

SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

Progress Report



OCTOBER 1 - DECEMBER 31, 2016

(Revised 10-31-2018)







Hen Mpoano







Friends of the Nation





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Cover photo: Fisher folk Executives from Ghana's West Coast holding a resolution they signed (palm-printed) at a World Fisheries Day event. (CREDIT: Socrates Apetorgbor)

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ACRONYMS

ССМ	Centre for Coastal Management
CLaT	Child Labor and Trafficking
CEWEFIA	Central and Western Region Fishmongers Improvement Association
CRC	Coastal Resources Center
CSLP	Coastal Sustainable Landscape Project
CSO	Civil Society Organization
DAA	Development Action Association
DQF	Daasgift Quality Foundation
DFAS	Department of Fisheries and Aquatic Sciences
F_2F	Fisherman to Fisherman (Dialogues)
FC	Fisheries Commission
FoN	Friends of Nation
FSSD	Fisheries Scientific and Survey Division of the Fisheries Commission
FWV	Fisheries Watch Volunteers
HM	Hen Mpoano
GITA	Ghana Industrial Trawlers Association
GIFA	Ghana Inshore Fishermen's Association
GIS	Geographic Information System
GNCFC	Ghana National Canoe Fishermen's Council
IR	Intermediate Results
IUU	Illegal, Unreported, and Unregulated (Fishing)
LEK	Local Ecological Knowledge
MOFAD	Ministry of Fisheries and Aquaculture Development
M&E	Monitoring and Evaluation
NAFPTA	National Fish Processors and Traders Association
NMFMP	National Marine Fisheries Management Plan
NGO	Non-Governmental Organization
PAH	Polycyclic Aromatic Hydrocarbons
SFMP	Sustainable Fisheries Management Project
MSMEs	Micro, Small and Medium Scale Enterprises
SMEs	Small and Medium Enterprises
SNV	Netherlands Development Organisation
SSG	SSG Advisors
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	United States Agency for International Development
VSLA	Village Savings and Loans Association

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1. PROGRAM OVERVIEW AND SUMMARY

Program Name:	Sustainable Fisheries Management Project
Activity Start and End Date:	October 22, 2014 to October 31, 2019
Name of Prime	Coastal Resources Center
Implementing Partner:	University of Rhode Island
Agreement Number:	AID-641-A-15-00001
	Hen Mpoano
	Friends of the Nation
	SNV Netherlands
Name of Sub-awardees:	SSG Advisors
Name of Sub-awardees.	Spatial Solutions
	Central and Western Fishmongers Association (CEWEFIA)
	Development Action Association (DAA)
	Daasgift Quality Foundation
Major Counterpart	Ministry of Fisheries and Aquaculture Development
Organizations	Fisheries Commission
Casaranhia Cayaraga	Ghana:
Geographic Coverage	Central Region, Western Region,
(cities and or countries)	Greater Accra Region, Volta Region
Reporting Period:	October 1 – December 31, 2016

Table 1. Sustainable Fisheries Management Project Summary

1.1 **Program Description / Introduction**

The objective of the USAID/Ghana Sustainable Fisheries Management Project (SFMP), a five-year project (October 2014-October 2019), is to rebuild marine fisheries stocks and catches through adoption of responsible fishing practices. The project contributes to the Government of Ghana's fisheries development objectives and the US Government's Feed the Future Initiative. Working closely with the Ministry of Fisheries and Aquaculture Development (MOFAD) and the Fisheries Commission (FC), USAID/Ghana SFMP aims to end overfishing of key stocks important to local food security through achievement of the following intermediate results:

- Improved legal enabling conditions for co-management, use rights and effort-reduction strategies
- Strengthened information systems and science-informed decision-making
- Increased constituencies that provide the political and public support needed to rebuild fish stocks
- Implementation of applied management initiatives for several targeted fisheries ecosystems

More than 100,000 men and women involved in the local fishing industry are expected to benefit from this project and tens of thousands of metric tons of additional high quality low

cost food supply from fisheries can be regained via improved and sustainable management of the marine fish stocks in Ghana's waters.

The Coastal Resources Center (CRC) at the University of Rhode Island's Graduate School of Oceanography is the lead implementer of the SFMP and works in consortium with other international and local partners, including SNV Netherlands Development Organisation, SSG-Advisors, Hen Mpoano, Friends of the Nation, and the Central & Western Fishmongers Improvement Association in Ghana (CEWEFIA), Daasgift Quality Foundation (DQF), Development Action Association (DAA), and Spatial Solutions. The project complements and coordinates closely with two other projects in the USAID/Ghana Coastal Program Portfolio: The Coastal Sustainable Landscapes Project (CSLP) and the University of Cape Coast/Department of Fisheries and Aquatic Science (UCC/DFAS) Institutional Strengthening Project.

The SFMP builds on the best practices and lessons learned from the USAID-Ghana's Integrated Coastal and Fisheries Governance (ICFG) Program implemented from 2009-2014,. In this follow-up, SFMP is focusing efforts on small pelagic fisheries along the entire coastline as well as the demersal fisheries and essential mangrove fish habitat in the Western Region. Additionally, improvements in the value chain of smoked fish, important to tens of thousands of women fish processors is supported. The project is also undertaking actions towards reducing child labor and trafficking in the Central Region of Ghana. Key government clients of this project include the Ministry of Fisheries and Aquaculture Development, the Fisheries Commission, the Regional Coordinating Council's Town and Country Planning Departments and associated districts in the Central and Western Regions; and the Marine Police. Additional support is provided to a number of local NGOs and women's associations that are active in fisheries management issues and serving either as core or supporting partners in the implementation of this project.

This progress report hereby details activities, results, and lessons learned during the first quarter of Project Year 3 (FY17). It also explains how partners contributed to the achievement of set targets and how these achievements will be sustained to meet the overarching goal of SFMP.

1.2 Summary of Results to Date

Highlights of activities and achievements during this reporting period are outlined below.

In support of improved enabling conditions for fisheries management: Development of a broad-reaching co-management policy, for sustainable fisheries advanced significantly during the quarter. Small and large scale defined fishery management units were identified along with required decentralized organizational structures for each of these levels. The SFMP also continued to engage with the Ministry of Fisheries and Aquaculture Development on a comprehensive reform of the Fisheries Act, as a designated participant in a multi-stakeholder expert group, expected to have its proposal ready in 2018. One key aspect of current policy is the issue of fuel and other subsidies to the industry, mainly via pre-mix fuel, but also including outboard motors. These in turn contribute to overfishing, with severe impacts in some specific fisheries. A recently completed study analyzed the impacts of 18 options to address the issue and recommended six of the most promising that will make fishers better off in the medium and long term.

A policy document was developed with the assistance of the Ministry of Gender, Child and Social Protection which provides guidance to the Fisheries Commission on Anti-Child Labor and Trafficking, outlining strategies such as withdrawal and rescue, rehabilitation, integration, and prevention. The implementation of this policy will be a significant step forward reducing child labor and trafficking in the sector.

Progress continued in strengthening the Marine Police capabilities and prosecutorial chain in order to strengthen deterrence against illegal fishing. In addition, the newly introduced Fisheries Watch Volunteers pilot program was initiated in two sites in Greater Accra will also contribute to improved enforcement capabilities. A total of fifty volunteers have been trained with the formal inauguration of the program by the Ministry of Fisheries expected in the second quarter.

Supporting strengthened information systems and science based decision making: An analysis of small pelagic fish stocks by the SFMP-supported Science and Technical Working Group finds them at their lowest levels in the past 24 years, at only one-tenth of their sustainable level. This information highlights the degree of need for immediate actions to reverse this alarming trend and has been brought to the attention of decision makers. Several additional milestones for improving information systems to confront this crisis included a survey of fisher folk attitudes toward acceptance of innovations that would contribute to improved financial services and provision of micro-insurance and savings schemes as one means help offset the impacts of short-term impacts of management measures.

A first of its kind study of the genetic identity of fisheries stocks has reached a milestone with the collection of fish samples from 12 countries. These stocks are important for food security in Ghana and all over the West Africa region. Currently the Fishery Committee for the Eastern Central Atlantic considers these stocks from Ghana as one stock to be managed as one unit. Laboratory analysis to test this assumption is ongoing.

Building Social Capital and Political Will: Fisher folk leaders across coastal Ghana have signed a resolution to register support for implementation of the Marine Fisheries Management Plan, and to combat Illegal, Unregulated and Unregistered (IUU) fishing in Ghana's waters. This is an initial step towards building massive support at the grassroots level. A series of stakeholder forums referred to as – Fisherman to Fisherman (F₂F) Dialogues have been planned for the rest of the year and are intended to build consensus for operationalizing implementation of the National Fisheries Management Plan and to combat IUU fishing in the quest to rebuild stocks. Conclusions from the dialogues will be presented to the Minister of Fisheries for negotiations and adoption.

Supporting implementation of applied management initiatives: A month's closure for industrial trawling was observed in November, 2016. Lessons learned from this initial closure effort will be applied to the upcoming February-March 2017 second planned closure.

Practical actions continued in the Ankobra estuary in support of improving environmental conditions for localized fish stocks while a community-led fisheries management plan for the estuary is being prepared. The Village Savings and Loans scheme established earlier on, has yielded enough funds and now serving as loans for members and helping increase purchasing power. In the Pra, efforts are focusing on the opportunities of co-management of local fish stocks, including identifying local stocks, management area boundaries and local level organization requirements.

The project supported partners to upscale the promotion and use of the Ahotor oven, which generates lower levels of PAH and is more energy efficient, to increase its acceptability among prospective beneficiaries – women-led small scale processing businesses.

During the quarter, 251 MSMEs were identified, assessed and trained in entrepreneurial skills and management techniques. Out of the 251 MSMEs benefiting from USAID assistance, 80%

were female-owned. Women fish processors and traders who are typically disadvantaged in obtaining business development opportunities are particularly targeted by SFMP and given the opportunity to build their skills to enable them to expand their businesses in the fisheries sector. There were 217 beneficiaries that received micro-loans this quarter totaling approximately US \$ 20,000 in total value. Five Village Savings and Loans Associations established in the Ankobra Estuary and totaling approximately 100 members, a majority of whom are women, to date have saved a total of US\$ 3,250 among all the groups.

Promoting strategic private sector partnerships: The roll out of a micro-insurance termplus life insurance partnership, called the "Fisher Future Plan", was started through the signing of a MOU by the USAID SFMP and the private sector partners – Millennium and UT Life Insurance, Vodafone and BIMA. A work-planning session was also held with fisheries stakeholders to map out first year of start-up, piloting and promotion of the micro-insurance product tailored to fisher folk needs. This product, for those that purchase it, will provide a social safety net for those participants and enable them to also avail of mobile money from the platform for making payments and receiving benefits or payouts.

Supporting improved capacity development: The National Fish Processors and Traders Association (NAFPTA) and the Ghana Industrial Trawlers Association (GITA) were added to the group of civil society organizations (CSOs) benefiting from SFMP organizational capacity assessment and strengthening support. The Project conducted baseline organizational capacity assessments (OCAs) and facilitated development of capacity strengthening Action Plans based on the assessment results. Stronger national level civil society membership-based stakeholder organizations that can directly and effectively represent important fisheries sector constituencies have high potential to catalyze and sustain transformational change for sustainable fisheries management.

Both men and women have responsibilities to ensuring sustainable fisheries management and/or biodiversity conservation. Individual capacities of stakeholders, including civil society organizations, processors and fisher associations were strengthened through training events conducted on fisheries management and other selected topics. Out of the total of 156 participants trained, 54 percent were men and 46 percent were women. This demonstrates relatively equitable opportunities for training are being provided for both men and women, an objective of the project's gender strategy.

Supporting gender equity and empowerment: A Gender strategy for the Fisheries Sector was approved by the Honorable Minister of Fisheries and Aquaculture Development, Sherry Ayittey, in December 2016. This decision formally acknowledges that women play important but often unrecognized roles in fishing as boat owners and trip financiers, fish processors and marketers. Implementation of the strategy by the Fisheries Commission will help to ensure women's full participation in decision making and opportunities for economic development I this sector.

Note: The table below has been revised to capture results according to each quarter. Some indicator data were revised to reflect indicator definition at the end of the year as part of internal review process. Also some of the results delayed and were reported in the next quarters as an update of the previous quarter result thereby creating inconsistencies in the way the previous quarter result as reported. The revision of this result table is as a result of project internal review and the adoptive management process. This revision did not change the annual figures reported.

Table 2 below summarizes the standard USAID indicators showing results completed in FY 16 vis-a-vis targets. Significant deviations between results and targets are explained in Annex A. Annex A shows both USAID standard and custom project indicators.

