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Coastal Sustainable Landscapes Project

Quarterly Report

Third Quarter – April 1 to June 30, 2018

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ACRONYMS AND ABBREVIATIONS

AFOLU	Agroforestry and Other Land Uses
ATEBA	Atebubu Beekeepers Association
BAC	Business Activity Center
BMP	Best Management Practice(s)
CA	Conservation Agriculture *or* Community Assistant
CCC	Climate Change Clubs *or* Community Conservation Committees
CCM	Center for Coastal Management (at the University of Cape Coast)
CBO	Community Based Organization
CDCS	Country Development Cooperation Strategy
CEWEFIA	Central and Western Fishmongers Improvement Association
CHED	Cocoa Health and Extension Division
COCOBOD	Ghana Cocoa Board
CREMA	Community Resource Management Association
CRI	Crops Research Institute
CRMC	Community Resources Management Committee
CSA	Climate Smart Agriculture
CSLP	Coastal Sustainable Landscapes Project
CSO	Civil Society Organizations
DA	District Assembly/ies
DCC	District Conservation Committees
DOFA	Departments of Food and Agriculture
EDIF	Export Development Investment Fund (of Ghana)
EMMP	Environmental Management and Mitigation Plan
EPA	Environmental Protection Agency
ESP	Environmental Sustainability and Policy for Cocoa Production in Ghana Project
FC	Forestry Commission
FCMCBSP	Fisheries and Coastal Management Capacity Building and Support Project
FMNR	Farmer-Managed Natural Regeneration
FON	Friends of the Nation (local NGO)
FORIG	Forestry Research Institute of Ghana
FSD	Forest Services Division (of the Forestry Commission)
FY	Fiscal (or Financial) Year
GAW	Greater Amanzule Wetland
GAWCCC	Greater Amanzule Wetland Community Conservation Committee
GDA	Global Development Alliance
GES	Ghana Education Service
GHG	Green House Gases
GIF	Gender Integration Framework
GIS	Geographic Information System
GOG/GoG	Government of Ghana
GSCDP	Ghana Supply Chain Development Project
ICFG	Integrated Coastal Fisheries and Management Project
IP	International Programs (of the USFS)
IPM	Integrated Pest Management
IR	Intermediate Result
ISP	Internet Service Provider
IUCN	International Union for the Conservation of Nature
LULC	Land Use/Land Cover
LUSPA	Land Use and Spatial Planning Authority (formerly TCPD)

M&E	Monitoring and Evaluation
METSS	Monitoring, Evaluation and Technical Support Services
MOFA	Ministry of Food and Agriculture
MOP	Manual of Procedures
MMDA	Metropolitan, Municipal and District Assemblies
MTDP	Medium Term Development Plan(s)
NBSSI	National Board of Small Scale Industries
NGO	Non-Governmental Organization
NRM	Natural Resources Management
NTFP	Non-Timber Forest Products
PAPA	Participating Agency Program Agreement
PMP	Performance Management Plan
PPP	Public Private Partnership
REDD+	Reduced Emissions from Deforestation and Forest Degradation
RMSC	Resources Management Service Center
SFMP	Sustainable Fisheries Management Project
SL	Sustainable Landscapes
SNV	Netherlands Development Organization
SOP	Standard Operating Procedures
STMA	Sekondi-Takoradi Metropolitan Assembly
TOT	Training of Trainers
TCPD	Town and Country Planning Department (now LUSPA)
UCC	University of Cape Coast
USAID	United States Agency for International Development
USFS	United States Forest Service
USG	United States Government
USGS	United States Geological Survey
VSLA	Village Savings and Loan Association
WD	Wildlife Division (of the Forestry Commission)
WR	Western Region
WRCF	Western Region Coastal Foundation

1. PROGRAM OVERVIEW/SUMMARY

1.1 Activity/Mechanism Overview

Program Name:	Coastal Sustainable Landscapes Project
Activity Start Date and End Date:	October 1, 2013 to September 30, 2018
Name of Prime Implementing Partner:	United States Forest Service International Programs
Contract/Agreement Number:	AEG-T-00-07-00003
Name of Subcontractors / Sub-awardees:	None
Major Counterpart Organizations	Ghana Forestry Commission (Forest Services Division, Wildlife Division), Ghana Ministry of Food and Agriculture, Ghana Land Use and Spatial Planning Authority, Ghana Education Service, Ghana Environmental Protection Agency, Ghana National Board of Small Scale Industries
Geographic Coverage (cities and/or countries)	Six coastal metropolitan, municipal and district assemblies of the Western Region of Ghana
Reporting Period:	April 1, 2018 to June 30, 2018

1.2 Program Description/Introduction

Ghana's Western Region faces multiple land use pressures in its six coastal districts. Inland and coastal forests are being cleared for commercial development, agriculture, cash crop development, charcoal, timber production, and artisanal mining. In all, these forces are posing significant threats to ecologically significant areas and biodiversity, including in-shore fisheries. High unemployment rates compound these pressures, exacerbating unsustainable natural resource management practices and reducing ecosystem services provided by the Western Region's natural areas. Off and inshore fisheries are on the verge of collapsing due to extreme rates of illegal fishing and the lack of political will to enforce existing laws.

Most land in the Western Region outside forest reserves, other protected areas and sacred groves has already been deforested and converted to agriculture. The current challenge is to find ways of taking pressure off the remaining forests and other natural areas while improving livelihoods.

Other anthropogenic pressures on the landscape, especially land use changes linked to developing oil and gas infrastructure, and a warming climate caused by increased atmospheric carbon dioxide, pose significant risks to the region's coastal landscapes. Climate change is also linked to jet stream fluctuations that cause irregular, more extreme, and unusual weather patterns and events. Changing rainfall patterns and intensities can lead to droughts in some areas and floods in others. In addition to storm events, other adverse impacts to the region from climate change include rising sea levels, salt water intrusion producing higher salinity rates of coastal water sources, changes in marine and terrestrial biological life cycles, and the likely extirpation of species.

The land cover maps below in Figure 1, prepared by the United States Geological Survey (2014), clearly show the trend in agriculture expansion and the loss of forest cover throughout Ghana. The rapid expansion of farmland threatens the remaining forests and natural areas and segments of the population that rely on these resources for their livelihoods. Many poorer rural inhabitants depend on natural products to supplement their income; frequently, these products are their main source of revenue. This is the case especially for youth, women and the elderly, and the loss of this income source equals a dramatic loss as it relates to food security.

USAID/Ghana's Environmental Threats and Opportunities Assessment of 2011 identified the need for the Feed the Future (FTF) program to mitigate any possible negative effects on forests and other natural areas from agriculture expansion. That threat, together with increased demand for fuel wood and charcoal production, are the dominant drivers of deforestation. Moreover, health risks increase as the quality and quantity of water resources for human and productive uses declines as a result of the hydrologic functions of watershed catchment areas being disrupted by agricultural expansion, deforestation and mining.

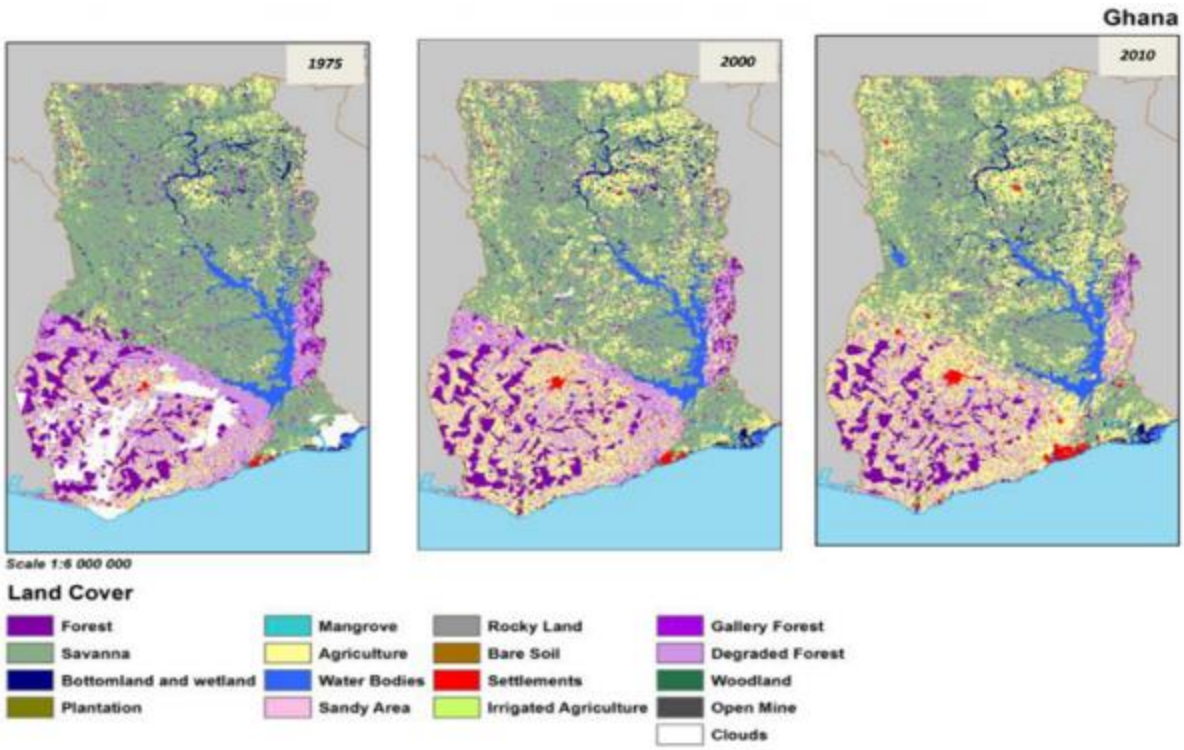


Figure 1. Ghana Land Cover Trends 1975-2010

To address these numerous threats to sustainability, USAID/Ghana's Economic Growth office has developed natural resource interventions in Ghana's Western Region. USAID's main initiative, the Fisheries and Coastal Management Program (FCMP), has four components: (i) Strengthened enabling environment for decentralized fisheries and coastal governance, (ii) Increased use of applied science to inform decision-making, law enforcement and the implementation of management plans, (iii) Heightened public awareness of trends, challenges and successes in ecosystem management and stronger public demand for sustainable use and conservation, and (iv) Improved management of marine and coastal natural resources for multiple benefits.

The US Forest Service, under an inter-agency partnership agreement with USAID, manages one component of the FCMP, the Coastal Sustainable Landscapes Project (CSLP). The CSLP contributes in some form to all four components with special emphasis on component (iv). The CSLP activities target landscape level engagement with communities, non-governmental organizations, government of Ghana agencies, the private sector, and international partners, who live and work in the coastal area from the Cote d'Ivoire border east to Shama District.

The CSLP is responding to the USAID Sustainable Landscapes (SL) Results Framework by focusing on Strategic Objective 1: *Accelerate the transition to low emission development through investments in clean energy and sustainable landscapes*. The SL interventions will support the second development objective of ensuring sustainable and broadly shared economic growth in Ghana under the USAID/Ghana Country Development Cooperation Strategy (CDCS). The goal of the strategy is to support the Government of Ghana in realizing its goal of becoming an established middle-income country by 2022. In this regard, the CSLP works to support Ghana's economic development agenda and strategies such as the Shared Growth and Development Agenda, Growth and Poverty Reduction Strategy (GPRS), and the Food and Agriculture Sector Development Policy (FASDEP II). USAID/Ghana's Development Objective 2 also supports two US Presidential Initiatives related to the CSLP, including Feed the Future and Global Climate Change.

If successfully implemented, these efforts will lead to increased employment, improved livelihoods, better land management, increased soil fertility, and increased carbon stocks. Moreover, improved land management will reduce pressure on intact areas of remaining natural forests and wetlands thereby protecting their biodiversity and allowing for the continued development of opportunities linked to ecotourism.

To confront these growing threats mentioned above, the CSLP is working to improve carbon sequestration, forest management, and livelihoods in the six coastal districts of the Western Region (see Figure 2). The overall long-term impact of the project will be to *promote low emissions development in Ghana's Western Region by strengthening community-based natural resource management and monitoring*. The project focuses on the coastal landscape, including mangroves, other wetlands, and forests and agricultural areas (within and outside protected areas) all of which are managed under a diversity of land tenure regimes.

Figure 2. The six coastal districts in Ghana's Western Region

Ghana has seen numerous interventions related to forest conservation in the past, many with only limited success. CSLP's primary activities are focused on community-level interactions that work to achieve low emissions development goals. The project's activities have been established within communities where there is an existing and functioning community governance body such as Community Resource Management Associations (CREMAs) or similar entities. This history of community collaboration provided an entry point for the project to work with community members on a variety of livelihood activities. One such activity leverages the Village Savings and Loan Association (VSLA) concept, a significant aspect of the project. It is a social entrepreneurial concept that enjoys much success in other areas of Ghana. But it is a novel idea for communities of the Western Region's coastal districts. With each passing year, enthusiasm and excitement builds with its implementation. The project uses it as a platform to help encourage and promote activities that maintain and increase forest cover with

native and existing tree species while also serving as a means of reaching a large portion of female farmers and household representatives. The CSLP is applying the VSLA concept to provide incentives for farmers and landowners to incorporate more indigenous species of trees on their land while helping provide seed funding for a revolving funding mechanism to work towards improved and diversified livelihoods.

CSLP's interventions have brought awareness among farmers, community members and government officials and substantially increased the understanding of these impacts among stakeholders in the Western Region during and since the project's first phase from 2013 to 2016. Climate smart agriculture activities and other resilient agricultural best practices are helping farmers adapt to this changing climate, reducing the need for high cost inputs, while aiming to sustain or increase productivity despite less predictable weather. In addition, conservation of secondary forest through activities such as beekeeping and increasing tree cover on degraded agricultural lands through farmer managed natural regeneration and enrichment planting has been increasing over the life of the project. The CSLP is building on this work by further connecting farmer groups with markets to increase value of their goods and thereby increase economic opportunity.

