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COASTAL SUSTAINABLE LANDSCAPES PROJECT

Quarterly Report

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ABBREVIATIONS AND ACRONYMS

| | |
|----------|---|
| AFOLU | Agroforestry and Other Land Uses |
| B-BOVID | Building Business on Values Integrity and Dignity |
| BMP | Best Management Practice(s) |
| CA | Conservation Agriculture |
| CBO | Community Based Organization |
| CDCS | Country Development Cooperation Strategy |
| CHED | Cocoa Health and Extension Division |
| COCOBOD | Ghana Cocoa Board |
| CREMA | Community Resources 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 |
| DOFA | Departments of Food and Agriculture |
| EDIF | Export Development Investment Fund (of Ghana) |
| EPA | Environmental Protection Agency |
| FC | Forestry Commission |
| FCM/FCMP | Fisheries and Coastal Management Program |
| FMNR | Farmer-Managed Natural Regeneration |
| 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 |
| GIS | Geographic Information System |
| GOG/GoG | Government of Ghana |
| GSCD | 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 |
| 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 |
| 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 |
| 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 |

I. PROGRAM OVERVIEW/SUMMARY

| | |
|--|---|
| Program Name: | Coastal Sustainable Landscapes Project |
| Activity Start Date and End Date: | October 1, 2013 to September 30, 2019 |
| 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 Town and Country Planning Departments |
| Geographic Coverage (cities and/or countries) | Six coastal districts of the Western Region of Ghana |
| Reporting Period: | January 1 to March 31, 2017 |

I.1 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. Ghana’s small pelagic fisheries are on the verge of collapsing due to high 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, mainly in the form of tree crops. The current challenge is to find ways of taking pressure off the remaining forests and other natural areas while improving livelihoods. The CSLP has had success during the first phase (2013-2016) in conserving key areas of secondary forest through activities such as beekeeping and increasing tree cover on degraded agricultural lands through farmer managed natural regeneration and enrichment planting.

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 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.

USAID/Ghana’s Environmental Threats and Opportunities Assessment of 2011 identified the need for the Feed the Future (FTF) programs 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.

The United States Geological Survey-generated maps below (Figure 1) show the agricultural trend across 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.

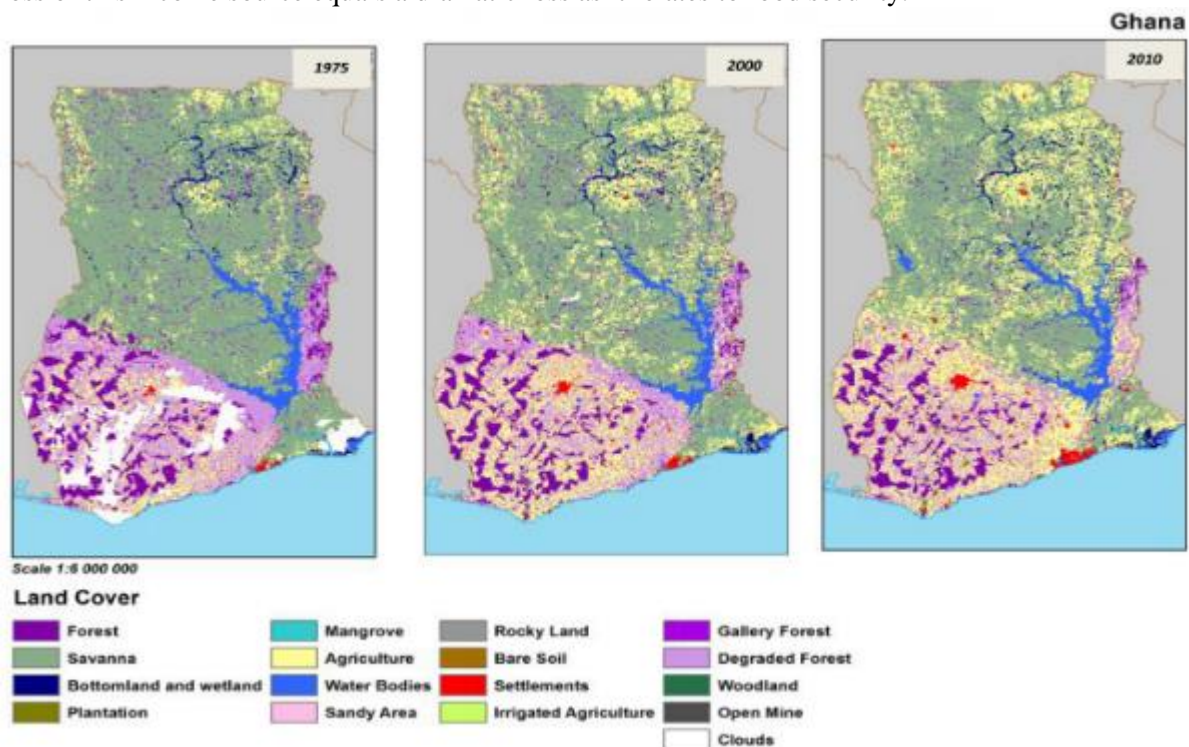


Figure 1. Ghana Land Cover Trends 1975-2010. USGS 2014.

On a broader scale, the lack of sound watershed management and the increasing rates of deforestation throughout much of the region, particularly in riparian zones, have negatively impacted water quantity and quality in the three main river systems running through the CSLP target zone. Fishing communities on these rivers and along the coast are finding it increasingly difficult to sustain their livelihoods. The CSLP has been working with communities in mangrove and wetland areas to reforest degraded mangroves that serve as important fish habitat to help mitigate these impacts. In addition, working with local NGO partner, Hen Mpoano, the CSLP is engaging communities in the Greater Amanzule Wetlands area to increase their cooperation and potential to establish management plans for the region that can help plan for local and district development and conserve the biological heritage of these important wetland areas. This work will continue in an expansion phase with the goal of achieving a legally recognized conservation status for the area within a few years.

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 FCM project 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, traditional authorities, 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 bordering Ghana's Central Region.

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.

As part of the expansion, the CSLP will 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. Funding for the project's second phase comes from the Feed the Future initiative.

The 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. Climate smart agriculture activities are helping farmers adopt strategies to mitigate impacts of this changing climate, reducing the need for high cost inputs, and examining simple strategies that will help sustain or increase the productivity of their agricultural crops even in the face of less predictable weather. In its second phase, the CSLP is building on its previous work and also placing greater emphasis on farms as small businesses, including helping to create farmer enterprises, strengthen farmer input networks and striving for improved marketability of their produce thereby increasing overall production value and opportunities for microeconomic growth.

One area where the CSLP is engaged is in the formation and support of Village Savings and Loan Associations (VSLAs) to help build stronger financial safety nets especially for women in the region. Nearly 20 VSLAs were established by the end of the first phase, with seven of those groups having completed a full year of modular training that resulted in an average return on investment of 25% across that sample. Participants were able to pay school fees, start small businesses and achieve greater financial stability to sustain them through challenging market price fluctuations. In addition, the ability for women and young people to gain greater financial power has helped increase their decision making influence within their households, including activities that favor conservation of natural resources and lower carbon emissions.

If successfully implemented, these continued 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.

2. SUMMARY OF RESULTS TO DATE

Table 1. Indicator Targets and Achievements

| Standard Indicators | Baseline FY 2014 | Annual Target | Q1 FY17 | Q2 FY17 | Q3 FY17 | Q4 FY17 | Annual Performance Achieved to the End of Reporting Period (%) | On Target ? Y/N |
|---|------------------|---------------|---------|-----------|---------|---------|--|-----------------|
| 4.8-7 Quantity of greenhouse gas (GHG) emissions, measured in <u>metric tons of CO₂e</u>, reduced, sequestered or avoided as a result of USG assistance | 0 | 7,000,000 | -- | 4,066,852 | -- | -- | 58 % | Y |
| 4.8.1-6 Number of <u>people</u> with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance | 0 | 1,200 | -- | 1,113 | -- | -- | 93 % | Y |
| 4.8.1-26 Number of <u>hectares</u> of biological significance and/or natural resources under improved NRM as a result of USG assistance | 0 | 1,415 | 450 | 89 | -- | -- | 38 % | Y |
| 4.8.1-29 Number of <u>person hours</u> of training in natural resources management and/or biodiversity conservation supported by USG assistance | 0 | 8,500 | 1,967 | 2,860 | -- | -- | 57 % | Y |
| 4.8.2-14 Number of <u>institutions</u> with improved capacity to address climate change issues as a result of USG assistance | 0 | 75 | -- | 31 | -- | -- | 41 % | Y |
| 4.8.2-29 Number of <u>person hours</u> of training completed in climate change as a result of USG assistance | 0 | 5,000 | 688 | 1,406 | -- | -- | 42 % | Y |
| EG. 3.2-1 Number of <u>individuals</u> who have received USG-supported short-term agricultural sector productivity or food security training | 0 | 831 | 191 | 291 | -- | -- | 58 % | Y |
| EG. 3.2-4 Number of <u>for profit private enterprises, producers organizations, waters users associations, women's groups, trade and business associations</u> | 0 | 63 | -- | 49 | -- | -- | 78 % | Y |

| Standard Indicators | Baseline FY 2014 | Annual Target | Q1 FY17 | Q2 FY17 | Q3 FY17 | Q4 FY17 | Annual Performance Achieved to the End of Reporting Period (%) | On Target ? Y/N |
|--|------------------|---------------|---------|---------|---------|---------|--|-----------------|
| (CBOs) receiving UGS food security-related organizational development assistance | | | | | | | | |
| E.G. 3.2-17 Number of <u>farmers and others</u> who have applied improved technologies or management practices | 0 | 344 | -- | 123 | -- | -- | 36 % | Y |
| E.G. 3.2-18 Number of <u>hectares</u> under improved technologies or management practices | 0 | 80 | -- | 14.35 | -- | -- | 18 % | Y |
| E.G. 3.2-20 Number of <u>for profit private enterprises, producers organizations, waters users associations, women's groups, trade and business associations</u> (CBOs) that applied improved organization-level technologies or management practices | 0 | 50 | -- | 27 | -- | -- | 54 % | Y |
| Custom Indicators | | | | | | | | |
| C-1 Number of <u>person hours</u> of training completed in VSL modules as a result of USG assistance | 0 | 5,000 | 833.93 | 255 | -- | -- | 22 % | Y |
| C-2 Number of <u>community sensitization sessions</u> on climate change issues and/or NRM/biodiversity conservation as a result of USG assistance | 0 | 50 | 16 | 23 | -- | -- | 78 % | Y |
| C-3 Number of <u>persons</u> receiving start-up items for improved NRM/ biodiversity conservation as a result of USG assistance | 0 | 600 | -- | 264 | -- | -- | 44 % | Y |
| C-4 Number of project-planted <u>seedlings</u> surviving in towns/ communities as a result of USG assistance | 0 | 65,000 | -- | -- | -- | -- | N/A | Y |

3. ACTIVITY IMPLEMENTATION PROGRESS

3.1 Progress Narrative

The second quarter's activities (spanning from January to March) coincides with the dry season in Ghana and in-the-field activities revolve around land preparation for agriculture, honey harvesting time and the bees swarming to establish new hives. Many of the CSLP's actions were also oriented around these biophysical events.