Standard Indicators	Baseline FY 2015	Annual Target	Year 3 (FY17) Results	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	Annual Performance Achieved to the End of Reporting Period (%)	On Target Y/N
Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance (EG 4.8.1-1)	0	10 hectares	0	0	N/A	N/A	N/A	0	
Number of agricultural and nutritional enabling environment policies completing the following processes/steps of development as a result of USG assistance in each case: (FTF 4.5.1(24)) 1. Analysis 2. Stakeholder consultation/public debate 3. Drafting or revision 4. Approval (legislative or regulatory) 5. Full and effective implementation	0	7 • Step 3-Ankobra (CBMP) • Step 3-Densu(CBMP) • CLaT strategy –Step 4 • Fish Act –Step 2 • NMFMP-Step 5 • Co-mgt. policy – Step 4 • Step 3 Pra (CBMP)	N/A	N/A	N/A	N/A	N/A	N/A	
Number of institutions with improved capacity to develop and implement managed access fisheries management plans	0	16 Ongoing, NAFTA replaces FA	0	0	N/A	N/A	N/A	0	
Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	0	704	130	130	N/A	N/A	N/A	18%	Ν
Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).	0	36	28	28	N/A	N/A	N/A	78%	Y
Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (EG 4.8.1-26)	0	619,473 hectares	0	0A	N/A	N/A	N/A	0	N
Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	0	4 (Ongoing)	4	4	N/A	N/A	N/A	100%	
Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Table 2. Summary of Results: Year 3 Quarter 1 (October 1 – December 31, 2016)

Standard Indicators	Baseline FY 2015	Annual Target	Year 3 (FY17) Results	Q1 FY17	Q2 FY17	Q3 FY17	Q4 FY17	Annual Performance Achieved to the End of Reporting Period (%)	On Target Y/N
Number farmers and others who have applied new technologies or management practices as a result of USG assistance (FtF 4.5.2)	0	100,000 (assumes national measure for small pelagics adopted)		N/A	N/A	N/A	N/A	N/A	
Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2)	0	896	251 M-20% F- 80%	251 M-20% F- 80%	N/A	N/A	N/A	28%	Y
Value of new private sector investments in select value chains (FTF 4.5.2-38)	0	Tracked, No target	\$ 0	\$ 0	N/A	N/A	N/A	\$ 0	Y
Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community- based organizations(CBOs) receiving USG assistance (RiA) (WOG) (FTF 4.5.2(11))	0	4 (1 new-NAFTA)	4	- 4	N/A	N/A	N/A	100%	Y
Number of members of producer organizations and community based organizations receiving USG assistance (S) (FTF 4.5.2(27))	0	TBD	228 M-43	228 M-43	N/A	N/A	N/A	100%	Y
Number of public-private partnerships formed as a result of Feed the Future assistance (S) (FTF 4.5.2(12)	0	1	0	0	N/A	N/A	N/A	0%	N
Number of people receiving USG supported training in natural resources management and/or biodiversity conservation, and climate change, disaggregated by gender (EG 4.8.1-27/ 4.8.2-6)	0	1492	156 M-54% F- 46%		N/A	N/A	N/A	10%	N
Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (4.8.1-29)	0	19,959	2,794 (14%)	2,794 (14%)	N/A	N/A	N/A	14%	N

¹This indicator is similar to the Feed the Future indicator: Number of rural households benefiting directly from USG interventions (FtF 4.5.2-13)

*Number of members of producer organizations and community based organizations receiving USG assistance (S) (FTF 4.5.2(27)) data for quarter 1 was revised to capture results after internal review was conducted at the end of the year.

* Number of direct project beneficiaries (number), the percentage of which are female (percent) (IDA Core Indicator) disaggregated by rural, urban (IR 2.1 indicator from Ghana CDCS) was taken off from the list of standard indicators

2. ACTIVITY IMPLEMENTATION PROGRESS

Progress Narrative & Implementation Status

IR 1: Strengthened Enabling Environment for Marine Resources Governance

This component employs a combination of legal and policy reform initiatives to be carried out at the national level with significant stakeholder engagement through a blend of bottomup and top-down approaches. The Ministry of Fisheries and Aquaculture Development and the Fisheries Commission are mandated to spearhead all fisheries policy arrangements. The SFMP is therefore working closely with the Ministry and the Fisheries Commission to facilitate effective marine resource governance by supporting the development of improved enabling conditions for sustainable fisheries management.

• 1.1 Addressing Key Policy Issues in the Marine Fisheries Sector

Fisheries Co-Management. Co-management, meaning the inclusion of fisher folk in decision making, is considered a best practice in fisheries and proven globally to improve sustainability of fisheries harvests. Ghana has many statements supporting co-management but does not as yet have a specific policy to guide implementation. Its specific application in Ghana therefore remains lagging. Development of a Co-Management Policy Framework advanced substantially during the quarter. The intent is to contribute to the rejuvenation of the fisheries sector with the active engagement of fisheries stakeholders in establishing harvesting rules within clearly defined fisheries management units. The draft framework includes designation of small scale fishery units and associated management committees for inland water bodies or large scale management units for marine species. The draft framework is still undergoing revisions including the details of organizational arrangements for co-management and an action plan. Once adopted, this framework will put in place a very important enabling policy for sustainable fishing. As co-management units are set up and operating, this is expected to significantly improve compliance with fishing rules and contribute in the long term to rebuilding fish stocks which is the project goal.

Legal Reform. Despite the passing of Ghana's Fisheries Act in 2002 and the Fisheries Regulations in 2010, activities of Ghanaian fishermen continued to infringe on local laws and international conventions leading to a warning (EU Yellow Card) in 2013, which put Ghana in the category of "a non-cooperative third party state in the global fight against Illegal fishing (IUU)". Consequently, sections of the Act were amended in 2014 to address the numerous infractions and violations. In order to consolidate these laws and address emerging issues in the fisheries sector, Cabinet approved the revision of the Fisheries Act and all subsidiary laws into a new Act with associated regulations. The Ministry initiated the revision process with the production of drafting instructions and constituted a multi stakeholder group of experts from 5 other related institutions including a technical advisor from SFMP to review the drafting instructions. The mandate of the expert group is to review and make suggestions where appropriate to the draft text before submission to the Attorney General's Department. SFMP has circulated the drafting instructions among project partners for study and comments and has also met with executives of the various fishing fleet to inform them to begin studying the fisheries laws again for input into the revision process. SFMP is particularly focusing on strengthened legal provisions for co-management. The new act is expected to be submitted to Parliament in 2018. Once adopted, the new legislation will pave the way for stronger enabling conditions for sustainable fishing.

Policy Analysis on potential alternatives to the fuel mix subsidy. The premix fuel subsidy costs the Government of Ghana US\$44 million annually. It is a 'capacity-enhancing' subsidy,

meaning it promotes increased fishing effort, overexploitation of fish stocks, lowers fishing productivity in the long run, and makes fishermen, boat owners and everyone in the fishery sub-sector poorer. The outboard engine subsidy is also a capacity-enhancing subsidy that is costing Ghana about US\$4.5 million/year. SFMP completed a study of the subsidies, including an analysis of 18 policy options in terms of their cost to the government, the socio-economic impact and the likely effects on fishing stocks. In brief, it is clear that fisheries actors would be better off in the long term without the subsidy. Funds spent toward these programs could be redirected to programs that promote fisheries conservation, research, monitoring and enforcement or other benefits for fishing communities that do not directly contribute to overfishing. Based on this analysis, the study recommends phasing out capacity enhancing subsidies in fisheries, and redirecting efforts and investment toward neutral or beneficial subsidies that will make fishermen and fisheries stakeholders better off in the medium to long term. If any of these recommendations are implemented, this would reduce the level of overfishing and would support the project goal of rebuilding fish stocks. The report will be presented to the new government administration for their consideration.

• 1.2 Strengthened Law Enforcement

Marine Police Competence-Based Integration and SoP development Planning Meeting.

The absence of a competence-based development curriculum or guide for the Marine Police Unit is a key limitation for effective enforcement, therefore SFMP initiated working sessions with the Marine Police heads for the development of such a guide. The set of core competencies was identified and integrated into a Standard Operating Procedure development process already initiated for the Marine Police with support from the United Nations Development Program (UNDP). Towards this, a Marine Police SoP drafting meeting with a mentor from UNDP assigned to the Marine Police Unit, was held. The meeting provided a platform to discuss and identify key areas for the integration of a competence-based capacity development process

Fisheries Watch Volunteers. The Fisheries Commission has undertaken several initiatives to address the depletion of Ghana's fish stock. Unfortunately, enforcement of harvesting rules has produced widespread confusion, anger, and in some instances, violent conflict. A longstanding history of weak enforcement and limited compliance with national fisheries regulations has elicited low expectations for real change by resource users. Lack of direct involvement of local stakeholders in policy formulation and enforcement has also contributed to the failure of fisheries management initiatives to achieve their desired result. The Fisheries Watch Volunteer program, which is made up of fisher folk from the coastal communities is designed to bridge this gap. The volunteer program is an outcome of a study tour to the Philippines in 2015 and a replication of the successful Philippine Bantay Dagat (Guardians of the Sea) program. The process of establishing the program continued with a number of training and outreach activities in the two designated pilot Districts - Accra Metropolitan Area and Ada East Districts. Twenty five volunteers each have been selected in the 2 districts including 6 women, 3 from each district. Two three-day training workshops were held in each district. The objective of the trainings was to empower the fisher folk volunteers to aid in the protection of critical fisheries resources off Ghana's coast and play roles, including educating their communities on Ghanaian fisheries laws and conservation and assisting the Fisheries Enforcement Unit in detecting and reporting illegal activity. The training was undertaken in collaboration with the Fisheries Enforcement Unit., Ghana National Canoe Fishermen Council. National Fish Processors & Traders Association and the Ghana Police Service.

The volunteers are expected to be inaugurated by the Honorable Minister of Fisheries in scheduled to be held in late February or early March. Meanwhile, some logistics for effective operation of the volunteers have been procured including uniforms, binoculars, and geo tagged GPS cameras for evidence collection. The Fisheries Watch Program will help create a sense of ownership among fisher folk which will in turn increase cooperation from coastal communities. The training will also equip them with the needed skills to effectively utilize the logistics purchased to aid in monitoring and reporting activities along the various landing beaches. The program is expected to be replicated in other parts of coastal Ghana with lessons drawn from the pilot phase.

• 1.3 Harmonizing Regional Fisheries Policies

SFMP continues to coordinate project activities with inter-governmental fisheries science and management bodies, mainly the Food and Agricultural Organization and the Fisheries Committee for the West Central Gulf of Guinea. This is to ensure synergy with member countries within the Gulf of Guinea relative to fisheries science and management activities. As part of this process the project is working to define biological management areas for the small pelagic stocks. These stocks are important for food security in Ghana and all over the West Africa region. Currently, the Fishery Committee for the Eastern Central Atlantic considers sardinella of Ghana as part of one stock extending from Liberia to Nigeria and is managed as one unit. This assumption will be tested through a DNA study underway that will clarify whether smaller management units are possible, and which would simplify regional management arrangements. SFMP completed the collection of fish samples of sardinella from 12 countries (Morocco to Angola) to analyze the genetic structure and diversity of the fish stocks. Samples will be analyzed next quarter using a genome sequencer at the University of Rhode Island with Ghana graduate students at URI, sponsored by SFMP. We expect to disseminate the results at a regional workshop in Q3 with the Fisheries Committee for the West Central Gulf of Guinea. This study is a first in West Africa and deemed very important in regional fisheries management, particularly for rebuilding fish stocks.



Figure 1. Data Collection of sardinella madaerensis samples

• 1.4 Informing the US Government on Key Fisheries Policy Issues in Ghana

SFMP hosts briefings and field site visits of US government and USAID officials to help educate them on key fisheries issues in Ghana so they can be better informed in discussions at high levels with Government of Ghana officials. This tends to be demand-driven at the request of the USAID Mission or Embassy. In this quarter SFMP hosted the US EPA Administrator who visited an improved fish smoking demonstration site in Elmina town in the Central region. Administrator Gina McCarthy was briefed on the research and extension program to introduce more fuel efficient smokers that reduce reliance on harvesting fuel wood from mangroves, reduces harmful carcinogens in the final product and reduces environmental health risks of fish processors from smoke inhalation.

The USAID Assistant Mission Director and delegation also visited the Ankobra Estuary in the Western Region; a site of multiple coordinated efforts among the three USAIDsupported coastal projects



Figure 2. Administrator Gina McCarthy observing the Ahotor fish demonstration stove and interacting with fish processors and project staff

supported by the Feed the Future Initiative. The visit provided a small snapshot of general development issues and interventions being undertaken by the projects.

• 1.5 Reducing Child labor and Trafficking in Fisheries

Child Labor and Trafficking is prevalent in three main economic sectors in Ghana; mining, cocoa farming and fisheries. While there is a national strategy on child labor and trafficking, there was no specific strategy to address this problem in the fisheries sector which serves as source communities for children trafficked into fisheries labor on Lake Volta. The practice is most widespread in the Central Region where children are involved in dangerous work in fishing as well as sale and trafficked both locally and to neighboring countries. To this end SFMP has adopted a two-tier strategy. At the national the project is developing a strategy for the fisheries sector that integrates actions among key Ministries including the Ministry of Fisheries and Aquaculture Development and the Ministry of Gender, Child and Social Protection. The project is also implementing a field level behaviour change communications and advocacy campaign in the Central Region aimed at prevention of these practices in a number of communities, where the problem is prevalent.

Developing a Child labor and trafficking policy for the fisheries sector. The significance of a strategy document to provide direction on child labour and trafficking is long overdue in the fisheries sector. In collaboration with Anti-Child Labour and Trafficking stakeholders, Fisheries Commission, the Ministry of Gender, Child and Social Protection, SFMP completed the final details on the Anti-Child Labour and Trafficking Policy document for the Fisheries Sector. The Policy Document outlines strategies such as withdrawal and rescue, rehabilitation, integration, and prevention. A final draft was submitted to the Fisheries Commission in December for onward submission to the Hon. Minister of Fisheries and Aquaculture Development for final consideration and approval. After review, the Minister suggested this be reworked as a strategy so as not to require Cabinet approval, and speed its implementation. She also directed SFMP to have this adopted under the Ministry of Gender, Child and Social Protection. Given the government transitions taking place after the national elections, this document will need to await the appointment of new Ministers before further action can be taken. Once adopted, it will provide a roadmap for better government action.

On-the Ground Child protection and prevention activities. District authorities and communities are seen as the front line of defense against child labor and trafficking in

fisheries but are often ill equipped with action plans or the skills needed to implement prevention, rescue and deterrence strategies. SFMP is working with districts in the Central Region to establish child protection committees and equip them with tools and skills needed to implement effective programs. Training programs are being planned and a rapid appraisal exercise conducted for eight coastal District Assemblies in the Central Region. The appraisal identified that Child Protection Committees (CPCs) and other statutory committees expected to address CLaT issues were weak and non-functional in the Districts though CLaT activities and practices were prevalent. The information gathered from the appraisal is being processed to design and implement a capacity strengthening program for these committees in order to contribute to their effective functioning and ability to benefit an estimated 7000 vulnerable children in these districts and provide them with improved services. This will also contribute to reducing wide spread child labor and trafficking practices in the Central Region of Ghana.

