The project should continue to strengthen its engagement with private sector partners so that improved varieties of saplings / seedlings will continue to be available in Liberia. Increased cooperation with the private sector will help in the sustainability of technology transfer initiatives.
- To ensure gender – balance, LIFE III should continue its engagement with farmer groups across the project operational counties to encourage women participation in the cocoa value chain.
- There is overall overlap in the different categories of institution in the cocoa sector, therefore, the Cocoa Sector Technical Working Group (CSTWG) which comprise

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of all stakeholders should strengthen coordination and partnership among cocoa value chain stakeholders including donor-funded project.

I. INTRODUCTION

I.1 The Context

In spite of relatively favorable market access conditions, the Liberian cocoa export value chain is affected by constraints so severe they have prevented it from meeting the requirements of international markets. Fundamental challenges present during the pre-war era persist today and in some cases have become exacerbated. Cocoa farmers, who make up a significant portion of cash crop production, are some of the poorest and most food insecure populations in Liberia. On the supply side, the absence of a well-functioning inputs market has led to a high dependency on imports and increased operating costs. The cocoa tree stock in the country is largely dilapidated and old. As is the case with other agricultural sectors, farming equipment is in short supply. For instance, the shortage of scales at the farm-gate level has led to wide discrepancies in terms of volume across the value chain. Technological and mechanization levels are very low. Other important supply-side weaknesses include an impoverished and outdated human capital base, and weak organization levels among sector stakeholders.

The sector faces significant challenges in terms of the business environment and institutional support. As in the case of other sectors, the trade support network of the cocoa sector is weak. Institutions such as the Liberia Produce Marketing Corporation (LPMC) are in dire need of an overhaul. The extension services branch of the Ministry of Agriculture has been struggling to maintain a technical presence in the field, due to which best practices and technical innovations have been slow to gain ground. Given how important strong economic institutions are for growth, Liberia in general – and the cocoa sector in particular – can use this situation to build a fundamentally different and equitable institutional structure that will catalyze a better future for the estimated 30,000 smallholders involved in the sector¹.

To support the recovery of the Liberian cocoa sector, ACIDI/VOCA received funding from United States Department of Agriculture (USDA) to implement LIFE III project in Bong, Nimba, Lofa, Gbarpolu, Grand Gedeh, and River Gee counties. Specifically, ACIDI/VOCA empowers 10,000 smallholder cocoa farmers, farmer organizations, and suppliers in these six counties to improve livelihoods by increasing the productivity, profitability, quality, and marketability of Liberian cocoa. The project is being implemented through the following five components:

1. Training: Improved Farm Management
2. Capacity Building: Producer Groups/Cooperatives
3. Financial Services: Facilitate Agricultural Lending
4. Inputs: Develop Agro-dealers
5. Market Access: Improved Market Information

USDA donated 11,900 metric tons of rice to ACIDI/VOCA to monetize and use the proceeds from the sale to implement the third and final phase of the LIFE interventions. Challenges faced in monetizing the commodity donated by the USDA delayed the implementation of the project by at least nine months. In addition to the delay in monetizing the commodity, the Ebola outbreak also affected the start of the LIFE III project. The Ebola outbreak in 2014 diverted the national agenda from post-war development to the fight

¹ Liberia National Cocoa Strategy

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against Ebola. These uncontrolled situations caused the project to delay for more than a year before it commenced implementation. The project design was reviewed after the monetization of the commodity and the Ebola outbreak.

The fundamental activity for the LIFE III project is the farmer field school through which smallholder cocoa farmers are trained on good agricultural practices for sustainable cocoa production. The first phase of these FFS began June 2015, approximately one year to the end of the project. The 10 months long training modules were condensed and delivered for seven months while the second phase of the FFS is running for five months beginning in March 2016 to August 2016. The project signed a fixed obligation grant with eight local agro-institutions to manage training sessions at the total of 186 farmer field schools across the six project counties.

1.2 Evaluation Purpose, Objectives and Questions

The purpose of the LIFE III midterm evaluation is to assess whether targeted beneficiaries are receiving services as expected; assess whether the project is on track to meeting its targeted goals and objectives; document initial lesson learned; and discuss necessary modifications or mid-course corrections that may be necessary to effectively and efficiently meet the stated goals and objectives. The specific objectives of the LIFE III mid-term evaluation are to:

- Assess the project's progress in meeting its expected results and the likelihood of attaining its outcomes as defined in the agreed Performance Monitoring Plan (PMP);
- Assess the effectiveness and efficiency of implementation approaches used by the project in service delivery;
- Review the appropriateness and usefulness of performance indicators described in the project document in assessing the project's progress;
- Assess how the project is integrating women and youth in its interventions and whether both men and women are benefiting equally from project interventions;
- Provide suggestions and recommendations on areas the project should focus in its remaining year of implementation;
- Identify measures/mechanisms for sustainability put in place by the project;
- Assess the effectiveness of project monitoring and evaluation system in facilitating achievement of results and project delivery, and;
- Assess how project monitoring data is used in decision making and adaptive management.