Well-established activities with the VSLAs, climate smart agriculture, technical assistance and trainings linked to the management of the Greater Amanzule Wetlands and quarterly updates with regional district and traditional authority stakeholders continued and were successfully reinforced and gradually scaled up in several instances during the reporting period.

Some of the achievements of the quarter are linked to the CSLP's strategies to help community members diversify their livelihoods in areas such as beekeeping, charcoal production and conservation/climate smart agriculture (CSA). Several of these are noted below.

- The project has ordered the local fabrication of two metal, mobile charcoal kilns that will improve charcoal production over traditional pit methods in two communities of Shama District. More than 40 charcoal producers have worked with the CSLP to improve the management practices of the tree species used for producing charcoal and have asked the project to help them with improving the carbonization process and to help limit emissions of greenhouse gases. As a precursor to installing the portable kilns, the CSLP has helped the producers organize themselves in two producer associations, provided training on group formation and dynamics, and assisted in the formulation of rules and regulations for using the kilns and their maintenance. Additional training is planned for the actual operation of the kilns, marketing the charcoal and record keeping to help improve efficiency of production and profitability of the associations.
- Almost 200 new farmers (including 110 women) participated in the CSLP's four introductory training modules on climate smart agriculture. These are growing in popularity as farmers are becoming more aware of the dangers of eating vegetable crops exposed to chemical fertilizers, pesticides and herbicides that they regularly apply to staple crops and tree crops in the region. A follow-on, hands-on practical training was conducted for 111 farmers (including 55 women) during the quarter. These farmers, working in clusters, set up demonstration sites while learning. These demonstrations will continue to be used by each cluster for additional hands on trainings, for coaching and to illustrate to the community at large that CSA practices are viable, successful and can help diversify livelihoods for more than just the early adopters.
- In related activities, TIKOLA Ghana has drafted a Memorandum of Understanding (MoU) to guide the supply of improved seeds to the CSLP farmers. Under a public-private partnership, the CSLP provided 10 trainees as participants in a TIKOLA-GIZ-Ankobra Farms 2-day training on establishing and managing an organic farm. The GIZ began pushing the envelope by providing insight into the standards for labeling their produce if they wish. The objective from this and future trainings of this type is to help CSA framers tap into the local market demand for organic produce from mining, oil and gas interests operating in the area.
- There was a first Training of Trainers (ToT) conducted in Nzema East Municipal Assembly on CSA vegetable production organized for Ministry of Agriculture extension agents and their district staff. The ToT participants (29 men, 9 women) will in turn organize community level trainings on the same subject for farmers in the district providing significantly greater reach of the principle promulgated by the project. The CSLP will monitor the district's CSA efforts from this ToT in subsequent quarters.
- The CSLP completed its promise to provide start-up equipment for early beekeeping champions across the six districts. In the quarter, 149 sets of beekeeping equipment were distributed to beneficiary beekeepers that are helping to demonstrate that this is another livelihood option for farmers in the region. In a related activity, 95 beekeepers (including 14 women) with established hives and apiaries received a refresher training that included honey harvesting and processing. A

third group of 53 individuals (including 10 women) began another cycle of trainings by participating in the CSLP's two modules that focus on the introduction of beekeeping. Most of this group was from Greater Amanzule Wetland communities.

- Closely linked to the above livelihood option activities is a new training introduced this quarter on food security. Members from four communities and numbering 167 farmers, with 88 women, received basic information on food security pillars and issues as it pertains to their own households, their own communities, to Ghana and even globally as well. The trainings integrate information on CSA, on access to hygienic food, and providing nutritional options for families as well. The training has been well received in these initial communities and will be continued in other communities during the life of the project.

Financial and economic security continues to be enhanced in more than 17 communities with the training and monitoring efforts of the CSLP's support to Village Savings and Loan Associations (VSLAs). The project cannot keep up with the demand to help establish more as communities and districts become aware of the advantages of saving within their own community and the boost that it provides to community members.

- One new VSLA was formed with CSLP support during the quarter bringing the total to 27 that have been formed and functioning. An additional two new VSLAs were also added through the project's small grant to Hen Mpoano. Several groups are now into their third savings cycle and continue to accumulate profits at rates that exceed savings rates at rural banks and on national treasury certificates. The CSLP continues to explore the opportunities for upgrading the VSLAs. Beyond the record keeping training skills, other trainings in the pipeline are the literacy and numeracy training as well as the financial training to enable the members to link confidently to certified financial institutions.
- The CSLP also helped to plan and implement a VSLA Summit for implementing partners of Feed the Future-funded projects that support VSLAs. Lessons being learned, the production of an introductory training video and issues on scaling up, and using the VSLAs as a platform tool to introduce other development activities were all part of the Summit agenda. Following the Summit, USAID/Ghana encouraged key players to continue the dialogue about scaling up VSLAs in Ghana.

Other activities of importance for the CSLP during the quarter included:

- Continued support for wetland and mangrove monitoring with the assistance of CREMA institutions, a formal wetland monitoring program linked to climate change clubs at junior and senior high schools, and work in the Greater Amanzule Wetlands (with CSLP grantee Hen Mpoano) to develop co-management approaches for the valuable resources contained therein. In one Ahanta West District wetland and one in Shama District the CSLP has been working with National Service persons to engage community youth, teachers and parents in monitoring wetlands. Such a grass roots approach is gaining momentum as local communities have adopted a formal management plan for one wetland (Shama District) and a new and dynamic chief is a champion of the environment (and wetlands) in another (Ahanta West). A rejuvenated CREMA there is also volunteering and renewing efforts to undertake and enforce formal management of the resources for which they have officially been ceded responsibility.
- The GAW management processes continued during the quarter and a total of 25 formal community institutions and two district-level ones have been formed. These will help to strengthen the governance in these communities through trainings, monitoring visits, and practical/hands-on field trainings to help ensure the long-term management of wetlands and mangroves in the area. Hen Mpoano leads these activities through a small grant from the CSLP. Close and collaborative coordination with the Wildlife Division is helping to ensure regional and national buy-in for this effort.
- Update meetings were organized during the quarter for the Western Region stakeholders, District Assembly/Local Government officials and the traditional authorities during the quarter. With each passing quarter, these project stakeholders become more familiar with the successes of CSLP activities, citing these experiences to others and providing constructive and informed commentary

that can help to both better integrate project actions into their development planning actions and ensure their sustainability.

- The project undertook another Training of Trainers effort during the quarter for 58 female teachers from 29 first cycle public schools in Shama district. With a theme of “Gender and the Environment” facilitators used the ToT as the tool to reach all female students in their school system and to have them play a role in the maintenance of a clean environment in their communities.

Output 1: Increased Incomes From Livelihood Diversification

Table 2. Activities being implemented under Output 1 with expected, achieved and elements outstanding for Quarter 2, FY 2017

| Activities to be Implemented | Expected Outputs | Achievements | Outstanding Activity |
|--|---|---|---|
| Activity 1.1: Intensified and Diversified Climate Smart Technologies adopted by Target Beneficiaries | <ul style="list-style-type: none"> Charcoal Producers Trained in Packaging and Marketing Standards for Charcoal Trainings in environment friendly farming practices organized for interested members in fifteen (15) communities Climate Smart Agriculture (CSA) demonstration sites established to promote adoption of best practice farming Farmers are linked up with relevant stakeholders including marketing and input dealers and their enterprises enhanced | <ul style="list-style-type: none"> Charcoal producers have agreed on a vision and landmarks for achieving the vision 7 CSA trainings were conducted during the quarter for 199 (90 males and 109 females) farmers from 7 communities 6 hands-on-trainings were conducted in 6 communities in 5 districts for 111 farmers (55 women, 56 men) in CSA TIKOLA Ghana and East/West Seeds International are supplying improved seeds for CSA farmers GIZ, TIKOLA/East-West Seeds International and Ankobra Beach organized a training in vegetable production and green labeling for 10 CSLP farmers | |
| Activity 1.2: Natural Resources Value Chains Improved | <ul style="list-style-type: none"> Beekeepers harvest and process honey without difficulty Beekeeping beneficiaries are knowledgeable in setting up and managing apiaries | <ul style="list-style-type: none"> 95 beekeepers, including 14 women, were trained in honey harvesting and processing during the quarter 53 beekeeping beneficiaries, including 10 women, received training in the basics of beekeeping | |
| Activity 1.3: Economic Opportunities Increased | <ul style="list-style-type: none"> VSLAs formed and functional VSLA members are trained in numeracy and literacy skills Financial training conducted for VSLA members and helped to link to certified Bank of Ghana institutions for support Record keeping trainings organized for VSLA members | <ul style="list-style-type: none"> Three new VSLAs formed during the quarter Discussions are underway with Daasgift Quality Foundation to conduct the trainings in the near future More investigations conducted on potential financial institutions suitable for linkage with VSLAs Record keeping trainings conducted for 8 VSLAs during the quarter | |
| Activity 1.4: Capacities Enhanced for Diversified Livelihoods | <ul style="list-style-type: none"> Farmers in 5 communities are conversant with the pillars of food security and impacts on their farming practices Training conducted for farmers in mushroom production, packaging and marketing | <ul style="list-style-type: none"> 167 farmers (including 88 women) from 4 communities in 2 districts were trained in the topics of food security and how food security can be achieved | <p>Farmers in the fifth community to be trained next quarter</p> <p>Delayed to next quarter</p> |

Improved charcoal production pilot

Charcoal remains a critical source of energy for Ghana and even though its production and use have serious environmental impacts, establishing regulations for its production and use are not currently under consideration in the country. This is therefore the reason why the production system adopted in Yabiw and Krobo in the Shama District of the Western Region is worth assessing for improvement. In these communities, woodlots are established with a prolific coppicing species, *Sena siamea* (yellow cassia). The woodlots are managed and harvested in three to four year cycles on the same area of land. Following a series of consultations with woodlot owners in FY 2015, the CSLP began working with these producers to improve charcoal production from two standpoints:

- Establishing, managing and harvesting the woodlot; and,
- Enhancing the carbonization process.