IR 2: Science and Research Applied to Policy and Management

Ghana's small pelagic fishery is at the edge of collapse based on several scientific reports and observations from fisher folk. The canoe fishery's annual sardinella catch plummeted to less than 20,000 metric tons in 2015 from a high of 120,000 metric tons almost two decades ago. Weak governance, overcapacity and an open-access fishery caused this crisis. At risk are not only the livelihoods of more than 160,000 Ghanaians directly engaged in the fishery sector, but also food security, as these stocks are an important high quality low cost protein source for the nation and region. A combination of fisheries management actions—based on the best scientific information available—are necessary to end overfishing by controlling fishing access and implementing effort controls through closed seasons and additional weekly fishing holidays. SFMP is engaging relevant stakeholders to improve fisheries management processes by improving scientific research and findings as well as improving capacity for applied research as part of the driving forces and rationale for management.

• 2.1 The Scientific and Technical Working Group

The Scientific and Technical Working Group is an ad-hoc scientific committee, established by the project that provides scientific advice to the Fisheries Commission relative to fisheries management and strategies for rebuilding fish stocks. This committee completed an updated assessment for small pelagic fish stocks of Ghana. Final reports will be presented in January 2017. Results indicated that the status of the small pelagic fish stocks remain severely overfished. Fishing mortality continues to increase (Figure 1) and biomass (Figure 2) has reached the lowest level since 1990, estimated to be at a tenth of the sustainable level. A recent scientific survey conducted in April 2016 in the waters of Ghana estimated similar levels of biomass for small pelagic stocks. The decline in average size of the fish landed, from 16cm in 1998 to 9.5cm in 2016, is also an indication of heavy recruitment and growth overfishing. The implications of these findings are clear, that actions called for in the national fisheries management plan must be implemented immediately in order for fish stocks to become rebuilt – a key goal of the project and one that can prevent an economic disaster in fishing communities if stocks decline further and leads to their total collapse, and with it, the livelihoods of tens of thousands of fisher folk. The scientific committee also recommended an additional management action – a seasonal one-month closer of the fishery in August – as necessary and the most expedient way to start rebuilding stocks quickly.



Figure 3. Trends of Fishing Mortality of small pelagic stocks (Sardinella, Anchovies and Mackerel) in from 1990 to 2015 in Ghana



Figure 4. Biomass tends of small pelagic fish stocks (Sardinella, Anchovies and Mackerel) in metric tons from 1990 to 2015 in Ghana.

• 2.2 ICT Innovations for Fisheries Management

In order to better grasp fisher folk understanding of digital finance and how they perceive ICT Innovations in fisheries management, SFMP and a USAID Consultant completed a survey among fisher folk in seven coastal communities in the Greater Accra, Central and Eastern coastal regions of the country. The survey allowed the team to ascertain the current reality in digital finance among fisher folk, to guide the SFMP in conceptualizing an appropriate product that would address their needs. Further, the survey informed the team as to whether ICT innovations like the proposed Tigo Fishers' Network and the Hotline (see IR 6 section) would be embraced by the fisher folk.

Related to this survey, SFMP participated in a USAID Digital Finance Lab, an ICT review workshop organized by the USAID Development Lab from Washington. Participants (SFMP and ADVANCE projects) discussed the status of each projects' ICT Strategy vis-à-vis USAID Consultant fieldwork and also reviewed ongoing project ICT activities. A roadmap for SFMP ICT innovation has been drafted, and is expected to be implemented, in order to clarify SFMP's ICT Strategy moving forward.

• 2.3 UCC/DFAS/CCM Capacity Development

Launch a research and extension program at CCM. SFMP sponsors the assignment of two extension agents to the University of Cape Coast (UCC) Center for Coastal Management (CCM). The two agents, currently enrolled in a PhD program at UCC, assist the Director of CCM to undertake joint activities with SFMP relative to extension and education of fisheries stakeholders in fisheries and coastal management and other extension activities implemented by the Center including the organization of short-term trainings in climate change, fisheries and costal management. During this quarter, they organized two trainings on climate change and fisheries management as well as assisted in preparing a proposal for an outreach campaign to address the use of chemicals in fish capture and processing.

Dual degree program. During Q1, a delegation from the University of Rhode Island visited the University of Cape Coast Department of Fisheries and Aquatic Sciences. The purpose of the visit was to continue working on common objectives outlined and signed in the MOU between URI and UCC. This visit, sponsored by URI, focused on establishing a graduate dual degree program in fisheries and aquaculture between UCC and URI. Both teams completed a working document outlining the strategy to establish a workable dual graduate degree program and highlighted areas for review and considerations by the admission and the graduate schools of both universities. The team agreed to meet at URI in April 2017 to finalize the modalities and operational logistics for the implementation phase expected to start by September 2017. If approved, the dual degree program will provide a unique opportunity for enhanced graduate degree program in fisheries and aquatic sciences at UCC.

Organize Focus Group Discussions on Local Ecological Knowledge on cuttlefish. One of the five key issues raised in the National Marine Fisheries Management Plan is the need to improve information on fisheries biology and stock assessment to support a stock rebuilding harvest strategy. Using scientific ecological knowledge, local ecological knowledge, and a tagging study, a collaborative research on cuttlefish is being implemented by the Ghana Industrial Trawlers Association, UCC and SFMP to contribute to future stock assessment projects. To kick-start the research, Hen Mpoano personnel interviewed fishermen involved in the cuttlefish fishery in Elmina and Mumford and solicited their knowledge on the migration, spawning times as well as different species of cuttlefish. Key among the findings from the interviews was that cuttlefish spawn between November–April eastward of Mumford (in Otuam waters). This information from fishermen is being used to select focal sites for the tag and release experiment under the cuttlefish collaborative research. Below is how Kwesi Mensah, a fisherman in Mumford, summarized his knowledge about cuttlefish spawning;

"They lay their eggs at one location and they stay to protect the eggs until they hatch and care for the juveniles. Getting to Easter (April) they carry/guide juveniles into deep waters."

Age and Growth Lab. The SFMP, in coordination with UCC and the Fisheries Statistical Survey Division (FSSD), completed the procurement, delivery and installation of equipment for the age and growth laboratory at UCC's Department of Fisheries and Aquatic Sciences (UCC-DFAS). This laboratory will be managed by UCC with shared access to FSSD. The purpose of the laboratory is to determine the age of fish and shellfish, necessary for improved fisheries stock assessment and will allow for better management decision. In addition, the age and growth information allow managers to understand the dynamics of fish stocks and how fish populations react to environmental stresses (i.e. climate change). The Senior Fisheries Advisor completed the setup and coordinated a training in the U.S. on behalf of Prof. Joseph

Aggrey-Fynn from UCC-DFAS who will oversee future research and management at the laboratory. A training for staff of UCC and FC-FSSD will be conducted by SFMP in Q3.



Figure 5. UCC Age and Growth Lab setup is complete

• 2.4 Improving FC Data Systems and Stock Assessment Capacity

Piloting mobile technologies SFMP completed the terms of reference for a workshop in January 2017 to begin a pilot project on the use of mobile technologies (tablets) for fisheries data collection in coordination with the Fisheries Commission Fisheries Statistical Survey Division (FC-FSSD), and coordinated with the World Bank's West Africa Fisheries Project, the Food and Agriculture Organization, and the Fisheries Committee for the West Central Gulf of Guinea. This pilot project will be focused on collecting data necessary for monitoring the performance of the National Fisheries Management Plan in the absence of a comprehensive M&E plan. IT will also demonstrate how mobile devices can be used to collect fisheries statistics more accurately and more timely, improving the ability to deliver critical stock status to fisheries managers in a more timely manner

Fishing Gear Technology cooperative research. SFMP completed a field training in the Western Region for two officers from FC-FSSD in conservation engineering and fishing gear technologies. The purpose of the training is to allow FC-FSSD staff to establish a monitoring plan relative to the evolving variety of fishing gear used by fishermen based on target species and quantify the extent of illegal gear used by the artisanal fishermen. FC-FSSD will continue with the survey in all four coastal regions and produce a catalogue of small scale fishing gear in Ghana by the end of Q3.

IT support to FSSD. Two officers from Fisheries Statistical Survey Division completed a six month training in computer networking and data management at IPMC in Tema. The purpose of the training is to increase the capacity of the Division to manage computer networking and data management and provide the onsite and in-house technical support of the information systems within the Division. Prior to the training, the Division relied on computer networking support from headquarters with unsatisfactory and inefficient response time. SFMP continued to assist the Division with fisheries data through on site working sessions and meetings. SFMP compiled the landings and effort data from 2000 to 2015 for all fisheries sectors (artisanal, semi-industrial and industrial fisheries) by species, region, gear type, and by month. The data were compiled in the programming language R and made available to FSSD and the UCC. This form of data allows an efficient way to meet the demands of data by fisheries managers, planners and scientists.

• 2.5 Environmental Planning Data Hubs and Capacity Building Center for the Western and Central Regions

Many coastal dwellers, particularly fisher folk, are vulnerable to flood related disasters occurring along Ghana's coastline. These disasters are magnified by climate change leading to rising sea levels. In the next few decades, these disasters will increase in frequency and severity as development intensifies in high risk coastal zones. Personnel of the Town and Country Planning Department (TCPD) in the central region are not adequately equipped with the tools and knowledge required to support decision-making for reducing vulnerability to flood disasters and protection of fisheries dependent uses of the coast. Spatial Solutions facilitated series of meetings with selected planners from the central region TCPD to outline an integrated coastal management (ICM) tool kit. Imagery from existing ortho-photos, google earth and those generated from UAV flights were used for this interaction. This resulted in the pre-identification of sites and issues that will be the focus of the central region ICM toolkit. Some of the issues pre-identified included uncontrolled beach tourism development, degradation of coastal ecosystems and shoreline erosion. This activity will result in the preparation of a tool kit which will serve as good practices guide for coastal land use and decision making.



Figure 6. Selected imagery used for interaction with planners - Iture wetland

Coastal spatial planning and land use management forms part of an integrated approach to fisheries development. Consequently, SFMP is providing capacity development support to the Town and Country Planning Departments and coastal districts in the Central and Western Regions to improve spatial and land use management and its connections to fisheries development. In line with this support, Spatial Solutions commenced work on a comprehensive GIS training manual for TCPD officers. The manual is being adapted to incorporate feedback from previous training held in September 2016. This will ensure that trainings for TCPD officers follow consistent approaches, standardized modules and utilize accessible software while developing the requisite competencies for coastal land use planning.

Coastal district assemblies and regional coordinating councils make important land-use decisions that affect the quality of life of fishing families, the efficiency of hundreds of fish landing and processing sites, and the condition of fish habitat including mangrove ecosystems, lagoons and near shore waters. The USAID/Ghana Fisheries and Coastal Management portfolio partners all need ways to carry out spatial analysis and implementation monitoring. The Fisheries Commission and Ministry of Fisheries have an even larger responsibility for making and tracking progress in fisheries management and improvements to the coastal and inland value chain from net to fishing community to plate. Good spatial information for the coast is scarce, costly, infrequent, and often of low quality due to cloud

cover. During Year 2, the SFMP demonstrated the use of small unmanned aerial vehicles (UAVs) as a low cost, rapidly deployable, extremely high quality imagery to support the work of SFMP and partners in resource management and environmental analysis and aid spatial planning activities at the regional and district levels. SFMP demonstrated UAV data collection techniques to Central Region planners. And trained UCC faculty and staff to pass the Ghana Civil Aviation Authority's (GCCA) flight safety check required to obtain permits for UAV use. This is a key step in enabling UCC to carry out independent data gathering missions. Four UCC personnel (all male) are now qualified to fly the Phantom 3 UAV for research and planning purposes. The training covered UAV operation using both an autopilot for aerial surveying and manual flight, as well as GCAA regulations and the permit application process. As a final capacity development step, SFMP also worked with UCC staff on the capability for image processing using Pix4D software.

Discussions are advanced on drafting the required operation and sustainability agreement required prior to the planned acquisition of a far more capable fixed wing UAV that can operate coast-wide and will greatly increase data gathering capacity, including monitoring of coastal resources, fish landing sites, and coastal landscapes. The new UAV will simplify mission planning, image processing, and analysis of the greatly increased volume of information that will become publicly available, immediately benefitting the Fisheries and Coastal portfolio partner stakeholders and specific host communities, as well as planners in the Central Region assisting in preparing a coastal management toolkit for the region, while preparing the groundwork for national applications of the technology.

IR 3: Creating Constituencies and Stakeholder Engagement

• 3.1 National Communications Campaigns for the small pelagic fisheries management

The communications component of the project seeks to build the political will and to elicit public support for achieving the project goal of rebuilding stocks. The first quarter focused mostly on supporting Fisheries Commission with implementation of the Fisheries Management Plan (NMFMP) through grassroots mobilization and consensus building. Communications campaigns included dissemination of fisheries management messages in accordance with MOFAD/FC's NMFMP as well as stakeholder engagements on implementation of the plan. A series of behavior change communications campaigns (such as Healthy Fish and child labor and trafficking campaigns) were all geared towards building support and ensuring active participation of resource users in decision-making.

Strategic Communications Campaigns in support of MOFAD/FC policy initiatives for the small pelagic fisheries

Communications Strategy for FWV. SFMP supported development of a communications and outreach strategy for the Fisheries Watch Volunteers (FWV) joint MOFAD/FC and SFMP pilot program. A mass media communications education campaign was held on six radio stations and television stations in local languages and in English to educate fisher folk in the community about the FWV and to ensure their credibility. A fact sheet on the FWV was also drafted awaiting review, final approval and dissemination in Quarter 2. (*For more on FWV, See 1.2*).

Fisherman to Fisherman (F₂F) Dialogues in support of NMFMP.

Lack of effective collaboration between the Fisheries Commission (FC) and resource users including the major stakeholder (Ghana National Canoe Fishermen Council (GNCFC), has contributed to the depletion of Ghana's small pelagic stocks – which are the mainstay of majority of fisher folk. Fishermen see management initiatives from the Fisheries Commission

as some alien restraint imposed on them and as such do not consent themselves fully to its implementation. This, coupled with lack of a sense of ownership of the fisheries resources and irresponsible fishing practices have contributed to the failure of formal fisheries management practices to yield the desired results.