With successful implementation, these cumulative efforts will contribute to increased employment, diversified and improved livelihoods, better land management of existing natural resources, augmentation of soil fertility, increased carbon stocks, and avoided emissions of greenhouse gases. Moreover, improved land management and livelihoods will reduce pressure on intact areas of forest reserves and areas of high conservation value, protecting their biodiversity, allowing for ecotourism opportunities and enhancing the value of other ecosystem services within the value chains of the local communities.

2.0 SUMMARY OF RESULTS TO DATE

Table 1. Indicator targets and achievements

Standard Indicators	Baseline FY 2014	FY18 Performance					Annual Performance Achieved to the End of Reporting Period (%)	On Target ? Y/N
		Annual Target	Q1 FY18	Q2 FY18	Q3 FY18	Q4 FY18		
4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO_2e, reduced, sequestered or avoided as a result of USG assistance	0	6,400,000	--	4,459,871	1,856,133	--	99%	Y
4.8.1-6 Number of people with increased economic benefits derived from	0	1,800	--	1,659	--	--	92%	Y

sustainable NRM and conservation as a result of USG assistance								
4.8.1-26 Number of hectares of biological significance and/or natural resources under improved NRM as a result of USG assistance	0	2,100	--	1,129	1,131	--	108%	Y
4.8.1-29 Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance	0	8,500	1,798	2,548	4,366	--	102%	Y
4.8.2-14 Number of institutions with improved capacity to address climate change issues as a result of USG assistance	0	80	--	46	29	--	94%	Y
4.8.2-29 Number of person hours of training completed in climate change as a result of USG assistance	0	5,000	661	2,039	883	--	72%	Y
EG. 3.2-1 Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training	0	980	398	347	199	--	96%	Y
EG. 3.2-4 Number of for profit private enterprises,	0	88	65	8	12	--	97%	Y

producers organizations, waters users associations, women's groups, trade and business associations (CBOs) receiving UGS food security-related organizational development assistance								
E.G. 3.2-17 Number of farmers and others who have applied improved technologies or management practices	0	504	183	83	112	--	75%	Y
E.G. 3.2-18 Number of hectares under improved technologies or management practices	0	100	20	21	39	--	80%	Y
E.G. 3.2-20 Number of for profit private enterprises, producers organizations, waters users associations, women's groups, trade and business associations (CBOs) that applied improved organization-level technologies or management practices	0	60	23	9	24	--	93%	Y
C-1 Number of person hours of training completed	0	5,000	1,314	2,796	1,794	--	118%	Y

in VSL modules as a result of USG assistance								
C-2 Number of community sensitization sessions on climate change issues and/or NRM/ biodiversity conservation as a result of USG assistance	0	60	18	22	24	--	107%	Y
C-3 Number of persons receiving start-up items for improved NRM/ biodiversity conservation as a result of USG assistance	0	100	77	--	15	--	92%	Y
C-4 Number of project-planted seedlings surviving in towns/communities as a result of USG assistance	0	57,600	--	--	--	--	--	Y

Other VSLA custom indicators	
Number of active informal savings and lending groups	49
Cumulative Amount (in USD) saved by informal Savings and lending (VSLA) Group	$79,962
Number of members of active in informal savings and lending groups	1,259
Men	403
Women	856
Amount of funds loaned (in USD) in this fiscal year by informal savings and lending groups	$64,116

3.0 ACTIVITY IMPLEMENTATION PROGRESS

3.1 Summary of the Quarter

Early in the calendar year USAID/Ghana revealed that budget cuts to the Mission were mandating that it significantly reduce it activities in country. At the start of the quarter, the CSLP was officially notified[1] that it was to terminate its activities effective 30 September 2018, a full year earlier than previously planned via the extension granted by the Mission Director in May 2016. Prior to the notification, the project team had been focusing on ensuring the various behavior change activities being supported could be sustained after the planned September 2019 completion date. The CSLP staff and partners had been reaching out to key stakeholders to help hone their skills and knowledge relative to roles they will play for beneficiaries for years to come.

With the early termination notice, the strategy changed. Any new topics under consideration were voided and efforts focused on regrouping around those activities with significant adoption rates. Greater efforts were also undertaken during the quarter by the project to reinforce the confidence among the famers, communities, and partners that they have the knowledge and capabilities to manage and continue to improve their livelihoods and their economic well-being, especially with those interventions promoted by the project, even as the CSLP withdraws from the landscape.

As the announcement of its earlier-than planned exit was explained to project beneficiaries and partners, the CSLP also stepped up its actions with counterpart agencies in the metropolitan, municipal and district assemblies (MMDAs) to link them more solidly with activities on the ground.

The unplanned early closing also means that the scaling down of technical activities must be accomplished by 31 July, a full two months prior to now official end date of 30 September 2018. This is necessary in order for reporting, financial and administrative matters required under the PAPA agreement can be taken care of prudently. All technical activities undertaken during this quarter were done with this 31 July date in mind.

The initial pages of this section highlight and summarize some of the activities completed during this third quarter of FY 2018. The bulk of Section 3 provides details of specific activities conducted during the quarter as outlined in the FY 2018 Annual Work Plan, and adjusted to meet the unplanned early project termination date.

Highlights

A rapid assessment of all communities that have received climate smart agriculture (CSA) support from the project was conducted to determine the successes and weaknesses linked to farmer adoption of the best practices to-date. Covering 14 communities, the aim of the exercise was twofold: (i) to help identify and begin to address constraints facing diverse farming communities applying the CSA principles and methods, and (ii) to document best practices for scale-up and sustainability of the CSA practices by stakeholders. By documenting gaps and barriers, opportunities and best practices are further highlighted for farmers. This helps them to combine the practices most suitable for their own context, decreasing losses in yield and increasing food security and resilience in coastal communities of the Western Region.

Village Savings and Loans (VSL) refresher trainings were organized for 25 Village Agents (VA) from 16 communities spread across all six coastal districts in the Western Region. The training was part of the project's efforts to help ensure sustainability of the model as the demand for VSLAs continues to grow due to numerous benefits that the financial model offers its members. The VA concept is a low-cost approach designed to ensure self-replication and sustainability of VSLAs. The VAs reinforced their skills with all seven standard VSL modules. Greater emphasis was placed on modules where VSLA memberships have the most difficulty. The

[1] USAID/Ghana letter dated 10 April 2018 to Ms. K. Sheridan, USFS-IP, on the CSLP Period of Performance.

refresher training also centered on adult learning principles, conflict resolution skills, facilitation skills, time management and planning, and collection of data on VSLA groups using standard data collection forms. To enable easy knowledge sharing to enhance their work, the VAs have created a WhatsApp platform where they can easily share information, ideas, and help each other solve problems. The VAs are now more confident and well-equipped to establish and train new VSLAs and to make basic financial services accessible to many in their communities for improved and secure livelihoods**.**

The project also conducted a VSLA training of trainers' workshop for USAID's Sustainable Fisheries Management Project (SFMP) sub-grantees as part of the CSLP's continued cooperation and coordination efforts with its sister USAID-funded project. The 3-day workshop trained staff of CEWEFIA and SNV on the seven standard Village Savings and Loans modules with practical demonstrations by the team after each module to enhance the understanding. Participants were also trained to collect VSLA data used to monitor group progress. A field visit was made to a CSLP-supported VSLA in the Shama District. The trainees first observed the group's weekly meeting and then had an interactive session immediately thereafter where they learned about the group's challenges, its usefulness to the members, and practical aspects of running and maintaining the group over the longer term. This hands-on session was beneficial to the association members and the trainees. It is expected that through the training, beneficiaries of CEWEFIA will have increased access to basic financial services to improve the business and conditions of living.

Two awareness events were supported by the project during the quarter: World Environment Day and the Annual CSLP Media Day. For the fourth time, the project helped to celebrate World Environment Day, this year at Nkotompo in the Sekondi-Takoradi Metropolis (STMA) in collaboration with Government of Ghana officials, Zoomlion Ghana Limited, Hen Mpoano and Friends of the Nation. Celebrated every year on June 5, 2018, this year's theme was "Beat Plastic Pollution". This year's celebration, held in two parts, started with an awareness creation procession through the principal streets of Sekondi-Takoradi and was followed by a community durbar with educational presentations by several partners and stakeholders on the harmful effects of plastics to human health, wildlife and the environment.

Figure 3. World Environment Day 2018 awareness creation procession by students of Kow Nketsia A.M.E Zion Junior High School, Nkotompo, Sekondi-Takoradi Metropolis

The Annual CSLP Media Day event, covered by members of print, TV, radio and internet media, was well attended by heads and representatives of eight Ghana government institutions from the Western Region Coordinating Council (WRCC). The annual event gives stakeholders the opportunity to interact first hand with project beneficiaries and to learn about experiences on CSLP-interventions, their challenges and the benefits they are receiving through the adoption of project interventions. The group made visits to project-supported CSA enterprise group sites, VSLA groups and Climate Change Clubs.

The 16th Quarterly (and final) Meeting of the CSLP Western Region stakeholders was a companion event to the annual Media Day. The platform witnessed the periodic review of CSLP activities implemented in the 3rd quarter along with highlights of achievements from 2014 to 2018. Building strong partnerships with local and national government agencies not only helps to ensure project sustainability, but also helps to maximize scarce

resources more effectively and better the lives of beneficiaries. While the project promised the sharing of technical and final reports, the various institutions present challenged themselves to ensure sustainability of interventions being undertaken to improve livelihoods in the region for more resilient communities.

A Training of Trainers (ToT) that focused on the safe use of pesticides in farming was conducted for 44 Government of Ghana staff from four districts in collaboration with the regional Department of Food and Agriculture (DoFA) and the Environmental Protection Agency (EPA). Participants included agricultural extension officers, director of Departments of Food and Agriculture, and staff of Plant Protection and Regulatory Agency, Environmental Protection Agency (EPA) from the Western Regional Coordinating Council. The widespread use of pesticides by Ghanaian farmers is intended as a means to ensure productivity by protecting crops from harmful pests and diseases. Farmers rely on pesticides, including highly toxic ones, much more than traditional and integrated pest management approaches and their increasing misuse is a growing threat to human and environmental safety. Too often, retailers, transporters and farmers lack knowledge on proper handling, use, and application of these agrochemicals. They also have limited or no access to trainings that address these topics. The training curriculum was designed by the CSLP applied Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP) guidelines and was fully vetted by Ghana's MoFA and EPA regional directors. It provided agricultural extension workers with hands-on practical skills on best practices for pesticide handling, use, storage and disposal. As part of the outputs, DoFA staff from each district developed a follow-on training plan for training farmers on safer use, handling, storage and disposal of agro-pesticides. Participants remarked that the training was the first of its kind given to them and promised to educate farmers on the need for both safer use of pesticides and for wider adoption of integrated pest management practices. The trainings are expected to increase farmers' knowledge about the pesticides they use and also lead to their safer handling, storage and use, and an overall lower exposure to pesticides.

The CSLP, in collaboration with the Environmental Protection Agency (EPA) and Ghana Education Service (GES), monitored trainings conducted for 976 students in 14 schools across four MMDAs. This was a follow-up on a series of trainer-of-trainers (ToT) workshops on environmental education and sanitation organized for some 100+ teachers from 74 schools in the region aimed at curbing sanitation challenges faced by schools and communities. The trainings have proven very useful as the schools visited demonstrated better understanding of sanitation issues and many have embarked on improved sanitary practices after the training, e.g., reusing and recycling of poly bags, proper disposal of waste and better hand-washing techniques (using tippy tap), recycling of plastic bags (mostly sachet water bags) into school bags and other items. Staff and students of schools monitored also have plans underway to embark on public education in their communities, tree planting and cleanup exercises.

Co-management activities linked to the biological resources of the Greater Amanzule Wetlands received a significant endorsement from traditional authorities. In an update meeting with more than 40 traditional chiefs from the Amanzule area and staff from the Forestry Commission's Wildlife Division, CSLP's grantee Hen Mpoano reported on progress made towards improving conservation of the wetland through the co-management process and to obtain buy-in from the traditional authorities on the community initiated norms for the conservation of the Greater Amanzule Wetlands. The Wildlife Division also briefed those present on the governments' responsibilities and commitments in the conservation of wetlands. The traditional authorities were pleased with progress of work toward the conservation of the GAW and also gave insights into what should be done going forward. Most importantly, these included finalizing the norms and presenting it to the next traditional council meeting for review and endorsement and the affirmation of their support to the GAW CCCs to function effectively.

GIS, remote sensing training and spatial planning training was conducted for GoG officials from the six coastal metropolitan, municipal and district assemblies (MMDAs) in the Western Region. Participants included staff from Physical Planning, Development Planning, Food and Agriculture, Parks and Gardens, Works,

and National Disaster Management departments The need for the training arose as an expressed need from planning officials to better address areas of rapid growth and development, especially in the oil and gas sector, that is challenging local government capacities' decision making on land use and planning. MMDA staff recognize the value of, and the need for, a broader understanding of the spatial dimensions of natural and man-made attributes within their constituencies. The four-day training equipped participants with the skills to gather and interpret data and in the basic use of QGIS software for geo-referencing. The practical training was geared toward helping planning departments collect and manage data, examine it spatially with maps, and to initiate a dialogue on examining how these outputs can assist the MMDAs to more effectively manage different land-uses and the natural resources that occur on the landscape.