Trainings that were conducted in the establishment of the woodlot touched on the need to consider natural regeneration of valuable indigenous timber and non-timber species as well as harvesting at the right height so that coppicing of the trees is optimized. For those with larger land areas, harvesting scheme alternatives are being considered. These include harvesting in alternate blocks, or harvesting matured stands only instead of block cutting and leaving the land bare to start vegetation from scratch. CSLP's monitoring of woodlot sights indicate that most practitioners have adopted these improved practices.

In tackling the next stage, the carbonization process, CSLP decided to introduce kilns to replace the traditional system where the wood is piled into a shallow pit and covered with soil before fire is set. This traditional approach is known to be slow, have low charcoal yields, and have other challenges such as caving in and therefore emitting a lot of gases and heat. It also requires extensive monitoring until the process is complete.

In order to ensure a successful adoption and use of the kiln to be introduced, several discussions were done with the practitioners to determine their interest. After such discussions, it was determined that mobile kilns were preferred over sedentary brick kilns (so that a group of people can use it collectively). The mobile metal kilns are reputed to be easy to assemble, disassemble, and easy to transport (in their disassembled state) to any level place where there is a concentration of wood. Vendors were sought who could develop such mobile kilns which are now being fabricated with a completion date expected in the next quarter. With only two pieces of mobile metal kilns being procured for about forty practitioners, the CSLP recommended that they organize themselves into producers groups.

As a result of these discussions, the charcoal producers agreed to the following:

- To organize into charcoal production and trading association(s);
- To develop rules and regulations for the use and maintenance of the kilns;
- To involve women producers in all decision-making meetings, especially in the case where Krobo which has a membership of 8 men and 12 women;
- To undergo training in the operation of the mobile metal kilns when they are ready for use; and,
- To undergo training in the packaging and marketing of charcoal.

As such, CSLP hopes that these improved practices will improve the harvest of timber used for charcoal production while reducing overall forest loss, increase efficiency of charcoal production, and reduce emissions from the associated production process. In addition, it is hoped that such efficiencies will ultimately provide greater economic returns for the producers over the longer term.

Climate smart agriculture (CSA) and vegetable production

Climate smart agriculture uses recognized practices and techniques that sustainably increases productivity, resiliency to pests and climatic events, reduces greenhouse gas emissions, and enhances

the achievement of national food security and development goals. The CSLP is seeing that CSA is gradually gaining the interest of farmers and Ministry of Agriculture staff from various communities across the six coastal districts. Farmers, in a bid to counter climate conditions that are increasingly limiting productivity, have resorted to applying huge quantities of commercial fertilizers including nitrogen, phosphorus, potassium and other chemicals to control diseases. CSA trainings by the project have helped farmers to increase their understanding of the consequences of these chemicals on the environment and on the vegetables they produce for home consumption and sale in local markets. One consequence of such extensive chemical use noted by producers and buyers alike is a very visible short shelf life of vegetables. The recent ban on vegetables and fruit exports from Ghana to the European Union is also putting farmers on alert. The challenge now is how to be successful in growing vegetables without the use of the chemicals. It is here that the CSLP's support becomes timely and relevant.

During the quarter, 199 farmers (109 women, 90 men) were trained from 7 communities on the principles of CSA. All were newly enlisted farmers and many were Village Savings and Loan Association (VSLA) members (see discussion on VSLAs below). These farmers were taken through the four primary CSA training modules that include best practices of CSA, composting, integrated pest management and post-harvest management practices. Following the classroom portion of the training, farmers with continuing interest in pursuing and adopting CSA practices on their own lands were provided practical, hands-on trainings in the field. These trainings are done in clusters using one of the farmer's fields as a demonstration and practice area.

The practical training is designed to take them again, through the four modules to review and reinforce the principles of CSA. These were focused on field preparation, seed acquisition, and caring for seed and seedlings. This resulted in a demonstration and learning site being established for each cluster of farmers. During the quarter six such sites were established across five districts providing a demonstration area for 111 farmers (including 56 men and 55 women).

Each of the hands-on trainings were carried out with the support of the extension agents from the Department of Food and Agriculture within the respective districts. With the increased interest in the CSA practices, the project is finding that the focus is moving beyond just vegetables, but is also extending to other crops as well. The CSLP has also been working with the certified vegetable seed distributors (the Ghanaian company TIKOLA and its associate East-West Seeds International), in helping farmers get connected to the seed suppliers and learning how to effectively plant and nurture the young vegetable seedlings.

Ankobra Farm (a registered NGO in Nzema East district) collaborated with the German Agency for International Development (GIZ), TIKOLA and East-West Seeds International to provide local farmers with a two-day organic farming training where 10 CSLP-registered farmers participated. The 10 CSLP farmers (6 women, 4 men) were drawn from five communities. While the content was not different from the CSLP curriculum, new components emphasized during the training included:

- Introduction of the vinegar extract from bamboo in charcoal kiln for pest control;
- Introduction of labeling standards by the GIZ; and,
- Seed availability from TIKOLA and East-West Seeds International.

The Ankobra Farm also provided more extensive proof of the possibility of growing crops in a way different from what many farmers in the region normally practice. In addition, the training and site visit helped to demonstrate that this new alternative is successful, provides better yields, is healthier for the farmer and his/her family and more environmentally benign. The 10 CSLP farmers will also serve as trainers within their respective communities to share the lessons learned from the training.

Beekeeping training

Beekeeping introduced as part of the CSLP's livelihood diversification strategy continues to gain more attention, awareness and visibility by farmers and district officials within the six coastal

districts. It also appears that the logic for which beekeeping was introduced remains sound. As long as the beehives remain, and the beekeeper desires to continue to harvest honey, then the protective and sheltering vegetation (often extensive tree cover) for the apiary is intact.

While the environmental benefits are evident, there are still challenges in the process. One such significant challenge is the initial inputs necessary to start beekeeping which are capital intensive, especially for lease holder farmers in the CSLP's zone of influence. The project originally subsidized the most committed farmers by supplying beehives, stands and honey harvesting equipment (i.e. smokers and bee suits) so as to demonstrate that honey production can be sustainable livelihood activity in the six coastal districts. The cost of providing this start-up equipment, plus the trainings and follow-on coaching and monitoring required to maintain such support, is not possible for the CSLP, nor is it a sustainable practice. Others interested in beekeeping are disappointed by the fact that the project is no longer providing the initial inputs and thus remains a roadblock to more widespread adoption.

About 150 sets of beekeeping equipment were distributed to prospective beekeepers during the quarter. This equipment, comprised of bee suits, bee veils, hand gloves, smokers and beehive knives, had been promised by the project to the initial group of pilot beekeeping trainees, in the first two years of the project. They have all received training and are being supported to establish the hives. Artisans trained by the CSLP constructed the beehives.

A professional Ghanaian beekeeper was engaged by CSLP during the quarter to help address issues experienced by a number of beehives on the landscape. These included rampant absconding (disappearance) of bees from hives, and in several instances, hives with no honey available for harvest during a season when it was expected. The consultant visited over 40 hives in 6 communities across 4 districts and made recommendations (see box below) based on his observations. These, and other recommendations, have been factored into the training manuals for new trainees while previously trained beekeepers received refresher trainings to reduce the chances of these problems reoccurring. The refresher trainings are conducted as part of the scheduled monitoring of apiaries and done in collaboration with the CSLP's Community Assistants.

| Apiary Dos and Don'ts |
|--|
| <ul style="list-style-type: none">• The beehive's surroundings need to be well cleared of all weeds and obstacles that might serve as entry points for pests into the hives;• Any use of agrochemicals around the hive must be done with extreme caution (and better not to be done at all) in order not to disturb the bees;• The buffer zones between the cocoa farms and the hive should minimally be 20, and preferably 50 meters in width;• The beehive lid should be well constructed (and periodically inspected) to ensure that the hive is properly covered and that no water can leak in;• The top bars should be properly arranged, completely covering the hive to prevent leakage of water and the entry of pests into the hive;• The mounted hive should be regularly baited at least every three weeks with regular visits to the hive until it colonized;• Areas with a prevalence of ants and termites should be avoided through a critical site study prior to the placement of the hive;• The hive entrance should be made to face east when installed; and,• Beehives need to be frequently inspected to determine the right time for harvesting the honey; it appears that the high rainfall and microclimates in the high rainforest zone may be influencing bees activity in a way that is different from other honey-producing zones in Ghana. |

The project engaged another experienced beekeeper from a beekeepers association in Attebubu in the Brong Ahafo Region during the quarter to provide practical training to 95 beekeepers (including 14 women) previously trained and supported by the project. The trainees, from 14 communities within the six coastal districts, received hands-on instructions and demonstrations in areas that included:

- The process for regular inspection of hives to establish familiarity between the beekeeper and bees, and determine when honey is mature for harvest;
- The handling and proper use of required tools;
- How the beekeeper's protective clothing is to be used and maintained most effectively; and,
- The harvesting of honey during a couple of the trainings.

During the quarter, 53 prospective beekeepers, including 10 women, were trained using the introductory beekeeping module that covers topics of common fears of working with bees, establishing the apiary and early management of the apiary. The participants were from 8 communities (mostly GAW communities) in four districts. In order to dispel the fear for the African bees, that of course are known to be the wildest of bees, and to give an idea of what is expected as a beekeeper, the participants were first shown a video which is titled "Holistic Approach To Beekeeping". One of the trainees also shared what he had learned from a documentary viewed on local television. The documentary explained the relationship between honeybees and human beings with regard to food security. The story excited the participants and increased their interest even further. This will be the first group of trained beekeepers who will not receive any apiary start-up materials from the CSLP.

Village Savings and Loan Associations (VSLAs)

One new VSLA was established with project support in Ayawora in the Ellembelle district. The group consists of 12 men and 13 women. Having undergone training in the first four modules, they have started share purchase contributions. Two additional new VSLAs were formed through the CSLP's small grant partner Hen Mpoano (see discussion below on the Greater Amanzule Wetland Management). VSLAs in the six coastal districts that are supported by the CSLP total 29 at the end of this quarter.

Twenty-six monitoring visits were done during the quarter for the CSLP-supported VSLAs. Monitoring visits are used to assess how accurately the groups are implementing their policies and regulations as well as the recordings made in their passbooks. The visits also assessed the performance of the trained Village Agents (VAs). The VAs are community/VSLA members (men and women) who are more experienced in the VSLA processes and are trained to support the VSLA Specialist to serve as resource persons in the communities when CSLP staff are not able to be present and after the CSLP project ends. The VAs were given more support where problems were detected as follow up to their extensive training conducted during the first quarter of FY 2017. Another group of prospective VAs are being identified for a scheduled training in the next quarter.

