

Coastal Sustainable Landscapes Project

ANNUAL PROGRESS REPORT

October 1, 2014 to September 30, 2015

Submission Date: November 6, 2015; Revised: January 20, 2016

Agreement Number: AEG-T-00-07-00003

Agreement Period: October 1, 2013 to September 30, 2016

AOR Name: Justice Odoi

Submitted by: Steven Dennison (PhD), Project Director
US Forest Service International Programs
P.O. Box MC 3407, Takoradi, Ghana

Tel: +233 (0) 312297824, +233 (0) 263982961

Email: cslp.director@gmail.com





This document was produced for review by the United States Agency for International Development Mission for Ghana (USAID/Ghana). It was prepared by US Forest Service International Programs.

1. ACTIVITY/MECHANISM OVERVIEW

Coastal Sustainable Landscapes Project
October 1, 2013 to September 30, 2016
United States Forest Service International Programs
AEG-T-00-07-00003
None
Ghana Forestry Commission (Forest Services Division, Wildlife Division), Ghana Ministry of Food and Agriculture, Ghana Town and Country Planning Departments
Six coastal districts of the Western Region of Ghana
October 1, 2014 to September 30, 2015

Ghana's Western Region is one of the fastest growing areas of the country and in all of West Africa. Land use pressures are enormous, especially in the high population centers of the region's six coastal districts. Demand for conversion of forests to agriculture, cash crop development, harvesting of mangroves and other forest species for charcoal and timber production, artisanal mining, and urban development all pose significant threats to forests in this region. High unemployment rates compound these pressures, exacerbating unsustainable natural resource management practices and reducing ecosystem services provided by the region's forests.

Most land in the Western Region outside forest reserves and other protected areas has been deforested and converted to agriculture. The current situation is one of urgency—to find ways of taking pressure off the remaining reserves and to improve livelihoods and land management outside the reserves. Coupled with the human pressures on the landscape, a warming climate caused by increased atmospheric carbon dioxide poses significant risk to the landscape. In addition to increased temperatures, climate change is associated with jet stream fluctuations causing irregular, more extreme, and unusual weather patterns and events. Changing rainfall patterns and amounts can mean droughts in some areas and floods in others. Changing phenology, distributions of plant species, and rising sea levels are some of the potential adverse impacts on the region from climate change.

To address these growing threats, 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 (FCM) Program, 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 a participating agency partnership agreement (PAPA) with USAID, manages one component of the FCM program, the Coastal Sustainable Landscapes Project (CSLP). It contributes in some form to all four components but most of its emphasis is on the fourth component. Operating in the six coastal districts of Ghana's resource-rich Western Region (see Figure 1), the CSLP activities target landscape-level engagement with communities, non-governmental organizations, Government of Ghana agencies, the private sector, and international

partners. The project's geographic area stretches from the Cote d'Ivoire border eastward through the Greater Amanzule wetlands complex, Cape Three Points, the Sekondi-Takoradi Metropolitan Area (STMA) and east to the Central Region border.



Figure 1. The six coastal districts in Ghana's Western Region

The CSLP responds 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 (GoG) in realizing its goal of becoming an established middle-income country by 2022.

To confront these growing threats mentioned above, the CSLP intends to improve carbon sequestration, forest management, and livelihoods in the six coastal districts of the Western Region. 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.

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. One key component of the CSLP strategy is the application of a Village Savings and Loan Association (VSLA) model—a social entrepreneurial concept that has already enjoyed much success in Ghana. It is employed by the CSLP as a novel vehicle to help encourage and promote activities that maintain and increase forest cover with native and existing tree species. The project's activities are being established within communities where there is an existing and functioning community governance body such as Community Resource Management Areas (CREMAs) or similar entities. This history of community collaboration provides an entry point to develop a community's capacity to launch their own VSLA and oversee loans to community members. 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.

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

2. ACTIVITY IMPLEMENTATION PROGRESS

2.1 Progress Narrative & Implementation Status

The FY 2015 work plan was focused on how to build upon the solid groundwork and relationships established in year one. It also aimed at consolidating and completing interactions at both the community and district levels, relative to training activities; and all the while emphasizing specific activities that would contribute to the low emissions development process.

The following list captures the main activities that were achieved in FY 2015:

- 1,947 local farmers were trained in 12 different modules under climate smart agriculture (CSA), beekeeping
 and forestry/agroforestry livelihood options with trainees adopting best farming practices promulgated in
 these modules
- A total of 269 farmers were trained in beekeeping as a diversified livelihood option; six local artisans were trained in beehive construction, enhancing their income sources
- Four community tree nurseries were established and supplied with equipment to produce over 26,000 seedlings for planting
- In total, 44,000 seedlings (from four community nurseries and private sources) were distributed for planting
- An additional 10,000 mangrove seedlings have also been raised and are ready for planting in FY 2016
- 10 new Village Savings and Loan Associations (VSLAs) have been established and are functioning
- 17 Village Agents have been trained to support the VSLAs across the six coastal districts
- 10 climate change trainings were organized for stakeholders
- A media day was organized involving Western Region Coordinating Council stakeholders
- An estimated 2,700 people participated in 18 community climate change awareness sessions that included nighttime video viewings and discussions about local climate change events and adaptation
- Stakeholders' briefings were organized for the traditional authorities, district assembly staff, CREMAs, etc.
- 30 Community Assistants were trained to use GPS units facilitating land use and land cover (LULC) farm mapping and tree nursery management
- 40 community and government participants were trained in the basics of carbon stock measurement

Intermediate Result I: Improved Livelihoods through Enhanced Natural Resources Management Practices

Table 1. Planned Activities for IR 1

Sub IRs to be Implemented	Expected Outputs	Achievement	Outstanding Activity
Sub IR 1.1: Provide capacity building for targeted community groups to effectively manage and conserve natural resources in priority areas	Draft diversified livelihood training modules Train interested farmers in identified livelihood options Procure equipment and set up demonstration livelihood options Community Assistants (CAs) recruited to support field work	4 CSA and 4 beekeeping training modules developed 269 farmers were trained in beekeeping, 962 farmers benefitted from CSA training in vegetable production, IPM, composting Livelihood equipment procured for beekeeping 29 CAs recruited	Training module on entrepreneurial skills Beekeeping training Part 3 Study tour to agroforestry sites
Sub IR 1.2: Identify, develop and demonstrate appropriate agroforestry and reforestation methods (technology and practices) for native ecosystems improved	•5 draft training modules in reforestation & agroforestry •Selected farmers trained in Farmer Managed Natural Regeneration (FMNR) •Agroforestry demonstration set up at TRACTOR site in Angu •Four community nurseries established to produce seedlings for planting •Degraded mangrove site replanted in Yabiw	Four training modules were developed to build farmers' capacity conserving/restoring native ecosystems Four trainings were carried out with 710 farmers during the period Five nurseries established and provided with equipment/tools 10,000 mangrove seedlings produced, ready for planting Angu demonstration site set up including nursery to produce required seedlings for planting Over 26,000 tree seedlings produced at community nurseries; 22,000 procured from private sources. In total, 44,000 were planted.	• 10,000 mangrove seedlings to be planted in FY 2016. The site has already been plotted.
Sub IR 1.3: Promote incentives to implement improved natural resources management for improving livelihoods, biodiversity, and sequestering carbon	New VSLAs formed VSLAs trained and functional Interested VSLA members trained as Village Agents Draft training module on woodlot management and charcoal enterprises Selected farmers trained in woodlot management and charcoal production Locally facilitated registration of farmers' planted trees VSLAs source additional funding to support their activities	•10 new VSLAs established with training in 7 modules at various stages •17 Village Assistants trained •10 start-up kits procured for the new for the VSLAs •Woodlot practitioners discuss and list issues of concern •29 woodlot/charcoal producers underwent training in two communities •Draft position paper on local timber registration being reviewed	 Study tour to existing VSLAs was postponed and may be carried out in 2016 Linkages of VSLAs for possible additional funding postponed to FY 2016 Record keeping capacity building postponed
Sub IR 1.4: Increase capacity for interagency coordination and extension services	CSLP is abreast with national issues Lessons shared with GoG partners	Participated in 2 national workshops to review/update the Wildlife Resources Management Act 2011 sections on CREMA	National conference/ workshop on land- scape restoration and ecosystem services postponed

(related to ecosystem services and landscape restoration) for GoG partners	•Improved capacity for field activity implementation	•2 CSLP staff participated in the USFS-IP International Seminar on Watershed Management	•Study/extension tour for GoG staff postponed

Tables presented over the following pages summarize a number of the achievements and outputs from the planned and implemented activities under the CSLP's IR 1 during FY 2015. These include training-related actions for CSLP farmers and GoG stakeholders linked to diversifying and improving livelihoods, producing tree seedlings for planting and assisting in the adoption of agroforestry and reforestation strategies to complement farmer livelihoods in the coastal districts of the Western Region.