A two-day trainer-of-trainers workshop on wetland health monitoring was conducted for 6 teachers from two wetland communities. In a cooperative effort with the CSLP's sister USAID-funded project at the University of Cape Coast, the training was facilitated by instructors from the Department of Fisheries and Aquatic Sciences. It was aimed at equipping teachers working with the CSLP's Climate Change Clubs with knowledge on functions and values of wetlands to target communities, and to improve technical skills on obtaining data on wetland ecological health monitoring parameters in their communities. On returning to their respective schools, teachers are better equipped to help students learn more effectively from the UCC's Wetland Monitoring Modules. This knowledge, which is being imparted in six pilot communities, can also lead to changed behaviors in wetland management and conservation in each of the beneficiary communities.

Integrated pest management (IPM), farmer-managed natural regeneration, and beekeeping/apiary management activities with supported farmers were all intensified during the quarter as technical staff prepared to withdraw from the landscape. Following up on the expressed needs of farmers during the rapid rural appraisal of CSA practices, IPM refresher trainings were provided for 21 DoFA extension agents, 100 CSA enterprise group farmers and 69 climate change club members. These refreshers were designed to provide farmers more confidence in decreasing their dependence of chemically manufactured pesticides and to focus more on environmentally safe and sustainable production methods, to improve their food security and diversify and reduce risks associated with the primary livelihoods present on the CSLP landscapes. The trainings also help DoFA extension staff to successfully replicate and monitor resilient agriculture best practices among farmers in the Western Region. At the junior high school climate change clubs, the successful application of IPM practices in the school gardens are proving to be valuable demonstration areas for other community members.

Observations from the project's monitoring efforts of farmer-managed natural regeneration (FMNR) interventions are showing that many farmers who did not participate in FMNR training, but who have been coached by CSLP-supported community assistants, are now adopting the practice. Today, fully 90% of all farmers that the CSLP has trained in the practice continue to nurture the natural regeneration of trees on their farms – mainly species that are commercially valuable to the farmer stewards. Most trees identified three years ago in the training exercises have emerged above cocoa crop canopy to provide needed shade. FMNR is a low-cost land restoration technique helps promote a healthier, more productive tree crop understory, improve resilience to extreme climatic conditions and provide additional income to the famer.

Beekeeping and apiary management across the CSLP's operational area is seeing a significant upsurge of success and a rapidly expanding demand from farmers who are seeking to "get on board" and adopt the livelihood practice. The lessons learned from the best practices assessment and their implementation, coupled with the study tour of last quarter to the Brong-Ahafo Region, beekeepers are constructing/purchasing more beehives as others begin to harvest quality honey in quantities that make everyone sit up and notice. One noted *"… two of my neighbors who witnessed my harvest of 4 liters honey in March have been motivated to get involved in beekeeping. And they have also made their own beehives".* A farmer who recently bottled 12 liters of honey from one hive (!) said, "*I never knew this was going to be so profitable. I am the envy of my colleagues who did not take this intervention seriously. I have sold all my honey from which I got GHS 480. I am going to make three*

additional hives for my apiary". And the Department of Food and Agriculture in Shama now directs individuals interested in beekeeping to CSLP-supported beekeepers in Yabiw to learn more about the activity. Livelihood strategies in developing countries typically depend on agriculture but in the face of climate change, beekeeping is proving to be a valuable adaptive strategy that provides additional income and food to rural families.

Table 2. CSLP training events[1] in FY 2018, Quarter 3.

Training title	No. of trainees		Type of trainees[2]				Indicator	Comments and/or unique attributes of the training
	M	F	A	B	C	D		
Output 1: Increased incomes from livelihood diversification								
Climate smart agriculture (CSA) hands-on trainings for farmers & others	35	31					EG. 3.2-1	For farmers in 3 communities
Village Savings & Loan Association (VSLA), Modules 1, 2, 3, 6, 7	40	104					C-1	Includes share out sessions and trainings for one new group formed.
Financial education	30	165					C-1	8 VSLAs in four communities
Training of Trainers (ToT): VSLA	2	6					C-1	For CEWEFIA staff; a partner of USAID/SFMP
Refresher training for VSLA Village Agents (VAs)	17	8					C-1	VAs from 16 communities and a staff of Hen Mpoano
Numeracy	48	83					C-1	10 VSLAs in 9 communities
Ecosystem based livelihoods	10	21					EG. 3.2-1	1 community
Output 2: Improved environment and natural resource management								
Spatial Planning	31	4					4.8.1-29	For GoG staff in 6 coastal MMDAs
Training of Trainers (ToT): Safe use of pesticides	37	7					4.8.1-29	4 districts covered. Collaboration with EPA and DoFA
ToT: wetlands modules	8	1					4.8.2-29	Teachers from 2 schools in 2 districts. UCC collaboration
Wetland monitoring, review of modules 1,2 &3	17	22					4.8.1-29	1 public school / CCC; UCC pilot training
Wetland monitoring, Module 4	38	45					4.8.1-29	2 public schools / CCC; UCC pilot module training
Wetland monitoring, Module 5	32	20					4.8.1-29	1 public school / CCC; UCC pilot module training
Linkages between environment and livelihoods	39	25					4.8.2-29	3 CREMA communities; with the Wildlife Division
Integrated pest management (IPM) refresher	115	85					EG. 3.2-1	For farmers, DoFA staff and CCC members
Exchange learning by conservation committees	44	22					4.8.1-29	Effective wetland management
Environmental education in schools	510	466					4.8.1-29	14 schools, 4 districts. Work done with the EPA, GES & WD
Number of different trainings: 17	**1,053**	**1,115**						

[1] These represent the sum of the training events of the quarter. Some occurred over multiple dates and venues.

[2] **A**: Producers **B**: People in government **C**: People in private sector firms **D**: People in civil society NGOs, CBOs, CSOs, research and academic organizations

3.2 Output 1: Increased Incomes from Livelihood Diversification

Table 3. Planned and implemented activities for Output 1 in Quarter 3 of FY 2018

Activities to be Implemented	Expected Outputs	Achievements
1.1 Intensified and diversified environmentally resilient land use technologies adopted by beneficiaries	● Enterprise groups are supported and producing wholesome vegetables using climate resilient agricultural practices	● 7 CSA vegetable enterprise groups comprising of 63 women and 52 men received refresher training in Integrated Pest Management (IPM) in vegetables production ● 84 junior high schools students & 5 teachers of 3 CCCs received IPM refresher training
1.2 Natural resource value chains improved	● Farmers and beekeepers have improved skills in the management of the farms, apiaries and marketing	● 2 ToT in safe use and handling of pesticides were organized for staff of DoFA and EPA ● Beehives were monitored during the quarter
1.3 Economic opportunities increased	● Community-based groups such as VSLAs and enterprise groups function effectively to enhance the livelihood of members	● 25 Village Agents receive training in the skills and techniques for the facilitation of VSLA standard modules. ● 2 VAs sign agreement to support 4 VSLAs through monitoring and training to ensure smooth VSLA cycles. ● 195 members from 8 VSLAs and from 4 communities undergo training in financial education. ● 27 VSLAs are celebrated and recognized as mature groups. ● ToT organized in the facilitation of VSLA groups for 7 CEWEFIA staff and 1 SNV staff.

Activity 1.1 Intensified and diversified environmentally resilient land use technologies adopted by beneficiaries

IPM Refresher Training in CSA Vegetable Production

The CSLP facilitated organic vegetable production is continually receiving traction within the six coastal landscapes within the Western Region. This is due to the strategy that CSLP has adopted since its introduction in FY 2015. Farmers point to this time when they were used to applying huge volumes of pesticides and chemical fertilizers before achieving success, they doubted the possibility of growing the vegetables on their land without these inputs. The majority of farmers paid little heed or interest in trying something they were unfamiliar with. With a number who were willing to take the risk, the CSLP worked with them and also set up demonstration plots so that others in the community could also view the progress of these early adopters.

Notwithstanding the lack of interest, CSLP provided the transfer of knowledge and skill with patience and repeated regular visits for coaching, mentoring and hands-on-training. Their success became the proof and

justification to the farmers and they began to devote larger areas to practice the CSA technology, up to 0.75 ha, which is the average size of land earmarked by most farmers for subsistence annual crops.

A workshop was also organized for the principal actors in the CSA vegetable production chain. The farmers shared what challenges they faced and therefore what products and services they needed while the service providers also shared what products that each had, especially relating to Integrated Pest Management (IPM) products. The fact that farmers now have clear evidence that they can grow vegetables without harmful chemicals is a huge breakthrough for many.

As part of reinforcing sustainability measures following the news that CSLP had to close a year earlier than planned, a survey was conducted by CSLP among the vegetable producing enterprise groups to assess what challenges they faced. One major obstacle identified was the application process linked to IPM. In response, a series of refresher trainings was provided to 115 farmers, including 63 women. The refresher training focused on explaining to the farmers, the mode of activity of the IPM that are used, most of which are water-based compounds. It was explained to them that most of the IPM preparations restrain the vectors from destroying the crops, at best, scaring them off the plants. Since they are water-based, they get washed away once there is rainfall and that will call for another treatment. Therefore, as opposed to the conventional insecticides and fungicides which kill the organisms and also leave some residues in the plant of interest, the IPM preparations only make the environment unfavorable and uncomfortable for the organisms and therefore they leave the premises. There is therefore no residues deposited in the crop. In addition, some of these are household products which are used for cleaning, food preparation or medicine such as powdered detergents, chili pepper extract, garlic extract and neem extract. They were encouraged to be observant and to be conversant with the normal appearance of the crops such that any slight change in appearance should be noted and investigated. The trainees were also informed that IPM begins with a hygienic farm and that some pests may be managed manually such as picking them off the farm especially when they have not reached threshold levels.

In a bid to influence the youth to stick to CSA practices even while they are young, CSLP has introduced school gardens with 10 junior high school climate change clubs across the coastal Western Region of Ghana. As part of CSLP's exit strategy and in order to avoid leaving them less prepared, 84 students from 3 schools were also trained in refresher IPM including 5 teachers. This offered them the opportunity to practice IPM on their school farms while helping them to improve their knowledge and skills.

Rapid Appraisal on CSA

Regular monitoring of the farmer managed CSA demonstration plots within the landscape continues to reveal that the farmers are appreciating and developing greater interest in the CSA practices. They do, however, brand it as difficult to practice. Based on the fact that CSLP has to close one year earlier than planned, it became necessary to investigate what is the general perception of all the farmers about the practices and better understand their issues so that these could be resolved before the new close out date. A 5-day rapid appraisal was conducted in 15 core CSA participating communities to better understand and document the perspectives of beneficiary farmers on the lessons learned, challenges and successes of the CSA intervention. The purely qualitative study, ensured that the methodology was designed to generate in-depth information about the CSA practices. Data was collected using Focus Group Discussions (FGD) and aided by a FGD guide.

The assessment[2] revealed that farmers and schools (youth groups) appreciate the CSA concept, are practicing and realizing intended benefits. It noted the move from negative farming practices to the adoption of better farming methods and CSA technologies. Among the adopted technologies were effective soil management (e.g. use of organic fertilizers and composting), use of improved seeds, avoidance of bush burning and integration of trees in food crop farms. Others were the use of organic recipes to control pest and planting of nitrogen fixing trees. Key

[2] The report will be posted with close out reports and also on the CSLP subsite in *ghanalinks.org*

challenges faced by the farmers in the CSA approach included access to and cost of inputs (e.g. improved seeds), pest invasion and ineffectiveness of some control methods (e.g. use of the organic recipes), marketing of produce (same price for both organic and inorganic produce in most markets) and reduction in the number of enterprise group members.

The biggest challenges faced was the IPM methods for the control of pests. From discussions held during the assessment, the CSLP learned that most of the problem arose from a misconception about how the IPM preparations work. Based on this, refresher trainings were designed in IPM to deepen their understanding about how to apply the IPM preparations and how to manage pests generally. A critical factor is the fact that water based preparations are easily washed away when there is rain but that is the assurance that the produce are safe of any harmful residues. It calls for more applications of the recipes and regular inspection to ensure that the organisms are scared off. The fact that the recipes are economically affordable makes it feasible to apply. A farmer should therefore trade off the effect of harmful chemicals on the health of consumers and the environment for the extra time needed to manage the pests as well as the low cost of the IPM recipes.

Activity 1.2 Natural resources value chains improved

Safe Use and Handling of Pesticides Curriculum

Presently, farmers in Ghana apply all manner of chemicals on their fields for a variety of reasons, but with very few regulations, minimal instructions about dosages and applications, and usually little if any knowledge about the hazards associated with their use or application. Chemical usage used to be restricted to tree crop farms such as cocoa to control the major diseases such as capsid and black pod now but is now used on the CSLP landscapes for all kinds of agriculture (including vegetables) and tree crop farming. The soils on many of these farms are so degraded that most crops struggle to remain healthy and become vulnerable to pests, diseases and weed infestations. Farmers feel they are forced to use chemicals in order to reduce the volume of work in controlling weeds and also losing all crops to pests and diseases. Although chemical use may be useful if used appropriately and wisely, there are many other concerns relating to its use in Ghana and within the CSLP operational landscape in particular. Some of these include:

- Wrong applications, e.g., chemical meant for cocoa spraying is used on vegetables;
- No use of personal protective equipment (PPE);
- Chemical use without following the prescription, e.g., higher doses than recommended;
- Re-use of chemical containers with very little caution; and,
- Wrongful disposal of used chemical containers, e.g., into streams, rivers and on farms.

The CSLP undertakes no activities with agrochemicals but it does have an obligation with its participating farmers to help make them more aware and knowledgeable about their proper use and handling. The project's Environmental Management and Mitigation Plan for FY 2018 also spells out some activities aimed at this issue. The primary one is to create a wider awareness and education activity on the safe use and handling of chemicals within the CSLP operational area. As a start, a *Safe Use and Handling of Chemicals Curriculum* was drafted during the second quarter of this year for the training of farmers as well as extension agents of the Cocoa Health and Extension Division of the COCOBOD and the DoFA in the six coastal district local assemblies.