Numeracy and literacy skills among VSLA members are weak and this is one area that the project wants to help address beginning this fiscal year and continuing through the life of the project both for its own sake and because it is seen as a major factor in the long term sustainability of VSLAs. A meeting is now scheduled for early next quarter with Hen Mpoano (CSLP grantee) and Daasgift Quality Foundation (a local financial NGO) to discuss a pilot training of VSLA members in numeracy and literacy skills. Daasgift is already piloting numeracy and literacy training for some microfinance enterprise groups in some coastal districts in the Western Region. The scheduled meeting will discuss what CSLP's interests are and what roles the two institutions can play towards capacity building in numeracy and literacy skills, starting from pilot VSLAs before rolling out to cover more VSLAs (and perhaps some CSA vegetable producer groups as well).

CSLP is committed to exploring and supporting linkages between the VSLAs and reputable, certified public financial institutions but with a cautious approach. This is meant to broaden the horizon for VSLA group opportunities and to limit risks such as potential cash loss and payment of unnecessarily high interest rates. Following an earlier interaction with some rural banks and microfinance institutions to assess the potential feasibility of this linkage, additional investigations were made to verify previous findings. As a result, a financial education training manual is being crafted that will

both inform the VSLAs about choices and alternatives with rural banks and help them in their decision-making before they move forward with making any formal linkages.

In an associated activity, eight VSLAs were trained on the previously established record keeping training module during the quarter. A total of 172 participants, including 116 females and 37 other CSLP beneficiaries who are not VSLA members, went through the three-hour training. The CSLP introduced the module to help make more informed decisions based on basic records that they can maintain. It was the roll out of the record keeping training in FY 2016 that underscored the need for the literacy and numeracy trainings, especially among women who comprise most of the membership of the VSLAs and who are often the least educated in the rural communities of the Western Region.

Training in food security

Food security is an important issue within the six coastal districts of the Western Region particularly because of the following challenges.

- Increasing occurrence of illegal mining (*galamsey*) with its resulting negative impact on agricultural lands and water bodies.
- Increasing competition among food crops and tree crops (especially rubber and oil palm) for arable land due to economic gains.
- Competition for land/space by oil and gas related industries within the six coastal districts.
- Population increases and the related development for domestic and office accommodation that also competes for arable land.

Beginning in this fiscal year, the CSLP has been engaging community leaders to discuss and understand the importance of food security, how it is achieved/ensured and its importance to family health and economic well-being. By the end of the quarter, members of four communities (in two districts) participated in training sessions that covered general awareness issues about food security. Almost 170 people (53 percent were women) learned about (a) food security and nutritional security and what they need to do to sustain the two, (b) important component/pillars of food security and (c) critical factors that affect food availability, access to food, its use and the reliance on staple foods. Training facilitators also talked about what the CSLP is doing to help improve food security in the trainees' communities.

Trainees commented on their appreciation for the training and the awareness it was creating in the community, especially about how national (and even global) issues can affect and impact activities on their own farms. Participants, at the end of the training, also noted that local dealers in agrochemicals needed to be engaged so that their communication and support to farmers in the use and handling of these farming inputs can be improved and made more safe.

Natural resources-related livelihood options

Two Greater Amanzule Wetland (GAW) communities (Anyanzinli and Metika) have set aside pieces of land for the establishment of nurseries to produce mangrove and woodlot seedlings for planting. These initiatives which are facilitated by the conservation committees of both communities, with the support of the chiefs and elders, come as part of the management actions for the two communities as reflected in the management plans for GAW communities developed with the support of the Wildlife Division of the Forestry Commission. The targeted number of mangrove seedlings will be used to rehabilitate degraded portions of their respective mangrove areas of jurisdiction. Until now, the proposed species for the woodlot is *Sena siamea* (also known as *Cassia siamea*). The CSLP is working with its grantee and local NGO, Hen Mpoano, for the maintenance and operation of these two nurseries. Additional information is found below on the GAW management efforts being addressed through the small grant.

Output 2: Improved Environment and Natural Resources Management

Table 3. Activities being implemented under Output 2 with expected, achieved and elements outstanding for Quarter 2, FY 2017

| Activities to be Implemented | Expected Outputs | Achievements | Outstanding Activity |
|---|---|--|----------------------|
| Activity 2.1: Forestry and Agroforestry Interventions Developed and Practiced | <ul style="list-style-type: none"> • Urban forestry trainings conducted for groups and tree plantings facilitated • CREMA and CCC have improved skills in mangrove seedlings production and raise seedlings for re-planting in degraded areas in Akwidaa | <ul style="list-style-type: none"> • Urban forestry planting in 10 school compounds were monitored during the quarter • Through the mobilization by the CREMA CRMC, sensitization meetings, mangrove nursery establishment and re-planting occurred in Akynim, Ketakor and Akwidaa in the Ahanta West district • 800 red mangrove seedlings supplied for re-planting in Akynim | |
| Activity 2.2: Carbon Sequestration Improved and Effectively Monitored | <ul style="list-style-type: none"> • Planted trees are monitored and data collected | <ul style="list-style-type: none"> • 283 sites of planted trees were monitored and 82% of trees are surviving | |
| Activity 2.3: Stakeholder Coordination Strengthened | <ul style="list-style-type: none"> • Quarterly regional stakeholders update conducted • District quarterly GoG staff update conducted • Field monitoring with district assemblies organized • Traditional authorities updated on CSLP activities • Lessons shared with other implementing partners | <ul style="list-style-type: none"> • Representative of the Regional Minister and 8 other stakeholders from the Western Region administration participated in the 11th Regional Stakeholders meeting • 36 participants including 5 females from 5 assemblies attended the meeting • A monitoring visit was organized to the Komfoeku DA JHS in the honor of the Shama District Education Directorate and the CSLP Program Manager from Washington, DC • A total of 32 chiefs and elders (26 males and 6 females) from 17 communities were updated on CSLP activities • CSLP participated in SFMP review meeting and shared lessons on livelihood activities | |
| | <ul style="list-style-type: none"> • CREMAs strengthened to support wetland conservation | <ul style="list-style-type: none"> • Yabiw Wetland Volunteer group reviewed the drafted management plan | |

| | | | |
|--|---|--|--|
| <p>Activity 2.4: Capacities Increased in Climate Change Adaptation and Natural Resources Management</p> | <ul style="list-style-type: none"> • Wetland monitoring activities coordinated with the UCC • Female teachers from public schools in the Shama District are more knowledgeable on the environment and waste management issues. • More climate change clubs formed • Environmental awareness trainings organized for community groups • Video presentations organized on values of wetlands in GAW communities • Brochures on climate change produced • GIS trainings organized for district assemblies | <ul style="list-style-type: none"> • 64 members (including 41 women) from 3 CRMC received training in “CREMAs and Wetland Management” in 3 training sessions • Wetland monitoring in Yabiw and Akwidaa continued during the quarter while helping to pilot the University of Cape Coast Wetland Curriculum with the support of two National Service Persons • 58 female teachers out of the 60 from all public schools in the Shama District participated in a training of trainers on environment and waste management issues • New climate change clubs formed at 4 schools in the Shama District • Awareness trainings for 3 CSMCs of the Cape Three Points CREMA were completed • Videos were presented in 10 GAW communities on the values and importance of wetland resources • Collaborating with WRCF, 6,000 copies of the CSLP Climate Change Brochure were printed to help raise awareness in 100 communities in the six coastal districts of the Western Region • Preparatory meetings undertaken with district assemblies to assess their spatial planning needs | |
|--|---|--|--|

Urban forestry plantings monitored

Many compounds of public schools in the landscape of the six coastal districts are bare and as a result have negative environmental impacts. Without vegetative ground cover, serious erosion occurs and with no trees present as buffers against the wind with the more intense rain events, school building roofs are often torn off. In some traditional areas and communities, there are superstitious beliefs that have driven the chiefs and elders to lead the community to fell all trees in the towns and villages because it is believed that witches and wizards hold meetings in the tree canopies and attack the people.

The CSLP is helping to mitigate these circumstances (and educate communities) by supplying tree seedlings for planting in 26 school compounds (including primary, junior and senior high schools). Monitoring of these plantings is undertaken with school officials and Ghana Education Service district staff. In ten schools in Jomoro District, survival rates averaged almost 70 percent. The very sandy soils of the district and lower than normal rainfall has meant that careful attention to these trees has been required so that survival rates do not fall any lower. Survival rates in school compounds will be challenging given the risks of vandalism, abuse by animals and lack of a regular watering schedule, especially at times when schools are not in session. Nonetheless, it is hoped that this urban forestry

effort can ultimately provide great benefits to students, teachers and communities where they are planted.

Mangrove seedlings management and re-planting

Akwidaa in the Ahanta West district and its immediate surrounding communities have a substantial area of coastal mangrove vegetation with considerable portions in need of attention and more careful management. In the past, due to the lack of a village chief, the resource has been mismanaged and it has been difficult to achieve any sustained community effort to address the threats of the resource. At the end of last year, a chief was installed and he has expressed his commitment to the welfare of the mangrove resources. Increasing the chief's knowledge on the role of the CREMA and its relationships with relevant institutions such as the Wildlife Division and the District Assembly will be a priority for CSLP given the chief's relative newness to the community. The CSLP is working with these institutions to brief him from time to time and provide support that will lead to the re-energizing the Community Resources Management Committee (CRMC) in Akwidaa to champion the resource management effort there.

Eight hundred mangrove seedlings, transferred from Yabiw to nearby Akyinim were transplanted during the quarter. The planting was facilitated by the National Service person stationed in Akwidaa and involved members of the CRMCs of both Akwidaa and Akyinim. They were taught how to manage the seedlings in a nursery as well as how to handle the seedlings and transplant. There is still a substantial area that needs to be re-planted and the CRMCs and the Climate Change Clubs will be trained in how to raise seedlings from seeds/propagules that they can collect locally for such future replanting efforts.

Planted trees are monitored

More than 280 sites where trees were planted with CSLP support were monitored with the help of the Community Assistants during the quarter. More than 6,000 seedlings were planted on these sites and the survival rate is more than 80 percent—a satisfactory figure. The monitoring also revealed that 105 farmers are practicing farmer managed natural regeneration (FMNR); this amounts to about 37% of the farmers—also a favorable adoption rate for this type of activity.