Table 2. Livelihood diversification training modules developed and number of participants

lkovo	Training	Training Module Objective of Training Males Females		f Trainees	Domoniko	
Item	Module			Females	Remarks	
1	Climate Smart Vegetable Production	To make farmers aware of sound and environmentally friendly agronomic practices that can be adopted in vegetable production	285	114	Farmers became excited and developed interest in producing organic vegetables. It will however take some time for this to happen effectively and monitoring will continue through the life of the project (LoP)	
2	Climate Smart Agriculture – Integrated Pest Management	To introduce and demonstrate environ-mentally friendly pest control systems to farmers	138	131	2 recipes were introduced: I. Pepper and soap II. Neem extract	
3	Climate Smart Agriculture - Composting	To expose vegetable farmers to composting as an alternative environmentally friendly fertilizer to improve soil nutrients	139	62	10 staff of the Department of Food and Agriculture supported the training and continue to part of the extension efforts	
4	Climate Smart Agriculture Demonstration Training	To assist selected farmers to set up eco-friendly vegetable demonstration sites	73	20	Following monitoring of farmers' sites after the training, it became necessary to reinforce on-site training	
5	Beekeeping Training 1	To introduce beekeeping as a livelihood option with a win-win outcome to improve natural resources management	109	17	Training was also designed to enable participants to decide whether they are ready to work with bees or not	
6	Beekeeping Training 2	To introduce farmers to how to set up and manage an apiary	124	19	A few additional participants joined during the Part 2 training. They were provided an introduction that also served as a refresher for all others that participated in Part 1.	
7	Beekeeping Training 3	To introduce farmers to processing, storage and marketing of honey products	-	-	To be implemented in FY 2016	

8	Beehive Construction Training	To train selected artisans to fabricate beehives for supplying to interested beekeepers in the Western Region and to increase income	6	-	135 beehives have been fabricated to date by the 6 artisans. Two are farmers who have also made an extra three at their own cost for sale to private clients. Ten additional hives were constructed for the CSLP grantee, TRACTOR
---	-------------------------------------	--	---	---	---

As part of the CSLP's effort to diversify and strengthen livelihoods, technical staff and consultants began implementing two beekeeping/apiary training activities for interested farmers. The third part of the beekeeping training will be done in FY 2016 when trainees begin to harvest honey and the other products from their hives. The Part 3 Module covers items such as harvesting, processing, storage, packaging, marketing and developing networks.



Fig 1: Beehive Construction Trainees with their Trainer

In a corollary activity, six artisans benefited from a beehive construction training assisted by a CSLP consultant. The artisans were selected from woodworkers in the communities noted below. The three from Takoradi were included because they have access to woodworking equipment that can be used to form items with precise standards, i.e., the beehive top

District	Community	Artisans trained
Ellembelle	Ayawora	1
Ellellibelle	Adubrim	1
Jomoro	Fawoman	1
STMA	Takoradi-Kokompe	3
	Total	6



Fig 2: Trainee beekeepers interacting with their trainer on beehive setup at an apiary site



Table 3. Postponed or cancelled livelihood diversity activities

Planned activity	Reason(s) why the activity did not happen in FY 2015
	Attention was focused on providing technical know-how to
Training module on entrepreneurial skills	improve production. Once appreciable quantities are
Training module on entrepreneurial skins	produced, marketing and value chain skills will be
	introduced.
Booksoning training Part 2	Ideal time for this is when farmers begin to have mature
Beekeeping training, Part 3	honey for harvesting; hives just set out at end of FY 2015
Study tour to agreforestry sites	Re-scheduled for farmers to learn from their first major
Study tour to agroforestry sites	planting which took place during the last quarter of FY 2015

Table 4. Training modules developed in forestry/agroforestry livelihood options with participants trained

Training Module	Training Objective	Number of Trainees		Remarks	
	•	Males	Females		
Farmer Managed Natural Regeneration (FMNR)	Build farmers' capacity to identify and manage naturally germinated seedlings and coppice shoots of preferred indigenous forest trees Build charcoal woodlot	220	60	The second half of the training covered the practical field identification of over 60 species of trees and included 12 GoG participants from the District Assemblies, Wildlife Division, Forest Services Division and the Department of Food and Agriculture.	
Charcoal/Woodlots Best Management Practices	practitioners and traders' capacity in sustainable/ best woodlot manage- ment practices	26	3	The training module utilized discussions and inputs about challenges and issues faced with practitioners from two communities	
Nursery establishment and management	Raise farmer awareness of the importance of best tree nursery management practices	62	3	58 (57 males and 1 female) of trainees were not Community Assistants (CAs) but farmers interested in learning and applying the practices in their own farming ventures	
Agroforestry and enrichment planting for restoring native tree cover	Provide additional knowledge and skills to help restore tree cover and contribute to climate change mitigation	283	83	Included participants from 16 communities in the 6 coastal districts	

During the initial community assessment phase, the CSLP asked farmers about tree species with which they were familiar. The technical specialists also assessed what species would be most useful for farmers to plant on their farms as timber species for later harvest, and as agroforestry species to complement and enhance the current on-farm land uses in the six coastal districts. Seeds were procured and the CSLP helped support four community tree nurseries to raise seedlings for distribution to participating farmers. One nursery was dedicated to nurturing mangrove cuttings to help restore wetland areas in Shama district. Table 5 illustrates the tree species produced per nursery site.

Table 5. Tree seedlings produced, by species, per CSLP-supported community nursery site

Community	Tweak	o #1	Adub	rim	Tume	ntu	Yabi	iw	Anto- Tre	тот	ALS
Species	Planted	Lifted	Planted	Lifted	Planted	Lifted	Planted	Lifted	Planted	Planted	Lifted
Terminalia superba	4,647	3,795	5,486	5,320	3,000	2,858	1		1	13,133	11,973
Terminalia ivorensis	1,777	965	1,086	1,054	1,190	1,025				4,053	3,044
Black mahogany	900	876	1,075	853	1,072	869				3,047	2,598
Kusia	320	320	955	890	1					1,276	1,210
Kyenkyen	200	129	154	124	100	20				454	273
Cassia spp.							4,354	3,094		4,354	3,094
Red mangrove									10,000	10,000	
Total	7,844	6,085	8,756	8,241	5,363	4,772	4,354	3,094	10,000	36,317	22,192 ¹
Nursery success		78%		94%		89%		71%			84%

¹Red mangroves produced at Anto-Tre not yet lifted at time of this report

Overall, the tree nursery survival rate was very good especially noting that this was the initial effort by the CSLP and Community Assistants (CAs) who provided the daily management chores on each site. Lessons learned by the CSLP technical staff and the CAs at each site have been captured and will be applied to nursery activities undertaken in FY 2016.

To help meet the assessed farmer demand, the CSLP also engaged the services of two private seedling producers to supply quantities of seedlings under contract. These are seedlings of species that are scarce and difficult to come by outside the forest reserve areas. The two sources are well recognized by the Forest Services Division and have been involved in national plantation programs. One of them specializes in the production of tree species seedlings to be nurtured for non-timber forest products, while the other produces mainly seedlings of commercial timber species. A total of 22,344 seedlings were procured from the private sources as shown in Table 6.

Table 6. Quantities of seedlings (by species) procured and their primary use/purpose envisaged by participating farmers

Tree species	Quantity procured	Main use
Nsoko (<i>Garcinia afzelii</i>)	8,942	NTFP
Hwentia (Xylopia)	2,893	NTFP
Prekese	200	NTFP
Mahogany	7,035	Timber
Edinam	1,143	Timber
Danhoma	25	Timber
Bompagya	24	Timber
Guarea	113	Timber
Nyankom	1,387	Timber
Akasaa	122	Timber
Baku	247	Timber
Allanblakia	213	NTFP
Total	22,344	-

Almost all of the production from the two main sources was lifted and a quick analysis of the summary information in Table 7 shows that, on average, each participating farmer received 65 tree seedlings (from one or more of the 18 tree species raised). On average, each community received over 2,400 seedlings.

An additional 4,200 seedlings were also produced at the Angu Demonstration Farm with assistance that the CSLP provides to the NGO TRACTOR (see discussion below), via a small grant. There were also a small number of seedlings brought in from other sources to complement the seedlings produced at the Demonstration Farm and for planting on the site.

In collaboration with TRACTOR/B-BOVID, the Angu demonstration site has been mapped with a description of its key components noted in Table 8. One of the objectives of the small grant to TRACTOR and the establishment of the Demonstration Farm in Angu is to help TRACTOR transfer climate change awareness and carbon sequestration to its out-grower groups. Through its on-farm activities, it demonstrates the practical nature of agroforestry, farmermanaged natural regeneration, riparian site protection and fallow enrichment plantings.