The curriculum which was drafted in close consultation with the Western Region Environmental Protection Agency (EPA) and the Regional Extension Officer of the Ministry of Food and Agriculture (MoFA) covers topics that define pesticides, the types of pesticides in farming use, usefulness of pesticides, pesticide risks, and how to avoid or reduce pesticide exposure to humans and the environment. The curriculum has been fully vetted with MoFA and the EPA.

Two sessions of two-day training of trainers (ToT) in safe use of pesticides were organized for staff of DoFA and EPA during the quarter. A total of 44 trainees, including seven women, received the training. There were three staff from the regional EPA, three from regional MoFA and the remaining participants were DoFA field extension agents from four coastal municipal and district assemblies. The training included fieldwork where participants visited local pesticide shops to collect data on pesticide labels for use in decision-making in the selection of pesticide for specific purpose using the pesticide register that was sourced from the EPA.

Apiary Monitoring

CSLP introduced beekeeping to the landscape with the objective to improve household nutrition, diversify income through sale of honey and honey products and also to conserve forest cover/diversity by encouraging setting aside forest patches as apiary locales. Numerous challenges faced by the beekeepers have been addressed by the project CSLP through trainings, a consultancy assessment, study tours and exchange visits. Some of the challenges faced include a lack of available inputs, lack of artisans' knowledge in hive construction, fear of bees, rampant use of pesticides across the landscape and frequent absconding of bees from hives.

Another problem that the CSLP identified, was the lack of interest and time at the apiary sites by the beekeepers, and the unwillingness to invest in an additional hives beyond those that the project provided for demonstration. This was thought to be the result of lack of the conviction that beekeeping is a profitable venture. To change this perception, the CSLP facilitated a training tour for 19 of its trained beekeepers (including 5 women) to interact with members of the Atebubu Beekeepers Association (ATEBA) in the Brong Ahafo Region. ATEBA, in existence for the past ten years, has faced challenges similar to those of the CSLP group. The training provided the opportunity for CSLP beekeepers to learn of ATEBA's successes and failures and to share their own more nascent experiences.

Following the study tour visit, the CSLP monitored a selection of apiaries that it had been supporting for the past two years to assess the impact of the ATEBA visit on their operations and to learn of further challenges and issues that might be addressed before the project ends its technical activities during the next quarter (July 2018). The impact of the study tour has been nothing but superlative. Following the lessons they received from their host beekeepers in Atebubu, CSLP trained beekeepers are now able to construct the beehives by themselves, instead of engaging carpenters who make it for not less than GHC 250 (about $56.00) per unit. In Yabiw in the Shama District alone, 22 new beehives have been constructed and are being established in apiaries there. Even more positive is the news from the early adopter beekeepers that more people are expressing interest in beekeeping and they are ready to support them to also set up hives.

Other community monitoring in Ellembelle District indicated that 12 hives belonging to 12 persons were harvested and yielded a total of 36 liters of honey. About 90% of the honey was sold within the communities themselves as honey demand is very high and generated sales worth GHC 1,800 (US$ 407). Two beekeepers in Ahanta West Municipality were able to harvest 18 liters of honey, including 12 liters from one hive! These beekeepers are leading the way for others in their communities and the interest in this livelihood is growing quickly in the operational area of the project.

Activity 1.3 Economic opportunities increased

Village Agents (VAs) Refresher Training

Twenty-five (25) Village Agents (VAs), including eight women (representing 10 communities and 5 GoG assemblies) received a refresher training in the facilitation of the village savings and loans standard modules during the quarter. The VAs are selected from amongst VSLA members who have been identified to have the capacity and commitment to be able to support the VSLA processes for a complete and successful cycle. These members are grouped and receive further training in the seven VSL modules as well as other disciplines which are found to be relevant for their functions. The VAs support the VSLAs in their preparatory stage to begin meetings

and trainings in the seven modules until share-out. This support is critical especially when it is impossible for the VSLA field supervisor to be present at all times to facilitate their events and resolve difficulties.

The refresher training, held annually for newer VAs, became even more relevant as result of an assessment conducted by the CSLP to determine their capacity to manage in the absence of CSLP and the VSLA field supervisor after CSLP close out. The assessment helped to flag some weaknesses and these were addressed in the refresher training. Apart from the training in the seven standard VSL modules and how to facilitate them, they also received insight into other topics listed below.

- Facilitation skills
- Conflict resolution
- Group formation & dynamics
- Adult learning principles
- Time management & planning
- Conversion from old to new Ghana currency
- Financial record keeping

The training process includes role-plays creating opportunities for participants to act as VSLA members at meeting in one instance, and in another as facilitator of VSL modules. The performance of the participants at the training provided strong evidence that the VAs are in the position to sustain the existing VSLAs (except perhaps for newer groups who may have challenges mobilizing inputs from the right sources distant from their communities).

VSLAs – VAs Agreement

The implementation of the Village Agent (VA) model was started for the project in FY 2016. This was initiated as the beginning of a sustainability strategy in preparation for CSLP's planned exit in September 2019. The primary requirements for individuals were reasonable literacy and numeracy levels, a readiness and commitment to volunteer and a willingness to make the time to learn and support the VSLAs. They received group trainings followed with individual, on-the-job skills development that were monitored by the CSLP's Supervisory VSLA Specialist who critiqued and coached the VAs when/where necessary.

Until recently, the VAs offered their services to the VSLAs on a pro bono basis. Although as part of their training, they have been made to understand that it is entirely on voluntary basis, but there was the risk that upon the close out of CSLP, there may not be any motivation for VAs to trek distances on foot or by any vehicle to continue to provide services on a pro bono basis. To mitigate this risk, the CSLP-facilitated discussions among a number of VSLAs and VAs and an agreement was signed that upon share-out, the VAs will be paid some agreed token amount (the amounts tend to vary from one VSLA to another). To date, four VSLAs have signed such agreements spelling out the expectations and limitations of the parties with expectations of more such agreements in the final weeks of the project.

Financial Education Training for VSLAs

The VSLAs established under the facilitation of CSLP are located mostly in the rural areas of the coastal Western Region of Ghana where the majority of the people are farmers and/or fishermen. Almost 70 percent of the people who benefit the most from the VSLA interventions are women who have low literacy and numeracy levels. This limits their decision-making capacity relative to how they best utilize their savings from the VSLA share-out events. This has made potential linkages of the associations to banks and other financial institutions even more risky simply because they lack the capacity to negotiate head to head with the banks, better analyze opportunities and to make investment decisions.

A financial education training module was developed to improve the numeracy and literacy skills of the members of the VSLAs. In this most recent quarter, it was provided to 195 members (160 were women) from eight VSLAs in four communities. Its design was focused on VSLA members to become financially inclusive and keep

minimum records that are meaningful to themselves (as individuals) and to enable them to understand whether their ventures are leading to profits or losses and at what margins. Topics included:

Strengthening the ability to save	Planning/budgeting for households & businesses
Improving skills for loan management	Making informed choices about financial products

VSLA Graduation

To date, the CSLP has facilitated and trained 49 VSLAs (10 being supported by the project's grantee, Hen Mpoano). All are at different stages of experience with the modular elements of training and in the number of complete cycles (7 modules) that they have finished. As part of the exit strategy of the CSLP, 27 of the VSLAs were awarded certificates of participation in individual and group ceremonies and symbolically passed to the MMDAs Business Advisory Centers (BAC), who were present, as the overall monitoring support agency.

Of the 27 VSLAs, 8 have completed 3 cycles, 11 have completed 2 cycles and 8 have completed 1 cycle and have all continued to hold themselves accountable with loan repayment rates approaching 100 percent.

VSLA Share-Out

The VSLA has a cycle of about 48 to 52 weeks whereby members make their weekly agreed loan savings and social contributions. Two months before the end of the annual cycle, members stop giving out loans and focus on repaying the loans given out to that point. Following the re-payment of all loans and the end of the cycle, members distribute to each member the amount contributed and share the accrued interest according to the ratio of member contributions. This event is called the share-out. All loan contributions and interests are shared, except the social fund which some of the group decide to invest it. During the quarter, four VSLAs reached the share-out stage successfully. The group with the highest loan fund among the four provided GHC 18,546 ($4,881) worth of loans while the lowest had a figure of GHC 6,410.60 ($1,687.00), all of which were paid back to the associations.

ToT for CEWEFIA in VSLA Establishment

The CSLP's success with its support of VSLAs in the Western Region has not gone unnoticed by the GoG agencies, NGOs and other donor-funded projects. The VSLA stands out when compared to the regular microfinance systems where the farmers' money is collected and saved in an account physically away from them. Many of these farmers have experienced situations where the microfinance staff did not return to the communities and the farmers lost their money. The VSLA is also an effective platform for increasing awareness and interest in other project or development interventions. The CSLP has received several requests for assistance in establishing and implementing support for VSLAs in other areas.

The Central and Western Fishmongers Improvement Association (CEWEFIA), a local partner of the USAID-funded Sustainable Fisheries Management Project (SFMP) operates in communities in the Western and Central Regions of Ghana. CEWEFIA is a woman-focused organization geared to empowering women and ensuring the social well-being of children in the rural areas. During the quarter, five staff of CEWEFIA and one from SNV, the Netherlands Development Organization, received training from the CSLP's Supervisory VSLA Specialist so that they could begin to help establish and support VSLAs. The primary focus was on the standard seven modules of the VSLA. The 5-day training comprised of PowerPoint presentations, role plays, and field visits to view an active VSLA session. The trainees were also given contact links to the input manufacturers for items such as the metal boxes and the money sacks needed for the groups.

3.3 Output 2: Improved Environment and Natural Resources Management

Table 4. Planned and implemented activities for Output 2 in Quarter 3 of FY 2018

Activities to be Implemented	Expected Outputs	Achievements
2.1 Forestry and agroforestry interventions developed and practiced	● Trees are integrated into community and farming landscapes to improve environment and with secure tenure	● Monitoring of all planted sites and farmer managed natural regeneration initiated ● Preparations for greening the STMA are advanced
2.2 Carbon sequestration improved and effectively monitored	● Carbon sequestration in CSLP enlisted sites monitored and calculated	● GIS training was conducted for 33 staff of the 6 coastal district local assemblies in the Western Region
2.3 Stakeholder Coordination strengthened	● Regional, district and community level stakeholders are updated on CSLP activities and feedback solicited	● 16th Regional Stakeholders' meeting took place during the quarter ● Field Media Day for FY 2018 took place in the Nzema East Municipal Assembly
2.4 Capacities increased in environmental resilience and natural resources management	● MMDAs and communities have improved skill in resources management and integrate spatial planning in natural resources management	● 350 mangrove seedlings were transplanted from nursery by the Yabiw CCC ● 6 Senior High School teachers and 3 students from 3 schools participated in a training tour to the Ankobra Beach organic farm ● 21 DoFA Extension Agents from Ahanta West Municipal Assembly received refresher training in IPM and CSA production ● 976 junior high school students (including 466 girls) received training in environmental education from 14 schools ● 3 CRMCs of the Cape Three Points CREMA received training in "CREMAs and the Environment" ● World Environment Day 2018 was celebrated in the Sekondi Takoradi Metropolitan Assembly

Activity 2.1 Forestry and agroforestry interventions developed and practiced

Monitoring of Planted Trees

It is estimated that Ghana's forest cover decreased from 7.5 million Ha in 1990 to 5.0 million Ha in 2010. The result of this loss of tree cover impacts agriculture and leads to reductions in water quality and quantity as well as disasters from increasingly violent storms that are damaging buildings such as schools and health clinics. Through awareness creation by CSLP, many more farmers, managers of public places, and secondary and primary high school youth now understand and embrace the importance of planting trees, erosion control and mitigation and other tactics that communities can undertake to increase their climate resiliency.

CSLP has mobilized all the Community Assistants (CAs) with the objectives to monitor all CSLP facilitated planted trees since inception. Though monitoring is on-going, over 500 trees have been monitored in the Jomoro Municipality and particularly in 17 public school compounds. In the schools where they have open compounds, a lot of the trees were lost through browsing by domestic animals while a good number of schools which are located in sandy soils also lost many trees during the drought. Due to the high interest of maintaining trees on the compounds, some of the schools which have very sandy soils have replaced the CSLP species with local species which was originally introduced from Cote D'Ivoire which is locally known as "Konkoma" which is a fruit tree and also thrives well in sandy soils.

Urban Forestry

The Sekondi Takoradi Metropolitan Assembly (STMA) quest to collaborate with CSLP to green the twin city is now gaining traction gradually but at a time when CSLP has to close out in the next month. During the second quarter of this financial year, the committee set up by the Metropolitan Chief Executive to plan and implement the planting identified a number of schools to be responsible for the establishment of the nursery for producing seedlings for planting. During the quarter, CSLP has provided nursery tools such as wheel barrows, spades and shovels, watering cans and water holding containers. Trucks of black soil were delivered to the schools for filling into the polythene bags. 10,000 pieces of polythene bags have been distributed to the schools and more than 6,000 polythene bags have been filled ready to receive seeds. One of the schools, namely Ketan Catholic Junior High School received 5kg seeds of *Adenanthera parvomina* for sowing into filled polybags.

During the quarter under review, the Greening STMA Committee had the last of its meetings at which the CSLP announced an end to all field activities by July 2018. In view of that, all activities relating to the supervision of the nursery to produce seedlings for planting in the STMA has been handed over to the Parks and Gardens of the STMA.