Quarterly regional stakeholders' update

The 11th regional quarterly stakeholders meeting was held at the end of the quarter and attended by eight institutions (only one stakeholder, the Environmental Protection Agency, was absent). The objectives of these meetings are to appraise the participants of CSLP activities implemented within the quarter, discuss planned activities for the ensuing quarter and to ask for their inputs and comments. The CSLP also asked for information being undertaken by the regional stakeholders that was relevant to its operations in the six coastal districts. The regional stakeholders recommended the need for a stronger collaboration between the CSLP and the Department of Food and Agriculture, and the Business Advisory Centre, on livelihood diversification efforts. The CSLP already works closely with these two groups at the district level, but will work to improve this, especially with the BACs. The Minister's representative also asked the perennial question about how the CSLP's activities could be promoted/scaled up to other districts in the Western Region.

District GoG agencies updated on CSLP interventions

The joint district assemblies update meeting took place on the March 28, 2017. Participants from seven district-level institutions, numbered 36, including 7 women. Hen Mpoano participated for the first time and shared their grant activities within the GAW area with the stakeholders. The meeting discussed some of the areas of successful collaboration between agencies and CSLP including:

- Urban forestry in public school compounds between CSLP and Jomoro DoFA and GES;
- CSA hands-on demonstration training between DoFA and CSLP; and,
- Beehive monitoring and training between CSLP and DoFA.

As per the agreed plan, it was the turn of Business Advisory Centers (BAC) to share their activities with the whole group. BAC officials from the Jomoro District, Ellembelle District, Nzema East Municipal Assembly, Ahanta West District and Shama District made presentations to share their activities, challenges and areas of potential collaboration. The presentations revealed that the BAC, under the Rural Enterprises Project, runs similar interventions across the landscape and most of the activities centered on trainings for livelihood empowerment and targeted vulnerable individuals including the physically challenged and persons living with HIV. Among the activities were bead making, beekeeping, soap making, sewing and support to local micro enterprises. Others were numeracy and literary training for micro and small enterprises, as well as improved fish smoking.

Field monitoring with district assembly agencies

Officials from the Ghana Education Service Shama District Directorate paid a monitoring visit with the CSLP to Komfoeku Climate Change Club that included a visit to their demonstration farm that was in its initial stage of establishment. CSLP facilitates such visits in order to encourage the district officials to become conversant with what their institutions/officials are doing in collaboration with CSLP. The visitors included the CSLP Program Manager. The Climate Change members and their patron teachers discussed with the visitors their activities including training tours and visits, weekly Climate Change Club meetings and activities at their demonstration site. Having been impressed by the depth of knowledge and excitement displayed by the students, the visitors advised the students to share the lessons they were learning with their parents and peers.

Traditional authorities updated on CSLP activities

Seventeen communities from five districts were represented by 32 chiefs and elders (26 men, 6 women) at the quarterly update meeting for traditional authorities in the CSLP’s geographic area. After listening to the presentation from the CSLP, the chiefs and elders made a number of comment and suggestions. These are noted in the box below.

| Activity | Comments/Suggestions |
|---|--|
| Climate Smart Agriculture (CSA) | -Farmers need to continue with the CSA practices and it will pay off in few years. |
| Village Savings & Loan Associations (VSLA) | -Special thanks to the CSLP for the VSLA intervention. We were deceived in the past. Most companies absconded with our cash. Now more people want to join. Getting more money to pay our children’s school fees and other issues has helped. -We also need more VSLAs at Fiasolo. The VSLA is really helping. The profit we make from the group is amazing. No more loan access issues with financial institutions. |
| Beekeeping | -There are fewer flowers in the Nzema areas and that is not helping our beekeeping. The CSLP should consider supplying fruit tree seedlings such as mango and orange to help us with the beekeeping. |
| Tree planting | -Our forest size is reducing and there is the need to plant trees to have more trees back on land and also restoration. -Trees species like <i>emire</i> and mahogany grow very fast and people are already highly interested and such trees should be supplied. |
| School clubs | -It is good platform employed by the CSLP. Working with the youth will yield more positive results. |

Lessons shared with other implementing partners

The CSLP participated in one of the three days of the Sustainable Fisheries Management Project’s Partners review meeting in Elmina and provided presentations in two of the five panel discussions. The main focal points shared the lessons in the community mangrove management efforts in the GAW area, Akwidaa and Yabiw, as well as VSLA approaches and lessons learned thus far.

The CSLP helped with the planning and organization of and also participated in the VSLA Summit for USAID/Ghana projects during the period. The one day summit, which was jointly organized by CSLP, Resilience In Northern Ghana (RING) Project, METSS and the USAID/Ghana EG Office, was planned to share achievements and lessons from supporting VSLAs, the possible future direction of VSLAs and community members' perception of VSLAs. The summit sought to help implementers improve their VSLA processes and build the confidence of implementers wanting to develop VSLAs within their projects. There are an estimated 4,000 VSLAs operating in Ghana today. About a quarter of those receive support from different types of USAID-funded projects, largely within the Feed the Future initiative.

Project management also participated in the annual USAID/Ghana Feed the Future two-day symposium. Ideas, research, results and lessons being learned were shared among Feed the Future implementing partners and USAID/Ghana staff.

Community-based organizations support wetland conservation

In Shama District, the Yabiw chief, elders and the community decided to draft a mangrove management plan for implementation to reduce further mangrove degradation. This is after the community supported a re-planting effort of over 20 hectares of degraded mangroves through the mobilization of the community volunteer group. The plan development was facilitated by the CSLP and drafted by the Community Benefits Specialist. The document was referred back to the Community Volunteers to review for accuracy. Since the Yabiw Management Plan derives its authority through the draft Shama District By-Laws, it is being referred to the Shama District Assembly for their review and consent as well.

The Cape Three Points Community Resources Management Association (CREMA) has been in existence for over ten years but has not been as effective as expected. To help improve the performance, CSLP targeted four of its Community Resource Management Committees (CRMCs), in Cape Three Points, Ketakor, Akwidaa and Akyinim, during the quarter and led a series of training topics with group members. During the quarter, Akyinim, Ketakor and Cape Three Points underwent training in "The CREMA and Wetland Management". The trainings (attended by 64 CRMC members including 23 men and 41 women) were organized in collaboration with the Western Region Wildlife Division and the CREMA Executive Committee (CEC) and was facilitated by the CEC Chairman. The objective of the trainings was to increase the CRMC members' awareness of the contents of their constitution and by-laws, re-acquaint them with the importance of the resources they are responsible for managing and promoting the values of those resources to the communities and the district. The process will also help them to become more aware of what rights community people have and what may be considered as violations of established rules and regulations.

Mangrove monitoring curriculum

The piloting of the University of Cape Coast (UCC) Department for Fisheries and Aquatic Sciences wetland monitoring curriculum continued in Yabiw and Akwidaa schools. The curriculum modules are facilitated by the patron teachers at the schools with additional technical assistance from the National Service persons. The curriculum is designed for the Junior High School and is meant to enlighten students on wetland resources and their usefulness. The two schools involved are the Akwidaa and Yabiw Junior High School's Climate Change Club. Some of the objectives of the curriculum include supporting the students and the community as a whole to periodically monitor the health of the wetlands and instill a spirit of conservation with the club's members.

During the quarter, the two National Service persons assigned to each of the two junior high schools, as well as one teacher from each school, attended a one-day Training of Trainers (ToT) meeting at the UCC. The training focused on familiarizing participants with modules three and four (of the 7-module program) on wetland monitoring and conservation so that they can in turn work with their students on the activities and lessons contained in the modules.

Training of Trainers for female teachers in environment and waste management

Waste management continues to remain a major challenge in the CSLP area (and throughout Ghana, especially within its urban areas). In continuing its commitment to address urban solid waste management, especially as it pertains to environmental conservation, the CSLP facilitated a Training of Trainers for teachers from all public schools within the Shama District in collaboration with GES, the Shama District and Zoomlion, the local waste management company. From a total of 113 teachers in the district, 60 are females. It was therefore felt that the female teachers should be strategically targeted so that in turn they will work with the female students who generally outnumber the boys at this stage of the education ladder.

In collaboration with the Shama GES Directorate, 58 out of the 60 female teachers from 29 public schools were taken through a one day ToT titled “Gender and the Environment”. The training exposed the female teachers to issues such as:

| | |
|---|---|
| Definitions of gender and environment | Ghana’s population (gender dimension) |
| Key environmental issues in the district | Why women should be concerned about the environment |
| Role and importance of women in addressing environmental issues | |

The female teacher trainees received instruction on training all female students within their respective schools, beginning after the Easter break. The objective was to help them adopt positive and respectful approaches to the environment and to be role models for their peers and parents on solid waste management and environmental conservation.

Climate change clubs

Four new climate change clubs were formed during the quarter—all located in Shama District. The district’s Directorate of Education and the CSLP inaugurated the new clubs which came into being through the efforts of some of the teachers who participated in the ToT on waste management that was organized by CSLP (see above). The teachers were so motivated that they requested support to form the clubs. The new clubs are all in junior high schools and have a total membership of 208 students (110 boys, 98 girls).

Awareness creation for community based organizations

Awareness training was conducted for three CRMCs of the Cape Three Points CREMA, namely Asuboi, Nkwantanam and Adalazo—all in the Ahanta West District. A total of 37 executives (including 12 women) were trained on the Cape Three Points CREMA constitution and how they can implement its rules. This was necessary since many of the members had lost touch with the group’s constitution (through low literacy and inactivity) and needed a refresher and support on how to go about using it effectively. This will be followed up with other trainings on the values of wetlands and mangrove management.

In the Greater Amanzule Wetland area, video shows were conducted in 10 communities facilitated by community conservation committees. The 20 minute video demonstrates what mangrove wetlands do for humanity relative to livelihoods, nutrition, flood protection and carbon sequestration. It also shows local flood events within some localities within the six coastal districts of the Western Region which may be worse if coastal mangroves are eliminated for physical development as is going on now.

The audiences listened to commentary given by their own elected GAWCCC members who also facilitated discussions on what lessons may be gathered and what they can do to reduce risks as community members. On average there were about 150 community members per video show.