Evaluation Questions

The midterm evaluation was geared towards providing answers to the below learning questions:

Relevance

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- What are the prevailing project context and its significance to project implementation?
- How are the different stakeholders involved in the project delivery?
- Are the technologies and practices being promoted by the project well established and well suited to the local environments?
- Are the project objectives, and activities still in line with and the beneficiary, community, governance and needs and priorities?
- Does the project design (i.e. priorities, outcomes, outputs and activities) address the stakeholder needs that were identified?

Effectiveness and Efficiency

- What progress has the project made in achieving its respective objectives as outlined in its performance plan?
- How effective are implementation approaches used by the implementing partner in achieving intended objectives/results and reaching scale?
- To what extent have women and youth been integrated into the design and implementation of the project activities?
- To what extent have activities reached scale in terms of; outreach, to direct beneficiaries and indirect beneficiaries; adoption of new technologies and practices and adoption of innovative business models?
- Is the project making sufficient progress towards its planned objectives?
- Have resources (funds, human resources, time, expertise etc.) been allocated strategically to achieve outcomes?
- What are the strengths, weakness and challenges in project implementation (management, staff capacity, coordination and reporting) and what strategies have been employed to overcome them?

Sustainability

- What mechanisms have been put in place to ensure sustainability of program results?
- What is the level of overall viability of the expected outcomes and signs of sustainability of the same?

I.3. Overview of LIFE III Activities

LIFE III is the final phase of the Livelihood Improvement for Farming Enterprise (LIFE) program, started in 2008 and concluding in August 2016. The eight million USDA monetization funded project empower smallholder cocoa farmers, farmer organizations, and suppliers to improve livelihood by increasing the productivity, profitability, quality, and marketability of Liberian cocoa.

Literature review showed that under LIFE I and II, ACDI/VOCA facilitated the development of 30 new smallholder farmer groups which have developed good reputations for improved democratic governance, good management principles and a focus on cocoa production and marketing.

Moreover, the program was instrumental in developing Liberia's 2010 National Cocoa Sector Development Strategy, supports local civil and government capacity to act for the benefit of cocoa farmers, and has built the capacity of CARI to found the national cocoa breeding program in collaboration with ARS – USDA Miami and the West Africa Cocoa Breeding group. LIFE III has been critical to the successful transition from a cocoa sector in rapid decline for over 30 years to a vibrant sector attracting GOL and private sector investment and the formalization and growth of strong farming cooperatives and private sector input providers throughout the cocoa belt of Liberia.

LIFE III program aligns with Food for Progress Strategic Objective I by increasing farm-level productivity. ACIDI/VOCA signature approaches – Farmer Field schools (FFS) and Farming as a Business (FaaB) trainings – are tailored to increase application of new agriculture techniques and technologies, improve crop diversification, and strengthen farm management practices. The project increases farmers' access to cocoa markets by strengthening their business management capacity, increasing the use of post – harvest facilities, establishing market linkages, and facilitating the dissemination of market information. Key activities highlighted delivered up to date include:

2. EVALUATION METHODOLOGY

PMS employed mixed data collection and analysis methods to provide answers to the evaluation questions. Data was collected in all of the project's six counties – Grand Gedeh, Lofa, Nimba, River Gee, Bong, and Gbarpolu – by two sub teams. PMS utilized data collection and analysis methods to adequately provide answers to the evaluation questions.

2.1. Evaluation approach

The evaluation plan followed set protocols and a highly qualified team. The plans were agreed upon and approved for implementation. The sub-sections below discuss the plan in detail.

2.2. Sampling methodology

With a 5% margin of error and 95% confidence level, the evaluation team determined a sample size of 372 from LIFE III project's 10,000 targeted cocoa farmers. The sample size was calculated based on the sample size calculation formula. After the sample size was determined, the sample was then proportionally distributed across the six LIFE III project counties. The evaluation team then employed simple random sampling to determine respondents for the survey in each county based on the sample allotted to the county.

Table 1: Sample Distribution per County

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County	Total FFS beneficiary per county	Percentage of the total population per county	Number of selected respondents per county disaggregated by sex		
			M	F	Total
Grand Gedeh	566	20%	58	16	75
River Gee	346	12%	37	9	46
Gbarpolu	239	9%	18	14	32
Lofa	661	24%	65	23	88
Bong	497	18%	46	20	66
Nimba	494	18%	54	12	66
Total	2803	100%	278	94	372

Participants for the key informant interviews and the focus group discussions were purposefully selected based on their level of knowledge of the project, and experience. The selection also considered the different stratifications within the targeted counties, ensuring that participants for the key informant interviews and the focus group discussions were true representations of the different stratifications.