Table 7. Quantities of tree seedlings distributed in FY 2015

51.11.		Num	ber of Far	mers	Quantity	Quantity
District	Community	Male	Female	Total	Requested	Supplied
	Akwidai	13	-	13	268	250
Ahanta West	Akatekyi	13	-	13	327	180
Ananta West	Cape Three Points	8	8	16	1,209	1,480
	Tumentu	13	3	16	1,581	1,615
	Ayawora	42	15	57	1,527	2,343
Ellowsh allo	Fiasolo	28	3	31	935	1,343
Ellembelle	Sendu	33	7	40	757	1,211
	Adubrim	112	17	129	7,843	9,824
	Adezuaso	36	7	43	13,437	5,294
	Fawoman	33	9	42	3,372	1,369
Jomoro	Tweako Navrongo	13	9	22	5,217	5,157
	Tweako 1	37	5	42	4,998	7,087
Nzema-East	Asonti	107	23	130	2,857	4,180
NZema-East	Bokro	21	1	22	319	752
	Dwomo	11	-	11	234	122
Shama	Krobo	9	1	10	109	150
	Yabiw	27	3	30	1,887	1,402
Demo Site	Angu	-	-	-	-	200
	Total	556	111	667	46,878	43,959

Table 8. Summary Description of CSLP-TRACTOR Activities at Angu Demonstration Site

Item	Site Component	Size (Acres)	Description of Activities	Remarks
1	Forest Fallow	39.85	Trees have been planted on strips created at regular intervals of 10 meters and 6 meters within strip in the fallow. Five indigenous species have been identified as having naturally regenerated while another five species have been introduced through the nursery. Six beehives have also been introduced in the fallow. In other words, the site has become richer with trees to provide valuable environmental services.	Over 2,700 seedlings have been planted, comprised of 16 timber and nontimber forest tree species. Some of the species were raised in CSLP-supported community nurseries and transferred to Angu
2	Eco-Garden	11.33	The Eco-Garden originally had only fruit trees such as citrus and coconut. With the CSLP's collaboration, some forest trees have been planted as boundary trees at 4-meter intervals while some naturally occurring trees have been nurtured within the garden as farmer-managed natural regeneration (FMNR). There is also another beehive sited on the fringes of this heavily visited area.	There has been extensive labeling of the various components noting the various fruit, timber and nontimber forest trees, their values and use

Item	Site Component	Size (Acres)	Description of Activities	Remarks
3	Vegetable Garden	9.93	The vegetable garden is on a slope. To avoid excess erosion, 3 meter-wide strips of fallow have been created at intervals along the contour and planted with both non-timber and commercial timber species. In between the fallow strips organically grown vegetables are cultivated.	The fallow strips have been designed across the slopes.
4	3 Water Ponds	10.01	These are artificial ponds that have been created along a valley with the objective of holding water and making water available for watering the components, especially the vegetable garden. In order to reduce erosion on the banks (both into the dam and outside the dam), trees have been introduced all-around the dams. When mature, the trees will also reduce evaporation and enhance conservation of water and the soils.	The species used are water loving in order to ensure survival. Banks of 2 of the 3 impoundments have been planted; the third dammed area will be planted in early FY2016
5	Tree Nursery	0.32	4,200 tree seedlings were raised at the Angu site nursery. Of this total, more than 3,600 have been outplanted on the various components of the demonstration site. Planting continues into FY 2016.	3 timber species and 3 non-timber forest species were raised in the nursery.

In addition to increasing local communities and GoG capacity to more effectively manage their natural resources and to diversify their livelihoods within a LED pathway, the CSLP has also been actively engaged with its farming communities to promote incentives that will complement these actions. This is most notable in its activities linked to Village Savings and Loan Associations. In FY 2015, ten new associations have been added, bringing the total number of VSLAs that the CSLP helped to initiate to 15. Table 9 below summarizes the status of the VSLAs in pursuit of the seven training modules that each group passes through to maturity. They were all provided with the requisite basic equipment (cash box, ledgers, standard forms, etc.) to help them with their start-up functions.

To complement and reinforce the community VSLAs, 17 Village Agents (VAs) were trained during the year. Their main function is to support and facilitate the CSLP Village Savings and Loan Specialist's role in each community. Most are members of one VSLA or another, except five who are (Government of Ghana) community development or business development officers in the district assemblies.

There were several VSLA activities planned for FY 2015 that were unable to be implemented. These are listed and discussed in Table 10 below.

Table 9. VSLA summary and their modular training status

			Мо	dule	1	2	3	4	5	6	7
Community	VSLA Name	Status (year estab- lished)	M	F	Group naming & Election of Mgmt	Policy Formulation for SF, SP and Loan Activity	Development of Constitution	First Share purchase	First Loan Disbursement	Loan Repayment	Share out /Action - audit
				Jomor	o District						
Tweakor- Navrongo	Dzigbodi	FY2014	7	12	~	✓	✓	✓	\	~	
Fawoman	Nyame Nhyira	FY2014	4	14	✓	✓	✓	✓	✓	✓	
Tweakor 1	Yesu Mo	FY2015	15	15	✓	✓	✓	✓	✓	✓	
		Ellembelle District									
	Nyame na Aye	FY2014	13	12	✓	✓	✓	✓	✓	✓	
Ayawora	Biakoye	FY2015	12	13	✓	✓	✓	✓	✓	✓	
	Odo	FY2014	11	14	✓	✓	✓	✓	✓	✓	
Adubrim	Biakoye	FY2014	9	14	✓	✓	✓	✓	✓	✓	
	Nyame Mmere	FY2015	6	12	✓	✓					
				Nzema	East Dist	rict					
	Nebeyin	FY2015	6	19	✓	✓	✓	✓	✓	✓	
	Asomdwie	FY2015	5	20	✓	✓	✓	✓	✓	✓	
Asonti	Nyame Ye	FY2015	5	21	✓	✓	✓	✓	✓	✓	
	Abotare	FY2015	6	16	✓	✓	✓	✓			
	Kanyiri	FY2015	4	21	✓	✓	✓	✓	✓		
			Shama I								
Krobo	Abotare Ye	FY2015	11	9	✓	✓	✓	✓	✓		
Dwomo	Emmanuel	FY2015	5	8	✓	✓	✓				
	Total Me	embership	119	220							

Table 10. Postponed or cancelled VSLA activities

Planned VSLA Activity	Reason(s) why the activity did not happen in FY 2015					
Study tour to existing VSLAs	Although farmers were skeptical initially, following a little effort of explanation and comparison of the VSLAs with the financial institutions whose experiences they know, communities generally accepted the concept. There was therefore no need to take people on tours. With the incoming engagement with Greater Amanzule Wetland communities, there may be need for local visits to VSLAs.					
Linking VSLAs to financial institutions for possible additional funding	Two reasons namely: To allow VSLAs to reach share out stage and test their resilience To have time to assess potential appropriate financial institutions and build VSLAs' capacity in accessing them effectively over the longer term					
Record Keeping Capacity Building	As more VSLAs emerged, CSLP has decided to concentrate on bringing all groups to the desired level. There is already some amount of record keeping imbedded in the 7 modules. More targeted efforts will occur in FY 2016.					

The CSLP worked in other areas linked to interagency coordination with GoG partners. These are noted briefly below, while Table 11 summarizes IR 1.4 activities that were planned but did not take place.

A position paper was drafted during the year to recommend the registration of planted timber and non-timber forest products under the administration of local district institutions such as the district assembly, the traditional authority and other civil society organizations. An initial first draft was completed by the end of August 2015. The CSLP had discussions with some staff of the Resources Management Support Center and the Climate Change Unit of the Forestry Commission and based on that demanded some data particularly from the Climate Change Unit. Based on this, the draft is being further reviewed. Upon completion, it will be discussed with like-minded stakeholders such as traditional authorities, local Non-Governmental Organizations, the district assemblies, opinion leaders and farmers to seek consent, ideas and support before engaging the Forestry Commission. The new draft will be concluded in the next quarter to allow initiation of engagement with the Forestry Commission.

The CSLP participated in two national workshops during the year under the auspices of the Achichire - Sureso - Pebaseman CREMA Co-Operative Association Limited. This was part of an effort funded by the Business Sector Advocacy Challenge (BUSAC) who hired consultants to facilitate a review of the Wildlife Resources Management Act 2011. Most of the focus was on re-crafting the sections of that law legalizing the Community Resources Management Areas (CREMAs).

Table 11. Planned IR 1.4 activities that were postponed or cancelled

Planned activity	Reason(s) why the activity did not happen in FY 2015
National conference/workshop on landscape restoration and ecosystem services, especially linked to carbon sequestration	More outputs are needed from the CSLP activities in order to make such an event more meaningful; it would have been premature for FY 2015. Additional information of onfarm carbon estimates, more thorough mapping of community land uses among participating farmers and greater climate change awareness at community level and at the district level is still needed.
Study/extension tour for Government of Ghana staff	CSLP thought it good to wait until the major planting activity is over before embarking on such a tour. This will give room for the stakeholders to observe and make appropriate recommendations as appropriate.