Information, Education, Communication (IEC) materials

During the quarter, the CSLP collaborated and agreed to share costs with the Western Region Coastal Foundation (WRCF) in the printing of 6,000 pieces of the CSLP-designed (and tested/used) climate

change brochures crafted for creating environmental awareness and discussion. The WRCF will use them in 300 communities in the six coastal districts of the Western Region. A total of 28 Community Conversation Managers (including 12 women) from 4 institutions including the Community Land and Development Foundation (COLANDEF), United Civil Society Organization for National Development (UCSOND), Hen Mpoano, and Friends of the Nation (FoN) were trained in the basic understanding of the causes of green house effects, greenhouse gasses, and global warming. They were shown videos of flooding in localities within the six coastal districts that may have been exacerbated by climate variability. These were all linked to human impacts and emphasized what may be done to at least maintain the status quo or what activities to undertake in order to mitigate and improve the situation. The plan is for these 28 trainees to train 600 community volunteers who will then facilitate this among stakeholder groups in the communities. The CSLP will monitor the volunteer and community trainings for the WRCF to ensure accuracy and understanding among trainees.

QGIS trainings for local government staff

CSLP, in collaboration with the Western Region GIS hub, housed in the TCPD, has attempted to enhance local government capacity in the utilization of geographic information systems in their planning and reporting of spatial data. This was expected to also create relevance for spatial planning data that will be shared with them by CSLP. Trainings in Quantum GIS (QGIS) that ended last quarter, were facilitated for 5 assemblies' institutions that included planners, engineers, agricultural agents, health and sanitation staff, Ghana Education Service personnel and the district health staff.

With the intention to sharpen the skills of trained staff, a refresher was planned for the districts. Though the refresher trainings were targeted at the already trained staff, it turned out that most of the already trained staff were missed for a number of reasons including staff transfers, while some new trainees appeared. It was also realized that only a few trainees (about 25%), followed up to utilize the skills to support their day to day work. This was quite worrying for the CSLP and was discussed at the Regional Stakeholders meeting and it was agreed to engage the management teams of the district assemblies to discuss and chart the way forward to ensure successful future trainings.

During the quarter, a meeting involving the District Coordinating Directors (DCDs), development planners, physical planners of all the five assemblies namely Jomoro, Ellembelle, Nzema East, Ahanta West and Shama Districts, as well as their regional heads was organized. According to the regional heads, capacity building in QGIS is now even more relevant for the assemblies since the new planning scheme makes it mandatory to include spatial data especially related to development activities. The regional bosses also informed their supervisees that the new Land Use and Spatial Planning Act 925 of 2016 requires the assemblies to have designated "data rooms" to be furnished with desktop computers to store and centralize all spatial data.

To better adapt to specific and unique district needs the CSLP will make a concerted effort for:

- Trainers to visit all 5 districts to discuss/assess to district specific interest and needs in spatial planning;
- Keeping the district coordinating directors (DCDs) as the first point of contact to facilitate selection of training participants and as a key decision maker regarding discussions and developments relative spatial planning training;
- Training should be residential outside trainees home offices;
- The regional and district heads should make spatial data mandatory in line with the new planning scheme and Act 925 of 2016; and,
- The assemblies should budget for such trainings as well as procure equipment to furnish the district data rooms.

Greater Amanzule Wetlands Management

Hen Mpoano, through its small grant agreement with the CSLP has continued to lead activities in communities within the Greater Amanzule Wetland (GAW) area.

Formation of new Community Conservation Committees (CCCs)

The two communities of Apataim and Adelekazo, located in the Nzema East District and within the Ankobra River estuary, have very rich, almost pristine mangrove forests as well as wildlife including crocodiles. Two Greater Amanzule Wetland Community Conservation Committees (GAWCCCs) were formed during the quarter and completed initial trainings in the values of the wetlands and mangroves as well as their roles as executive members of the committee. They will continue to receive skills development in order to increase their functionality. This brings the total GAWCCCs to 25 that have been established across the three GAW districts.

Monitoring visits to GAWCCCs

Nineteen monitoring visits were done during the quarter with the objective to assess the performance of the community conservation committees, to understand some of their challenges, and to support their development. Most GAWCCCs are becoming functional while some are having challenges. Two examples of the latter are Sanzule and Old Bakanta where committee members have become employees of ENI, the gas processing company, and thus now limited in their availability for community mobilization. In addition, ENI is dumping waste from its site into a portion of the Sanzule wetland while they look on helplessly, giving the members a sense of irrelevance and failure.

These GAWCCCs need frequent visits and support at this time. As the oil and gas companies and supporting infrastructure continue to develop within and adjacent to the GAW problems are likely to continue growing. Helping communities to have a clear and respected voice about decisions that impact community lands and resources is especially important.

Training of Community Conservation Committees

Twelve GAWCCCs comprised of 172 members (including 64 women) received several trainings during the quarter.

| Topic | No. of communities | Participants |
|-------------------------------------|---------------------------|-----------------------|
| Group formation | 2 | 63 members (27 women) |
| Building a stronger volunteer group | 6 | 57 members (9 women) |
| Wetland monitoring and restoration | 4 | 52 members (28 women) |

Hen Mpoano will continue with the monitoring visits and provide tailored support and training where necessary for the GAWCCCs.

Livelihood opportunities in the GAW area

Following the classroom training in the four modules of CSA (CSA best practices, composting, integrated pest management and post-harvest management), practical demonstration trainings have begun. This is a collaborative exercise between the CSLP and Hen Mpoano staff targeting an initial five communities in the GAW.

In a bid to stem the shortage of cassava, which is a major staple food within the six coastal districts of the Western region, Hen Mpoano introduced planting materials of three improved varieties of cassava to six GAW communities for 116 farmers ((76 males and 40 females). These varieties are early maturing (6 to 9 months) and are therefore expected to be available for harvest from about three months from now. Hen Mpoano has therefore started to establish linkages with potential buyers who are mainly local food sellers to prepare them to buy so as to avoid glut and disappointment for the farmers. Some food sellers have expressed interest but would want to see and test samples to find out how useful the varieties are for their businesses prior to purchase.

VSLAs in GAW communities

The two VSLAs facilitated by Hen Mpoano in the GAW area, namely Alloekpoke and Ankobra, were monitored during the quarter to provide the necessary support and coaching to ensure the groups' success. A third VSLA is emerging in Alloekpoke and the group is in the early formative period.

Restoration of degraded areas within GAW area

Two GAWCCCs have facilitated the establishment of nurseries to produce seedlings for the restoration of degraded mangrove areas. These communities have received training in nursery establishment skills and basic management and operation of the nurseries. Over 10,000 mangrove and *Sena siamia* seedlings are being nurtured in the two nurseries.

To provide additional support and incentive for their activities, 2,000 mangrove seedlings were transferred from the SFMP mangrove nursery site in Ankobra to Anyanzinli for re-planting while they continue to nurture their own seedlings to cover the remaining degraded areas.

Quarterly review meetings with GAW DCCs

As part of the efforts aimed at sustainability of the Greater Amanzule Wetlands initiatives, two GAW District Conservation Committees (GAWDCC) were formed in Jomoro and Ellebelle Districts to oversee the activities of the Greater Amanzule Wetlands Community Conservation Committee (GAWCCC), and to serve as a link between the Assembly and the GAWCCC. As part of their by-laws, these committees agreed to meet quarterly to review accomplishments, obtain feedback from communities and make informed decisions moving forward.

Two meetings of these committees took place during the quarter and included a number of new faces due to a new assembly staff joining and transfers of other staff that happened as a result of the change in Ghana government administration late last calendar year. The meetings provided opportunities to update new members on the objectives of the district committees, values and importance of the wetlands, their functions as stated in their terms of reference, and other updates.

Participatory mapping of wetland resources

Three community wetland resource maps were completed during the quarter for Bonyere, Azulenloanu and Alabokazo. In order for a more holistic assessment of the wetland resources around the Domunli lagoon, the wetland of the three communities namely Egbazo, Old Kabenlasuazo and Bonyere were merged into one wetland map complex. The resource maps are aimed at enabling the identification of the associated resources in the communities, their sizes and the extent of degradation (See Image 1 below). They are done with community members creating the opportunity for the GPS unit and a broader understanding of each communities' wetland resource by its members.

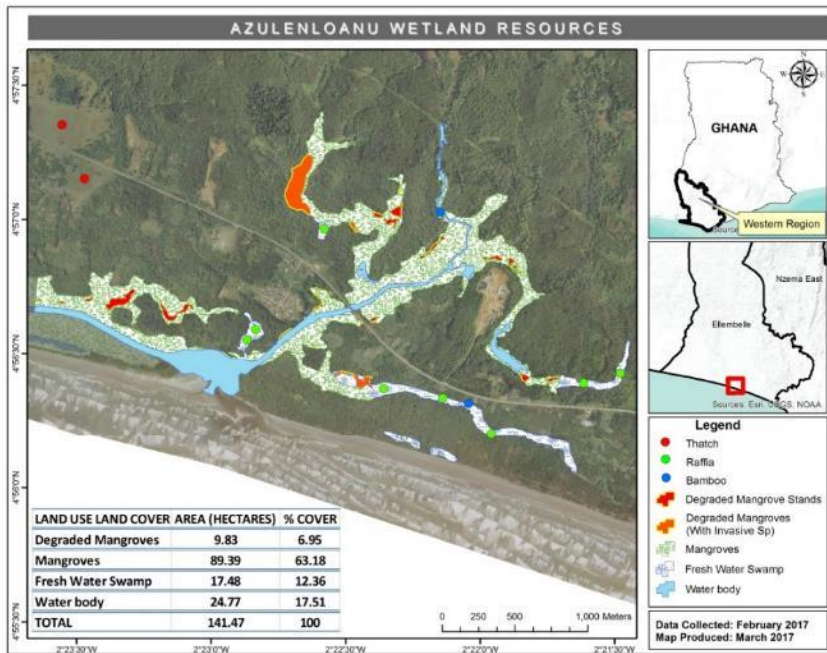


Image 1. Azulenloanu wetland resources map.

Development of a GAW “Management Plan”

In collaboration with the Wildlife Division of the Forestry Commission of Ghana, the GAW communities have drafted a plan to guide them in its management. This is referred to as management actions as a shift away from the more classical management plans concept as described in the box below.

Greater Amanzule Wetlands – A Plan of Management Actions

- They are community level nested “Management Actions” that are more or less independent from community to community;
- The “Management Actions” were developed through a facilitation guided by the Wildlife Division and Hen Mpoano with the community;
- The “Management Actions” are decided upon based on the knowledge of the people, of the status of the resources today, how they used to be, how the community wants to see it and use it in the future; and,
- The “Management Actions” are iterative and are likely to lead from one action to another depending on outcomes and interests.

This strategic approach was adopted in order to provide community members with the spirit of ownership and to spur them to implement these plans. It also needed to be simple in structure and content for the community members to read, interpret and defend. Though the community-level management actions are now establish, the nested management plan for the overall GAW complex is in the final stages of drafting.