The team also conducted 13 focus group discussions (FGDs) with 112 Individuals (25 females and 87 males) and interviewed 21 key informants (19 males, two females) across the six counties

2.3. Data Collection Team Composition and Training

The evaluation was conducted by a team of four evaluators and 10 Research Assistants/Enumerators. To enable timely data collection, the team was divided into two sub-teams, each comprising an Agricultural Economist, an M&E/Research Specialist, and five Research Assistants/Enumerators. One team conducted data collection in River Gee, Grand Gedeh and Nimba Counties; while the other carried out data collection in Lofa, Gbarpolu and Bong Counties. The evaluation team also conducted key informant interviews in Monrovia. The Evaluation Team Leader, an Agricultural Economist, was responsible for the overall supervision of the entire data collection process.

2.4. Data Collection Methods

Data collection began by reviewing key project documents including the project's Performance Management Plan (PMP), progress reports, baseline report among others.

Using standardized semi-structured interview templates, 22 Key Informant Interviews (KIIs) were conducted with the project stakeholders, including farmers, LIFE III management and staff, County Agriculture Coordinators and partners' staff. Each interview was conducted by two interviewers, ensuring cross-referencing and data quality.

In addition to the KIIs, 13 Focus Group Discussions (FGDs) totaling 112 persons with women groups, farmers' cooperatives/associations. standardized FGD guides were used

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to conduct each session. Where holding a FGD was not tenable, the team employed group interviews/meetings to gather data from many people at once.

The evaluation team also collected quantitative data from 372 LIFE III beneficiaries, using a standardized questionnaire. To maintain consistency, the team used the same questionnaire used during the baseline survey.

Additionally, the evaluation team collected waypoints of farming sites, using GPS devices. The evaluation team also observed and photographed the beneficiary farming activities at the various locations that were visited by the team.

2.5. Data Analysis Procedures

The evaluation team employed both quantitative and qualitative techniques to analyse the data collected from the field.

Quantitative analysis was based on data collected through the mini survey from 372 project beneficiaries. Using Excel Afterwards, the team compared the processed data from the mid-term evaluation with the project's baseline data and Life of Project (LOP) targets. The results are presented in a table, indicating the observed trends.

For the qualitative analysis, the evaluation team transcribed and reviewed the audio files from KIIs and FGDs, carefully checking audio files to ensure accuracy. Afterwards, the team carried out analysis, using a five-step process to organize the data, find and organize ideas, build over-arching themes, cross-check to test reliability and validity by examining within each transcript and across others to determine if issues are corroborated or refuted. Together with information gathered from the desk review, explanations and interpretations were given to findings, on which to base conclusions.

2.6. Limitations

The evaluation design is strengthened by the triangulation of data collection methods and sources. The evaluation employed mixed methods to collect the evaluation data, and reached out to diverse group of project beneficiaries and other stakeholders.

However, this design and some issues that underlie the findings of this are summarized in this session. These are concerns that could possibly distort the results:

- Majority of the respondents did not have invoice to authenticate the self-reported data on the quantity of cocoa sold. The self-reported data could be overstated or understated by the farmer, which could lead to misrepresentation of the actual baseline value for income generated and farm production. Moreover, some farmers are selling more than they can harvest from their own farm, they gathered cocoa from other smaller farmers. The production data of those farmers could mistakenly include production of other farmers.

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- Adoption of improved husbandry techniques was determined by the enumerator's observation and judgment; therefore, wrong judgment on the application of improved techniques could lead to misrepresentation in the data.
- Secondary data were used to provide context to some of the survey findings and to compare situations in some instances. The quality of those data was not verified the evaluation team.

3. EVALUATION FINDINGS

This section presents the findings from the midterm evaluation on the long term goal and short term aims. Issues of relevance, efficiency, effectiveness, and sustainability are addressed throughout the next section.

3.1: Training: Improved Farm Management

Increasing agricultural productivity or yield is critical to economic growth and development of farmers. This can be achieved by using improved agricultural technologies and management systems. The result framework of the LIFE III project hypothesized that by increasing the knowledge of farmers on improved techniques and technologies, it will lead to application of improved cocoa husbandry technique; and subsequently increase in productivity. Considering this theory, data was collected to prove the given hypothesis.

From the project's SharePoint database and available source documents; it was confirmed that 2,423 cocoa farmers graduated from 83 FFS after 7 months long training on improved cocoa husbandry techniques; and also, there are additional 3500 farmers registered and being trained at 103 farmer field schools on good agricultural practices for sustainable cocoa production during data collection.