Intermediate Result 2: Strengthened Stakeholder Engagements and Coordination on Sustainable Landscape Management

Table 12. Planned activities for IR 2

Sub IRs to be Implemented	Expected Outputs	Achievement	Remarks		
Sub IR 2.1: Improve public awareness on the relationships between ecosystem services and livelihoods	 CSLP communities are conversant with CSLP activities with enhanced climate change awareness Produce CSLP branded: Calendars Newsletter T-Shirt Update CSLP on FRAME Web 	 Community durbar organized in Fiasolo and Sendu to introduce project and enlist interested farmers in project interventions Videos were shown in 18 communities on climate change and the world environment day celebration which occurred in Adusuazo in the Jomoro district with over 2,000 mostly illiterate viewers (youth, adults, elderly) 10 climate change trainings attended by 309 teachers and local 	There were over 200 participants at each event The World Environment and Media Day events were shown on National Television and reported by the national print and on-line platforms		
Sub IR 2.2: Promote stakeholder engagement and coordination at all levels	Relevant Stakeholders within the CSLP operational area are briefed on CSLP goals and achievements on a periodic basis	chiefs who are ready to continue addressing climate change impacts & receive more training 2 school climate change clubs formed in Asonti and Adusuazo with over 150 pupils ready to embark as climate change ambassadors World Environment Day June 2015 celebrated in Adusuazo with the 2 climate change clubs Media Day celebrated with Regional Stakeholders 500 copies of calendars produced 500 copies of CSLP Newsletter produced	Climate Change Clubs are involved in other activities to enhance awareness (e.g. football competition, clean-up exercises, quiz) These GoG stakeholders are committed to CSLP activities and actively participate in field events		
		 4 meetings organized for chiefs and elders from 21 communities to brief them on CSLP activities 4 Regional stakeholders' meetings organized to brief GoG partners on CSLP activities 4 joint meetings were held with staff of the 6 district assemblies to update them on the outcome of CSLP activities and discuss upcoming events and activities 			
Sub IR 2.3: Promote platforms that will support sustainable landscapes management	Some critical stakeholders participate in climate change related activities.	 12 trainings in NRM organized for 229 people and 9 local institutions focused on linkages between their livelihoods and environment CSLP participated in the Western Region Implementers meetings 	Some not CSLP communities but stool land owners in CSLP communities and deserving information .		



Figure 4. Climate change video presentation in Akatakyi,
Ahanta West

There were video shows in 18 communities during the year on climate change. The climate change video is 30-minute video showing the impacts in the Shama District of flooding and damage due to a significant rain event in 2013. Following the video, community members discussed adaptation measures and other climate change impacts that can affect their community. On average, more than more than 200 people per community attended these awareness presentations and discussions.

The World Environment Day was celebrated In Adusuazo in the Jomoro District. The day was celebrated with the active involvement of the CSLP-supported Adusuazo and Asonti Climate Change School Clubs. Videos taken of the event were broadcast on national television and also shown to the two respective communities in separate evening showings.



Fig 5: Climate Change Club staging drama

The Climate Change Club staged a drama as part of the World Environment Day Celebration to explain the importance of sustainable management of forest resources.



Fig 6: Jomoro Director of Education awarding a quiz contestant

The quiz competition was a challenge between the Adusuazo and Asonti Climate Change Clubs. In the end, the day was carried by the visiting school club, Asonti.



Fig 7: Brass Band procession in the streets

What started as Climate Change Club affair, turned out to be a reason for the whole community to celebrate.

Table 13. Summary of meetings with traditional authorities

Date	District(s)	Number of Communities	Number of Chiefs and Elders
10 Feb 2015	Ellembele Nzema East	7	17
11 Feb 2015	Jomoro	6	16
17 Jun 2015	Ahanta West	4	12
22 Jul 2015	Shama	4	11
	Total	21	56

The CSLP also met regularly with other district and regional stakeholders during the year to provide information and updates of the activities the project was implementing in the communities. With the chiefs and elders (see Table 13) the objective was also to prepare them about issues that will require their involvement such as the local registration of planted trees being proposed by the CSLP.

Four quarterly Western Region Stakeholders' meetings were also organized during the year. Most of the critical institutions participated in the meetings and supported the CSLP with useful recommendations and technical advice to improve the project's implementation efforts. The recommendations have been most useful in dealing with the district assemblies and their related stakeholders.

Regional and district stakeholders are invited to the CSLP training events with community members and many choose to participate. Such field events included trainings in the use of GPS for mapping, climate smart agriculture processes, and monitoring of field activities linked to farmer-managed natural regeneration and agroforestry.



Figure 8. Discussion at a quarterly Regional Stakeholder Meeting

Four joint meetings were held with the staff of the six coastal district assemblies. The meetings' objectives were to discuss implementation and outputs of CSLP activities in their respective districts and to enable them access to CSLP data and information. This is information that they incorporate into their quarterly and annual reports to the Regional Coordinating Council as part of the Medium Term Development Plan process. The CSLP also regularly shared information about upcoming events where their participation would be advantageous.

Table 14. District/Municipal/ Metropolitan Assembly officials' participation in CSLP briefing meetings

Date	Participants	Position			
	Jo	omoro District			
		Community Development Officer			
		Head, Business Advisory Center			
	7 men	Director, Ghana Education Service			
19 Mar 2015	0 women	Town Planning Officer			
	0 women	Assistant District Director, MoFA			
		District Officer, MoFA			
		District Planning Officer			
	Elle	mbelle District			
	6 men 2 women	Development Planning Officer			
		Director, Ghana Education Service			
		Principal Technical Officer, MoFA			
19 Mar 2015		Town Planner, TCPD			
19 IVIAI 2013		Community Development Officer			
		Deputy Social Development Officer			
		Deputy Budget Officer			
		District Director, MoFA			
	Nzei	ma East District			
		Director, Ghana Education Service			
		District Director, MoFA			
	7 men	Community Development Officer			
19 Mar 2015	0 women	Planning Officer, TCPD			
	o women	Municipal Livestock Officer			
		Assistant Development Planning Officer			
		Town Planning Officer, TCPD			

	Ahar	nta West District			
		District Director, MoFA			
		Community Development Officer			
	6 men	Officer, Business Advisory Center			
7 July 2015	1 woman	Assistant Development Planner			
	1 Woman	DDE			
		Town Planning Officer			
		Budget Analyst			
	SI	hama District			
		Social Welfare, Community Development			
		Town Planning Officer, TCPD			
19 Mar 2015	4 men	Development Planner			
19 Mar 2015	2 women	District Director, Ghana Education Service			
		National Board for Small Scale Industries			
		Budget Officer			

Table 15. Community-based institutions receiving basic climate change awareness training

Date	Institution	District	Community	Participants			
Date	mstrution	District	Community	Males	Females		
26 Nov 2014	Dzibodzi VSLA		Navrongo	7	12		
13 May 2015	Yesu Mo VSLA		Tweakor 1	15	15		
8 Sep 2015	Nyame Nhyira VSLA	Jomoro	Fawoman	4	14		
25 Mar 2015	Ghana Nungua-Cocoa Town CREMA		Elubo	31	-		
27 Nov 2014	Odo VSLA		Adubrim	11	14		
10 Sep 2015	Nyame Na Aye VSLA		Avamora	13	12		
11 Sep 2015	Biakoye VSLA	Fllembelle	Ayawora	12	13		
24 Mar 2015	CREMAs	Ellellibelle	Nyamebekyere	26	-		
4 Feb 2015	Greater Amanzule Working Group		Esiama	10	-		
12 May 2015	Nebeyin VSLA	Nzema East	Asonti	6	19		
12 May 2015	Asomdwee VSLA	inzeilid EdSt	ASOIILI	5	20		
27 Mar 2015 Cape Three Points CREMA		Ahanta West	Agona	40	-		
	Totals						

The CSLP participated in all meetings of the donor funded Implementers Meetings of the Western Region in Takoradi. This meeting gathers about a dozen institutions, both local and international, that have different goals but similar activities. The objective is to create the opportunity to share knowledge about/from their activities and examine potential areas of synergy where new opportunities can be leveraged. If properly coordinated, it can also help avoid community/stakeholder fatigue among our members of communities where we work simultaneously. During the year, the monthly meetings have touched on a number of topics. One or more implementers who have practical experience in the area lead the theme discussions. Recent topics during the last quarter of FY 2015 included:

- Coastal Mangroves
- Canoe (small pelagic) Fisheries
- Livelihood Diversity

Intermediate Result 3: Enhanced Capacity for Ecosystem Services Monitoring

Table 16. Planned Activities for IR 3

Sub IRs to be Implemented	Expected Outputs	Achievement	Outstanding Activities
Sub IR 3.1: Provide Capacity Building on Forest and Wetland Carbon and other Ecosystem Services Measurement	Stakeholders are aware and have improved capacity to measure and communicate carbon stock analysis	 The District Town and Country Planning Offices, Hen Mpoano and to some degree, LOGODEP, are some of the institutions which are doing spatial planning within the 6 coastal districts of the Western Region Climate Change training was organized for 59 members of district planning offices and other officers of the districts who are our major partners in spatial planning 40 people representing a cross section of individuals from the coastal districts (MoFA, FSD, WD) received training on basic carbon measurement 30 Community Assistants have been trained in the use of GPS units 	Estimate baseline carbon stocks data in all land cover types for all CSLP intervention sites Analyze carbon stocks data and assign coefficient per site/tree species
Sub IR 3.2: Collect and Utilize Biophysical and Socio-Economic Data to Inform Land use Planning and Decision-Making Process	Bio-physical data available for sharing with the district, regional and national stakeholders	•40 people were trained, as the first batch, in above ground carbon measurement during the year	
Sub IR 3.3: Integrating Lessons learned on national level jurisdiction monitoring, reporting and verification systems to integrate into a regional REDD+ system framework	CSLP is in relationship with relevant institutions and conversant with Ghana national GHG and REDD+ standards	Base maps for the 6 coastal districts have been produced in collaboration with Hen Mpoano Through the engagement at community meetings over 500 sites were identified for tree planting	Work with Hen Mpoano to stratify CSLP landscape Work with Hen Mpoano to undertake ground truthing to validate stratification

The CSLP's orientation with ecosystem services monitoring is biased towards the carbon sequestration elements and also working with district institutions (and some NGOs) in the baseline mapping of the natural environmental assets in each of the project's six districts (see Table 17). There may be some other non-governmental organizations (NGOs) that are involved in spatial planning activities. CSLP is working to identify them and seek cooperation where possible. The project's interaction with the district town and country planning departments (TCPDs) indicates that these institutions have a fairly good hardware and software capacity in terms of spatial planning. This was provided by the CSLP predecessor project, the Integrated Coastal Fisheries and Governance (ICFG), for all the six district offices and the regional office as a hub. In the early part of FY 2016, the project will assess the practical application of this capacity, especially as it relates to understanding the natural resource attributes and their spatial issues and dimensions in each district's landscape. Other critical challenges lie with the skill and capacity gaps in climate change awareness, adaptation and mitigation planning.