Though the document is in draft, GAWCCCs have started implementation of their activities in most places. Some of these include:

- Monitoring of the resources and checking the presence of some fauna and flora they know exist there as well as checking for illegal activities within the resource;
- Establishment of nurseries to produce mangrove seedlings for re-planting;
- Establishment of *Sena siamia* seedlings to establish woodlots as alternative fuelwood sources to mangrove;
- Re-planting of degraded sites by some communities who are privileged to have seedlings; and
- Skills development through trainings to enhance the performance of community members as executives.

When the draft is complete, GAWCCCs will be given their own set of actions to be taken and supported to develop timelines to implement others with expertise from Hen Mpoano, the CSLP, the Wildlife Division and other partners.

Presentation of materials to community conservation committees

Following the development of the nested GAW management actions with the support of the Wildlife Division of the Forestry Commission, some GAWCCCs have started their activities. These include monitoring of the resources to prevent unwanted activities, participatory mapping of their resources, nursery establishment and re-planting in degraded areas. The provision of a few quantities of knee-level boots and cutlasses to each of the GAWCCCs was one step taken by Hen Mpoano to address the challenge of a lack of equipment.

4. IMPLEMENTATION CHALLENGES

The promotion of Climate Smart Agriculture (CSA) within the Western Region Coastal Districts landscape has a huge potential of success but not without some challenges. CSA impacts will require some time to be seen in the field (i.e. the soil quality and nutrient status that produces the desired yield). At the same time, the poor farmer who will be the major beneficiary of the benefits of climate change practices is often cash-strapped and more attracted by practices that yield the quick maximum produce that translates into cash quickly. Therefore, many farmers are caught between adopting a sustainable practice or a quick cash producing practice to meet immediate household needs.

While many farmers are quick to respond positively to CSA to produce food, the unknowns as far as costs and timelines before the benefits accrue results in some hesitation in widespread adoption. This posture is reflected in a statement by a farmer that said that he will produce under CSA conditions for his household use and produce the regular way for the market. It is, however, also felt that giving free inputs and services to farmers may not necessarily encourage wholesale adoption of the CSA practice over the long term.

Beekeeping as a livelihood option introduced by CSLP is growing within the CSLP operational area. The logic for the introduction was that, in order for the hive to be safe and for the bees to function and produce honey, the area must remain forested with reduced hazards that affect the bees. In so doing, beekeepers will be promoting environmental conservation and possibly carbon sequestration. However, the provision of free inputs that were adopted in the early stages as an incentive to attract people into beekeeping has made it quite capital intensive for the CSLP. The final group of 149 prospective beekeepers to receive inputs from CSLP was completed during the quarter.

Another group of 53 prospective beekeepers completed the initial training modules during the quarter. That number had dropped substantially from a higher number after people learned that they would not receive free inputs. This also indicates the possibility that even with the new trainees, we are likely to see a small number who will ultimately become beekeepers. Thus, finding the right balance between training and inputs while ensuring longer term sustainability remains a challenge for some key project interventions.

5. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

5.1 GENDER EQUALITY AND FEMALE EMPOWERMENT

The project is excited to see that numbers of women participating in its supported activities is continuing to increase, even in areas that are traditionally considered as male activities within the rural Ghana culture such as beekeeping and charcoal production. For instance, it is gratifying to know that the charcoal producers association that is in the process of being formalized in Krobo in the Shama District has 12 females out of 20 members. VSLA membership also continues to have memberships that are more than 60 percent women. It is however recognized that some of the new policies such as the decision to stop providing start up for prospective beekeepers may limit women's participation. This may require some kind of affirmative consideration to encourage their involvement.

CSLP is still planning to conduct a gender assessment within its jurisdiction. Three individuals have been identified and one will be selected in the next quarter to undertake the exercise over the coming months.

5.2 SUSTAINABILITY MECHANISMS

The 25 Greater Amanzule Wetland Community Conservation Committees (GAWCCCs) and two District Conservation Committees (GAWDCCs) are now established. In the effort to ensure sustainability beyond CSLP, Hen Mpoano is using its small grant funds in capacity building efforts for the GAWCCC members. The trainings provided can collectively be called "Strengthening Governance". The members are developing skills for promoting inclusion of everyone in the management process, building stronger volunteer groups that are all needed to ensure that resources are monitored, and that degraded areas are re-planted and restored for the benefit of the community at large. Hen Mpoano, as the lead NGO facilitating the process, is in itself a sustainability mechanism as they will remain on the landscape well beyond the CSLP and will continue to support the GAWCCCs.

5.3 GLOBAL CLIMATE CHANGE

The initial three years of the CSLP's program were the result of direct support of GCC monies. Indicators tracked and activities undertaken had climate change as a focal point. Beginning in FY 2017, and with the projects 3-year extension, the funding source changed to the Feed the Future initiative. The source change has resulted in a re-emphasis on food security and approaching farming as a small business in the area of influence. New economic growth indicators were added (see Annex A) but the global climate change indicators are still tracked and are an integral part of the CSLPs 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, 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

Under the small grant that the CSLP provided to Hen Mpoano, two GAW District Conservation Committees have been formed. The district committee has membership of the District Planning officer, the Director of Agriculture, Business Advisory Centre District Officer, District Environmental Health Officer, Representative of the District Assembly Sub-Committee responsible for Wetlands

Management and Assembly Member(s) responsible for the GAW communities. This membership was recommended by the District Coordinating Directors as a means of ensuring that all critical officers of the district assembly are involved and committed to enhance the work in the GAW. As officers responsible for the various portfolios, they are expected to influence the community level decisions with the district (and even national) policy.

5.5 LOCAL CAPACITY DEVELOPMENT

When the CSLP started to introduce beekeeping within the six coastal districts of the Western Region in December 2014, there were no sources of services providers within the landscape. This meant that the necessary inputs including beehives, bee suits and smokers, hand gloves and beehive knives were all to be brought from outside the Western Region. One of the first things done was to identify (within Ghana), someone to train local artisans to construct beehives. Six people subsequently followed the training and they have become the source of supply for over 200 hives that CSLP has procured.

Two farmers who also double as carpenters were trained. One out of the two who are farmers has also constructed about 10% of the hives procured so far. He has made about 10 beehives for farmers who need extra hives apart from the ones provided by CSLP. The other beehive artisans have subsequently constructed dozens of hives for other clients, both individuals and other donors.

During this quarter, honey harvesting training was conducted for 95 beekeepers as well as some Community Assistants. Training assessments at the end of the training indicated a high level of confidence (90%) among the participants who felt that they could harvest honey safely. One week after the training, the two Community Assistants (CAs) in Ayawora were invited by a beekeeper who was not able to attend the training to harvest his honey. The CAs successfully harvested eight liters of honey and also used the opportunity to train the farmer on proper harvesting techniques.



James Mushi is a carpenter at Adubrim who recently participated in beekeeping training. He realized there could be a demand for beehives and took the initiative to begin constructing Kenyan top-bar beehives for sale.

5.6 PUBLIC PRIVATE PARTNERSHIP (PPP) AND GLOBAL DEVELOPMENT ALLIANCE (GDA) IMPACTS

Eighty farmers were trained in Ankobra Beach Farms in the Nzema East District of which 10 were CSLP farmers. This training was a very useful one as it sought to promote the production of organic vegetables within the coastal districts in the Western Region. The training brought together people from GIZ, East-West Seeds International, TIKOLA Ghana, Department of Food and Agriculture agents and the site operators, Ankobra Beach Farms. The German agency for International Cooperation (GIZ) was present to discuss standards for labeling farmers' production of organic vegetables. The CSLP's strategy that encourages farmers to practice CSA/organic farming may also provide an opportunity for the farmers to be included in labeling efforts led by GIZ.

6. STAKEHOLDER PARTICIPATION AND INVOLVEMENT

The quarterly stakeholders meetings have always provided very useful recommendations since its inception as a part of the project. During the last quarterly meeting, the CSLP expressed its frustration concerning its attempts at building local government institutions' capacity in Quantum GIS skills. The recommendation by the stakeholders to hold a meeting of the district officials to discuss and seek a

common level of understanding for solutions led to the meeting of planners and coordinating directors and involved some of the regional stakeholders themselves. The outcome helped the CSLP to reach a consensus and to achieve buy-in from the districts on how to proceed, who would be responsible within each district and what the desired outcomes would be. As a result, meetings have been started with the district managers to discuss the unique issues and needs of each district. Once the round of assessments with all the MMDAs is completed next quarter, the CSLP will use the acquired information to design trainings that target specific individual specialists in each district and to help address the gaps identified.

7. MANAGEMENT AND ADMINISTRATIVE ISSUES

The project is in the process of procuring a new vehicle, a diesel engine, double-cabin pickup truck. Delivery of the vehicle is planned for the next quarter. Once acquired, a disposition plan will be provided to USAID/Ghana for one of its four aging vehicles. Other items in the disposition plan include two very antiquated photocopy machines and 10 motorcycles (acquired from previous USAID-funded projects) that are new but not used. In other procurement, the CSLP will put out bid requests for at least one new printer/photocopier/ scanner to replace its one photocopier that is of little use presently.

During the quarter, application requests were made through the NGO and USAID/Ghana project networks for two positions. One is for a full time Communications Specialist (this function is now being handled by the project's M&E Specialist) and the other is a new position, the Program Support Officer, who will help to address administrative issues and support in the field and also to help improve data collection and recording for the project's M&E system. To date no qualified candidates have been identified for the Communications Specialist. Finalists have been identified for the Program Support Officer and the CSLP expects to make the choice from among three qualified candidates and hire the new person early in the next quarter.

8. LESSONS LEARNED

The complexity of creating sustainable interventions remains a challenge and the CSLP is learning lessons as the project progresses. In the realm of beekeeping, tree planting and the CSA, there has been initial strong interest in all activities and the CSLP often provided the inputs for all three interventions as these ideas were promoted throughout the region. As the project has matured and the inputs and costs have increased, CSLP has sought to reduce or discontinue the provision of such inputs. The intention is that provision of such free inputs may often provide little incentive for adoptees to maintain the equipment and invest in their activities over the long term and after the project has ended. CSLP is learning though, that this initial provision of inputs has created an expectation amongst communities and has now led to a reduction in interest for adoption of such practices.

The team continues to support trainings and capacity building in these areas and advocate for farmers to leverage resources through the VSLA groups as a means of cost sharing or purchasing necessary inputs. In addition, provision of seedlings by the Ghana Cocoa Board, for example, is complementing CSLP efforts at increasing tree cover on some farmscapes which should ultimately lead to increased tree cover in the area. Nonetheless, the project team is learning of the challenges posed by shifting some of these strategies during the course of the project but also the importance of continuously learning and improving as we move along.