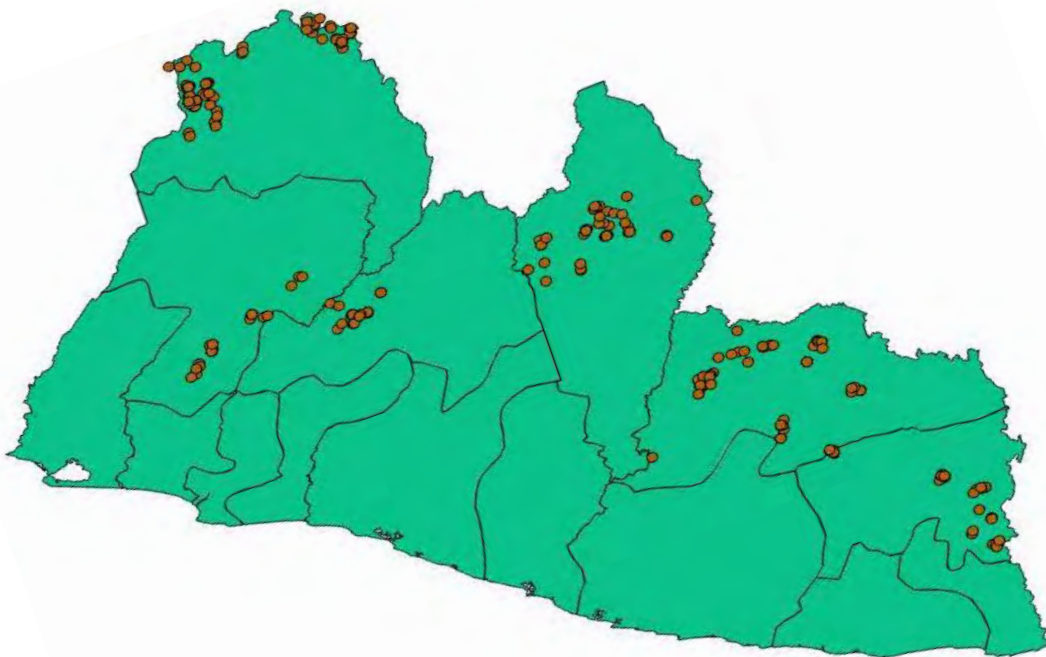
Figure 1: Farmer Field School in Session



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To further test the hypothesis, direct observation was done on the farm of 372 sampled FFS graduates, the data collected from those direct farm observations showed that 59% of the farmers are applying at least three of the five recommended improved cocoa techniques which is higher than the baseline value (31%); however, there were inadequate crop management on most of the farms as well as pests and diseases were damaging the cocoa pods. The map below show GPS waypoint of farm observed.

Figure 2: Map of Project Areas



Through household interviews and FGDs, the team asked “why the farmers were not applying the techniques learned from the FFS” and 72% of the respondents attributed the disapplication of the recommended practices to their inability to buy inputs such as agro-chemicals, hired labor etc.

However, the evaluation team gathered that the project has already planned complementary approaches to mitigate the reported problems of low application of recommended technologies. The project has established value-chain arrangement with local agro-dealers to supply inputs to farmers; and also, the project is working through farmer groups to organize communal labor task force to conduct rotational rehabilitation on each member’s farm.

In a key informant interview with WIENCO – a local agro-dealer company partnering with the project to implement farmer field school; the team gathered that WIENCO has established a value-chain agreement with farmers to supply package of agro-inputs including fertilizer, pesticides, and fungicides and spraying can. The agro-chemicals provided by WIENCO through the facilitation of the project are recommended by the Cocoa Research Institute of Ghana (CRIG), Tafo and Central Agricultural Research Institute (CARI) of Liberia. WIENCO has at least two storehouses in each of LIFE III operational counties where smallholder cocoa farmers can access the package.

3.2: Capacity Building: Producer groups / Cooperatives

LIFE III continues its capacity building efforts in collaboration with the Cooperative Development Agency (CDA) – a government bureau responsible for strengthening cooperatives in the country. Cooperative development is a suitable way of increasing farmers' chances by creating linkages with commercial banks and other financial institutions; and to enhance the marketability of cocoa from smallholder farmers at higher price through joint negotiation and bulk selling.

The baseline report highlighted that there was limited operation support to the CDA staff which has hampered routine supervision thereby leading to proliferation of poorly managed cooperatives; however, information gathered from key informant interviews showed that there was enhanced partnership between the LIFE III project and the CDA. As the result of this partnership, the project has conducted up to 90 joint supervision visits against the zero baseline value. Besides, 19 farmer associations were strengthened and certificated as Cooperative, which give them legal status to benefit from loans given by financial institutions. Furthermore, the baseline reported that CDA staff had no advanced training on cooperative governance and administration; financial management and conflict resolution. Literature review of the project documents during this midterm evaluation revealed that 19 (14 men; five women) staff of the CDA was trained by LIFE III on various topics including financial management, cooperative governance and administration.

The baseline also reported that farmer groups had poor management structures which contributed to the continuous reduction in membership with high risk of the groups collapsing; however, the evaluation team gathered that the project provided training to 129 farmers (118 men; 11 women) representing the leadership of 30 farmer groups across the six project counties. These trainings have repaired the poor management styles of the leadership thereby increasing the group's membership by 21% above from the baseline value.

LIFE III has made significant progress on implementing the activities under this component of the project and it has reached the LOP target for five of the six performance indicators underlying the objective; however, the project is yet to implement pilot grants to groups for artisanal processing of byproducts from cocoa subgrades. The evaluation team was informed during the KII that RFP was advertised for the recruitment of sub-grantees to implement this activity.