Table 17. Institutions engaged in spatial planning activities within the six coastal districts of the Western Region

Institution	Comments			
Six district and the Western Regional Town and	Responsible for all the local district spatial planning			
Country Planning Department (TCPD) offices	for development			
	A USAID-supported project helping to incorporate			
Ghana Local Governance Decentralization Program	spatial planning dimensions consistent with			
(LOGODEP)	national and regional standards into districts'			
	development planning processes. Ends Dec 2015.			
	Benefited from the store of resources from the			
	University of Rhode Island's Coastal Resources			
Hen Mpoano	Center in spatial planning for coastal and			
	vulnerability management. Also a CSLP grant			
	recipient.			

Table 18. Municipal and district officers participating in climate change awareness trainings

			Metrop	olitan/Mu	nicipal/Dis	trict Assembly		Ge	ender
	Position	STMA	Shama	Ahanta West	Nzema East	Ellembelle	Jomoro	Male	Female
1	Physical Planning Officer		3	2	1	3	1	10	
2	Finance Officer	1			3			4	
3	Administrator	1						1	
4	Budget Officer	1			1			1	1
5	Superintendent of schools, GES	1	1	1	1		2	4	2
6	MOFA Director	1	1	1	1	1		5	
7	Development Planning Officer	1	1				1	3	
8	Social Welfare Officer	1					2	3	
9	Accountant Health Directorate	1						1	
10	Assistant Development Planning Officer	1		1	1	1		3	1
11	Principal Executive Officer		1					1	
12	Assistant Coordinating Director			1	1		1	3	
13	Assistant Accountant		1					1	
14	Assistant Budget Officer		1	1					2
15	Assistant Physical Planning Officer	1							1
16	Social Welfare Officer			1				1	
17	Presiding Member		1					1	
18	Coordinating Director's Representative		1		1		1	2	1
19	Health Director			1		1	1	3	
20	Engineers		1					1	
21	Economic Planning						1	1	
	Western Region Coordinating C	Council sta	ff						
22	Assistant Town Planning Officer								1
23	MoFA Crops Officer (coconut)							1	
							Total	50	9



Fig 9: Carbon Measurement training participants in Agona

Forty people were trained in carbon stock measurement during the year including:

- 23 Community Assistants,
- 2 staff of the Regional Planning Unit in Sekondi,
- 3 staff of the Forest Services Division,
- 2 staff of the Wildlife Division of the Forestry Commission, and
- 10 staff of the Department of Food and Agriculture

This training was a trial for a full scale module that be rolled out to train many more people in FY 2016.

A significant amount of effort continues to be expended in mapping farms and their land use cover for each of the farmers engaged with the CSLP's activities. Once mapped, these areas provide the baseline figures for comparing project progress against areas of improved natural resource management and the amount of carbon sequestered. The latter will help show GHG emissions reduced, sequestered or avoided (standard indicator 4.8-7) from the low emissions development activities being promulgated under the project. As noted, mapping activities are on-going and as of the end of FY 2015, about 60 percent of the CSLP farm sites (see Table 19) have been mapped (and a smaller percentage have had total above-ground carbon estimates calculated).

Table 19. CSLP-registered farms mapped and not yet mapped by community, FY 2015

District	Community	Num	ber of Far	mers	No. sites	No. sites to	
District		Male	Female	Total	mapped	be mapped	
Jomoro	Adusuazo	36	7	43	14	29	
	Fawoman	33	9	42	35	7	
	Tweako Navrongo	13	9	22	18	4	
	Tweako 1	37	5	42	38	4	
Ellembelle	Ayawora	42	15	57	52	5	
	Fiasolo	28	3	31	28	3	
	Sendu	33	7	40	25	15	
	Adubrim	112	17	129	87	42	
Nzema-	Asonti	107	23	130	89	41	
East	Bokro	21	1	22	-	22	
Ahanta West	Akwidai	13	-	13	=	13	
	Akatekyi	13	-	13	6	7	
	Cape Three Points	8	8	16	5	11	
	Tumentu	13	3	16	5	11	
Shama	Dwomo	11	-	11	-	11	
	Krobo	9	1	10	=	10	
	Yabiw	27	3	30	20	10	
Totals		556	111	667	422	245	

Thirty Community Assistants were trained in the use of GPS units for the mapping of these farmlands. Over time, they have developed varied levels of skills, a capacity that has already been taken note of by MoFA agents and technicians in the district assemblies.

2.2 M&E Plan & Implementation Update

Internally, CSLP has utilized the weekly staff meetings as well as some field visits by the Assistant Director and some external visitors to provide data quality assessment opportunities. Visits by colleagues from METSS identified a few issues for action. One issue was the need for custom indicators to be developed and monitored to enable the project to capture data and tell stronger stories of CSLP interventions and outcomes as a result.

As noted elsewhere in this report, there have been a number of challenges associated with the mapping of farm land uses on farms registered with the CSLP. Most of these have involved the amount of time needed to collect the information. Secondary forest patches and long-term fallow areas received initial priority and as farmers adopted particular agroforestry and climate smart agriculture activities, it became necessary to map and monitor those individual farm land uses as well. The change (and 2-month hiatus as a new Specialist was hired) in the CSLP Spatial Planning and Environmental Services Specialist, resulted in some data quality and data monitoring hiccups. As the project moves into FY 2016 these have been addressed and are being better monitored. These data are important foundations for both baseline information collected by the project for estimating areas under improved NRM and also for estimating quantities of GHG emissions sequestered, reduced or avoided. They also represent unique data for Ghana (and elsewhere as well), because they are being collected and monitored at the individual farm level.

Acknowledging some of the shortcomings regarding monitoring and evaluation, CSLP engaged the services of a consultant to identify gaps in M&E processes and procedures and make recommendations on how to improve M&E processes for the project. The consultant provided key recommendations and some templates related to field data collection forms, standard operating procedures for M&E, security measures to safeguard collected data, and development of five key custom indicators. These recommendations are being incorporated into the project to improve monitoring and evaluation practices and procedures.

Specific remarks on some of the standard indicators are provided below.

Indicator 4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of Co₂e reduced or sequestered as a result of USG assistance

This indicator is dependent upon the ability to measure all areas of CSLP intervention. As described below, CSLP continues to work toward mapping all of these areas but has encountered challenges in completing this mapping during this year. The figure for the year, therefore, remains at the amount estimated at the end of the second quarter largely from areas estimated to have avoided deforestation and degradation as a result of intervention. CSLP anticipates making progress on this indicator in FY 2016. It therefore has suffered the same fate as indicator 4.8.1.-26.

Indicator 4.8.1-26: Number of hectares of biological significance and/or natural resources under improved NRM as a result USG assistance.

This indicator hinges largely upon the ability to map sites of intervention. Unfortunately, CSLP was not able to measure all the sites that have been planted with seedlings this year. These measurements require a significant amount of local *in situ* knowledge, good weather, cooperation of local authorities, a trained cadre of personnel to use equipment required to obtain the measurements, a hefty supply of batteries for equipment power, regular monitoring of individual farmers in each community, and a sack full of patience. Even with careful advance planning, sites to be measured often had to be postponed (sometimes numerous times) because irregular (or no) cell phone communication, severe weather, and/or funeral events occupied the whole community.

The CSLP gained important experience in this first full year of activities with its participating farmers. The experience with training local Community Assistants to assist with the data collection and mapping activities was both positive and negative. Data quality and reliability checks on the initial batch of land use and land cover (LULC) measurements was irregular and not up to the quality expected. Some of this was due to human error or improper use of the GPS

units being used to capture the data, and some was also due to using software that was not well-suited for the measurements being taken resulting in errors in the transcription process.

As the project moves into the next fiscal year it is better prepared to cope with these issues and also the multiple day-to-day irregularities in the field. Establishing the baseline in each community and monitoring farmers' participation with the CSLP interventions has been far more challenging than was envisioned in the initial design and the management of the data being collected. The specialist initially responsible for the oversight of these measurements and the management of the data being collected resigned mid-year. There was a two-month hiatus while the project searched for and hired a new, well-qualified specialist. By the end of the year, this specialist was very much up to speed with the issues involved with the data measurement, collection, and management and well on her way to solving problems and adding more value to processes linked to collecting and managing data for Standard Indicators 4.8-7 and 4.8.1-26.