Activity 2.2 Carbon sequestration improved and effectively monitored

GIS Training for MMDA Staff

GIS skills within the coastal local assemblies is generally limited. Many resources and efforts have been provided to the assemblies by way of trainings and provision of logistics, such as computers, by past and even present projects. However, for most of the locales, the trained staff get transferred and the knowledge and skill is lost. Presently, there are few staff who have some amount of computer literacy and in GIS in the assemblies—often limited to those within the Landuse and Spatial Planning Authority (LUSPA). In the past, there was no urgency on the MMDAs to worry about this

Figure 4. A group of participants during a practical session on how to download data points from a GPS device for analysis

lack of IT literacy but now, the National Development Planning Commission (NDPC) is demanding by compulsion that all development agendas should have spatial plan components. In the face of the limited staff numbers of LUSPA and also limited skill in GIS, the MMDAs face challenge in meeting the NDPC demand and also lose the opportunity for the development of critical natural resources within their areas.

In the attempt to improve knowledge and skills in GIS within the landscape, CSLP, in collaboration with the Western Region GIS Hub and Hen Mpoano designed training curriculum for the staff of the MMDAs. A total of 33 staff, including 4 women, received two trainings which were in two sessions each as follows:

TRAINING TOPIC A	PARTICIPANTS
1. Introduction to GPS unit for collecting real world data 2. Introduction to QGIS for analyzing real world data, creation of attribute data and performing basic data manipulation	**Session A** Reginal office, STMA, Shama, Ahanta West **Session B** Nzema East, Ellembelle, Jomoro
TRAINING TOPIC B	
1. Geo referencing of image and geo data, and coordinate conversion/ standardization of data	**Session A** Regional offices, STMA, Shama, Ahanta West **Session B** Nzema East, Ellembelle, Jomoro

Having completed this training, each of the staff (who were selected from institutions based on their needs for spatial planning knowledge included those from the Land Use and Spatial Planning Authority (LUSPA), Development Planning Department, DoFA, Parks and Gardens, Works Department and the NADMO), was able to gather data, export it into Quantum GIS (QGIS), analyze and create attributes and also geo reference the data. All the trainees were given access to QGIS, which is an open sources software for GIS analysis, as well as the Ghana country shapefile. A QGIS manual has also been drafted and shared with the various MMDA offices to be kept as reference document to support the trained staff in the use of the software moving forward.

Activity 2.3 Stakeholder coordination strengthened

Western Regional Stakeholders' Update Meeting

The CSLP facilitated the 16th and the last of Western Regional stakeholders' meeting during the quarter. The meetings, meant for stakeholders such as the WRCC (in order to inform the Regional Minister), MoFA/DoFA, EPA, Development Planning Unit, Landuse and Spatial Planning Authority, Ghana Education Service, Forestry Commission, usually had CSLP presenting all that was implemented during the quarter as well as any challenges that were encountered. Stakeholders usually critiqued and provided recommendations as and when necessary. There were also discussions about potential synergies between stakeholders and CSLP activities.

The event was also used as a forum to announce the early closure of the CSLP. The various stakeholders were informed that the various CSLP beneficiaries were therefore being left in the care of local partners and government institutions for support. In view of that, there were a few community members that were invited to participate in the meeting for the first time for them to also hear of the CSLP close out.

Field Media Day

The CSLP annual field Media Day is organized to coincide with the regional stakeholders' meeting. It is meant to create the opportunity for the regional district stakeholders to experience and interact with farmers in the field. The primary participants are the regional stakeholders as well as electronic and print media personnel.

The event took place in two communities in the Nzema East Municipal Assembly, namely Asonti and Bomokrom where the stakeholders visited CSA vegetable demonstration sites for enterprise group members and climate change club. The farmers and students from Bomokrom shared the lessons and experiences that they have gained so far. The media personnel also interacted with the students, farmers, CSLP staff and the regional stakeholders and developed publications including the following:

1. http://www.ghananewsagency.org/social/usaid-empowers-rural-communities-through-farming-mutual-loans-134930?utm_source=gna&utm_medium=search&utm_campaign=sitesearch&utm_term=keywords&utm_content
2. https://www.ghanaweb.com/GhanaHomePage/NewsArchive/USAID-empowers-rural-communities-through-farming-mutual-loans-664917

Activity 2.4 Capacities increased in environmental resilience and natural resources management

Mangrove re-planting in Yabiw

Mangrove management has been a significant component of CSLP's interventions in the communities mainly because coastal mangroves play a major role in the sustenance of marine fisheries which is the source of livelihood for about 70% of the population along the coasts. Mangroves also have been proven to hold far more carbon per unit area than even terrestrial tropical forests. Mangrove management is one of the areas where CSLP believes that youth involvement is a way to ensure that they grow to become used to sustainable managers in the future.

Figure 5. Members of Yabiw Climate Change Club engaged in mangrove replanting exercise to restore degraded portions of the wetland at Yabiw, Shama District

As part of the facilitation of the wetland monitoring curriculum which was developed by the University of Cape Coast's Center for Coastal Management (CCM) with the Yabiw Junior High School Climate Change Club, 350 mangrove seedlings were raised. The objective was to help them develop concern, interest and appreciation for the resource so that they will commit themselves to ensure sustainable management by creating awareness among their parents. The 36 boys and 20 girls were involved in the whole process from the selection of propagules, through nursing, maintenance of the nursery to transplanting. They transplanted the seedlings and replaced dead plants within the area that was re-planted about two years ago.

Training Tour To CSA Organic Farm by 3 Senior High Schools

The CSLP has introduced CSA agricultural practices to three Senior High Schools (SHS) which have agriculture as one of their programs. These are the Uthman Bin-Affan Islamic SHS of Kamgbunli and Nkroful SHS both of the Ellembelle District and Shama SHS of the Shama Municipal Assembly. The objective is to ensure that this age group of young people also learns about the need to minimize unregulated use of harmful chemicals and its impact on the environment and humans. Secondly, as schools that run agriculture programs for students, by incorporating these ideas within their lessons, students will contribute to ensuring sustainability of the CSA wave. Unfortunately, with the announcement of the early closure of CSLP, there is not enough time to facilitate the establishment of a demonstration plot where they are guided to learn the practical steps.

In place of establishing a demonstration plot, the teachers and a few students were taken on a study visit to the Ankobra Beach organic farm. A total of 9 participants (2 teachers and a student from each of the 3 schools) were

involved in the visit to learn and share with their colleagues. The visitors had an exposure to a variety of issues such as the need to reduce and possibly eliminate the use of harmful chemicals due to the impact on the environment and human diet. They also saw at first sight on the ground the fact that one can grow vegetables with only organic inputs. The teachers and the students experienced some of the organic IPM recipes and how they were applied. This visit was found to be useful in that, they will likely approach the Ankobra Beach for any support in the future when CSLP has closed out, for establishment of their own CSA plots.

Study Tour by Yabiw Climate Change Clubs (CCCs)

The Yabiw CCC embarked on a study tour to the Central Region during the quarter in order to help them understand the wetland monitoring curriculum better and in a practical way. Yabiw is one of the CCCs that has had the privilege of being taken through the wetland monitoring curriculum on a pilot basis. Module 1 of the curriculum talks about the nature, types and importance of wetlands and module 5 talks about the water quality of the wetlands and other issues. Unfortunately, some of the land forms that were mentioned such as closed and open lagoons are not available within their locality and including the water quality assessment equipment for them to observe. CSLP therefore collaborated with the University of Cape Coast (UCC) who are the authors of the curriculum to agree on a date for visit to two sites in the Central Region where there are a closed lagoon and an open lagoon. The UCC staff engaged the students at those sites to help them understand what the curriculum contained and also carried along some of the water quality assessment equipment from their laboratory. 63 students and 9 teachers participated in the visit. The facilitators from the UCC briefed participants on the lagoon types, listed flora and fauna species present, threats to the wetlands/lagoons and also allowed them to try using some of the water quality assessment equipment. The students and their teachers were very much excited about the lessons learned which created the opportunity for them to compare the wetlands observed in the Central Region with those from their home areas.

ToT for CCC Teachers

The University of Cape Coast's (UCC) Center for Coastal Management (CCM) is affiliated with the Department for Fisheries and Aquaculture. The CCM drafted the wetland monitoring curriculum with the objective that senior and junior high school students within the Western and Central Regions will be educated on the nature, types and importance of wetlands, the ecological conditions, biodiversity and anthropogenic threats to coastal wetland habitats, and the techniques for monitoring the ecological health of wetlands.

Figure 6. Teachers engaged in hands-on training on measuring wetland ecological health parameters

The CCM instituted a means to pilot the curriculum with its partners in which CSLP opted to participate. The climate change clubs in Yabiw and Akwidaa were therefore used as the pilot groups. In order to enable the teachers who function as advisors for the clubs to be able to facilitate the modules, they were taken through the Teachers' Guide of the curriculum that prepares them to teach the students. Earlier, the teachers were taken through module 1 to module 4. During the quarter, it became necessary to take them through modules 5 to 7 so that they will complete the entire 7 modules with the students.

A total of six teachers, including one woman, participated in the training for three days where two lecturers from the Department of Fisheries and Aquaculture were the major facilitators. During the 3 days, they were exposed to the content of each of the 3 modules namely module 5-7 and were supported to be able to explain and/or interpret all the scientific terminologies in the modules. There was also a field day in which they observed the fauna and flora of the wetlands and linked them to the scientific names, pictures and the live organisms. This was useful

especially since some of the teachers do not have scientific training. The teachers also shared with the lecturers some of the difficulties that they have with the facilitation of the modules since the whole idea as a pilot is to improve the curriculum to ensure its effectiveness and use.

DoFA Collaboration in CSA Monitoring

In order to meet the demands for training in CSA from organizations and partners outside of the communities, CSLP adopted the strategy of training DoFA Extension Agents who are responsible for the Western Region so that they would be able to offer extension support to those farmers in communities where it is impossible for CSLP to operate. In view of the early close out of CSLP and also learning from the outcome of interactions with CSA farmers through a rapid appraisal which identified IPM management as a critical area that requires more coaching, CSLP organized a refresher ToT for 21 DoFA Extension Agents from the Ahanta West Municipal Assembly during the quarter. The 21 trainees, including 4 women, increased their understanding of the critical differences between the conventional harmful pesticides and those of IPM preparations. In addition, trainees learned about the need to observe the farm and eliminate some pests without the use of chemicals.

Environment and Sanitation Training for Junior High School Students

Sanitation is generally poor in Ghana's cities, towns and villages with what may be described as only lip service that is paid to the problem by the authorities. Through the quarterly regional stakeholders' meetings, it turned out that the EPA, Wildlife Division of the Forestry Commission and the CSLP were all facilitating interactions and establishing school clubs with the objective of influencing such behavior in a positive way through awareness creation. A critical assessment of the various curricula showed that the contents were skewed towards the goal of each organization while the clubs were located in various communities within the six coastal assemblies. It was therefore decided that a collaboration among all the three institutions and harmonizing the curricula into one presentation would be useful and enable all the clubs to benefit from the goals of all three. The three institutions therefore engaged the Ghana Education Service (GES) Regional Directorate who bought into the idea and led the drafting of the merged training curriculum.

Figure 7. Bag made from used sachet water plastic bag by students of Hopes & Dreams School, Ahanta West Municipality

Through the regional directorate of the GES, 110 teachers were trained in a ToT fashion in the curriculum which was titled "Environmental and Sanitation Training". Through the regional GES, the teachers were selected from across the coastal landscape as follows:

Municipal/District Assembly	No of Schools	Number of Teachers Trained		
		Males	Females	Total
Jomoro	15	19	5	24
Ellembelle	15	18	11	29
Nzema East	29	18	11	29
Ahanta West	15	19	9	28
Totals	**74**	**74**	**36**	**110**

The CSLP facilitated discussions with three institutions namely EPA, WD and GES to mutually agree on the monitoring and reporting standards to be used across all the schools visited. Report writing templates were drafted and distributed to the teachers through School Health and Environment Program Coordinators in the four

assemblies. Fourteen in-school trainings were monitored by a section of staff from the four institutions. In total it was found that 976 students (466 were girls) were trained in Environment and Sanitation. Discussions after the trainings led to a number of actions that the students resolved to carry out. Some of these included recycling, clean-up exercises, and tree planting. The remaining 60 schools will be monitored by the GES, EPA and WD to ensure that the trainings are rolled out to the students.

Environmental Training for CRMCs

The CSLP collaborated with the WD during the quarter to train 3 CRMCs of the Cape Three Points CREMA in "CREMAs and the Environment". This is the final training planned for the CREMAs with the goal to enhance the understanding among CRMC members on the linkage between the environment and their livelihoods. The Cape Three Points CREMA, which has 20 CRMCs, has been in existence for more than 10 years yet it is not as functional as could be expected. The CRMC executives look on as their resources are looted and vandalized without any resistance.

The Cape Three Points CREMA covers 20 communities that surround the Cape Three Points Forest Reserve which also happens to be closest to the sea in the whole of West Africa and also a declared biologically significant biodiversity area (GSBA). The establishment of the CREMA around such a resource was meant to transfer the authority for the management of their off reserve resources into the communities' hands so that it would serve as a buffer around the reserved area while providing the members with the skills and capacity to protect the forest reserve. Unfortunately, this was not achieved and an enquiry for the reason was just that it was due to a lack of understanding as to their role as CREMA members in relation to such conservation. Similarly, they did not see any linkage between a vibrant environment and their livelihoods as farmers and fishermen.

The participants in the training (see the table below) came from three communities in the Ahanta West Municipal Assembly:

Community/CRMC	Men	Women	Total
Princess Town	5	17	**22**
Nkwantanan	23	1	**24**
Cape Three Points	11	7	**18**

World Environment Day 2018

World Environment Day (WED) is celebrated on the 5th of June every year, and is the United Nation's principal vehicle for encouraging awareness and action for the protection of our environment. First held in 1974, it has been a flagship campaign for raising awareness on emerging environmental issues and has grown to include participation from over 143 countries annually. The theme for 2018 was "Beat Plastic Pollution" and was focused on creating awareness for people to move away from over-reliance on, single-use of, and disposal of plastic and its consequences on the oceans, natural places, and the health of humans and wildlife.