3.3: Financial Services: Facilitate Agricultural Lending

The project identified farmer's access to agricultural lending to be a cardinal point in the cocoa value chain. Agricultural lending underpins the efforts to build vibrant producer groups that are able to conduct variety of business activities with their members. The project engages this objective with two-dimensional approaches – a) establishing Village Saving and Loan Clubs; and, b) facilitating value-chain financing including pre-financing partnerships between associations and buyers and input-credit mechanisms with agro-dealers.

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The baseline reported that 37 Village Savings and Loan Clubs (VSLCs) were established in the project communities; and none of the clubs was certified as credit union by the CDA; hence, could not affiliate with Liberian National Credit Union Association (LCUNA) to benefit from larger loan provided by the Central Bank of Liberia. However, literature review of the project's documents revealed that eight credit unions were established while 12 additional were being assessed for possible certification which totals 20 credit unions thereby exceeding the LOP target.

The baseline report finds out that 12 value chain arrangements were made by previous LIFE interventions benefiting approximately 2,297 (1,838 men, 459 women) farmers. At baseline, none of such arrangements was made under this third phase of the project; however, the midterm evaluators gathered from literature review that 18 of such arrangements were made against the LOP target of 20. These arrangements have benefited 2,461 (1298 men; 1163 women) farmers halfway to achieving the LOP target of 5000 with the total of four hundred and ninety thousand, one hundred and fifty – six (\$ 490, 156) United States dollars disbursed which is nine times higher than the LOP target.

3.4: Inputs: Develop agro dealers

The project is expanding its technical assistance to agro dealers in Liberia to provide short, medium and long term solutions such as improved seed, side grafting and commercial cocoa nurseries. Technology transfer initiatives was identified to be an important step to offset the technology gap that continues to restrict the Liberian cocoa sector in terms of processing capabilities and increases in production yields. Therefore, LIFE III intensified its capacity building in nursery management to four of the eight private partners sub-granted for management of the farmer field schools. The project provided assistance to the grantees for the establishment of sustainable commercial cocoa nurseries in the six project operational counties to produce hybrid seedlings to be sold at affordable price to cocoa farmers giving preference to project beneficiaries.

The midterm evaluators noted that the four institutions trained 74 (52 men; 22 women) persons to maintain and nourish 800,000 cocoa seedlings at 37 commercial nurseries in the six counties. The germinated seedlings will be sold to smallholder farmers at an affordable price subsidized by the project. Waybill from the research institute in Ghana showed that five varieties of cocoa seeds (52.42; 77; pan 150; 85; 67) were imported and planted at the project sponsored nurseries. See picture below of care and maintenance of cocoa nurseries.

Figure 4: Cocoa nursery- Douyee town, Tchien District, Grand Gedeh County



To sustain the production of hybrid cocoa seedlings in Liberia, LIFE III has facilitated the establishment of cocoa seed garden at the government-owned Central Agriculture Research Institute (CARI) in Suakoko, Bong County; and private-owned seed garden in Saclepea, Nimba County managed by CWAP. Through collaboration with USDA – ARS and University of Reading, the project has excitingly increased the number of new improved cocoa varieties to 25 varieties far above the project LOP target. The evaluation team visited CWAP five-acreage cocoa seed garden in Nimba County where five varieties of seeds are planted

Figure 5: Cocoa seed garden: Loyee, Nimba County



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Furthermore, the evaluation team also had an interview with WIENCO – an agricultural company that specializes in the importation and distribution of high quality agro- inputs – it was revealed that nine kinds of improved cocoa specific agro-chemicals are available to farmers. WIENCO has at least two storehouses in each of LIFE III operational counties. The company provides technical support to farmers and a package that comprise of fertilizer, pesticides, fungicide and a spraying – can to farmer with one acres of cocoa farm. Farmers are organized in a group of 20 individuals.

The agro-chemicals provided by WIENCO through the facilitation of the project are recommended by the Cocoa Research Institute of Ghana (CRIG), Tafo and Central Agricultural Research Institute (CARI) of Liberia. The below table contains new kinds of improved planting material available to farmers.

No.	Insecticides	Herbicides	Fungicides	Fumigants	Supplement	Seed Treatment
1	Confidor 200SL	Lumax 537.5	Ridomil gold plus 66	Phostoxin	Cropmax	Apron star 42WS
2	Karate 5EC	Touchdown 360SL	Nordox super 75WG			

3.1.5: Market Access: Improved Market Information

LIFE III has improved on its channel of disseminating cocoa market price to smallholder farmers. The baseline reported that the way in which market information was being disseminated to smallholder farmers was rudimentary. The project was printing and distributing hardcopies to farmer which was ineffective and inefficient way of broadcasting cocoa price thereby making it very difficult to cover larger farmer population. Triangulation of survey data to those of the KII revealed that significant progress have been made to reaching more farmers with cocoa market information.