There are areas associated with these indicators where the project might have been better prepared to find and adapt to/with other alternatives to secure data related to the indicators. At this point they are part of the lessons being learned and will be applied to the fieldwork going forward. Targets need to be established for FY 2016 based on these experiences and therefore the updated FY 2016 work plan will be updated to reflect these new targets.

In the first quarter of the next fiscal year the baseline measurements for the (nearly 600) farm areas will be complete providing the LULC data about their farms across 17 communities. It is from this baseline that impacts of the CSLP's interventions are to be monitored in terms of metric tons of CO_2 emissions sequestered, reduced or avoided (Indicator 4.8-7) and the number of hectares under improved NRM (Indicator 4.8.1-26).

The baseline figure for these indicators will be updated as new farmers (and communities) become registered with the project. Over the course of the next fiscal year, 23 additional communities will be assessed and potentially have new participants as part of the conservation efforts of the project by partnering Hen Mpoano. If farmers do express interest, the LULC of their lands will be mapped and added to the baseline. Common lands with mangroves and wetlands within these communities will also be registered and their values added to the database that will be linked to these two indicators.

Indicator 4.8.1-29 Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance

Indicator 4.8.2-29 Number of hours of training completed in climate changes a result of USG assistance.

These two indicators measure CSLP's training activities. During the year, all relevant stakeholders were identified and targeted trainings were carried out. These stakeholders included the regional bureaus, district assembly staff, CREMA members, and traditional authorities.

In addition, a major stakeholder group was the nearly 500 farmers who have registered with CSLP. Some of the farmers are part of VSLAs or serve as Community Assistants and so may have received training in multiple topics throughout the year. Some training targets were missed due to the daily challenges of farming and harvest periods. For example, during the cocoa drying periods, farmers need to stay close to their drying platforms so that they could attend to the produce in case of sudden rain or theft. There were instances when training attendance was lower than expected due to these unforeseen limitations for farmers.

3. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES



Figure 10. Gathering their share of timber tree seedlings for their

3.1 Gender Equality and Female Empowerment

Women's participation in CSLP activities continues to grow. A strong example from this year was the establishment of the Adubrim tree nursery which is managed by two female Community Assistants. The women established a strong community tree nursery that served as a source point for seedlings distributed throughout the Western Region. CSLP is encouraging these women to become involved in other interventions of the project and is hopeful that they will serve as positive role models for other women and girls throughout the region.

In addition, women are actively engaged in the VSLAs at a

rate of 2 women for every 1 man engaged. Participation in the climate smart agriculture activities also includes a strong female presence.

Some traditionally male dominated activities such as fallow enrichment planting, beekeeping and charcoal/woodlot enterprises have proven difficult to ensure greater gender balance. These activities are generally capital and labor intensive, requiring the practitioner to own a piece of land or have legal access to the land which often limits women's participation. Given these limitations, CSLP is continuing to evaluate how to engage women and girls to be actively engaged in project interventions and will aim to increase participation in this coming year.

3.2 Sustainability Mechanisms (including local solutions and partnerships)

Sustainability of CSLP interventions depends on several factors including economic viability, socio-cultural acceptability, and technical suitability. CSLP is mindful of these factors and aims to engage farmers at the beginning to analyze and discuss technological options before moving forward with interventions. For instance, the charcoal woodlot practitioners were gathered to discuss and identify what issues and concerns they had with their current processes. The training module was then designed to help address the listed concerns and limitations.

The local governance institutions also play critical roles in the sustainability of interventions. These local institutions include district assemblies, traditional authorities, CREMAs and NGOs, amongst others. CSLP is engaging and building the capacity of these institutions in order for them to serve as owners of project interventions and therefore create greater sustainability. These institutions have been involved in activities such as awareness creation for development and management of VSLAs, trainings in climate change concepts, and events such as celebration of the World Environment Day. It is hoped

Urban Forestry in the Nzema Manle Traditional Council

The Nzema Manle Traditional Council led by Awulae Annor Adjaye III, is celebrating 25 years of his reign on the throne which coincides with the annual Kundum Festival. As part of the program, the council has chosen to include urban tree planting. The goal is to plant trees in more than 20 towns and villages. CSLP has been invited by the Chiefs to serve as a partner on this activity to increase urban green space and improve air quality throughout urban areas in the Western Region.

that these institutions will encourage and facilitate communities and societies to sustain the change that is being introduced by CSLP.

3.3 Environmental Compliance

One key CSLP intervention that has the potential for environmental challenges is the use of chemicals in relation to climate smart agriculture practices. These improved agricultural practices are normally undertaken on sites which have been extensively used and have suffered nutrient loss and soil erosion. The training module has therefore built in lessons on organic means of nutrient recovery such as composting and the use of Integrated Pest Management systems instead of the use of chemical fertilizers on these sites. These strategies are being promoted and are being adopted gradually. Nonetheless, chemical usage is on the increase in the CSLP operational area, whether for pest and disease control or nutrient restoration. The usage however, in most situations, does not appear to be in accordance with manufacturer recommendations and therefore poses health and environmental hazards. CSLP is aiming to increase awareness of the risks of using such chemicals and build awareness of safeguards that should be put into place should farmers choose to use such chemicals on their land. CSLP demonstration sites will remain free of such chemical use and CSLP will continue to raise awareness about the long term benefits of reducing such chemical usage.

An additional activity that posed potential for environmental review was the establishment of tree nurseries. However, due to careful site selection and preparation, all nurseries were established on fairly level ground except one which was sited on the apex of a slope. With this in mind, the nursery beds and the arrangements of the polythene pots were done across the slope. There were no fertilizers or chemicals used during the nursery process so as to reduce any negative environmental impacts.

4. STAKEHOLDER PARTICIPATION AND INVOLVEMENT

The year included very fruitful collaboration with stakeholders at the local, district, regional and even national level. At the national level, visits from the head of the Forestry Commission climate change unit allowed for observation and exchange of CSLP work in the Western Region. The CSLP used the opportunity to share concerns of farmers with the commission especially on issues related to registration and security of planted trees.

At the regional level, stakeholders have been actively engaged in events such as climate change awareness activities, joint trainings of farmers such as in climate smart agriculture technologies, or by attending quarterly stakeholders' meetings and providing input into ongoing CSLP interventions. Another evidence of useful collaboration is with the Nzema Manle Planning Committee of CSLP. As highlighted earlier, the traditional council has incorporated tree planting as a part of their upcoming celebration. CSLP is taking this invitation seriously and is engaged to help establish community nurseries to provide seedlings to ensure the achievement of their objective.

The Forestry Commission Ladies Association, Western Region Chapter, expressed the desire to collaborate with CSLP to green certain identified sites to include mangroves and recreational sites within the Sekondi-Takoradi Metropolitan Area (STMA). This interest has sparked a collaboration involving many other institutions within the STMA and the Western Region Coordinating Council to develop a plan of action for urban greening. Some of the institutions now involved include the Parks and Gardens organization, Urban Roads division, Hydrological Services Department, Town and Country Planning, and the Wildlife Division.

Through a grant from CSLP, Hen Mpoano initiated processes to facilitate the establishment of a management structure for the Greater Amanzule Wetland. The first six months of the grant allowed Hen Mpoano to review the proposed management option with all stakeholders and communities and also sought their commitment to the plan. Having ended successfully, the second phase, which seeks to begin the actual community work, has just started for this upcoming year.

Another grant has been established to support the local NGO Transforming Rural Agricultural Communities Through Organic Re-engineering (TRACTOR). The objective is to build the NGO's capacity in climate change and environmentally conscious agroforestry so that they disseminate this to their out-grower farmer groups scattered in the various districts in the Western region. Two TRACTOR agriculturalists are seconded to the CSLP and work closely with activities planned and implemented together while lessons are learned and shared. In addition, CSLP aims to build the organizations administrative capacity so as to be able to manage funds and grants for similar work in the future.

5. LESSONS LEARNED

One key lesson learned this year was related to the methods and processes for management of cassia woodlots and associated charcoal burning/production. Having limited experience in this realm, CSLP brought together practitioners to identify the challenges they face in these endeavors. Following the development of the list of challenges, recommendations were sought from the practitioners for improved management practices. As a result, CSLP introduced some Best Management Practices (BMP) such as focusing on reduced or zero burning. The major practice being promoted is the adoption of a new means of burning wood for charcoal production. This practice may require adoption of improved kilns which would be capital intensive and therefore more difficult to promote. Interest in tree planting continues to grow within the CSLP operational area. The limiting factor now is space availability. A critical step for CSLP is to identify other attractive means of integrating trees either on farm, in urban areas, or alongside water bodies. It is hoped this will provide means for those who are interested in further trees but have run out of space on their farmlands.