CSLP collaborated with the STMA, WD, EPA, GES, Zoomlion Ghana Ltd (private waste management company), Hen Mpoano and Friends of The Nation to celebrate the annual event in Nkotompo and its environs within the STMA. The event started with a procession led by the students of Kow Nketsia A.M.E Zion Junior High School (JHS), teachers, partner staff and community members who carried placards with messages to encourage attitudinal change in people. The second part of the celebration was a durbar where partner organizations shared examples of real world challenges in that have been seen in the oceans, wildlife, communities. A section of students from the Kow Nketsia A. M. E. Zion JHS staged a drama and recited series of poems related to the theme for the day.

3.4 Livelihood Strengthening and Improved NRM through Small Grants

Table 6. Planned and implemented Greater Amanzule Wetland (GAW) conservation activities

Activities to be Implemented	Expected Outputs	Achievements
Strengthening governance within GAW communities	• Improved community participation in mangrove wetland management in the GAW	• The semi-annual update to the GAW Traditional Authorities took place during the quarter • Selection of CCC members totaling 66, including 22 women, from 22 communities undertook field visit to Old Kabenlasuazo and Metika to learn about their mangrove management
Mapping of community wetlands	• Community members are abreast with the extent and status of their wetland resources through spatial plan tools	• The wetlands of Bobrama and Ellonyi were mapped during the quarter through participatory processes with the community members
Restoration of degraded mangrove wetland areas	• Wetland resources are sustainably managed and provide economic and environmental services to communities	• 5,000 mangrove seedlings are being raised in Metika for transplanting • 3,500 mangrove seedlings were transplanted in Anyanzinli
Livelihood opportunities are improved within the GAW communities	• Income generating activities are diversified in the GAW communities	• 2 new VSLAs were initiated in Asanta and Azuleloanu

Strengthening governance within GAW communities

The Greater Amanzule Wetlands (GAW) which is about 100 square kilometers in size, lies in the western most part of the Western Region of Ghana and extends to the border with the Cote D'Ivoire. Rich as it is in both flora and fauna, it is not yet supported by any recognized management regime. CSLP is collaborating with Hen Mpoano to facilitate a process for the formal management of the resources with the objective of ensuring sustainability.

Semi Annual Update of the GAW Traditional Authority

During the adoption of the preferred management scenario for the GAW, the Traditional Authorities who are the custodians of the land, were identified as the final decision-makers for the resources. They were therefore to be updated periodically of any developments that will spring up, whether good or bad while their endorsement was also necessary for the adoption of any major decision or activity. In line with this, a semi-annual update was instituted to be able to achieve this.

The chiefs received briefing during the quarter under review. All the paramount chiefs, chiefs and queen mothers, totaling 40, met to receive updates on the extent of implementation in the GAW. The meeting was facilitated by Hen Mpoano and supported by the Wildlife Division of the Forestry Commission who have the legal

responsibility for the management of wetlands in Ghana. The chiefs were pleased with implementation and expressed their full support for the 24 GAW CCCs and urged them to work to meet the desired goal.

The draft community wetland management regulations which was collated through consultation meetings within the 24 communities was reviewed by the chiefs during the meeting. The chiefs suggested the necessary amendments and requested that the document be finalized by the incorporation of their suggested changes and submit it to the next Traditional Council meetings for endorsement. Once endorsed, it becomes legal for implementation in all the 24 communities.

GAW Community Conservation Committee (GAWCCC) Exchange Visits

The preferred management scenario as adopted for the GAW proposes a three-tier structure to include the community structure, district structure and the traditional council structure which is the highest authority. The community level structures, which are the CCCs, are the field workers on who all the real on-the-ground work depends. Out of the 24 CCCs which are operational, some are effective while others are not as effective as would be desired. The implementing institutions are therefore constantly seeking opportunities to improve the skill of members of the CCCs.

Metika and Old Kabenlasuazo are two CCCs who are performing well in their varied settings. Old Kabenlasuazo has relatively pristine wetland vegetation but their challenge is related to managing it to create the openings for water transport as well as openings for fishing which they organize and cut based on the trainings they have participated in through Hen Mpoano. On the other hand, Metika has nearly 50% of its mangrove resources (about 4 hectares) degraded through cutting which they also are mobilizing the community to establish and nurture seedlings into maturity and re-plant the degraded sites.

In a bid to encourage 12 CCCs to learn and adapt from their peers, an exchange was organized with the CCCs of both Metika and Old Kabenlasuazo. A total of 66 participants, including 22 women, took part in the visit. The objective was for the 12 CCCs to learn from how the executives of these two CCCs are able to win the trust and respond to the calls for action in the management of the wetland. The CCCs involved in the visits were Asanta, Bobrama, Apataim, Adelekezo, Azuleloanu, Old Bakanta, Alloakpoke, Half Assini, Beyin, Ellonyi, Ekpu and Ezinlibo. The 12 CCCs sounded convinced to work harder to make communal efforts in the wetland attractive to the community members.

Mapping of community wetlands

One major necessity for wetland/mangrove conservation is the determination of the extent, status and potential threats of the resource(s) of interest. As part of the ongoing effort to put the Greater Amanzule wetland under some conservation status, Hen Mpoano is mapping the wetland resources of all 24 GAW communities using a participatory approach. During the quarter, the wetland maps of Bobrama and Ellonyi were completed.

The process began with community members indicating the extent and attributes of their resources on a printed orthophoto on flexy material as visual aid and then was followed with ground truthing using the GPS with community members guiding the tour. The CCC members provided information about the ownership of the land, extent of the resources, potential threats and resource use patterns. The CCC members who are trained as Community Assistants then gather relevant data using GPS units that are digitized on the maps.

Contrasting features from two communities provide an interesting example of data being collected as noted below:

Landuse cover	Bobrama	Ellonyi
	Area (ha)	
Mangrove	7.29	1.22
Degraded mangrove	-	0.22
Swamp forest	20.66	208.67

Degraded swamp forest	0.33	-
Water body	0.62	4.09

For communities, these maps are useful tools for planning management actions for sustaining the resources; for the district they are useful in identifying important biological resource areas, planning and decision making regarding land use and land use changes. They also provide the communities with the rationale to make critical and useful management decisions. They are also being encouraged to update the maps periodically so as to be able to monitor changes over time.

Restoration of degraded mangrove wetland areas

Mangrove Nursery Establishment

The Metika in the Jomoro Municipal Assembly's CCC and the general community was shocked to realize from the map that out of the total of 8.60 ha of mangrove, 3.77 ha was degraded. As such, the CCC committed to ensuring that all the degraded areas are restored to appreciable status. The CCC started to raise mangrove seedlings in their nursery last quarter and has continued such that 5,000 mangrove seedlings have been nurtured to be transplanted. The nursery activities were carried out by the CCC of Metika which comprises of 88 men and 104 women and are waiting until the appropriate time when they will mobilize the community to transplant the propagules.

Mangrove Re-planting in Anyanzinli

The mangrove re-planting drive which started during the second quarter in Anyanzinli also continued during this third quarter. A total of 3,500 mature and healthy mangrove seedlings were transplanted in Anyanzinli with part of the seedlings coming from their own nursery while the rest came from the nursery in Metika. Part of the 3,500 seedlings were used to replace dead seedlings from the previous re-planting while the majority were used to expand the re-planted areas drive.

Livelihood opportunities are improved within the GAW communities

Two New VSLAs Established

The Village Savings and Loans (VSLA) concept has been applied under the CSLP as the platform to mobilize community members to develop the habit of saving while managing their natural resources more sustainable. The VSLA has altered the development equation in marginalized communities in the GAW, providing members with means to cope with emergencies, build capital and re-create social dynamics that support genuine self-reliance.

During the quarter under review, new VSLAs were formed at Asanta (called Yesu Mo) and Azuleleonu (called Boeyele) both in Ellembelle District making a total of eleven (11) VSLAs formed by Hen Mpoano under the CSLP. The two groups comprised of 54 women and 11 men. Both VSLAs have completed the 4 modules and therefore are in the share purchase phase. These two new VSLAs and all other VSLAs within the GAW area will be monitored by Hen Mpoano into full maturity.

4.0 IMPLEMENTATION CHALLENGES

The CSA vegetable production is being accepted day in and day out both in CSLP communities and beyond. This acceptance is based on the fact that people are recognizing the cost of inappropriate use of harmful chemicals on the health of farmers and consumers. This change in production is, however, being resisted by a certain number of farmers. The farmers are used to a system where they apply a chemical once and relax while all pests are destroyed. This is a practice that is in contrast to the IPM principles which require more regular care for crops. In addition, farmers are describing the CSA practices as difficult based on the fact that the inputs for the practices are not easily available within the locality. These inputs include bamboo vinegar, citronella oil, neem cake, citronella hydrosol and charcoal powder. Even a product like poultry waste is not easily available in the quantities that are

desired and may be an avenue for someone to take advantage and start a business. Another huge area that draws back activities is accessibility to improved seeds. To make matters worse, the seeds that are labelled as certified do not seem to have any regulation in Ghana. These issues must be overcome to enhance CSA farming practices in the landscape.

5.0 INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

5.1 Gender Equality and Female Empowerment

The VSLA platform was used during the quarter to help educate and enhance women's numeracy and literacy skills. 8 VSLAs received training in financial education training and in these 8 groups which total 195, 165 are women. The mere fact of membership of the VSLA created the opportunity for these 165 women to receive insight into how they as women and managers of their household can manage themselves and finances. The 165 women received insight into many useful topics including the importance of and practices for budgeting. Such critical exposures are likely to influence not only the finances of the women but also likely to influence the household as a whole.

5.2 Sustainability Mechanisms

The response of community members within the six coastal assemblies to the adoption of the CSA practices for the production of food crops is so exciting to the CSLP that, with the announcement of the early closure, CSLP has tried to ensure that some measures are put in place for the system to sustain itself. Under normal circumstances and through adult learning principles, it will require many exposures, lesson learning and benefit reaping for adults to accept and believe in such a practice. In the absence of these, CSLP has engaged the children of these farmers and their teachers who have a little understanding of scientific principles that improves likelihood of adoption. As was predicted and one of the reasons why the Climate Change clubs were initiated into the CSA equation, the school children have started to influence their parents in their farms beyond the school gardens. This is the primary reason why the senior high school teachers were taken on a trip to visit the Ankobra Farms where one can find all the best practices being implemented. Once the teachers learn from Ankobra farms, they will likely enlighten years' worth of high school students to these ideas.

Forty agriculture extension agents of the DoFA from across 5 coastal local assemblies namely Jomoro (6 men), Ellembelle (4 men and 1 woman), Nzema East (6 men and 1 woman), Ahanta West (11 men and 4 women) and Shama (6 men and 1 woman) have all been trained in the CSA practices. Another 21 of them have also received refresher training in IPM. These trainings were aimed at developing systems to ensure continuity of the practice beyond the CSLP close out.

5.3 Global Climate Change

Although the funding source for the project is now the Feed the Future initiative, the initial climate change indicators used under the first phase of the project (funded with USAID sustainable landscapes funds) are still tracked. They continue to be an integral part of the CSLP's approaches in its work with area farmers, district and regional government institutions and traditional authorities, NGOs and private sector entities. Additional evidence can be found throughout this report in instances where the CSLP works with these groups on climate smart agriculture, estimating GHG emissions avoided on a variety of land cover types, monitoring wetlands and mangroves that sequester carbon in substantial quantities, and on broad climate change awareness issues in school clubs, with recognized conservation committees and with other community-based organizations.

5.4 Policy and Governance Support

Transparency and accountability are major hallmarks of success in any communal activity. These qualities and others are required to draw people to become attracted to contribute to community resources management. The fundamental basis for achieving these is community generated rules and regulations for the management of the

resources. During the quarter, draft community regulations for the management of the GAW which was drafted through community engagement within the 24 CCCs was reviewed by the Traditional Councils and nearing finalization. The chiefs, during their semi-annual meeting, pledged their full support for this effort and have sensitized every community chief concerned to ensure its effective implementation.

The District Conservation Committees (DCCs) for the management of GAW, which includes local government officials and the assembly members of the electoral areas concerned, were set up as the middle level management structure between the communities and the chiefs to provide the necessary professional, technical and legal advice while also making sure that they do not lose out on any government opportunities that will be necessary to enhance development. It has been very difficult to ensure these two DCCs in Ellembelle and Jomoro are effective due to the fact that the members do not see it as their core responsibility but more of a hobby. Additionally, in the past, when the staff are learning to understand and begin to function effectively, they get transferred and new staff begin another learning experience.

The DCCs are now gaining positive traction and need to be encouraged to support the co-management efforts whenever possible. The latest Medium Term Development Plans of both assemblies are now featuring the activities of the GAW with funds allocated to their management. Activities earmarked for implementation include more awareness creation, monitoring visits to the CCCs and the incorporation of the GAW by-laws into the local assembly by-laws. These efforts are significant steps in the gradual formalization of the GAW management activities.

5.5 Local Capacity Development

The early close out of CSLP has significantly changed the planned sustainability mechanisms for the CSLP. However, there is some amount of hope that some critical interventions will be sustained because local capacity has been developed and partners are expected to support the efforts in the absence of CSLP.

Hen Mpoano is one local NGO that has been involved and supported to implement interventions such as CSA for the production of cassava and vegetables, VSLA implementation and also the evolution of a nested community centered management plan that departs from the conventional, elaborate management plans. It is believed that these efforts have created the necessary capacity such that Hen Mpoano can support some of the efforts championed by the CSLP though with greater financial constraints.

The training of staff of CEWEFIA in the facilitation of VSLAs is another potential legacy for the sustenance of VSLAs in the Central Region. The oft-heard rumor that CARE International is planning for more VSLA presence in the region is also encouraging, but until it comes to fruition, efforts should be made by other donor organizations and the NBSSI to foster the continued development of the successful efforts supported by the CSLP.