The evaluation showed that 59% of the farmers have access to market information which is 86% progress toward achieving the LOP target. The project through the Liberia Broadcasting System (LBS) signed MOU with local radio stations to disseminate cocoa market price in 10 local dialects. Most farmers have been reached through those radio programs.

3.1.6: Indicator Overview

The table below provides an overview on the current status of all LIFE III Project indicators.

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Table 2: Project Indicators Mid-term values, compared to baselines and LOP target

Component/ Activity	Performance Indicators	Baseline value	LOP Target	Mid-term Value	% Achieved
A. Training: Improved Farm Management	Kilograms of cocoa harvested per hectare	180kg	500kg	204kg	41%
	Number of farmers receiving training under LIFE III	0	5590	4497 (3106 men; 1391 women)	80%
	Number of hectares subject to improved cocoa husbandry techniques	0	8,000	1,211 ha	15%
	Number of individuals trained in income diversification activities (i.e. community vegetable gardens, livestock management)	0	10,000	3,840 (2,651 men; 1,189 women)	38%
	Number of cocoa farmers applying improved farm management techniques	0	9,000	5900	66%
	Number of farmers receiving training in Farming as a Business principle	0	10,000	2,780 (2,079 men; 701 women)	28%
	Number of demonstration sites established	0	144	187	130%
	Number of Farmer Field days held	0	6	0	0%
B. Capacity Building: Producer Groups/ Cooperatives	Number of CDA field staff completing capacity-building training in farmer organization outreach, assessment and support	0	12	19 (15 men; 4 women)	158%
	Number of farmers implementing pilot grants to groups for artisanal processing capacity to produce byproducts from sub grade cocoa.	0	90	0	0%
	Number of members of project-sponsored farmer associations established under the three phases of LIFE	4,782	10,000	6022 (4643 men; 1379 women)	60%
	Certification of new cooperatives by CDA	0	13	13	100%
	Number of leadership of producer groups received training	0	103	129 (118 men; 11 women)	125%
	Joint supervision visits with CDA to producer groups.	0	30	90	300%
C. Financial Services: Facilitate Agricultural Lending	Cocoa farmers accessing financial services	0	5000	2461 (1298 men; 1163 women)	49%
	Total value of loans disbursed to farmer associations by financial institutions (USD)	0	\$ 50,000	\$ 490,156	980%

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Component/ Activity	Performance Indicators	Baseline value	LOP Target	Mid-term Value	% Achieved
	Value-chain financing arrangements for the sale of cocoa in a given season (not cumulative)	0	20	18	90%
	Number of Village Savings and Loans Clubs certified as credit unions	0	17	8	47%
D. Inputs: Develop Agro-dealers	Local businesses or associations providing new agricultural packages	0	8	8	100%
	New or improved kinds of planting material and cocoa-specific fertilizer, pesticides or fungicides available to farmers	0	4	28	700%
	Number of public-private partnerships formed as a result of USDA assistance	0	4	8	200%
	Cocoa seedlings distributed or sold to farmers as a result of the project activities.	0	2,200,000	200,000	9%
E. Market Access: Improved Market Information	Cocoa nurseries established that provide improved, reasonably priced planting material available to smallholder farmers	0	18	37	205%
	Number of cocoa farmer associations that regularly provide updated market information to their members	1	25	30	120%
	Number of farmers who are able to access current prices for cocoa	0	7,000	6022	86%

3.3. Evaluation Criteria

The OECD-DAC Criteria for Evaluating Development Assistance were used during the midterm evaluation:

3.3.1. Relevance

LIFE III project is contributing to USDA's food for progress strategic objective I to increase agricultural productivity. The project's hypothesis is that, by increasing the use of improved cocoa husbandry techniques and technologies and equally improving farm management, cocoa yield will increase; which will ultimately increase farmer's income.

The baseline report identified the low yield of cocoa as a major constraint affecting the livelihood of smallholder cocoa farmers. This high decline in cocoa productivity was due to old aged trees. 56% of the farmers surveyed during the baseline said that their cocoa

trees were planted more than 25 years ago. As a consequence of long years of neglect, cocoa farms degenerated into secondary forest.

The Government of Liberia and IMF estimated in the PRS paper that real GDP from the cocoa sector decline by 79.5% during the crisis in Liberia. The decline was felt across in all sectors. Agricultural production dropped as people fled their farms and the supporting infrastructure collapsed.

To tackle this challenge, the Liberian government through its Ministry of Agriculture identified the below outcomes as key challenges to the transformation of the Liberian agricultural sector:

- Increasing crop yield by adopting improved agricultural techniques and technologies;
- Improving access to seeds, fertilizers, and other inputs, and strengthening linkages to output markets, primarily by rebuilding farm-to-market roads;
- Restoring value chains and increasing community and MSME participation in supply and value chains;
- Strengthening key agricultural institutions that were destroyed during the conflict;
- Providing greater opportunities for women and youth in agriculture, especially in the formal sector.