To this effect, executive members of the GNCFC and the Chief fisherman met to discuss a proposal of a series of Fisherman to Fisherman Dialogues - to support the Fisheries Commission to achieve objectives of the National Fisheries Management Plan (NMFMP 2015-2019) and build appropriate fisheries development models of the artisanal fishing sector through voluntary compliance and self-governance in order to rebuild stocks. The major fisheries associations including the Canoe Council, national women fish processors association and the Inshore Fishers Association are key implementers of the F₂F Dialogues.

Consequently a global event, World Fisheries Day was chosen to launch the F_2F initiative. The event was organized by the GNCFC in collaboration with SFMP. In attendance were leading members of the four major stakeholders in the fishing industry including Chief Fishermen of the GNCFC, executives of NAFPTA, Ghana Inshore Fisheries Association (GIFA), Ghana Industrial Trawlers Association (GITA), academia and other stakeholders.

Participants - particularly the four main fisheries associations - signed a resolution to accept

responsibility for depletion of the fish stocks and pledge their readiness to combat IUU, promote responsible fishing, to make women integral part of decisionmaking and assist Fisheries Commission (FC) in implementation of the NMFMP.

The celebration was under the theme: "Empowering Fishing Communities for Sustainable fisheries." The event was preceded on the



Figure 7. A participant signing (palm-printing) the F₂F Compact at the World Fisheries Day 2016 celebration

November 21 by a series of media engagements on 8 selected television and radio stations to create awareness of the day. Links to news items and audio visuals of the event can be found at the following websites:

- <u>https://www.youtube.com/watch?v=XfUgu2acFOI</u>
- http://www.crc.uri.edu/2016/11/crc-joins-in-world-fisheries-celebration-in-ghana/
- <u>http://www.atlfmonline.com/h-ot-events/item/7207-fishermen-sign-fisherman-to-fisherman-compact-agreement</u>

As a follow up to the ceremonial event in Cape Coast, the GNCFC will lead and facilitate a series of dialogues among fishermen, chief fishermen, women processors and wives of chief

Executives of the women fish processors association have signed a compact at the maiden F_2F Dialogue to reject the sale of unwholesome fish landed by fishermen. The women declared their stand to mobilize other fish processors along the coast to do same. 67 Chief Fishermen from the Western Region also signed the compact indicating readiness to observe Sunday as the additional traditional fishing holiday. Majority of the fishing communities do not fish on Tuesdays. fishermen who play key roles in the sale and distribution of fish across the various landing sites. Named as F_2F , the dialogue is to organize members and increase their capacity to address the expected responsibilities in fisheries resource management.

The first of such F₂F dialogues took place in the Western Region with 67 Chief Fishermen and 13 female fish processors in attendance. This platform

provided the opportunity for the women to voice out their concerns on the depleting fish stocks as they declared their stand to reject bad and juvenile fish, and readiness to support the fishermen to adopt responsible fishing to help recover depleted stocks. The Chief Fishermen on the other hand agreed to take politics out of fisheries management, add Sunday as the additional traditional fishing holiday, inform other fishermen to comply with the canoe registration process and commit to the implementation of other aspects of the NMFMP to help the FC achieve its 2017 targets. The Western Region compact was signed to symbolize their commitment. Subsequent Regional F₂F meetings have been planned across the other regions to afford majority of the fishermen to be directly involved in the development of a resolution committing the stakeholders to fulfill fisheries management responsibilities vis-àvis the NMFMP.

Media Engagements

Fisheries reports in the media shot up by about 74 per cent from the previous quarter (July - September) to the current quarter (October 1 – December 23). Project engagement with journalists resulted in more media presence for SFMP and partners particularly for

disseminating messages and carrying out sensitization of the Fisheries Watch Volunteer pilot program, F₂F campaigns and international day events. Hitherto, reports on fisheries issues in the media were very minimal, and few media persons understood or were specialized in the area. Consequently, SFMP started engaging the

A well informed media is now championing the cause of fisheries management issues and discussions, and raising public awareness on the alarming status of Ghana's collapsing fishery! Fisheries issues also took center stage in the 2016 electioneering.

media in an attempt to build their capacity for quality reportage of fisheries issues, especially for a country whose fisheries contributes significantly to socio-economic development. The media engagements were also intended to help create more public awareness of fisheries management issues. The engagements culminated in the creation of a social media network of Ghana Journalists for Sustainable Fisheries which currently has about 40 members. Fisheries issues are now taking center stage and formed part of policy discussions particularly for the two major political parties during the 2016 electioneering in Ghana.

Three journalists who are members of the network of Ghana journalists for Sustainable Fisheries received funds from SFMP through a call for proposals, to run fisheries stories of choice. A minimum of 10 fisheries news items including a short audio-visual were produced and published on about 8 different print and electronic media platforms. All three beneficiaries have submitted final reports and proof of news items.

International Day events

Two **World Rural Women's Day 2016** events under theme "Say NO to Bad Fish" were held on October 14 in the Central Region and October 18 in Greater Accra. The event is celebrated each year by SFMP partner DAA as part of project Behavior Change Communications on Healthy Fish; using fish processors as change agents, to fight illegal fishing in communities. A series of sensitization platforms including the international day event, are used to empower fish processors (usually women) for advocacy on good fish; since many of them finance fishing trips and usually negotiate the price of fish when landed, and as such have the power to reject unwholesome fish landed by fishermen. Communities such as Moree, Elmina (Central Region) and Axim (Western Region) in the Central Region, have started rejecting bad fish landed by fishermen.

Best Fisheries Practices Awards

The first phase of a Best Fisheries Practices Awards (BFPA) scheme has ended with an

Resource users have started thinking of changing behaviors – such as cleaning landing beaches and documenting successes, particularly, taking photos of before and after situations in order to win some of the awards next year. applications review process of 65 entries for all 7 awards categories. The awards scheme is intended to among other things reward motivated resource users for voluntary compliance and adoption of sustainable fishing and post-harvest practices. It is also expected to create peer

pressure influence and atmosphere for multiplier behavioral change effects towards rebuilding fisheries stocks, while increasingly acknowledging the significant role of women in the fisheries, as agents of change for catalyzing behavior change, particularly at the fish harvest level. Categories include Most Exemplary Voluntary Initiative Combatting IUU Fishing, Most exemplary Fish Handling and Processing Practice, Best Traditional Management Practice, Most Clean Landing Beach, Most Outstanding Fisheries Leader, etc. An external Awards Panel has been constituted, that reviewed applications and has shortlisted three applications for each category. The second phase of the scheme includes a series of field trips early January 2017 to verify data provided by shortlisted applicants. A BFPA event is slated for 31st January 2017. This activity is in support of the MOFAD/FC Communications initiatives aimed at rebuilding stocks.

Communications Strategy on NMFMP and IUU Community Outreach Program

Generally, strict enforcement of fisheries regulations have seen some improvements in the last few years but IUU fishing is still rife among all fleets in Ghana's fishing industry. This calls for a suite of interventions including behavior change communication to instigate fisher folk voluntary compliance with fisheries laws and measures stipulated in the NMFMP.

During the quarter, Hen Mpoano screened videos on Illegal, Unreported and Unregulated (IUU) fishing in Elmina and New Takoradi. This event provided the platform for fishers to engage their peers in discussing responsible and sustainable fishing practices. Over 60% of the participants at these events were women processors and fish mongers. A fisherman, who had visited Cote D'ivore, noted; *''because the government over there strictly regulated fishing activities along the coast, fish was abundant there; monitoring and enforcement of existing laws should be intensified to control IUU fishing practices''.*

A fishmonger said that everyone gathered there had been witnesses to the illegal practices occurring in our waters. She added that in the past thirty years, light fishing, "*saiko*" and trawling within the inshore exclusive zone have been the major IUU fishing practices that have hindered the fishing industry.

Behavior Change Communications Campaign on Child Labor and Trafficking (CLaT)

The role of the media in promoting evidence-based advocacy on CLaT is significant to reducing the menace in the sector. SFMP will host an anti-CLaT media advocacy on Ghana Television – the national station with widest coverage will be hosted in January, 2017. The advocacy which was earmarked to begin in December 2016 was pushed back till now due to Ghana's 2016 General Elections and busy schedules of Ghana Television. This advocacy will focus on a National CLaT Strategy for the Fisheries Sector.

The SFMP's behavior-change communications on CLaT is geared towards creating awareness of the harmful and negative effects of CLaT practices in an effort to make such practices socially unacceptable. In the period under review, SFMP extended advocacy to three new fishing communities in the Central Region (Abandze, Narkwa and Ekumfi communities). Consequently, a total of 25 anti-CLaT advocates, including 15 women, have been engaged relative to discussing and identifying gaps in the implementation of anti-CLaT actions, particularly implementation of integrated referral mechanisms. This activity is intended to encourage child protection practices to address ClaT issues in the Central Region. Feedback from these meetings is being used to strengthened linkages and communication between the various child protection institutions such as the local District Assemblies, the police, social welfare, traditional leaders, the media, civil society organizations and the local anti-ClaT advocates within the Region. Towards this end, a workshop is planned for February 2017 to bring together all these actors to develop and agree on a strategy for the implementation of the integrated referral mechanism.

An anti-child labor and trafficking radio advocacy outreach program was started on Radio Peace in Winneba. The radio program provided a platform for community leaders and social welfare personnel to discuss and share information about the negative effects and impacts of CLaT to an estimated listenership of about 7500 people in the coastal area. The radio program contributed to informing coastal constituencies towards making CLaT practices socially unacceptable. The radio program was also used to mobilize people for anti-child labor actions and as a result ten listeners (6 women and 4 men) who called-in to the radio program expressed interest to join the anti-CLaT advocates and address CLaT issues through peer to peer education in their respective communities.

• 3.2 Executive Level / Policy Maker Communications

The executive level communications targets policy makers and fisheries authorities and is intended to formalize relationships with them to build the political will and support for SFMP's fisheries policy agenda aimed at rebuilding stocks. During the period under review, no major engagements were held with these groups including the Parliamentary Select Committee for Food, Agriculture and Cocoa Affairs; Coastal Members of Parliament and the Fisheries Commission Board, as a result of campaigning at the constituency level, leading to the 2016 General Elections in December. In the second quarter, SFMP will work with Central Government transition teams to provide technical assistance on fisheries-related strategies as well as provide initial orientation on the state of Ghana's fisheries and on the SFMP for newly constituted select committees and ministerial appointees.

• 3.3 Corporate Communications

A Communications Workshop was organized on December 20-21, 2016 for communications representatives of project implementing partners. The workshop, facilitated by resource persons from USAID/Ghana and METSS in collaboration with SFMP, treated success stories, graphics designing and quality reporting. The workshop reinforces and will further improve

identification of and generation of more success stories and progress reports as well ensure quality control of branding and marking of project activities.

Indicator	Results: Year 3 Quarter 1
Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).	CRC- 28 Press release – 3 - Insurance LOC Signing Event - Inauguration of Boat for Ankobra - World Fisheries Day Video documentary-1 - Save Our Fisheries Fund Documentary on 'Towards a Sustainable Fishery' Semi Annual Newsletter Vol2 - 1 News items/radio discussions on fisheries – 19 BFPA Flyer – 1 SFMP Calendar - 1
	BFPA Flyer – 1

Table 3. Table of IEC Materials Produced (October – December, 2016)

Table 4. Trends on Fisheries Reportage

	TREND OF FISHERIES REPORTAGE										
Year 1 Year 2								Year 3			
<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>	Total	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>Q4</i>	Total	Q1	
N/A	N/A	9	7	16	33	26	45	52	158	80	

IR 4: Applied Management: Improved Management of Marine Resources to Reduce Over-exploitation, to conserve Biodiversity and Provide Other Benefits

• 4.1 Implementing the National Marine Fisheries Management Plan

The decline in fish stocks have compelled fishermen to fish all year round with some communities setting sail even on the day expected to be observed as traditional fishing holiday. This has increased the pressure on the remaining stocks since they fish even during the spawning seasons. Ghana's Fisheries Management Plan prescribes a closed season for trawlers as one of the key measures to address overfishing and recovery of declined stocks. The FC implemented a one month closed season (November 1, 2016 to November 30, 2016) for all industrial trawlers licensed to fish in Ghana. This approach is not a common practice amongst the stakeholders, therefore the need to sensitize them in order to get their full cooperation. A series of pre-closed season consultative meetings with key stakeholders were held to discuss the plans and strategy for the implementation of Ghana's first closed season. In attendance were officials of Ghana Navy, Marine Police, Ghana Ports and Harbor, local Fisheries Commission staff and other key stakeholders. It came to light that key actors including Fishing Harbor Mangers - whose anchorage will be used by trawlers during the close season - had not received adequate directives on how they were expected to participate or contribute to the implementation. Consequently, these gaps identified were communicated

to the Fisheries Commission and this informed them to strengthen communication with those actors identified.

Fisheries Working Group. SFMP works through participatory fisheries management processes by contributing to strengthening stakeholder collaboration at the Regional level through the concept of multi-stakeholder Fisheries Working Group (FWG). Thus, a one-day FWG workshop was held in the Western Region to track the implementation of the first closed season. At the workshop 35 stakeholders including the Ghana Navy, Marine Police, Fisheries Commission, Trawlers, Inshore Fishers, women fisher processors, Canoe Fishers and other agencies discussed the progress of the closed season. It came to light that the closed season had been effective because of a perceived increase in fish landings observed along the coast; some artisanal fishers had begun to experience positive impacts such as landing of high value fish which were not available to them until the closed season. The Ghana Inshore Fishers Association were however not aware of their inclusion in the November closure, therefore the urgent need to intensify communication to all stakeholders especially on their roles and responsibilities for the February and March 2017 closure. Recommendations from the FWG meetings will improve the participation of all key stakeholders and enhance the effective implementation of the NMFMP in order to achieve set targets.