The CSLP's experiences with all aspects of the community-supported tree nurseries (both technical and managerial) have been significant for both the project's technical staff and the Community Assistants engaged to handle the daily operation. Project staff understand that the model is not a sustainable activity, especially at the scale undertaken in FY 2015. The activities were implemented with the intent to demonstrate that tree planting can bring benefits to their farm landscapes. But for it to really continue beyond the life of the project, there has to be a demand for the tree seedlings and a genuine incentive of ownership by the farmers receiving and planting the trees.

Currently, the demand for tree seedlings is not present, nor does the current tree tenure and tree ownership model promulgated by the GoG (Forestry Commission and others) lend itself to encouraging tree planting by farmers. The recent COCOBOD policy of planting a certain number of trees per unit area on a cocoa tree crop farm is helpful, but is still eclipsed by the tree tenure policy. The COCOBOD policy will result in greater yields of cocoa from the shade provided by the forest tree species, but the farmer is not guaranteed the products of those trees whether they be fruit or timber.

The CSLP intends to build upon its experiences with tree nursery production and on-farm planting to more carefully assess genuine demand by farmers and also examine very small-scale private nurseries with committed farmers raising a limited number of seedlings of just a few species. The project will also work more actively with district, regional and national FC bodies in an attempt to make the tree tenure issue more favorable to tree crop farmers and others who have lease agreements with absentee landlords. Some of this can also be tied to the REDD+ discussions and planning that will come out of the post-Paris COP in December 2015.

The challenges that were noted with the on-farm mapping activities highlighted the CSLP's weakness in the area of consistent and strong monitoring of data and being able to track those data over the longer term. Estimating areas under improved NRM and carbon and GHG emissions reduced, sequestered, or avoided is a much more onerous and detailed task than was originally envisaged for the PIRs for this project, given its behavior-change process and farm level approach. Obtaining the farm maps of the more than 600 CSLP-registered farmers, each with as many as 7 to 8 different land use types takes a lot of time and coordination and significant time for data transcription. The project's work with its 30+ Community Assistants trained in GPS use has proved to be fruitful, but with its own set of technical

and administrative challenges. The process in FY 2016 will capitalize on this experience and the associated lessons learned.

6. UPDATES ON ISSUES/COMMENTS RAISED BY AOR FROM THE LAST PROGRESS REPORT

No specific comments were raised on the most recent progress report.

A review commissioned by USAID/Ghana to take stock of the technical activities of the project assessed the overall performance of CSLP and provided recommendations for some actions that could be taken during the upcoming year. Other areas for improvement were identified and could be woven into the project if the period of performance and budget are extended.

7. PLANNED TASKS/INTERVENTIONS FOR THE NEXT REPORTING PERIOD

CSLP has completed the drafting of the annual workplan for the year 2016 with a corresponding budget. The plan is being consolidated into one document and will be submitted to USAID/Ghana shortly after completion of this annual report.

Annex I. Summary Results to Date

CSLP Life of Project Targets

Indicator	Baseline	FY2014		FY2015		FY2016						
indicator		Target	Actual	Target	Actual	Target	Actual					
Development Objective (DO): To promote low emissions development in Ghana's Western Region by strengthening												
community-based natural resource management and monitoring.												
4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO2e, reduced, sequestered or avoided as a result of USG assistance	0	0	-	20,496	8,565	43,188						
4.8.1-26 Number of hectares of biological significance and/or natural resources under improved NRM as a result of USG assistance	01	300	78	1,200	526.69	1,800						
4.8.1-29 Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance	0	3,000	435	9,600	5,711	14,400						
4.8.1-6 Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance	0	300	0	600	574	900						
4.8.2-14 Number of institutions with improved capacity to address climate change issues as a result of USG assistance	0	20	6	50	66	70						
4.8.2-29 Number of person hours of training completed in climate change as a result of USG assistance	0	1,000	165	4,800	3,197	7,200						

¹ The baseline figure should be recorded as zero as there were no areas being improved before the project. In FY 2016 areas by land cover type on each of the farms where the CSLP has registered farmers in its programs will be measured and established; these are essentially the baseline areas. This entails mapping the land use types of over 500 farmers, each with as many as 8 land use types on their farms. New farms added during and after FY 2016 will be mapped and added to the baseline figure each year. These mapped farms will also form the basis for the GHG calculations.

Annex 2. TraiNet Report

Not Applicable

Annex 3. Stories From The Field

40 COMMUNITIES BENEFIT FROM USAID's CSLP

The USAID funded and US Forest Service managed Coastal Sustainable Landscapes Project (CSLP) is currently focusing its interventions in 17 predominately agrarian communities. Through a grant to Hen Mpoano (a local NGO), an additional 23 communities fringing the Greater Amanzule wetland are engaged with CSLP activities. This brings the total to 40 communities that the CSLP and partner teams will be focusing attention and efforts on for the current project year ending September 2015. This number includes two additional communities, Fiasolo and Sendu, both in the Ellembelle District of Ghana's Western Region, which were welcomed to the project during the first quarter of the current project year. In the 17 communities where the CSLP team is focusing, there are over 400 farmers enlisted for diverse agroforestry and livelihood interventions.

The collaboration with Hen Mpoano and the other 23 communities supports the establishment of a participatory conservation strategy for the Greater Amanzule Wetland area. The Amanzule wetland area, which currently has no conservation protection designation, straddles the coastal districts of Nzema East, Ellembelle and Jomoro. Livelihood activities of the residents of these coastal communities are primarily focused on fishing while a few double as farmers.





CSLP and Hen Mpoano Complete First Phase of Wetland Conservation Activities

In November 2014, the USAID-funded and US Service-managed Coastal Sustainable Landscapes Project (CSLP), offered small grant funding to Hen Mpoano (a local NGO) to move forward the Greater Amanzule Conservation activities started by the previous USAID 4-year Integrated Coastal and Fisheries Governance (ICFG) project. The collaborative effort between CSLP and Hen Mpoano aims to establish a formal co-management process and improve management planning for the Amanzule wetlands. The area, rich in biodiversity, currently has no formal conservation designation.



A poster developed for the community sensitization activities during the grant period

The first phase of the collaboration ended in January 2015, during which time the partners successfully carried out a series of activities to enhance conservation awareness in 23 communities surrounding the wetland. At least 300 people, most of whom were fisher folks, farmers, artisans and other resource users, took an active part in the awareness-raising community meetings (durbars). Topics highlighted at the various durbars included linkages between livelihoods and wetland ecosystem services as well as awareness raising events related to Greater Amanzule conservation scenarios initially developed during the ICFG project.

Aside from community-focused events, engagements with local NGOs, traditional leaders and the district assemblies also took place. Paramount chiefs in the Ellembelle and Jomoro districts signed a resolution in support of the conservation effort during the ICFG period. Through the CSLP collaboration with Hen Mpoano, sub-chiefs of the 23 wetland communities affirmed their buy-in endorsing a similar resolution in support of the conservation management scenarios. In addition, some residents volunteered to be members of community-level conservation committees that will be considered in the next phase of the collaboration. Undoubtedly, the conservation awareness raising events have sustained stakeholder support and helped to the obtain buy-in of local chiefs for conservation of the wetlands to move the communities to the next phase of the collaboration and hopeful sustainable management of the area.

A follow on grant funding mechanism is being finalized to continue this important work between CSLP, Hen Mpoano and the 23 communities.

CSLP PROMOTES BEEKEEPING IN RURAL COMMUNITIES

The USAID-funded and US Forest Service-managed Coastal Sustainable Landscapes Project (CSLP), in collaboration with some of the project's enlisted farmers, prioritized beekeeping management as a livelihood activity of interest compatible with existing practices. It is also one that will provide the added benefit of conserving forest patches and tree cover on farms. The use of these secondary forest patches for beekeeping is an important climate change mitigation activity as farmers see the need for conserving these patches to promote pollination and development of the apiary rather than clearing them and converting them to agricultural land. The apiaries will hopefully provide valuable honey and associated by-products that can be Beekeeping training sold locally to meet high demand throughout the country.



Thanks to project efforts with farmers, these areas are being conserved and will help maintain important stocks of sequestered carbon.



Beehive construction training

Through this intervention, 83 farmers, including 10 women, in the Nzema East, Ellembelle, and Jomoro districts of Ghana's Western Region who are setting aside secondary forest lands for beekeeping, have gone through two trainings on beekeeping concepts. The first component focused on the basics of beekeeping while the second involved practical training on the establishment of apiaries and initial management practices. As part of the trainings, the farmers were taken through the uses of key beekeeping equipment and tools such as the smoker, protective clothing and

the hive itself. Trainees learned how to site an apiary within secondary forests through a demonstration in a nearby site. As part of the initial efforts, one beehive has been given to one promising farmer in each of the four communities across the three districts. The enthusiastic farmers will start practicing beekeeping at the next swarming season (which is typically late July to early November).

Additionally, beehive construction training was conducted for six carpenters/artisans; three of whom are CSLP enlisted farmers. At the end of the training, the carpenters constructed six beehives to the exacting standards required for successful hive production. These carpenters have now gained a new skill and will hopefully be engaged by additional farmers to use their skills to build additional hives and thereby gain additional income.