6.0 STAKEHOLDER PARTICIPATION AND INVOLVEMENT

CSLP, right from the inception, identified some critical government institutions as important stakeholders. These include the EPA, Forestry Commission's Wildlife Division and the Forest Services Division, MoFA, GES, Landuse and Spatial Planning Authority, and the Development Planning Department which all fit under their parent organization being the Western Region Coordinating Council (WRCC). With the exception of the Forest Services Division of the Forestry Commission, all these institutions have played very significant roles in one form or another in CSLP's implementation.

Through the collaboration of the WD of the Forestry Commission, EPA, GES and the CSLP, the environment and sanitation ToT was carried out for teachers from 75 junior high schools who are in the process of training the students of their respective schools.

Similarly, through the collaboration of the Landuse and Spatial Planning Authority and the CSLP, training was conducted for over 30 staff of all the 6 coastal local assemblies in the use of GPS to collect data and its application in Quantum GIS.

7.0 MANAGEMENT AND ADMINISTRATIVE ISSUES

CSLP received notification for the close out of the project a year earlier than expected. This notice meant that the CSLP had to undertake a rapid re-organization of the project's work plan to include some critical activities prior to close out, a prioritization on sustainability issues, and the notification of the project's closure to key partners. It is hoped that all stakeholders and partners who have committed themselves to contribute to sustain the gains of CSLP will be able to honor these commitments.

8.0 LESSONS LEARNED

Attitudes that people learn over time become very difficult to change. This accounts hugely for the reason why farmers find it difficult to try and adopt new ideas. The environment of the Western Region has suffered a great deal over the decades and makes it difficult it to produce outputs as they used to be. Due to the difficulty for farmers to change, they often label any new practice that they are not used to as difficult. Under such circumstances, there is a need to adopt wide array of strategies such as demonstrations and awareness creation so that they can become more convinced of the benefits of the new practice before they will continue on their own. Natural resources management and conservation projects by their very nature take time to show results and this significantly affects the adoption of best practices and their longer term sustainable implementation.

The CSLP relies heavily on changing behaviors and monitoring, coaching, and mentoring to lead to sustainability. While some beneficiaries are early adopters, others take longer and need the success of the early adopters to make them convinced that the change is a positive one that will bring increased benefits to their household. The early closure from USAID/Ghana has come just at the moment that the successes were beginning to multiply and the early adopters were beginning to lead the way. Demand over the last two quarters for CSLP guidance and advice has been increasing at a substantial pace. And now with the withdrawal of the team from the landscapes the benefit that would have been added in its final year will not happen.

9.0 PLANNED ACTIVITIES FOR NEXT QUARTER INCLUDING UPCOMING EVENTS

Technical activities planned for the next quarter are minimal. The decision to terminate the project one year early means that the major focus of the last quarter (July through September 2018) will be on report writing and administrative/financial close out.

A handful of activities planned for July include:

- An overview visit of project interventions with the CSLP's USAID/Ghana AOR;
- Final monitoring of CSA demonstration areas and enterprise groups, and tree planning, including farmer-managed natural regeneration;
- Graduation and recognition of VSLAs with one, two and three cycles of savings and loaning experience;
- Transitions and celebration workshop in late July to summarize project successes and lessons learned over the life of the project while celebrating with the CSLP partners and team as the project draws to a close;
- A final update with the CSLP's technical partners in the six coastal districts;
- Final USFS financial and administrative review as a part of project close out in late August; and,

- A second and final CSA Market Networking Workshop, supported together with its grantee, Hen Mpoano.

10.0 HOW IMPLEMENTING PARTNER HAS ADDRESSED A/COR COMMENTS FROM THE LAST QUARTERLY OR ANNUAL REPORT

No significant comments were received from the CSLP's AOR regarding the FY 2018 Quarter 2 report.

ANNEXES

Annex 1. Summary Results to Date

	Baseline		Unit of Measure	FY18	Quarterly Status – FY 18						Comments
Indicator	Year	Value		Annual Target	Q1	Q2	Q3	Q4	Cumulative Actual (to date)	Annual Performance Achieved to Date (in %)	
4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO2e, reduced or sequestered as a result of USG assistance	2014	0	Mt CO2e	6,400,000	-	4,459,871	1,856,133	N/A	6,316,004	99%	On target
4.8-7a Clean Energy											
4.8-7b Sustainable Landscapes						4,459,871	1,856,133		6,316,004		
4.8.1-26 Number of hectares of biological significance and/or natural resources under improved NRM as a result of USG assistance	2014	0	Hectares	2,100	-	1,129	1,130	N/A	2,260	108%	On target. Akwidaa wetlands/mangroves under improved NRM mapped with UAV (drone). Analysis on total area (ha) ongoing
Biologically significant areas						762	1,130		1,893		

All other areas						367			367		
4.8.1-29 Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance	2014	0	Number (of person hours)	8,500	1,798	2,548	4,366	N/A	8,712	102%	Indicator on target and will be fully achieved.
4.8.1-29aNumber of men hours					971	1,675	2,575		5,221		
4.8.1-29bNumber of women hours					827	873	1,791		3,491		
4.8.1-6 Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance	2014	0	Number of people	1,800	-	1,659	N/A	N/A	1,659	92%	Our VSLAs (48 in total; incl. 8 formed this quarter) provide great financial support for the other livelihood activities (e.g. beekeeping, vegetable production) and as incentives for conservation activities (wetland/man groves)
4.8.1-6a men						513			513		

4.8.1-6b women						1,146			1,146		
4.8.2-14 Number of institutions with improved capacity to address climate change issues as a result of USG assistance	2014	0	Number of institutions	80	-	46	29	N/A	75	94%	On target
Sustainable Landscapes, e.g., REDD+ capabilities						46	26		72		
4.8.2-29 Number of person hours of training completed in climate change as a result of USG assistance	2014	0	Person-hours	5,000	665	2,039	883	N/A	3,587	72%	On target
4.8.2-29a Sustainable landscapes men					355	1,336	536		2,227		
4.8.2-29b Sustainable landscapes women					310	703	347		1,360		
EG.3.2-1: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training	2016	0	Number of people	980	398	347	199	N/A	944	96%	On target
Type of Individual											
Producers					243	119	69		431		
Male					127	51	27		205		
Female					116	58	42		226		
People in government					112	24	65		201		
Male					67	24	55		146		
Female					45	0	10		55		

People in civil society					43	204	65		312		
Male					22	116	38		176		
Female					21	38	27		86		
EG.3.2-4: Number of for-profit private enterprises, producers organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) receiving USG food security-related organization development assistance	2016	0	Number of groups	88	65	8	12	N/A	85	97%	On target
Type of organization											
Community-based organizations (CBOs)					65	8	12		**85**		
New					23	8			31		
Continuing					42		12		54		
EG.3.2-17: Number of farmers and others who have applied improved technologies or management practices with USG assistance	2016	0	Number of farmers	504	183	83	112	N/A	**378**	75%	On target
Producers					183	83	112		378		
Male					84	30	87		201		
Female					99	53	25		177		
Technology type											
crop genetics					183				183		

cultural practices						43	63		106		
pest management						8	10		18		
soil-related fertility and conservation						10			10		
climate mitigation						22	49		71		
Commodity				Vegetables-eggplant, okra, pepper, cassava	Cassava	Vegetables, cassava			Vegetables, cassava		
EG.3.2-18: Number of hectares of land under improved technologies or management practices with USG assistance	2016	0	Number of hectares	100	20	21	39	N/A	80	80%	Farm mapping with GPS units underway
Technology type											
crop genetics					20				20		
cultural practices						11.38	39		51		
pest management						3.1			3		
soil-related fertility and conservation						1.73			2		
climate mitigation						4.46			4		
climate adaptation											
Sex											
Male					84	22	87		193		
Female					99	39	25		163		
Joint											
Commodity *(Vegetables-eggplant, okra, pepper, cassava*)					Cassava	Vegetables, cassava	Vegetables, cassava				

EG.3.2-20: Number of for-profit private enterprises, producers organizations, water users associations, women's groups, trade and business associations and community-based organizations that applied improved organization-level technologies or management practices with USG assistance	2016	0	Number of groups	60	23	9	24	N/A	**56**	93%	On target
Type of organization											
Community-based organizations (CBOs)					23	9	24		56		
C-1: Number of person hours of training completed in VSL modules as a result of USG assistance	2016	0	Person-hours	5,000	1,314	2,796	1,794	N/A	5,905	118%	On target
C-1aNumber of men hours					441	902	860		2,203		
C-1bNumber of women hours					873	1,894	933		3,701		
C-2: Number of community sensitization sessions on climate change issues and/or NRM/ biodiversity conservation as a result of USG assistance	2016	0	Number of sessions	60	18	22	24	N/A	**64**	107%	On target

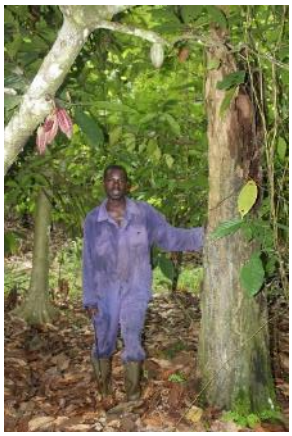
C-3: Number of persons/institutions receiving start-up items for improved NRM/biodiversity conservation as a result of USG assistance	2016	0	Number of persons	100	77	-	15	N/A	**92**	92%	On target
C-2a men					37				37		
C-2b women					39				39		
Institutions					1		15		16		
C-4: Number of project-planted seedlings surviving as a result of as a result of USG assistance	2016	0	Number of seedlings	57,600	N/A	N/A	N/A	N/A	N/A	N/A	Field monitoring & analysis underway for annual reporting.
Other VSLA Indicators											
Number of active informal savings and lending groups	2014	0	Number of groups								**49**
Cumulative Amount (in USD) Saved by informal Savings and lending (VSLA) Group	2014	0	Amount (in US $)								**$79,962**
Number of members of active informal savings and lending groups	2014	0	Number of people								**1,259**
Men											403
women											856
Amount of funds loaned (in USD) annually by informal savings and lending groups	2014	0	Amount (in US $)								**$64,116**

Annex 2. Stories From The Field

Farmer Managed Natural Regeneration: Restoring lands, building resilient communities

Ghana, like many African countries, is experiencing rapid rates of deforestation which poses a challenge to building sustainable development. According to FAO reports in 2010, between 2005 and 2010, the rate of deforestation in Ghana was estimated at 2.19 percent per annum; the sixth highest deforestation rate globally for that period. This equates to approximately 135,000 hectares of forest cover loss within Ghana annually.

"Initially, I did not see the need to have trees on my farm. And because of the *prekese,* people used to frequent my farm a lot to collect *prekese* fruits. In the process, they stole other farm produce and destroyed crops. This was a nuisance to me so I felled the tree," says Benjamin Addison, a farmer from Asonti in the Asonti Nzema East Municipality.



Benjamin Addision, showing the stump of the prekese tree he killed on his farm

CSLP-supported farmers are now working to change the trend. In 2015, the CSLP mobilized and trained 400 farmers to plant economically viable trees and adopt famer managed natural regeneration (FMNR) practices in the Western Region. The initiative, funded by USAID, aims to transform degraded farmlands lands and forest areas and increase resiliency.

Today, Benjamin Addison is one of many farmers working hard to restore forest cover back to the landscape. In 2015 when CSLP introduced restoration of shade trees on cocoa farms, he bought into the idea. He received seedlings including prekese (*Tetrapleura tetraptera*), which he has successfully restored. Benjamin now has thirty-nine trees on his farm (16 planted and 23 nurtured through FMNR).

"In our culture, we say "had I known" is a saying for fools. If I had known the importance of the trees and prekese on my farm, I would not have destroyed them. Now that I know, I don't joke with it," Benjamin says. "Since I stated planting and nurturing trees on my farm, I have noticed that my cocoa is doing better and its leaves do not dry as it used to. My food crop harvest has also improved," he explained.

Benjamin Addison proudly showing prekese he replanted on his farm

Across the CSLP landscape, farmers are now aware of the many benefits trees bring to them. Demand for tree seedlings to be planted on farms is steadily rising even among non-CSLP supported farmers. These farmers have received coaching from CSLP-supported community assistants and are now adopting the practice. Most cocoa farms that did not have any trees growing in the year 2014 have now at least 10 trees on farms.

To date, 90% of all farmers that the CSLP has trained in the practice continue to nurture the natural regeneration of trees on their farms. Common species include odum (*Milicia excelsa*), emire (*Terminalia ivorensis*), prekese (*Tetrapleura tetraptera*), and ofram (*Terminalia superba*), all commercially valuable to the farmer stewards. Most trees identified three years ago have emerged above cocoa crop canopy to provide shade for cocoa production. FMNR is a low-cost land restoration technique that helps promote a healthier, more productive tree crop understory, improve resilience to extreme climatic conditions and provide additional income to the famer which promotes livelihood diversification in the Western Region.

The USAID-funded and USFS-managed CSLP have worked farmers across the CSLP landscape to plant over 70,000 tree seedlings with about 45,500 surviving trees to help build resilience to climate change, contribute to the creation of climate knowledge and strengthen capacities to meet the and implement sustainable development.

Sweet Buzzing Success

"At first the buzz of the bees made me uncomfortable and their sting was very painful to me but I persisted. Now their buzz is sweet music to my ears. It's a symbol of my success," says Kofi Anyigla. What is the use of a hive that is not colonized, he asked. **"I recently sold 12 liters of my honey from which I got $ 109. I have used the money to make three additional hives for my apiary,"** Kofi says.