The NMFMP has not taken into consideration the monitoring and evaluation of these management activities. Contributing to addressing this aspect, SFMP and FC established an interim Fisheries Management Operational Committee with a mission to review the performance of the fisheries management actions and provide recommendations to the Fisheries Commission relative to adaptive management measures. The Committee will submit its annual report in April 2017 in which an assessment of the close season will be included.

Local Ecological Knowledge. Fisheries management in Ghana has not fully taken into consideration fishermen's local knowledge on stock information such as distribution, migration, breeding periods and spawning grounds. This has contributed to mistrust and lack of understanding between resource users and managers on key fisheries management approaches thereby erecting barriers against the implementation of fisheries management measures. Contributing to addressing this issue, Local Ecological Knowledge (LEK) of fisher folk were collated and analyzed using simplified bar chart and presented for validation by fishers during landing beach events in Half Assini and New Takoradi in the west coast. Feedback meetings to validate LEK results were organized. This event was attended by over 100 fisher folk, 40% of which were women. During the meetings, fishers gave the following feedback on the information presented; stocks they fish migrate from offshore onto the continental shelf as the upwelling starts. Cassava fish does not prey on sardinella as shown by the results but rather prey on shrimps. Mackerel do not prey on sardinella, as also shown in the results. This interaction and feedback sessions have created among fishers, a feeling of the importance of integrating their knowledge and soliciting their participation in fisheries management. A final draft report of the sardinella LEK which incorporates comments from the validation meetings will be shared widely with fisher folk.

• 4.2 The Western Region Demersal Fisheries Management Initiative.

Demersal fish species in continental shelf waters of Ghana include a variety of species such as grunts, snappers, goatfishes, groupers, seabreams and croakers. Fishing for these species is undertaken by small-scale, semi-industrial, and industrial vessels.

Stock assessment for four major species was analyzed and will be presented to the Science and Technical Working Group for validation in January 2017. The preliminary results

confirmed that the demersal fish stocks are overfished and overfishing is occurring. The assessment provides a baseline status of the demersal stock and will feed into the ongoing management measures implemented by the MOFAD for the industrial demersal trawlers. It will allow a monitoring and evaluation of the closed seasons imposed on the industrial trawlers.

• 4.3 Integrated Community Fisheries Management and Resilience Plans for the Ankobra River Estuarine and Mangrove System

Transplanting and tendering of mangroves.

Mangroves in the Ankobra estuary are constantly being cut for various purposes such as fuelwood for fish smoking. As the mangroves become degraded and are not restored, fuelwood supply shrinks and essential fish habitat is lost affecting fish production and a locally important food supply. The project is supporting the restoration of previously identified degraded mangrove areas. A year on after supporting

the Sanwoma fringe community to embark on a study tour to learn lessons from other local communities, where mangrove



Figure 8. Chief of Sanwoma - Odikro Nkrumah (left) - spearheading restoration exercise.

resources are well managed, about half of the 24hectares degraded area has been restored. Approximately 8,200 seedlings have been replanted. The Chief of the village made the following comments during the replanting exercise;

"We initially thought that mangroves regenerate themselves after harvesting but now we understand the need to replant mangroves to keep a sustainable supply for our fish processing business and healthy environment".

Early Actions to build ecosystem resilience. Riparian communities on the lower Ankobra catchment basin are inaccessible as there are no regular water transport services on the river and road access is impossible during rainy seasons. A boat was constructed to help the project access and provide services to these communities but also as a community managed asset that provides for easier access and transport of agricultural and fisheries products from the communities to local markets and to bring food supplies and other provisions into the



Figure 9. Traditional leaders of the area at the boat inaugural ceremony; branded boat on the water behind dignitaries.

community. A boat management committee was established this quarter with community and municipal representatives to develop a business plan for use of the boat and establishment and management of fees so that costs of the service, maintenance and eventually replacement of the boat can be sustained well into the future. The boat has already improved the ability of isolated riverside communities to have improved access markets for their agricultural and fisheries produce. • 4.4 Integrated Community Fisheries Management and Resilience Plans for the Pra River Estuarine and Mangrove System

Pra Estuarine Co-Management Planning Consultations. Following about 5 years of engagements with stakeholders living in communities surrounding the Pra Estuary, the need to continue to manage the estuary and its associated wetlands has been emphasized because of the important goods and services it provides to support the local economy. The estuary provides fishery resources, mangrove for fuel, and water for the people and other livelihood opportunities. Towards this end, the project engaged stakeholders from Anlo Beach and Shama Apo fringe communities to initiate strategies for improved management of the Pra estuary. At total of about 240 participants including 60 per cent women, approximately who were engaged in the process agreed to form a joint co-management will promote the conservation of the Pra Estuary and associated wetlands, and help sustain the livelihood of over 5000 people who live in the area. This approach of community involvement in the formulation stage will create a sense of ownership and increase responsible practices in the community.

UAV Capacity Building. The acquisition of a new Phantom 3 standard unmanned aerial vehicle (UAV) to enhance data gathering and mapping requires expertise to operate it. A one day working session was held by SFMP for Friends of the Nation Geographic Information System (GIS) personnel to equip them to operate the drone and upgrade skills in GIS and Remote Sensing for spatial analysis in order to undertake systematic analysis of complex fisheries and coastal problems. The use of the drone will improve the resilience planning and fisheries co-management work in the lower Pra area which will benefit the Shama District Assembly. It will provide high resolution imagery of the area for effective planning and management.

Pra estuary fish stock assessment. A fish species stock assessment on the Pra estuary has identified ten (10) main fish species of economic value for fringe communities. The assessment will feed into the development of an effective fisheries co-management plan for the Pra area and contribute to improved fisheries management. Also GPS coordinates along the boundaries of the co-management area were located to generate data for the production of maps for the proposed areas of jurisdiction.

A 10 hectares Cassia plantation has been established in Anlo Beach – Shama to reduce dependency and depletion of mangroves in the area used for fish processing. The community youth that spearheaded the planting exercise have undertaken to manage the plantation.

• 4.5 Central and Western Region Fishing Community Livelihood Development Value Chain and Post-harvest Improvements

Post-Harvest Processing Knowledge Development and Extension. The fish smoking sector in Ghana is highly dependent on fuelwood as a source of energy, and a 2014 study found that there were over 120,000 fish smoking stoves in near-constant use along Ghana's coastline and the Volta Lake basin. Where there are limited forest wood resources, mangrove is used and the extent and rate of mangrove forest depletion outstrips the slow rate of regeneration. Contributing to this high rate of deforestation is the widespread use of inefficient fish smoking technologies where women work under often strenuous conditions (exposure to heat and smoke) and for marginal incomes. The World Health Organization estimates that harmful cook stove smoke is one of the leading causes of death in developing countries. Recent SFMP analyses showed that smoked fish contains PAH levels that are well above those recommended for human health, with the Chorkor stove 7-10 times the EU standard. Consequently, a series of low-PAH stove models were developed under the project which resulted in the design of the *Ahotor* (Comfort) Oven. A PAH analysis showed that the *Ahotor* stove achieved 6 μ g/kg and 53 μ g/kg for BaP and PAH4 respectively; considerably lower than the Chorkor. In addition the stove was 32% more fuel efficient than the Chorkor.

In line with this SFMP supported partners to upscale the promotion and use of the *Ahotor* oven. SFMP built the capacity of stakeholders to effectively promote the *Ahotor* oven using available promotional models. A total of 19 persons (9 females and 10 males) comprising regional fish processor associations, fisheries officers and community facilitators participated in the



Figure 10. The Ahotor Oven in use.

training. A massive awareness campaign on the benefits of the *Ahotor* oven culminating in its demand in Apam and Winneba in the Central Region, Kokrobite in Greater Accra, Sekondi in Western Region and the Volta region. Construction of the ovens are ongoing. A series of demonstration trainings were also carried out in four communities (Apam, Winneba, Moree and Elmina) in Central Region for beneficiaries, intended to ensure effective use of the oven for optimal performance relative to the cost and means for acquiring the stoves. A total of 81 participants were trained comprising 62 Females and 19 Males.

Fisheries Value Chain and Livelihoods Improvements. A series of promotional events were organized in the first quarter to launch the *Ahotor* oven in ten focal communities in the four coastal regions: Western (Axim, Shama, Ankobra and Agona-Ahanta); Central (Apam and Winneba); Greater Accra (Kokrobite) and Volta (Ketu South and Keta Municipalities). At the event grounds in one of the communities, eight (8) fish processors for instance, in one of the communities - Apam - voluntarily offered to adopt the oven. As an incentive for increasing rate of early adoptions, the project has offered a 30% discount for early adopters. The promotional events reached about 400 persons. Education and communication materials on the benefits of the Ahotor fuel efficient oven were developed (120 T-shirts, 100 posters and 100 aprons) to enhance acceptance of the technology. Distribution of the IEC materials has increased the knowledge of fish processors and municipal authority staff on the benefits of the Ahotor oven.

Most fish processors are confronted with fire outbreaks and domestic accidents during processing. In collaboration with the Ghana National Fire Service, 137 women and 25 men in Elmina, Moree, Anlo and Sekondi were trained in fire prevention and safety. Subsequently the processors have adopted fire and safety measures to safeguard their processing sites/businesses.

Many of the fisher folk have no functional literacy in reading, writing or counting. One hundred MSMEs participated in a 12 month business model training in functional literacy in reading, writing, numeracy and language to boost their capacity. It is expected that the beneficiary fish processors from Axim, Shama and Ankobra in the west coast will be equipped to count, read and write to enable them grow through improved business transactions in record keeping of profits and expenditure.

Twenty (20) Micro, small and medium enterprises in Shama, Axim and Ankobra have been trained in marketing skills development, and have had their processing sites remodeled to meet approved hygienic standards in order to increase market acceptability in order to make profits.

Village Savings and Loans Associations. Lack of capital for livelihood development is a common issue for households living along the Ankobra river estuary. Microfinance institutions do not service these remote areas and the communities have had bad experiences in the past from outside banking agents who collected money for savings accounts but never returned. Village savings and loans was offered as an alternative way to build local community capital as well as serve as a community entry tool for the project.

Farmers and traders in excluded communities were trained in financial resources management in Eziome, Kukwaville and Ekpoazo through Village Savings and Loans Association (VSLA) structures. The progress and operations of the VSLA groups in the DQF/VSLA communities along the Ankobra river were tracked and are in their first cycle lasting 12 months with a share value of 25 cents each. The Ekpoazo VSLA group in the 6th month has a total savings of US\$ 420. The Eziome group in the 8th month has a total of US\$ 370 and Kukwaville in their 7th month has a total of US\$ 230.

Hen Mpoano established two VSLA groups with 54 members (80% women) in 2 villages. The groups have saved US \$ 2,230 and have been able to loan back to members US \$ 330 with US \$ 1,900 kept in *susu* and social funds, waiting to be accessed. Ongoing monitoring and support was transferred during this reporting period from Hen Mpoano to Daasgift



Quality Foundation as they are a local Finance NGO better equipped to provide long term support to these groups. Members of these associations have benefited from enhanced savings and ability to take loans. For instance, one women was able to purchase and stock more food for her small store, thus increasing food availability in the community. In another instance, a male beneficiary

of VSLA noted;

"I was able to pay for my child's school fees on time with loan accessed from my association; in the past I had to wait until the cocoa season when I can sell my farm produce, by which time my child would have been sent away from school for defaulting on payment"

Micro-finance services were made available to 400 established MSMEs/Entrepreneurs to purchase fish and fish smoking inputs. Loans were disbursed to 217 clients in December, totaling US\$19,550 One hundred and sixteen clients of Year One existing group received US\$125 each as their second cycle loan and the remaining 101 clients of the Year Two New 100 group received US\$50 each as their first cycle loan. There was a micro credit recovery in the month of December at Shama. Out of the total Principal loan amount and interest totaling US\$2,861 that was disbursed to the four cells, there has been a total recovery of US\$2,205

leaving an outstanding amount of US\$655.75 to be paid in 2 weeks. The credit facility has helped the fish processors improve upon their businesses. They are able to increase the number of fish purchased and able to transport their fish to the market centers and back.

A consumer stove-financing incentive was introduced to 200 stove users to ensure quality delivery of stoves to the processors. Two (2) double ovens were constructed at Sekondi and Konongo and incentive payments will be made end of January 2017. Incentive payments are due after a month of stove use after construction without issues. Fish processors in the Volta Region have expressed much interest in the *Ahotor* oven and in order to strengthen their desire for the oven, SNV has decided to construct six single unit *Ahotor* ovens for selected beneficiaries as demonstration ovens.

Inadequate financing opportunities for fish processors led to the introduction of a financing scheme and private sector engagement by the project to facilitate the provision of structured finance for microfinance Institutions and users. Consequently, negotiations are ongoing with GN Bank and Microfin Rural Bank in the Central and Western Regions respectively as well as Mawumenyo Susu Company in the Volta Region.

• 4.6 Development Action Association (DAA) Fisheries Training Center

The inadequate capacity of DAA Board and staff to oversee and run the DAA Fisheries Training Center sustainably after the project term necessitated that two advisory committee meetings be held where TORS were developed for the committee. Consequently DAA's management role over the center increased this quarter with the staff now effectively coordinating the operations of the center.

A contract was signed with a construction firm - Mikadu Construction Limited to build the DAA Fisheries Training Center whose sod cutting ceremony was held in December. The DAA Fisheries Training Center will serve as a training institute for best fisheries practices to encourage responsible fishing, while ensuring business orientation for persons who want to venture into the fisheries sector. Construction of the center was expected to begin in December 2016 but was delayed since the building permit for construction is not ready. The good news so far regarding permits is that the Environmental Protection Agency permit and land title have been acquired. The center when completed will be tasked with the production of hygienic fish and fish products for local and sub-regional markets, and even for export. Consequently, DAA visited seven institutions involved in fish production, sale and consumption to ascertain existing fish products on the market and also understand consumer preferences to inform the development of market survey tools and product development for future production.