FARMERS ADOPT CLIMATE SMART AGRICULTURE PRACTICES







Top photos: CSA trainings. Bottom photo: vegetable farms

Unsustainable farming methods are among some of the major contributors to greenhouse gas emissions. Many of these unsustainable agriculture practices are widely practiced in farming communities throughout sub-Saharan Africa. The situation is not different from the intervention communities of the USAID-funded and US Forest Service-managed Coastal Sustainable Landscapes Project (CSLP). Most of the farmers adopt slash and burn as a method of clearing and preparing the land for food production, a practice that greatly threatens remaining forest areas. In addition, the improper use of agrochemicals, indiscriminate cutting of valuable tree species and the removal of most vegetation cover both disrupt natural processes that can help maintain soil quality and also remove or damage potentially valuable sources of income to the famer.

As a means to reversing some of these unsustainable practices and further reduce greenhouse gas emissions, CSLP is promoting the concepts of Climate Smart Agriculture (CSA). As part of this effort, from December 2014 to February 2015, the project trained 405 farmers (72% of which are men and 28% are women) across five coastal districts on the principles of CSA with an emphasis on vegetable production. The trainings, facilitated by the CSLP and officials from the Department of Food and Agriculture (DOFA), aim to equip farmers with new concepts for management for sustainable crop production (largely of vegetables), conserving the environment and improving food security.

A significant number of the trained farmers are ready to adopt the new CSA best practices such as avoiding bush burning, reducing use of agrochemicals in vegetable production and creating buffer zones along

river banks. As farmers embrace these CSA practices, the CSLP is hopeful that they will contribute to improved natural resource management, further enhance farmer livelihoods and sequester carbon.

INTRODUCING STEPHEN SAKITEY, CSLP LOCAL CHAMPION IN FAWOMAN

Born on February 10, 1976 at Puada in the Volta Region of Ghana, Stephen Sakitey, is a CSLP Community Assistant based in Fawoman. Stephen is a carpenter by profession and an active farmer. In 2002, he relocated from Puada to Fawoman, one of CSLP's intervention communities in the Jomoro district. He is married and a father of two girls and two boys and has seven other dependents.



Stephen (right) showing CSLP Program Manager, Adam Stephen is the Record Keeper or Secretary Welti, (left) the beehive he constructed

As Community Assistant, he mobilizes farmers for all project interventions in the community. Stephen has received training on the use of Global Positioning System (GPS) and assists in mapping of different land cover types of the project enlisted farmers. He is among the six carpenters trained on beehive construction. After the training, Stephen voluntarily paid for the cost of producing the first model for his own use and is ready to pre-finance that of other farmers interested in beekeeping.

of the Village Savings and Loan Association

(VSLA) formed in Fawoman. As Record Keeper, he ensures that all transactions take place according to the group's rules and makes all passbook entries for shares and loans. Stephen has also benefited from other trainings organized by CSLP including those on climate smart agriculture, farmer managed natural regeneration, climate change and beekeeping. Stephen Sakitey is pleased with the project interventions and made the following remarks during an interaction with CSLP Staff.

"I'm really grateful to CSLP. Now, I have an additional great source of income. I can produce beehives and sell to interested farmers. I appreciate the new knowledge gained on the values of trees and the new skill acquired: the use of GPS. In fact, I had not seen a GPS device before, but now, I have used it to map farms and can assist other projects that will require the use of GPS in their activities. I'm ready to plant more trees and encourage other farmers to do the same. The VSLA is also really helpful; though I am yet to take a loan from the group, I cherish the great savings attitude I have developed. I'm also hopeful of making money from the honey production/beekeeping and I'm ready to train other local carpenters on beehive construction."

FARMER STOPS POACHING DUE TO USAID INTERVENTION

Without the timely intervention by USAID-funded and US Forest Service-managed Coastal Sustainable Landscapes Project (CSLP), a farmer at Tweakor No 1 in the Jomoro District of Ghana's Western Region, would have continued his illegal hunting activity in the Ankasa rain forest, one of the last virgin forests in Ghana which borders his community. The farmer noted that the Village Savings and Loan Association (VSLA)¹, formed with the CSLP's assistance, has allowed him to refrain from continuing the illegal act. He made the revelation when the CSLP's Activity Manager at USAID, Justice Odoi and Isaiah Tuohieno of the US Embassy in Ghana, joined the CSLP team for a monitoring visit to Navrongo and Tweakor No 1 in late April 2015. The farmer, responding to a question about his impressions of the project, noted;

'To be honest, I used to enter the forest to kill animals for a simple reason: to pay the school fees of my children. However, since joining the VSLA I have stopped that act. Now, I can easily get a loan from the group to pay the school fees. I knew that going to the forest was illegal and also felt sad and scared because I went there alone at night leaving my wife and children at home; it was risky, anything negative could have happened to me in the forest, or even on the way. Now, I don't go there anymore, and won't ever go again because I can pay my children's school fees from funds I obtain from my membership in the VSLA'.

As part of the trip, the team visited a secondary forest of a farmer where the CSLP has provided a beehive that has now been colonized. The farmer, with several others, has agreed not to deforest such places but use it for beekeeping and other forest products. The team also visited one of the CSLP's tree nursery sites at Tweakor No 1 and interacted with farmers there.

Farmers applauded USAID for the project and lauded many of the CSLP's interventions. These included beekeeping as an alternative livelihood, several targeted trainings such as climate change awareness, climate smart agriculture, farmer managed natural regeneration, and the VSLA, which they emphasized, has helped them to build a better savings culture accompanied by its timely access to a means of credit which is needed as the farmer's story demonstrates.



Executives of Tweakor No 1 VSLA group at a share purchase meeting of the group

-

¹ Is a member/community managed group of 15-25 people who save together and take small loans from those savings

USAID CREATES CLIMATE CHANGE AMBASSADORS

The United States Agency for International Development (USAID), through its 3-year funded Coastal Sustainable Landscapes Project (CSLP), managed by the US Forest Service International Programs, has formed Climate Change Clubs (CCC) in two public schools in Ghana's Western Region. Teachers and students of the club, numbering 80, serve as Climate Change (CC) Ambassadors, educating their parents, peers and community members on the causes and effects of climate change on their daily lives.

Amazingly, some of the students have supported CSLP to promote an important climate change mitigation activity by encouraging their parents and other relatives, mostly farmers, to avoid deforestation. In most of the project intervention communities, farmers have, on average, an acre of secondary forest at the borders of their farms. Prior to CSLP they were keen to extend their farming activities by removing the secondary forests. Now, with the intensive sensitization efforts of the CSLP team and Climate Change Club members, the farmers have decided against the removal and burning of these on-farm forest areas after understanding more about other values they hold. Most of these farmers have now decided to use their secondary forest patches for beekeeping, a source of medicinal plants, and other timber and non-timber forest products.

Previously, a significant number of farmers who planted trees initiated by past climate change projects that promised cash rewards, were at the verge of completely cutting down those trees as no such rewards were received. But now with the outreach interventions by the CSLP team,



Club members marching through a community with messages on climate change to raise awareness

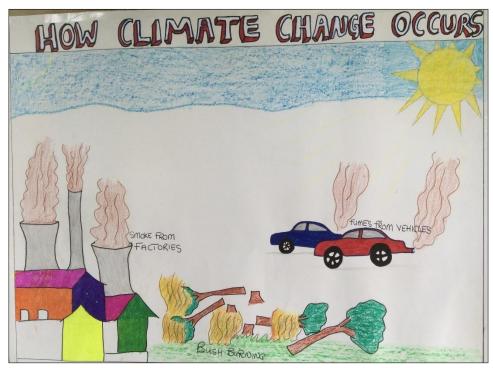
coupled with awareness being enhanced by CCC members, the remaining trees will continue to grow on their land as farmers are now willing to keep them without expecting any direct financial rewards.

Currently one of the clubs, Asonti Municipal Assembly Junior High School CCC, has an organic farm (located less than 5 meters from the school premises) and intends to use it to educate their parents and other adults on Climate Smart Agricultural practices.

As observed by one of the teachers, Mr. Somiah, "most farmers in Ghana now use agrochemicals for almost every farming activity. They complain of not having money but buy lots of agrochemicals. However, they could have saved money by practicing organic ways of farming and that is what members of the CC Club have started through the support of CSLP. In few months, our farm will serve as a demonstration site for farmers outside the region".

The club members are currently waiting for their supply of some tree seedlings from CSLP to plant in their farm. They are promoting agroforestry in the communities as they recognize tree planting as one of the ways to address the impacts of climate change.

Similarly, club members at Adusuazo District Assembly Junior High School are using drama and artwork to enhance awareness on climate change. USAID, through CSLP, has simplified understanding of climate change through a brochure that includes artwork by the Climate Change Club. Both clubs have planned a series of events at the local level to help in their sensitization and behavioral change efforts. These include tree planting, clean up exercises, community gatherings/meetings, processions with placards, discussions on radio and peer education in other schools.



Artwork by Adusuazo District Assembly JHS Climate Change club

Over the past several months a number of media groups (print, online, TV and radio) have followed with keen interest the activities of the two clubs as is evidenced in their local, regional and national reporting. There is no doubt that these club members will continue to serve as Climate Change Ambassadors for years to come. The District Director of Education for Jomoro District of Ghana has observed, "... the CSLP has caught these children at the right time, for as you catch them young, they will be yours forever"