Literature review of LIFE III project's documents showed that the project activities and outputs are consistent with the development objectives of the cocoa sector.

The traditional production system (TPS) used by cocoa farmers before were basic and unsophisticated and contributed to low productivity. There was overall lack of understanding of and expertise with, sustainable land management techniques and best practices such as Global Good Agricultural Practices (GAP). LIFE III sponsored farmer field schools have increased farmers knowledge on improved agricultural techniques and technologies which has increased the adoption rate to 59%.

Furthermore, it is highlighted in Liberia National Cocoa Strategy that technology transfer initiatives is an important step to offset the technology gap that continues to restrict the Liberian cocoa sector in terms of processing capabilities and increases in production yields. LIFE III is significantly contributing to this effort through the establishment of cocoa nurseries that produce high yield cocoa varieties for replanting of old aged trees.

The project is also collaborating with CDA to strengthen farmer groups that collapse during long years of civil crisis. Those groups are the driving force behind the marketing of smallholder produce for better price. LIFE III has contributed massively to building value-chain linkages between farmer groups; cocoa exporters and agro-dealers to benefit their members.

3.3.2. Effectiveness and Efficiency

Implementation of project activities was delayed by one year due to delay in monetization; and then the Ebola pandemic in Liberia. The fundamental activity for the LIFE III project is the farmer field school through which smallholder cocoa farmers are

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trained on good agricultural practices for sustainable cocoa production. The first phase of these FFS began June 2015, approximately one year to the end of the project. The 10 months long training modules were condensed and delivered for seven months while the second phase of the FFS is running for five months beginning in March 2016 to August 2016. Despite the project robust effort to complete its project activities; the outcomes of most of the activities may not be realized in the lifetime of the project. The LOP target for farmer training has been 80% completed; the training curriculum are standard which proves the quality of the training. Increased in farmer's knowledge on good agricultural practices has consequently increased adoption of improved technologies; and also increased the average yield per hectare. The project implemented the trainings in a cost-efficient manner by sub-contracting eight local institutions to manage the farmer field school. These sub-grantees provided 37% leverage contribution on the average.

Another component of the LIFE III project that has been effective and efficient is the capacity building of producer groups/cooperatives. Findings during the baseline survey showed that producer groups were poorly performing because of the non-compliance of their members to the bylaws and constitution which was primarily because of poor management by the leadership. The baseline report further explained that the membership of producer groups was continuously reducing causing high risk of the groups collapsing which could undermine the warehouse receipt program and other cooperative development efforts. On the contrary, LIFE III along with CDA has successfully strengthened the groups by providing training to the leadership on various topics including good governance. As the result, farmer groups have become vibrant in managing the day-to-day affairs of the various groups thereby increasing their membership by 21% above the baseline value. The capacity building initiatives in collaboration with CDA has been cost and time efficient. The project share staff-time with CDA.

Furthermore, it was reported in the baseline that limited operational support to CDA field staff has constrained routine supervision. The average supervision rate per farmer group was twice biannually, which also contributed to existence of poor managed farmer associations resulting to distrust in the groups. LIFE III provided leadership training to CDA field staff and conducted monthly joint supervision visits using ACIDI/VOCA's "M4 Assessment Tool" which is used to peruse the membership, management, money and marketing of farmer groups. As the result, 19 farmer groups were transformed to cooperatives.

LIFE III project also achieved its results on increasing farmer's opportunities for agriculture lending. The project has facilitated 18 value-chain financing arrangement with the total disbursement of \$490,156 USD benefiting 2,461 farmers. Despite some of the LOP targets under this objective have not been completed; there a significant progress made. The project also used an alternative measure in providing agricultural loan through informal financial institution such as credit unions. To date, the project made possible the transformation of eight credit unions while additional 12 were being assessed for possible credit union certification.

Establishing hybrid cocoa nurseries closer to farmers has been very helpful in farm rehabilitation effort to replace old-aged cocoa trees thereby increasing farm-level

productivity. The project facilitated these nursery developments by soliciting up to 70% leverage contribution from local businesses. Besides, the project partnership with WIENCO has increased farmers' access to agro-chemicals with no direct investment by the LIFE III project.

The baseline reported that the channel use previously in disseminating cocoa price was ineffective and inefficient. Broadcasting price information by distributing printouts of cocoa price was rudimentary; therefore, did not cover larger population of the farmers. LIFE III has been successful in reaching out larger population of the farmers via Radio. The project has reached 86% of its LOP targets.