• 4.7 Community Based Management of the Women-led Oyster Fishery in the Densu Estuary in Greater Accra

Oysters harvested from the Densu estuary have declined over the years in both the size and volume due to unregulated open access to every community member. Consequently, an initial stakeholder engagement saw the formation of an Oyster Management Group at Tsokomey/Bortianor (Greater Accra) that will organise oyster harvesters to support community based oyster management. This was to build capacity of resource users to manage marine resources to achieve ecological balance. The initial meeting involved 78 participants (77 females and 1 male) to constitute a management group to receive training on best methods in order to harvest and cultivate oysters as an alternative livelihood. This is in support of Ghana's Fisheries Management Plan in managing marine resources in a more

sustainable way. Outcomes of the engagements include commitment of participants to regularly clean the landing areas of the estuary, replant depleted mangroves and adopt hygienic fish handling practices. To build a comprehensive and ideal community-based oyster management group, key stakeholders from the local government, UCC (for research assistance) and the Fisheries Commission will be brought on board.

IR 5: Gender Equality and Empowerment

• 5.1 Development of a Gender strategy for the Fisheries Commission

Women play important roles in the fisheries sector and provide most of the labor in the postharvest sector, while many own canoes and finance fishing operations. However, women are not fully involved in fisheries management. SFMP is committed to increasing the voice of women in fisheries management—and that is something that can only be achieved through local champions. In collaboration with the leadership of the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission, SFMP has assisted in the development of a gender mainstreaming strategy for the Ministry. In a show of its commitment, the Honorable Minister, Sherry Ayittey, signed the strategy during the first quarter of FY 2017. The national gender strategy for the fisheries sector is important, serving as the first step towards building the Ministry's capacity to engage in gender analysis and planning. It will also enable the Ministry to incorporate gender into its management; promote the use of sex-disaggregated data and gender analysis, and establish accountability in its efforts to mainstream gender.

• 5.2 Implementation of the SFMP Gender Strategy and Action Plan

Women in the fisheries sector tend to be excluded in decision making processes related to the fishery. In order to further empower women to speak out and participate more fully, a *How Nam* (an action phrase literally meaning 'smoke fish') Dialogue series has been instituted. *How Nam* Dialogue is a learning and group experience sharing session for fisher folk to peer learn. The workshop was held for 16 women and 4 men in Moree, Elmina, Sekondi, Ngyeresia and Saltpond communities in the central region. As a result of the workshop participants deepened their understanding and sharpened their skills in group dynamics, conflict management and resolution strategies. This learning will be applied by the leaders of these groups regarding issues of delegation, transparency and accountability.

During the quarter under review, 251 MSMEs were identified, assessed and trained in understanding enterprise Environment, Systematic business Planning, Cost and cost categorization, Working Capital Management, Basic record/book keeping, Profit & Loss Analysis, Savings/Banking, basic budgeting and customer care. Out of the 251 MSMEs, 80% were female-owned MSMEs and 20% were male-owned MSMEs. Women owned business are particularly targeted by the project since they typically have few opportunities to build their skills towards expansion of their businesses, especially in the fisheries sector. Also, it is observed that there are more women owned MSMEs in the fisheries sector than men.

Both men and women have equal responsibilities to ensuring natural resource management and/or biodiversity conservation. Trainings were therefore conducted during the quarter to build the capacity of men and women in this regards. A total 154 participants were trained, 83 participants were males representing 54 per cent while the rest – 71 females, represented 46 percent of the total participants. This gender breakdown indicates the project is meeting its goal of equitable opportunities for men and women to obtain improved natural resources management skills.

IR 6: Strategic Private Public Partnerships

• 6.1 Millennium, UT Life Insurance Partnership

Fisher folk in Ghana face a variety of risks, including illness, accidental death and disability, loss of property, and natural disasters. The nature of the fishing industry in Ghana also makes it difficult for fisher folk to save for old age or retirement. Micro-insurance can reduce the risks fisher folk face and provide a means of saving for retirement. However, insurance firms are generally reluctant to cover artisanal fishermen and fish processors as the industry is perceived to be risky and unstructured.



Figure 11. Partners exchanging signed letters of collaboration. From right to left (Brian Crawford – SFMP Chief of Party in a handshake with Yolanda Cuba – CEO of Vodafone Ghana. Kwaku Yeboah-Asuamah- UTLife (middle); Mary Dove – Millennium Insurance and Regina Solomon – NAFPTA President.

In October, SSG successfully facilitated the signing of the Letter of Collaboration (LOC) for the Fishers' Micro-insurance Partnership. The signing of LOC officially inaugurated the partnership, which involves Millennium Insurance, UT Life Insurance, Vodafone Ghana, and BIMA as private sector partners and is facilitated by SFMP. The micro-insurance seeks to improve the livelihoods of fisher folk by reducing their risks and providing a means of saving for retirement, through the Fishers' Future Plan insurance product and the use of a mobile platform.

SSG organized a workshop in November to design a Year One Workplan for the insurance partnership (FY17). The workshop participants were made up of private sector partners, i.e., Millennium Insurance, UT Life Insurance, Vodafone Ghana and BIMA and SFMP implementing partners, as well as fisher folk associations (Ghana National Canoe Fishermen Council and National Fish Processors and Traders Association). Participants worked together to identify the pilot areas, to better understand the Fishers' Future Plan insurance product, and to develop a first year workplan, with emphasis on the pilot stage, as well as strategies for marketing and enrollment. The report on this workshop has also been completed and disseminated to all stakeholders.

• 6.2 Tigo Fishers Network Partnership

Currently, the Fisheries Commission is limited in its means to communicate with fishers about fishing best practices, regulations, and fisheries management interventions. Furthermore, fishers have limited access to key information, such as market prices and realtime weather data that could help them improve their livelihoods. The Tigo Fishers Network Partnership is a way to build on high cellphone ownership along the coast and use mobile platforms to make it easier for fisher folk to access important and up-to-date information, to increase use of eMobile money and other financial services, and to facilitate direct, two-way communication between fishers and the Government of Ghana to support fisheries management. Also, the Network will enable fisher folk who are part of the Fishers Network to call each other for free under a monthly subscription fee of GHS3.5 (less than 90cents); a strategy to help fisher folk save on call credit and have needed disposable income for other expenditure and reduce poverty.

Moving forward with the Tigo partnership, SSG is in discussions to finalize the partnership design. In December, SFMP organized a forum to enable Tigo present the Fishers' Network product for validation by stakeholders to help develop a product vis-à-vis partnership that reflect the needs of Government of Ghana and fisher folk. The forum was attended by MOFAD/FC, fisher folk associations (GNCFC and NAFPTA) and Tigo. At the end, stakeholders made inputs and agreed on the product that will effectively and efficiently assist the Fisheries Commission in its extension efforts in fisheries management and reduce poverty level among fisher folk. Further, the Tigo Fishers Network product will have a dedicated Toll-free line to enable fisher folk and general public effectively report to Fisheries Commission Illegal, Unreported, and Unregulated (IUU) fishing activities to assist in fisheries enforcement and also enable fisher folk have real-time response to questions, clarifications or concerns with respect to artisanal fishing activities and, government fishing policies and laws. This will help improve fisher folk knowledge in government fishing regulations which currently is very low.

In quarter 2, SFMP will circulate the Tigo partnership Letter of Collaboration (LOC) to partners, for comments/inputs and subsequently for finalization signing by partners to officially form the Tigo partnership which is a Public-Private Partnership (PPP) arrangement towards improving fisheries management in Ghana.

• 6.3 IUU Enforcement Partnership

Currently, sustainable fisheries management is complicated by poor law enforcement and citizens not reporting violations, meaning that law enforcement cannot respond quickly. The IUU Enforcement Partnership aims to empower Ghana's fisher folk to aid in the protection of critical fisheries resources through a community-based volunteer enforcement program, where illegal fishing activities can be reported through a toll-free hotline. SFMP has commenced discussion with potential ICT private partners to conceptualize the Hotline initiative. Discussion will continue in Q2 after which a concept note will be developed for the Hotline. As a result of the hotline implementation, SFMP expects greater collaboration between fisher folk and marine police, greater detection of illegal fishing and more effective enforcement, as well as increased community education on marine laws.

IR 7: Local Capacity Development

• 7.1 Capacity Development of Targeted Government of Ghana Fisheries and Coastal Management Institutions

SFMP seeks to improve fisheries management processes by engaging scientific research and findings as part of the driving forces and rationale for management, both in the Fisheries Commission and in non-governmental institutions including the University of Cape Coast, which is committed its role in training fisheries experts and expanding its ability to conduct
applied research, train the next generation of fisheries policy leaders and make fisheries information widely available.

The PhD student sponsored by SFMP, Evans Arizi, is developing his dissertation proposal, tentatively titled "Sardinella Population Dynamics Under Two Different Ecosystem-Based Fisheries Management Regimes In Ghana". Evans was also featured in the URI Foundation Annual Report for 2016. The feature, "Fishing for the Future", starts on page 12 (https://issuu.com/foundationpubs/docs/urif_annual_report_2016__1_f). Two additional individuals from UCC completed their first semester of Master degree training at URI starting in the fall of 2016. Ivy Gyimah is studying Marine Affairs (policy). Evelyn Takyi is in the Biological and Environmental Sciences program, concentrating on Fish Genetics, as recommended in the organizational assessment carried out for the UCC. Two Fisheries Commission staff, Rosina Cobbina and Vida Osei also begun studies toward URI master's degree programs. Their research proposals will be developed in Q2 and research conducted in Q3/Q4 in Ghana. Successful completion of their education and research projects will help fill a critical deficit in the Fisheries Commission of staff with advanced degrees as identified in its SFMP sponsored organizational assessment, which cited the need for advanced management and stock assessment capacity in order to carry out one of its core functions.

• 7.2 Developing the Capacity of Targeted Civil Society Organizations

Civil society organizations, especially membership organizations that directly represent fisheries resource users and value chain actors, are potentially the most significant drivers of transformational change in the sector. CSOs also have the potential to catalyze such change and sustain it more cost effectively than other types of actors. Realizing this potential depends on the organizational capacity of key CSOs in the sector to provide quality services to their constituencies on a sustainable basis. CSOs in the fisheries sector in Ghana are not fully realizing their potential due to gaps in organizational capacity, primarily in the areas of governance, financial management, program quality, and sustainability.

Since Year 1, SFMP has facilitated and supported baseline organizational capacity assessment, action planning and strengthening of key Local Partner CSOs. In Year 2 SFMP recognized that two additional membership organizations representing critical fisheries sector constituencies should be included among the CSOs receiving this type of support from SFMP. During the first quarter of Year 3, SNV undertook baseline Organizational Capacity Assessments (OCA) for the National Fish Processors and Traders Association (NAFPTA) held on 31st of October and 1st of November 2016 and for the Ghana Industrial Trawlers Association (GITA) on 6th December, 2016. With the participation of 12 National Executives (all women) of NAFPTA and 10 (2 women, 8 men) of GITA, the baseline assessment results in the areas of Governance, Financial Management, Programs, Human Resources, External Relations and Partnerships and Sustainability were used to develop Action Plans that address priorities identified for improvement in these organizations.

NAFPTA's and GITA's commitment to implementing the action plans and strengthening their organizations is manifest in the actions they are initially taking to revise their constitutions to strengthen their governance frameworks as a result of weaknesses identified by the OCA process. NAFPTA has finalized its' constitution and is waiting to adopt it at an Annual General Meeting. Representative, well documented and transparent governance structures are fundamental for these CSOs to realize their potential as; a.) sustainable fisheries management service providers and change agents for the constituents they represent, b.) collaborators with government and c.) partners of donors and other development actors. Financial audits are being conducted by an outside firm, Ernst and Young, for five local implementing partners. For two, Friends of the Nation and Hen Mpoano, this is required due to the level of funding they are receiving, but for all, it is also part of the capacity building effort to have an independent assessment of their financial capabilities after two years of capacity development activities. The findings will be used to develop action plans for continued improvements and ability to implement all USAID administrative and financial policies and procedures effectively.

Implementation Challenges

The national election campaign leading up to the December elections made it difficult to implement activities where it required participation of elected or other high level government officials at the national and district level. Often these individuals were busy campaigning and were unavailable to approve training events or be available for events that required their participation. For instance, the official launch of the Fisheries Watchdog Committee, which was planned for November did not materialize as a result of the absence of the Minister of Fisheries from the country and due to a heavy campaigning schedule. The transition to a new government is expected to slow down some activities in the upcoming quarter such as policy initiatives which will need to wait for new appointees to take up their posts.

Challenges in implementing activities at the field level occurred in some cases due to the bumper harvest season coinciding with the training sessions. It was difficult for the participants to be available during this peak season as this is when their businesses are most active.

M&E Plan and Update

The M&E plan was revised for FY17 on Performance management task and responsibility schedules, USAID revised indicators and targets, and performance indicators tracking tables. This was to ensure that the plan is up to date and reflects the needed changes in the project.

3. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

3.1 Gender Equity and Female Empowerment

Please see Section 2, IR5 for information on activities directly related to this issue.

3.2 Sustainability Mechanisms

In order to assure sustainability of project activities, emphasis is placed on involvement of relevant government officials in procurement processes undertaken has been highly participatory with government staff involved in developing specifications for procurement. In some cases this has resulted in a longer timeframe for procurement but more buy-in and assurance that it meets the needs of the intended beneficiaries. Capacity building and development of local stakeholders is described throughout the report and a key strategy to enhance sustainability of project outcomes.

In addition, to promote sustainability of local scale actions, one of the SFMP local implementing partners, Daasgift Quality Foundation, has created consultation platforms for fisher folk and other organizational stakeholders to engage in important issues that affect the fishing community. A partnership was also established with the Business Advisory Center to engage fisher folk in business training and enable them to access ongoing support and resources from the Center to continuingly improve their business practices.

3.3 Environmental Compliance

No activities were implemented during the quarter that required environmental screening. However, there were site inspection and monitoring of several construction activities. The Ahotor stoves that were constructed by Daasgift in Axim were inspected to ensure that necessary environmental issues are complied with.