9. PLANNED ACTIVITIES FOR NEXT QUARTER INCLUDING UPCOMING EVENTS

A number of activities being planned can be highlighted at this writing.

From a technical perspective some of the activities that will take place in the third quarter include:

- Continued support for farmers as they to prepare to take advantage of the upcoming rains, including establishing additional CSA demonstration plots on farms and in conjunction with climate change clubs supported by the project in the region's schools.
- Support awareness-raising activities for World Environment Day on June 5th. With its theme for 2017, Connecting People to Nature, and the global focus on national parks, nature reserves and other protected areas, the CSLP will help local communities and government officials highlight such important protected areas in the six coastal districts of the Western Region.
- Provide delivery of the two mobile metal charcoal kilns for Krobo and Yabiw charcoal producers. These will be accompanied by project efforts to:
 - Organize producers into producer groups to manage the kilns collectively for their benefit;
 - Provide training on the use and maintenance of the kilns; and,
 - Provide trainings to help them function effectively as producer groups in areas such record keeping and marketing.
- In collaboration with the SFMP, conduct a formative survey of livelihoods and VSLAs. A sample size of 100 members of CSLP-supported VSLAs was determined to be sufficient to acquire statistically significant data across the project's 27 associations with their 650+ members on the benefits being derived within the household as a result of participation in VSLAs.
- Continue to assess spatial planning activities and training needs (especially those linked to the next round of medium term development plan formulation and implementation), with district assembly coordination directors and planners. Once complete across the six districts, the CSLP will provide district-specific targeted trainings to help address some of the issues identified.
- Train the WRCF and their partners in climate change awareness and how to work with communities to help mitigate the threats accompanying climate change.
- Maintain the quarterly update discussions with traditional authorities, district assembly leaders and regional stakeholders. The latter group will meet following the CSLP's annual Media Day in late June.

On the administrative front, the project hopes to complete its search for a full-time Communications Specialist and bring that person on board before the annual work planning exercises take place in the last quarter of the year.

The new position of Program Support Officer will be filled early in the next quarter from the list of finalists. All staff will work to bring the new team member up to speed on project activities and to become effective in carrying out his/her activities.

It is expected that early in the quarter the procurement process for a new vehicle, a double cabin diesel pickup will be completed. This will help to replace one of the aging vehicles that the project operates. Currently one of the four vehicles managed by the project is out for maintenance every week severely curtailing activities in the field. The new vehicle will provide more space for transferring of

field equipment over the project area while still providing adequate moving of CSLP staff between sites.

The Administration and Finance Specialist will participate in a program management training in Washington, DC in mid June. She will also work with USFS IP staff to begin preparations for the biennial financial and administrative review of the project's books that helps to assure compliance the US government regulations and auditing standards. Administrative operations and policies are also routinely assessed as part of this process.

10. HOW IMPLEMENTING PARTNER HAS ADDRESSED A/COR COMMENTS FROM THE LAST QUARTERLY OR SEMI-ANNUAL REPORT

No comments were received.

II. ANNEXES

Annex A. Progress Summary

Table 1. PMP Indicator Progress - USAID Standard Indicators and Project Custom Indicators

| Project Goal: To promote low emissions development in Ghana's Western Region by strengthening community-based natural resource management and monitoring. Purpose: Poverty reduction and increased resiliency in communities in the six coastal districts in the Western Region through improved natural resource management, livelihood diversification, value chain development, and ecosystem restoration | | | | | | | | | | | |
|---|-----------------------------|---------------|-------|----------------------------------|--------------------------|----------------------------|-----|-----|-----|--|---------------------------|
| Indicator | Data Source | Baseline data | | FY 2017 | | Quarterly Status – FY 2017 | | | | Annual Performance Achieved to Date (in %) | Comments |
| | | Year | Value | Annual Cumulative Planned Target | Annual Cumulative Actual | Q1 | Q2 | Q3 | Q4 | | |
| Output 1: Increased incomes from livelihood diversification | | | | | | | | | | | |
| EG. 3.2-1 <u>Number of individuals</u> who have received USG-supported short-term agricultural sector productivity or food security training | Training reports | 2016 | 0 | 861 | 482 | 191 | 291 | N/A | N/A | 58 % | Indicator on target |
| EG. 3.2-4 <u>Number of for profit private enterprises, producers organizations, waters users associations, women's groups, trade and business associations (CBOs)</u> receiving UGS food security-related organizational development assistance | Project records | 2016 | 0 | 63 | 49 | N/A | 49 | N/A | N/A | 78 % | Indicator on target |
| EG. 3.2-17 <u>Number of farmers and others</u> who have applied improved technologies or management practices | Field data/ project records | 2016 | 0 | 344 | 123 | N/A | 123 | N/A | N/A | 36 % | Indicator on target |
| EG. 3.2-18 <u>Number of hectares of land under improved technologies or management practices</u> | GPS/ GIS Field Data | 2016 | 0 | 80 | 14 | -- | 14 | N/A | N/A | 18 % | Mapping of sites underway |

| | | | | | | | | | | | |
|---|---------------------------------|------|---|-----------|-----------|-------|-----------|-----|-----|------|--|
| EG. 3.2-20 <u>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</u> | Field data/ reports | 2016 | 0 | 50 | 27 | -- | 27 | N/A | N/A | 54 % | Indicator on target |
| 4.8.1-6 <u>Number of people with increased economic benefits derived from sustainable NRM and conservation as a result of USG assistance</u> | Field data | 2014 | 0 | 1,200 | 1,113 | -- | 1,113 | N/A | N/A | 93 % | Indicator on target |
| Output 2: Improved environment and natural resource management | | | | | | | | | | | |
| 4.8.1-26 <u>Number of hectares of biological significance and/or natural resources under improved NRM as a result of USG assistance</u> | GPS/ GIS maps, field data | 2014 | 0 | 1,415 | 539 | 450 | 89 | N/A | N/A | 38 % | Mapping of mangrove & CSA sites underway |
| 4.8-7 <u>Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO₂e, reduced or sequestered, or avoided as a result of USG assistance</u> | Field data | 2014 | 0 | 7,000,000 | 4,066,852 | -- | 4,066,852 | N/A | N/A | 58 % | Indicator on target |
| 4.8.2-14 <u>Number of institutions with improved capacity to address climate change issues as a result of USG assistance</u> | Training reports | 2014 | 0 | 75 | 31 | -- | 31 | -- | N/A | 41 % | Indicator on target |
| 4.8.1-29 <u>Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance</u> | Training reports | 2014 | 0 | 8,500 | 1,967 | 1,967 | 2,860 | N/A | N/A | 57 % | Indicator on target |
| 4.8.2-29 <u>Number of person hours of training completed in climate change as a result of USG assistance</u> | Training event reports | 2014 | 0 | 5,000 | 2,094 | 688 | 1,406 | N/A | N/A | 42 % | Indicator on target |

| Custom Indicators | | | | | | | | | | | |
|--|------------------------|------|---|--------|-------|-----|-----|-----|-----|------|---|
| C-1 <u>Number of person hours of training completed in VSL modules as a result of USG assistance</u> | Training event reports | 2014 | 0 | 5,000 | 1,089 | 834 | 255 | N/A | N/A | 22 % | Indicator on target |
| C-2 <u>Number of community sensitization sessions on climate change issues and/or NRM/biodiversity conservation as a result of USG assistance</u> | Field data | 2014 | 0 | 50 | 39 | 16 | 23 | N/A | N/A | 78 % | Indicator on target |
| C-3 <u>Number of persons receiving start-up items for improved NRM/ biodiversity conservation as a result of USG assistance</u> | Field data | 2014 | 0 | 600 | 264 | -- | 264 | N/A | N/A | 44 % | Indicator on target |
| C-4 <u>Number of project-planted seedlings surviving in towns/communities as a result of USG assistance</u> | Field data | 2014 | 0 | 65,000 | -- | -- | N/A | N/A | N/A | N/A | Annual reporting; trees surviving being counted |

ANNEX B. STORIES FROM THE FIELD

CSLP EMPOWERS FARMERS TO HARVEST OVER 10 - YEAR OLD COLONIZED BEEHIVE

The USAID funded Coastal Sustainable Landscapes Project (CSLP) has supported farmers to successfully harvest a colonized beehive after 14 years of being abandoned in a half hectare secondary forest. The hive was established by a farmer, Kwesi Nyamekye, with support from a Dutchman, Allan Van Abros in 1998 at Krobo in the Shama District of Ghana's Western Region. Due to inadequate equipment and know-how, it was left in the forest after harvesting in 2003 by Abros.

According to the farmers, the agreement with Abros was for the farmers to provide land space for the hives and be paid some money after harvesting. This informal arrangement received community support and 30 hives were established on farmlands (mainly woodlots) of fifteen farmers. Unfortunately, the dreams were dashed as Allan passed away in 2003 and that led to the collapse of the enterprise. Due to the fact that the apiaries were no longer managed, most of them were lost to bushfires and termites. Later, the Non-Formal Education Unit of the District Assembly provided basic beekeeping training but that did not help the farmers to fully manage their apiaries because they did not have the necessary protective clothing and equipment. Eventually, all the hives were destroyed by termites and bush fires except one.



CSLP Specialist, Kwame Appiah Owusu, demonstrates simple packaging style to beekeepers in Krobo

The hive, with an active honeybee colony, was not been harvested, again because none of the farmers had the appropriate tools and protective clothing to undertake the rather risky activity. In late 2014, the CSLP identified the apiary as an untapped potential for a win-win sustainable livelihood activity in a landscape that needed to be developed. Between 2015 and March 2017, the CSLP built the capacity of nine interested farmers in the community as active beekeepers and supported them in establishing their own apiaries. With hands-on trainings and coaching, the project provided start-up materials such as beehives, beehive stand, bee wax (attractant) and protective clothing (bee suit with attached veil, bee gloves). This effort also resulted in the successful harvest of honey from the 14-year old Kenyan top-bar hive. The harvested and processed honey is currently selling at US\$10 per liter in Shama District. This has not only generated excitement among others in the community but also enhanced motivation among farmers to reconsider beekeeping as a viable, additional livelihood. In addition, such activities serve as an important climate change mitigation activity as it helps to avoid deforestation and/or encourages sustainable management of woodlots.

The US Forest Service managed CSLP has supported over 230 farmers in the six coastal districts of Ghana's Western Region in the setting up of apiaries and continue to promote the activity in its geographic areas of operation.

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