3.3.3. Sustainability

The evaluation team further directed its research efforts to discover the extent to which project activities are likely to continue after the closure of the LIFE III project. Data gathered from literature review, KII and FGDs informed the midterm evaluators on the sustainability efforts that underlay each project objectives. The project exit strategies include:

- **Training: Improved Farm management:** Training modules offered at the FFS have unarguably increased the knowledge of farmers on improved cocoa husbandry technology. 59% of farmers who graduated from those farmer field schools have applied the recommended technologies on their farms thereby increasing the average production to 204kg/ha.
 - To sustain the above results, LIFE III partnered with eight local agro-dealers to leverage the management of farmer field schools. The capacity of those sub-grantees was strengthened on basic accounting principles and proposal writing. In addition, the local agro- institutions were encouraged to hire lead farmers from the targeted communities who served as co-facilitators in each of the farmer field schools; as the result, smallholder cocoa farmers will continuously receive extension services from their peers to further build their expertise on good agriculture practices.
 - Three of the sub-grantees have signed Memorandum of Understanding (MOU) with the Community Colleges in Nimba and Lofa Counties for internship program. The colleges are assigning their prospective graduates to work with those local agro-institutions so that they are prepared for extension services.
- **Capacity building: producer groups/cooperatives:** Leadership training provided to 30 cooperatives have strengthened good governance and conflict resolution skills among farmers; as the result, the membership of producer groups has increased consequently leading to increase in the production capacity of the groups.
 - The project's collaboration with the CDA to assess and strengthen farmer groups is a guaranteed way of building the functionality of producer groups across the country. In a key informant interview with CDA staff, they

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informed the team that they have acquired better knowledge from joint supervision visits with the LIFE III staff; and that they were prepared to continue assessing and training the cooperatives.

- **Financial Services: Facilitate Agricultural Lending:** Linking farmer groups to value-chain actors resulted to an unprecedented increase in the amount of loan disbursed to smallholder farmers enabling them to solve their domestic financial needs and also investment on their farms.
 - In addition, the project is establishing 20 credit unions that will sustainably provide agriculture loan to their members. By transforming VSLCs to credit unions, LIFE III uplifted the barriers that impede farmers from receiving loan from the Central Bank of Liberia.
- **Inputs: Develop Agro dealers:** Establishing commercial nurseries across the countries has contributed significantly to replanting unproductive farms and also expanding the size of farms in other areas. The evaluation team discovered that farmers were happy with the new variety of cocoa beans produced at the project sponsored nurseries. The commercializing the production of hybrid cocoa seedlings is an approach to sustain development of cocoa nurseries.
 - Furthermore, the cocoa seed gardens will be used to supply improved seeds to the commercial nurseries thereby reducing the cost of importing seeds from Ghana and Ivory Coast.

5. CONCLUSIONS

This report provides analytical findings on data collected through LIFE III midterm evaluation on household socio-economic status; cocoa productivity; financial services to producer groups, and availability of agricultural inputs. The results of the survey were used to determine the progress made in achieving the LIFE III project's objectives. The evaluation concludes the following based on data collected for the midterm evaluation:

- The LIFE III project remains relevant to improving cocoa production in Liberia. The project's objectives align with the Government of Liberia's vision for building the Liberia cocoa sectors. Also, smallholder cocoa farmers find the project useful, relevant and necessary for improving the sector and their livelihoods;
- There is significant progress be made in achieving most of the project targets; however, there remain challenges in reaching initial LOP targets for some of the indicators;
- Engagement with private institution is a sustainable way of building the capacity of farmers as well as strengthening local organization to continue extension services to smallholder farmers. LIFE III has progressively build the business knowledge of those local institutions.
- Increasing farmers' knowledge on improved agricultural techniques and technology is an important steps towards increasing farm productivity;

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- Acquiring agricultural loan from formal financial institution such as bank has proven to be challenging; therefore, an ideal way of increasing farmer's access to agricultural loan is through value-chain pre-financing arrangements and/or rural lending initiatives such as credit unions etc.
- Commercial nurseries are sustainable way of increasing farmer access to improved agricultural inputs rather than investing in community –owned nurseries.
- An ideal way of disseminating cocoa price is through radio broadcast in local dialects instead of printing and distributing cocoa price. Radio broadcast cover larger farmer populations.
- Poor management of producer groups undermines the functionality of the groups. There is high risk of the group collapsing if the leadership is not properly trained in good governance, conflict resolutions and other leadership topics.

6. RECOMMENDATIONS

In view of the analyses, contextual and conclusions provided in this report, the evaluation team would make the following recommendation:

- There is overall overlap in the different categories of institution in the cocoa sector, therefore, the Cocoa Sector Technical Working Group (CSTWG) which comprise of all stakeholders should strengthen coordination and partnership among cocoa value chain stakeholders including donor-funded project.
- To rapidly increase annual cocoa production of smallholder, there is a significant work required in term of upgrading and rehabilitating the mass of cocoa farms. Therefore, the project should complement its training effort at the farmer field schools with support to the graduates to conduct communal labor scheme (kuu system) in which farmers will rotationally enforce the application of improved cocoa husbandry techniques on each other's farm.
- Increased cooperation with the private sector will help in the sustainability of technology transfer initiatives. Therefore, the project should strengthen its engagement with private sector partners so that improved varieties of saplings / seedlings will continue to be available in Liberia.
- To ensure gender – balance, LIFE III should continue its engagement with farmer groups across the project operational counties to encourage women participation in the cocoa value chain.