Figure 12. Site inspection for the Daasgift Quality Foundation Model Kitchen

The contractor of the Development Action Association Fisheries Training Centre was taken through the USAID Environmental procedures and the monitoring protocol developed to ensure that the construction activities do not have significant impact on the environment. The company already have environmental personnel and a detailed health and safety plan that addresses most of the potential impact identified with their corresponding mitigation measures. It was agreed that the Environmental Compliance Officer will monitor the construction progress on monthly basis for the first six month and bi-monthly till construction is over.

3.4 Global Climate Change

See Section 2, IR4.5: Pra and Ankobra Resilience plans for information on climate activities

3.5 Policy and Governance support

See Section 2, IR1 which describes SFMP's policy and governance support initiatives.

3.6 Local Capacity Development

See Section 2, IR7 for capacity development activities of government, producer, processor and CSO groups.

3.7 Public Private Partnerships

See Section 2, IR 6 for activities on development of public-private partnerships.

In addition, a Private Sector Partnership was started by Daasgift Quality Foundation with a large scale fish processing company in Accra, Cann and Kaa Ltd., who are certified exporters of fish and showed interest to partner with them and signed an agreement/memorandum of understanding with Daasgift. Also Daasgift-trained small fish processors (fish processors and

traders) embarked on a trip organized by the Western Region Coastal Foundation to meet catfish farmers they have supported in order to establish a supply chain marketing network for sales of these fish in the Western Region.

3.8 Science, Technology, and Innovation

See section 2, IR 2 for activities on the scientific and technical innovations achieved during the quarter.

The SFMP, with the collaboration of Spatial Solutions, Hen Mpoano and the University of Cape Coast, has pioneered and made rapid progress in overcoming the limitations of obtaining and utilizing spatial information for planning and project monitoring by demonstrating the capabilities of small helicopter battery powered craft that have recently become widely available as recreational devices in the US. (See IR 2.5). The key innovation is in using advanced software to plan photography missions and then assembling the hundreds or thousands of images from a surveyed location into a set of orthophotographs as well as digital elevation information. These new highly detailed and accurate maps for areas reaching the survey limit of the vehicle, have been further processed by URI based experts for land cover and use classification and to generate shoreline erosion and flooding vulnerability in fishing communities, for example Sanwoma, Ellembelle District. The capacity developed at UCC during the first quarter is aimed at transferring this expertise to Ghanaian institutions both to continue using the smaller craft for site specific work, and having it in place when a much more capable fixed wing vehicle is obtained later this year. UCC experts and partners such as Hen Mpoano will be able to apply skills in satellite image analysis to the images captured by the small unmanned aircraft since the new vehicle will have multispectral image capability. In addition to supporting community planning, the new data acquisition will support disaster risk management, monitoring dynamic coastal processes and mangrove bio-mass and health mapping in coastal fishing communities and ecosystems that serve as fish nursery grounds and candidate sites for co-management of localized fish stocks.

The micro-insurance product called the "Fisher Future Plan" is a term-plus life insurance partnership between USAID SFMP and the private sector partners – Millennium and UT Life Insurance, Vodafone and BIMA. The product will operate on phones and a mobile money platform and will provide a social safety net for those participating. The product will also enable participants to avail of a mobile money as the platform for making payments and receiving benefits or payouts and thereby increase digital financial literacy and usage in the fishing industry, reduce financial risk associated with what is now almost completely a cash based systems. (See IR 6 Private Sector partnerships)

4. STAKEHOLDER PARTICIPATION AND INVOLVEMENT

Stakeholder participation and involvement is a key pillar of the SFMP approach and a central means to achieving the overall project goal to restore Ghana's marine fisheries to a healthy and sustainable state. As such, stakeholder participation is mainstreamed into all of the intermediate results categories including IR3; building constituencies and political will for reform, IR; national policy initiatives, national dialogues and workshops, IR 4; applied management initiatives, IR 5; gender, and IR 6; private sector partnership activities have involved substantial numbers of fisheries stakeholders.

5. MANAGEMENT AND ADMINISTRATIVE ISSUES

This reporting quarter represented a period of staffing transitions and changes. Two Fisheries specialists (Socrates Apetorgbor and Margaret Ottah Atikpo) were recruited by SFMP and undertook a month long orientation on technical activities within their responsibility to be undertaken at SFMP as well as field work with partners. These new recruits represent added technical capacity and support for the project and to improve oversight and supervision on the many local partners and their activities. They will augment fisheries policy and livelihoods technical capability as the current Chief of Party and senior fisheries advisor transition out of their full time Ghana-based duties.

Two positions for the Communications Department of the Accra-based project office, have been made permanent. These include the Communications Assistant position and the MIS Database Communications Officer. The Communications Assistant Emmanuel Attramah will be mainly responsible for tracking and documenting project successes to ensure major outcomes and impacts are highlighted, documented and disseminated in the form of success stories, whether narratives or audio-visuals. The MIS Database Communications Officer Mary Asare is responsible for the management of SFMP's contact management database, ensuring creation of diverse user groups and listserv for dissemination of periodic fisheries management messages among others.

The resignation of the previous M&E assistant in September, combined with an increasingly demanding workload for M&E reporting, led the SFMP to recruit a new M&E assistant, who was hired during this quarter to fill the vacancy. Samuel Fant Kombian was given a two week orientation at the SFMP office mainly by the M&E specialist and other technical staff.

A transition plan for Senior Fisheries Advisor who will return to the US at the end of January 2017, was developed. Some work tasks are being turned over to the new fisheries specialists hired although the advisor will continue to work on the project half-time, with frequent travel to Ghana for activities requiring his unique expertise, especially in strengthening the fish stock assessment capacity development at the Fisheries Commission.

The current Chief of Party is scheduled to return to the US at the end of March 2017 and recruitment of a new Chief of Party is underway. In-country interviews of the leading candidates are being scheduled for the January to February period.

USAID Ghana provided a partial obligation of funds for the approved FY 17 workplan that is expected to carry the project through mid-year of FY 17. Therefore a second pipeline analysis and request for obligation of funds is expected in the February to March period for the second half of FY17. Sub-recipient agreements for FY 17 where partially funded for the first six months and as obligated funds draw down and a new obligation is received from USAID, the remaining balance of the FY 17 budgets will be added to their agreements.

6. LESSONS LEARNED

The following are a few highlights of lessons learned during the course of implementation of project activities this quarter.

• Effective stakeholder engagement and collaboration at all levels through one-on-one and focus group discussions at all stages of implementing project activities promote high participation and acceptance. For instance, the active involvement of fisher folk through the F₂F initiative promoted their committed to ensuring that the NMFMP is fully implemented.

- Behavioral change communication among fish mongers, fishermen, fish traders and all who are involved in fishing activities is vital to the success and sustainability of the project initiatives that directly affect these fisher folk.
- Involving the youth in community SFMP project implementation contributes to achieving the project sustainability objective. For instance, the involvement of youth led to the establishment of mangrove farms and tree planting which is aim at restoring the depleted forest.
- Continuous interactions with the fisher folk as part of the project follow up visits encourages them to continue to practice the skills they received from trainings and workshops. More education and sensitization needs to be done so that the beneficiaries can change their attitudes and adopt to continue to implement the good practices even after the life of the project.
- In spite of the social barriers and strong belief systems such as the fish comes from God and there is no way the fish stock can deplete and the sea can kill the fish of these fisher folk, consistent visits, orientation, sensitization and education have paved way for understanding and adoption of some scientific base interventions.
- Taboos like going to sea on Tuesdays are now not being observed because of massive competition for the limited fish in the sea as a result of declining in the fish stock.
- The team has learnt to tailor scheduling of programs/events according to the specific issues on the ground that would have previously hindered the progress and success of programs. For example, Ankobra regularly at high tide (3pm) gets flooded.

7. PLANNED ACTIVITIES FOR NEXT QUARTER INCLUDING UPCOMING EVENTS

Selected highlights of upcoming activities in the FY 17 second quarter include:

IR1

- National CSOs meetings to review implementation of the NMFMP February
- Training of trainers for marine police and FEU supervisors on fisheries enforcement curriculum March
- Training on the identification of vulnerable households March 2017
- Collaborate with the Fisheries Commission to undertake a field exercise to train the volunteers on the use of gadgets meant for their operations and write-up an Operational Guide for the volunteers. February

IR2

- MIS specialist R. Bowen to Ghana, Electronic data collections systems with FSSD. Jan
- Coastal planning specialist D. Robadue, to Ghana to advance operations and sustainability plan for UAV with UCC and preparations for returning Master's Student research, Summer 2017 and planned semester abroad for 5 DFAS Ph.D. students, Fall of 2017. – Jan
- Fisheries Leadership Training of Trainers Castro and Ricci and UCC Feb-March

• Awareness creation on tagging and recapture for cuttlefish - February – March

IR 3

- Best Fisheries practices awards event Jan 31st
- Media outreach event- fishing trip Feb
- Twelve (12) Community durbars and drama on ClaT. January to March, 2017
- Radio Campaign on CLaT. January to March, 2017
- Radio sensitization on IUU fishing in Accra February March 2017
- IUU video screening in Volta and Greater Accra Regions January March 2017

IR4

- Gambia consultants for Oyster Fishery TA and follow-up meeting of participants to Sene-Gambia study tour end Jan early Feb
- DAA Training center construction ongoing all quarter long
- Training on fish handling for processors by DAA March
- Final validation workshop on small pelagic and demersal stock assessment reports Jan
- Organize meetings with end users and stove builders for a dialogue on pricing and technological issues January March 2017
- Gender Advocacy/mainstreaming Workshop Feb 7-8
- Two (2) National Association consensus building workshops of NMFMP February to March
- Training of MSMEs in fish processing business development in Greater Accra February
- Technical training in HFH, Packaging and Branding, for 200 MSMEs March
- Construction of 100 improved stoves in Greater Accra region February
- Validation of sardinella LEK results in Volta region, Tema and Elmina January
- Mangrove restoration exercises at Ankobra estuary January March
- Stakeholder meetings on community based fisheries management planning Ankobra January March

IR5

- Elin Torell to Ghana in February for Gender and Leadership event.
- Field Coaching and Monitoring of Implementing Partners, Fisheries Commission -March 2017
- Gender mainstreaming trainings for Fisheries Commission zonal focal persons February 2017

IR6

• Conclude discussions with potential ICT private partners for the Hotline initiative, and decide which potential partner should be further engaged.

- Develop concept note and circulated to MOFAD and Fisheries Commission for their input.
- Undertake a workshop for Tigo to present their offer under the proposed partnership to stakeholders (MOFAD, Fisheries Commission, SFMP and fisher folk association

IR7

• Mid-Term review of CSO action plans – January

Project Management

• Full partners meeting scheduled for Cape Coast March 14-16

Staffing transitions:

- Senior Tech Advisor Transition back to URI January 31
- Chief of Party finalist candidates in-country for on-site interviews January-February
- New CoP hired and on board March 31

M&E MSME formative assessment Jan-March: SFMP, through its implementing partners established MSMEs and VSLAs for both males and females in a lot of communities within the beneficiary regions. These MSMEs and VSLAs had challenges in terms of capacity, credit and facilities among others to help improve upon their business and quality of fish they produce hence had poor livelihood. Based on these, SFMP through it partners implemented activities such as trainings in business development and management, fish hygiene handling, fire, functional literacy and provided credit and also facilitated in linking these MSMEs to credit institutions etc. all geared towards improving their businesses and hence better livelihood among the Beneficial's and their communities at large.

After two years of implementing these activities, it is therefore prudent to assess how these activities are contributing in achieving the intended outcomes hence the need for formative evaluation. The main purpose is to examine the progress of implementation, efficiency, effectiveness, and sustainability of these MSMEs/VSLAs and other livelihood activities of the project. Captured important information on lessons learned and best practices from the implementation of MSMEs/VSLAs activities will be used to recommend necessary immediate modifications that would re-focus and strengthen the activity for the remaining life of the MSMEs/VSLAs and possible future MSMEs/VSLAs activities. After presenting the concept note of the MSME/VSLA formative assessment at USAID coastal Project coordination meeting in Takoradi, UCC and CSLP projects who have implemented similar livelihood activities expressed interest to participate in the exercise. It was agreed that SFMP, UCC and CSLP will conduct a joint formative assessment with SFMP playing the lead role.

8. FINANCIAL INFORMATION

Budget Item	Total Funds Obligated to Date Dec 31, 2016 (US\$)	Total Funds Expended to Date, through Dec 31, 2016 (US\$)	Pipeline as of Dec 31, 2016 (US\$)	Estimated Expenditures and Encumbranc es (US\$) Jan-March 31, 2017	Pipeline as of March 31, 2017 (US\$)
Direct costs	6,066,123	4,791,018	1,275,105	730,000	545,104.71
Subgrantees and grants	5,100,594	4,662,102	438,492	305,000	133,491.99
Construction	65,000	15,000	50,000	50,000	-
Training	68,501	38,100	30,401	24,850	5,551.00
TOTAL DIRECT	11,300,218	9,506,220	1,793,998	1,109,850	684,147.70
INDIRECT	1,382,826	1,035,260	347,566	190,036	157,530
TOTAL	12,683,044	10,541,480	2,141,564	1,299,886	841,678

ANNEX A: PROGRESS SUMMARY

The summary table below includes all standard USAID indicators as shown in Section 1.2 as well as SFMP custom indicators. It measures planned versus achieved during the reporting quarter and gives a cumulative performance in each quarter.