At 35 years old, Kofi Anyigla is not only a farmer and a father, he is also a role model to farmers who want to diversify their livelihoods through beekeeping in Aketekyi in the Ahanta West Municipality. "I am very happy that I took part in the trainings and took them seriously. I never knew this was going to be so profitable. I am now the envy of my colleagues who did not take this intervention seriously," he says.

"Now people come to me to learn how to start their apiaries," Kofi tells me excitedly. "I teach other people because that is the right thing to do. They also have to be able to make extra money to help cater for their families. It is the only way by which our community will grow and prosper," Kofi explains. Kofi believes that if he keeps his knowledge to himself, he will always be poor because people will always borrow from him when he makes money.

Honey combs harvested for processing from Kofi Anyigla's apiary

Cocoa-based rural families in CSLP communities have insufficient resources to cater for their basic needs as income generated from tree crop farming is often inadequate. As a means of improving rural incomes and resiliency, the USAID-funded and USFS-managed CSLP promotes a diversified livelihood option through beekeeping. Since 2014, the CSLP has trained and supported more than 200 farmers who elected to engage in beekeeping as an additional livelihood activity across all six coastal districts of the Western Region.

Many CSLP-supported beekeepers are beginning to reap multiple benefits from beekeeping such as increased household income and an additional source of nutrition for their families. Ninety percent of honey harvested is immediately sold within the producing communities where demand for the product is very high. In addition, the activity has garnered attention from farmers and community members in areas where CSLP-supported beekeepers come from.

Processed honey belonging to Kofi Anyigla, a CSLP-supported beekeeper from Aketakyi

"During my last harvest, I got 3 gallons of honey from which I made $ 136. I started with 2 hives, now I have 10 of them. I have also made 5 additional hives which I am yet to set up. Soon when rich men from my district are being called, I will be called too."	*Walter Cudjoe, Navrongo*
"… two of my neighbors who witnessed my harvest of 4 liters honey in March have been motivated to get involved in beekeeping. And they have also made their own beehives. I have also added twelve beehives to my apiary."	*Peter Ackon, Yabiw*
"I now earn extra income to support my family's upkeep."	*Gladys Kwasi, Ayawora*

Beekeeping has the potential to contribute to sustainable rural development on the CSLP landscapes by supporting agricultural production, providing honey, wax, products for home use and, importantly, provide income for both landowners and lease-holder farmers. It is expected that income generated from beekeeping will be reinvested into their agricultural livelihoods. These will help ensure that farmers and their communities become more resilient and are better able to buffer climatic variations and economic shocks bringing more stability and sustainability to rural livelihoods.

VSLAs: Helping raise women's voices

"Now we are not afraid to speak-up. We are able to voice our opinions during meetings and even at home and our husbands listen. This was not the case before, but the VSLA has changed a lot of things," says Salamata Shaibu Kraku, a 46 year-old mother of seven and a member of Koryele VSLA from Kamgbunli in the Ellembelle District.

In West Africa, despite major strides made over the last decade, women's voices are still under-represented in all political spheres; at home, in their communities and at national levels. Since 2014, the USAID-funded and USFS-managed CSLP has worked to build changes needed for women to realize this fundamental human right.

However, in many communities, women and girls' empowerment cannot be sustained without having men and boys involved. Kamgbunli, where Salamata Shaibu Kraku hails from, is a strong Muslim community that has a history of practicing social norms that perpetuate gender inequality. However, through participation in local VSLA groups, women are now allowed to voice their opinions and make contributions to important discussions.

"Now the women are more open. They speak freely and with confidence. They know they have men's support and we value their contributions," says Abdullai Yahya, Koryele VSLA Chairman. Abdullai confesses that this was not always the case. This was achieved through consistent education by CSLP's Supervisory Village Savings and Loans Specialist.

Selection of CSLP-empowered women across the six coastal districts of the Western Region

"Before we joined the VSLA, we dared not talk when men were discussing matters. You will not even think of it. And the few times when we were allowed to speak, any man could easily shut us down," Ayeshetu Umar recounts. "Today I am a money counter for my group. I count the men's money and I help them take decisions for the group. This has given me confidence to even make contributions at home which my husband likes very much so long as I am not disrespectful." She added that other women have also taken on administrative positions in the group.

Nearly every woman talks about how the VSLA is about more than money. There is also a focus on empowerment that helps them to think big and access opportunities. "It has given me and my fellow women confidence, self-worth, and access to endless possibilities in life and also the ability to participate equally in decision making at home. We are not afraid to lead," says Mariama Karbah Musa.

Stories from women in Kamgbunli are just a few of many that proves that CSLP's interventions are transforming, empowering, and sharpening the skills of rural women, ensuring sustainable development and delivering lasting change. All women encountered across the CSLP landscape say they can make decisions about what to do with their VSLA money and businesses without anyone else's permission. Women across the landscape are quick to say "I use my money on myself," when they are asked what they use their monies for demonstrating the power of VSLAs to increase economic equality within households.

Since 2014, CSLP have empowered over 700 women through 49 VSLAs, to make their voices heard using VSLAs as platforms for building confidence for further community engagements. VSLAs have proven to be a viable tool for promoting opportunities for women's economic and social empowerment in rural communities.

Annex 3. Events Log

Date(s)	Event Type				Event Description	Comments/Observations
	Meeting	Training	Visitation	Other		
Apr 5				✓	VSLA data collection	2 communities
Apr 5-6				✓	Data review and analysis	For quarterly reporting
Apr 6		✓			Mangrove monitoring	1 community
Apr 6		✓			Training on wetlands for students	1 public school in Shama district
Apr 6-9		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
Apr 9		✓			Monitoring CSA site of CCC	1 school in Shama district
Apr 10		✓			CSA monitoring	1 community
Apr 10-11		✓			Spatial planning training (part I)	For GoG officials in 3 districts
Apr 10				✓	VSLA data collection	1 community
Apr 10		✓			Examination on wetlands	For students in 1 public school in Shama district
Apr 11		✓			Quiz competition on wetlands	In 1 public school in Shama district
Apr 11				✓	Development of Information, Education & Communication (IEC) materials	For outreach purposes
Apr 11-12		✓			ToT on safer use of pesticides	For DoFA staff in Ahanta West municipality
Apr 12		✓			CSA training for students	Kamgbunli Senior High School
Apr 12				✓	VSLA data collection	1 community
Apr 12		✓			CSA monitoring	1 community
Apr 13		✓			CSA monitoring	1 community
Apr 13-16		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
Apr 16	✓				Monitoring of conservation committees	GAW communities
Apr 16-17		✓			Spatial planning training (part I)	For GoG officials in 3 districts
Apr 17	✓				Meeting with farmers on access to land	1 community in Ahanta West municipal
Apr 17		✓			Mangrove monitoring	1 community
Apr 17-19				✓	Scaling up mangrove nursery	2 communities in GAW
Apr 19	✓				Meeting with farmers on access to land	1 community in Ellembelle district
Apr 19				✓	VSLA data collection	1 community
Apr 20		✓			Apiary monitoring	1 community
Apr 20	✓				Monitoring of conservation committees	GAW communities
Apr 20-23		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
Apr 23-27	✓				Monitoring of conservation committees	GAW communities
Apr 24-25		✓			NRM training for CREMA	3 communities. Collaboration with WD
Apr 24		✓			Mangrove monitoring	1 community
Apr 24-25		✓			Spatial planning training (part 2)	For GoG officials in 3 districts
Apr 24-25		✓			ToT on safer use of pesticides	For DoFA staff in Ellembelle district

Date(s)	Event Type				Event Description	Comments/Observations
	Meeting	Training	Visitation	Other		
Apr 26				✓	LULC Validation Workshop with WABiCC in Accra	CSLP provided info on Western Region and Central Region sites
Apr 27-30		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. To be led by Hen-Mpoano
Apr 30	✓				Monthly technical meeting	Reviewed activities implemented in April and planned for May.
May 2	✓				CSLP staff retreat	Prioritized activities for a successful project wrap up and close-out
May 2-4	✓				Monitoring of conservation committees	GAW communities
May 3				✓	World Environment Day preparations	Initial planning
May 7-11				✓	Wetland mapping: participatory and GPS ground truthing	1 community in GAW
May 8				✓	Pre-test: focus guide discussion guide	Rapid appraisal on CSA. 2 groups
May 8-10		✓			Apiary monitoring	3 communities
May 8-10		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
May 9	✓				Meeting with WA BiCC on LULC and wetlands in Ghana	In Accra between WA BiCC CoP and CSLP Director
May 10		✓			Integrated Pest Management Training	For DoFA staff in 1 district
May 10-11				✓	Feed the Future IPs meeting	Held in Accra and attended by CSLP's director & communications specialist
May 10-11		✓			VSLA monitoring	2 communities
May 15	✓				Meeting with Ellembelle district DoFA	Planning training on pesticide use
May 15-17		✓			Apiary monitoring	3 communities
May 15-17				✓	Rapid appraisal on CSA	CSA groups in 13 communities
May 16-18		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
May 22	✓				Meeting with Ahanta West Municipal DoFA	Planning training on pesticide use
May 22-23		✓			Apiary monitoring	2 communities
May 22-24		✓			Financial education & bank linkages discussions	For VSLAs in 3 communities
May 23	✓				Meeting with Jomoro district DoFA	To plan training on pesticide use
May 23				✓	Ecosystem-Based Livelihood Intervention	Enterprise Group Formation and Registration. Hen-Mpoano led event
May 23-24		✓			VSLA formation, trainings and monitoring	Groups in GAW communities. Led by Hen-Mpoano
May 23-25		✓			Integrated Pest Management Training	For farmers in 4 communities
May 24		✓			Exchange visit among GAW CCC	Peer learning by conservation groups
May 29		✓			CSA training tour at Ankobra beach farm	For farmers and teachers
May 29-31		✓			VSLA ToT for CEWEFIA staff	Held in Takoradi
May 30	✓				Workshop with Community Assistants	Held at Esiama
May 31				✓	World Environment Day preparations	Finalize planning

Date(s)	Event Type				Event Description	Comments/Observations
	Meeting	Training	Visitation	Other		
May 31	✓				Semi-Annual Chiefs Meeting: Review of Community Norms	Hen-Mpoano-led activity
May 31		✓			Financial education & bank linkages discussions with VSLAs	1 community
May 31	✓				Exit discussions on CCCs	With GES in one district
Jun 1				✓	Development of wetland management plan	Akwidaa wetlands
Jun 1	✓				Exit discussions on CCCs	With GES in three districts
Jun 1		✓			Training on wetlands for students	1 public school in Shama district
Jun 4-8				✓	GIS work on farm mapped	Review and analysis of farm mapping
Jun 4				✓	Development of wetland management plan	Akwidaa wetlands
Jun 5				✓	World Environment Day celebration	Held at Takoradi; with GoG agencies, local NGOs, media, schools etc.
Jun 5-8		✓			VSLA Village Agents refresher training	For selected village agents
Jun 6	✓				Exit discussions on CCCs	With GES in one district
Jun 6-7		✓			CSA training for cassava farmers	2 communities
Jun 6-8		✓			Monitoring of planted trees	Schools in Jomoro municipal
Jun 7		✓			Integrated Pest Management Training	For farmers in 1 community
Jun 7		✓			Monitoring of CSA site	1 community
Jun 7				✓	Presentation on wetland management plan	Akwidaa wetlands
Jun 7-8		✓			VSLA trainings and monitoring	Groups in GAW communities; led by Hen Mpoano
Jun 8		✓			Training on wetlands for students	1 public school in Shama district
Jun 11-13		✓			ToT on sanitation follow up in schools	8 schools in three districts. Collaboration with the EPA, WD & GES.
Jun 11-13				✓	Scaling up mangrove nursery	2 communities in GAW
Jun 12-13		✓			VSLA trainings and monitoring	Groups in GAW communities; led by Hen Mpoano
Jun 12-14		✓			Farmer managed natural regeneration/agroforestry monitoring	1 community
Jun 13-14		✓			ToT on wetlands for Teachers	From 2 public schools in two districts. Training facilitated by CSLP & UCC
Jun 13		✓			VSLA trainings and monitoring	10 groups in GAW communities; led by Hen Mpoano
Jun 14		✓			Monitoring of planted trees	Schools in Shama district
Jun 14	✓				Semi-annual chiefs meeting	Hen-Mpoano led activity
Jun 14		✓			Ecosystem-Based Livelihood Intervention	Enterprise group formation and registration; led by Hen-Mpoano
Jun 18-22				✓	GIS work on farm mapped	Review and analysis of farm mapping
Jun 19		✓			VSLA trainings and monitoring	Groups in GAW communities; led by Hen-Mpoano

Date(s)	Event Type				Event Description	Comments/Observations
	Meeting	Training	Visitation	Other		
Jun 19-20		✓			ToT on sanitation follow up in schools	6 schools in Nzema East municipality. Collaboration with the EPA, WD & GES.
Jun 19-21		✓			Farmer managed natural regeneration/agroforestry monitoring	3 communities
Jun 21		✓			Ecosystem-based Livelihood Intervention	Enterprise group formation and registration.; led by Hen-Mpoano
Jun 21-22		✓			Integrated Pest Management training	For farmers in 3 communities
Jun 22		✓			Monitoring of planted trees	Schools in Shama District
Jun 22		✓			Training on wetlands for students	1 public school in Shama District
Jun 27				✓	CSLP Annual Media Day	Held at Asonti & Bomokrom
Jun 28	✓				16th Regional Stakeholders Meeting	With regional GoG officials
Jun 28		✓			VSLA monitoring	1 community; led by Hen Mpoano
Jun 29		✓			Ecosystem-based Livelihood Intervention	Enterprise group formation and registration; led by Hen-Mpoano
Jun 29		✓			Monitoring of planted trees	Schools in Shama District
TOTALS	**19**	**61**	**0**	**23**		

NOTE: Events in *italics* are planned (or on-going) and subject to change. **Last update: July 6, 2018**