		Baseli	ne data	FY 2017		Quarterly St	tatus – F	Y 2017		Annual	Comment(s)
Indicator	Data Source	Year	Year Value	Annual Cumulative Planned target	Annual Cumulativ e Actual	Q1	Q2	Q3	Q4	Performance Achieved to Date (in %)	
Project	t Goal: Rebu	ild targ	geted fis	h stocks via ado	ption of sust	ainable prac	tices an	d exploi	tation l	evels	
Project Goal Indicators											
Number of hectares in areas of biological significance and/or natural resource showing improved biophysical conditions as a result of USG assistance (EG 4.8.1-1)	Biophysical assessments , landing data, maps	2015	0	10 hectares	0	0	N/A	N/A	N/A	0	This indicator will be tracked in 2019
Number of indirect project beneficiaries (number), the percentage of which are female (percent) (IDA Core Indicator) (Goal level indicator from Ghana CDCS)	Project record and surveys	2015	0	Counting 130,000 if the close season or second fishing holidays is adopted	N/A	N/A	N/A	N/A	N/A	N/A	This will be tracked in FY 2017
Intermediate Result (IR): POLI	CY: Strengt	hened e	enabling	environment fo	r marine res	ources gover	rnance		1	•	
Number of agricultural and nutritional enabling environment policies completing the following processes/steps of development as a result of USG assistance in each case: (FTF 4.5.1(24)) 1. Analysis 2. Stakeholder consultation/public debate 3. Drafting or revision 4. Approval (legislative or regulatory) 5. Full and effective implementation	Copies of laws, policies, strategies, plan or regulation	2015	0	7 Step 3-Ankobra (CBMP) Step 3-Densu (Oyster Plan) CLaT strategy – Step 4 Fish Act –Step 2 NMFMP-Step 5 Co-mgt. policy – Step 4 Step 3 Pra (CBMP)	N/A	N/A	N/A	N/A	N/A	N/A	Will be tracked at the end of the FY.

Table 1(a): PMP Indicator progress - USAID Standard Indicators and Project Custom Indicators

		Baselin	ne data	FY 2017		Quarterly St	tatus – F	Y 2017		Annual	
Indicator	Data Source	Year	Value	Annual Cumulative Planned target	Annual Cumulativ e Actual	Q1	Q2	Q3	Q4	Performance Achieved to Date (in %)	Comment(s)
Intermediate Result (IR): SCIEN		EARCH	I: Increa	ased use of science	e and applie	d research to) inform	decisio	n-maki	ng, law enforc	ement and
the implementation of managem Number of institutions with improved capacity to develop and implement managed access fisheries management plans	Project records, capacity assessment reports	2015	0	16 Ongoing, NAFTA replaces FA	0	0	N/A	N/A	N/A	0	Indicator will be tracked in FY 2017
Intermediate Result (IR): CONS	STITUENCI	ES: Co	nstituen	cies and politica	l will for po	licy reform &	& imple	mentati	on buil	t	•
Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	Trip reports, project records	2015		704	130	130	0	0	0	18%	Indicator on target to be achieved as most external TA planned for Q2&Q3
Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).	Sample of reports	2015	0	36	28	28	N/A	N/A	N/A	78%	achieved
Intermediate Result (IR): APPL	JED MANA	GEME	NT: Im	proved manager	nent of mari	ine resources	•			1	
Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (EG 4.8.1)	GIS Maps, policy documents	2015	0	619,473 hectares	0	0	N/A	N/A	N/A	0	This indicator will be tracked from FY 17,to FY 19
Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	Project records, mgt.t plans	2015	0	4 (Ongoing)	4	4	N/A	N/A	N/A	100%	Ongoing assistance to DAs.
Improvement in fisheries enforcement and prosecutorial chain to counter IUU fishing (increase/decrease in prosecutions and percent that lead to conviction) (Project Indicator)	Project, police, district attorney, and FEU records	2015	0	Increasing	N/A	N/A	N/A	N/A	N/A	N/A	Data acquired for western command, will be reported next quarter

		Baselin	ne data	FY 2017		Quarterly St	tatus – F	Y 2017		Annual	
Indicator	Data Source	Year	Value	Annual Cumulative Planned target	Annual Cumulativ e Actual	Q1	Q2	Q3	Q4	Performance Achieved to Date (in %)	Comment(s)
Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)	Assessment reports	2015	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No target for the quarter
Number farmers and others who have applied new technologies or management practices as a result of USG assistance (FtF 4.5.2)	Project records	2015	0	100,000 (assumes national closed season or other measure for canoes/small pelagics adopted)	N/A	N/A	N/A	N/A	N/A	N/A	This indicator will be tracked in FY17, FY 18 and FY 19
Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2)	training participant records, lists of micro- enterprises supported	2015	0	896	251 M-49 (20%) F-202 (80%)	251 M-49 (20%) F-202 (80%)	N/A	N/A	N/A	28% M-20% F-80%	Indicator on target and will be fully accomplished by end of quarter 4
Value of new private sector investments in select value chains (FTF 4.5.2-38)	Private sector financial records, program data	2015	0	Tracked, no target	\$ 0	\$ 0	N/A	N/A	N/A	0%	Will be tracked
Number of food security private enterprises (for profit), producers organizations, water users associations, women's groups, trade and business associations, and community-based organizations(CBOs) receiving USG assistance (RiA) (WOG) (FTF 4.5.2(11)	Project document	2015	0	4 (1 new-NAFTA)	4	4	N/A	N/A	N/A	100%	Target achieved
Number of members of producer organizations and community based organizations receiving USG assistance (S)(FTF 4.5.2(27))	Project documents	2015	0	TBD – as an additional org was added this year – NAFPTA	228 M-43 F-185	228 M-43 F-185	N/A	N/A	N/A	100%	Target to be revised after discussions with NAFPTA

		Baseli	ne data	FY 2017		Quarterly St	tatus – F	Y 2017		Annual	
Indicator	Data Source	Year	Value	Annual Cumulative Planned target	Annual Cumulativ e Actual	Q1	Q2	Q3	Q4	Performance Achieved to Date (in %)	Comment(s)
Cross Cutting Indicators		L	L			L				I	•
Number of public-private partnerships formed as a result of Feed the Future assistance (S) (FTF 4.5.2(12)_	Project documents	2015	0	1	0	0	N/A	N/A	N/A	0%	This will be reported at the end of the FY17
Number of people receiving USG supported training in natural resources management and/or biodiversity conservation, and climate change, disaggregated by gender (EG 4.8.1-27/ 4.8.2-6)	Project training reports and participant lists	2015	0	1492	156 M-85 (54%) F-71 (46%)	156 M-85 (54%) F-71 (46%)	N/A	N/A	N/A	10% M-54% F-46%	Below target due to electoral activities during the quarter some of the activities could not be implemented.
Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (FtF 4.8.1-29)	Project training report.	2015	0	19,959	2,794 (14%)	2,794 (14%)	N/A	N/A	N/A	14%	Below target due to electoral activities during the quarter some of the activities could not be implemented.

* Number of members of producer organizations and community based organizations receiving USG assistance (S) (FTF 4.5.2(27)) data for quarter 1 was revised to capture results after internal review was conducted at the end of the year.

* Percentage of gender breakdown was captured

* Number of direct project beneficiaries (number), the percentage of which are female (percent) (IDA Core Indicator) disaggregated by rural, urban (IR 2.1 indicator from Ghana CDCS) was revised from direct to capture indirect beneficiaries.

ANNEX B: TRAINET REPORT

This report includes trainings that count towards two indicators: including farmers, receiving business development services from USG assisted sources (FtF 4.5.2-37), and Number of people receiving USG supported training in natural resources management and/or biodiversity conservation, and climate change, disaggregated by gender (EG 4.8.1-27/ 4.8.2-6). For indicator reporting they are included in one or the other of these result areas based on the type of training provided, but not double counted in any cases for both indicators. The trainings reported in the following Table are for the current reporting period: October 1 – December 31, 2016.

Program Name	Start Date	End Date	USAID Budget (USD)	USAID Actual (USD)	Total Male Participants	Total Female Participants	Total Participants	USAID Budget Per Participants (USD)
Training for community Anti CLAT champions -DAA (YR3 Q1)	12/16/2016	12/16/2016	1,083	1,083	18	11	29	37
Refresher training for community Anti CLAT-DAA (YR3 Q1)	11/17/2016	11/17/2016	535	535	7	2	9	59
UCC Pilot training and Image Processing - CRC(YR3Q1)	12/21/2016	12/21/2016	1,856	1,856	6	1	7	265
Fisheries Watchdogs Training	12/11/2016	12/13/2016	4,131	4,131	51	35	86	48
ToT on Ahotor stove -SNV (YR3Q1)	10/26/2016	10/26/2016	405	405	4	5	9	45
ToT on functional literacy -DQF YR3Q1	11/28/2016	12/1/2016	396	396	5	4	9	44
Fire Prevention and Safety Training- CEWEFIA YR3 Q1	12/19/2016	12/22/2016	1,875	1,875	26	135	161	12
Training on how to use Ahotor stove, IEC message and Financing Scheme	10/25/2016	10/26/2016	3,312	3,312	14	58	72	46
FSSD staff training in MIS	6/1/2016	12/1/2016	3,295	3,295	2	0	2	1648
US Training								
Masters of Marine Affairs at University of Rhode Island	9/7/2016	8/31/2018	76898	0	0	1	1	76898

Program Name	Start Date	End Date	USAID Budget (USD)	USAID Actual (USD)	Total Male Participants	Total Female Participants	Total Participants	USAID Budget Per Participants (USD)
Masters of Biological and Environmental Science	9/7/2016	8/31/2018	76898	0	0	1	1	76898
Masters of Marine Affairs at University of Rhode Island	9/7/2016	8/31/2018	76898	0	0	1	1	76898
PhD Biological and Environmental Science Program University of Rhode Island	1/26/2016	5/18/2019	120872	0	1	0	1	120872
Masters of Biological and Environmental Science	9/7/2016	8/31/2018	76898	0	0	1	1	76898
Total			445,354	16,888	134	255	389	430,669

ANNEX C: TABLE OF FISHERIES STORIES REPORTED IN THE LOCAL MEDIA

No.	Platform/ Media House	Segment Type	Topic/ Issue	Date
1	Ahomka Radio, Radio Peace, Radio 360	Talk show	Talk show on fisheries management issues such as CLaT	Oct – Dec 2016 (Every Tues)
2	Radio Central	Radio	Efforts in Ghanaian fishery unsustainable	Oct 3, 2016
3	Daily Graphic, Pg 10	News Item	Ghana's Coast: Hazards, planning, management, disaster response	Oct 4, 2016
4	The Ghanaian Times, Pg 18	News Item	Duakor, Ekurofo Mpoano fishermen praise President	Oct 6, 2016
5	The Ghanaian Times, Pg 26	News Item	Bui Power Authority moves to boost fish production	Oct 7, 2016
6	Daily Graphic, Pg 13	News Item	Drivers participate in programme to reduce child trafficking	Oct 7, 2016
7	Citi Fm online	News Item	http://citifmonline.com/2016/10/09/well-build-10-landing-sites-for-fishing- communities-npp/	Oct 9, 2016
8	Daily Graphic, Pg 10	Letter	Stop drying fish on pavement	Oct 10, 2016
9	Daily Graphic, Pg 61	News Item	Duakor, Ekurufo Mpoano get landing beach c'ttees	Oct 10, 2016
10	Radio Ada	Talk show	Radio Advocacy programme on Fisheries	Oct 12, 2016
11	Daily Graphic, Pg 60	News Item	Fisher folk to benefit from micro-insurance initiative	Oct 13, 2016
12	Ghana News Agency	News Item	http://www.ghananewsagency.org/economics/insurance-policy-rolled-out-for-fisher-folks-109043	Oct 15, 2016
13	Ghana News Agency	GNA Feature	http://www.ghananewsagency.org/features/ghana-needs-to-build-resilient-coastal-and-fishing-communities-109032	Oct 15, 2016
14	B&FT, Pg 6	News Item	Fishing community to benefit from micro-insuranceas USAID, four others sign agreement	Oct 17, 2016
15	The Ghanaian Times, Pg 7	News Item	NGO facilitates efforts to end child labour	Oct 18, 2016
16	The Ghanaian Times, Pg 28	News Item	Adopt safe techniques to save fishing industry	Oct 18, 2016
17	B&FT, Pg 5	Editorial	African waters must not be misused	Oct 18, 2016
18	The Ghanaian Times, Pg 32	News Item	\$100m invested in fisheries	Oct 19, 2016
19	Daily Graphic, Pg 40 & 41	News Feature	Ghana to honour fishermen for good practices	Oct 19, 2016
20	News Ghana.com	News Item	https://www.newsghana.com.gh/losing-aquatic-matter-through-sand-winning-in-coastal- areas/	Oct 21, 2016
21	Modern Ghana.com	Feature Article	https://www.modernghana.com/news/729183/winning-the-sand-and-losing-fisheries-a-	Oct 21, 2016

Table 5. List of Fisheries Stories Reported in the print Media and Radio for this reporting period (October-December, 2016)

No.	Platform/ Media House	Segment Type	Topic/ Issue	Date
			growing-coastal-be.html	
22	The Ghanaian Times, Pg 32	News Item	Ghana imported \$135m fish products in 2013	Oct 21, 2016
23	The Daily Dispatch, Pg 8	Feature Article	Winning the sand and losing fisheries - A growing coastal belt problem in Ghana	Oct 21, 2016
24	Daily Graphic, Pg 43	News Item	Enforce fisheries laws to protect life - Ayittey	Oct 22, 2016
25	Joy online	News Item	http://www.myjoyonline.com/business/2016/October-23rd/government-to-strictly- enforce-fisheries-law-mahama.php	Oct 23, 2016
26	ATL FM online	http://www.atlfmonline.com/about-us/our-mission/item/1969-ghana-s-fish-stock-nearing-depletion	Oct 23, 2016	
27	Spy News Agency	News Item	http://spynewsagency.com/winning-the-sand-and-losing-fisheries-a-growing-coastal- belt-problem-in-ghana/	Oct 24, 2016
28	Daily Graphic, Pg 32	News Item	Government introduces closed fishing season. To help replenish depleting fish stock	Oct 24, 2016
29	The Ghanaian Times, Pg 17	News Item	National Fish Festival celebrated at Anloga	Oct 24, 2016
30	The Ghanaian Observer, Pg 9	Feature Article	Winning the sand and losing fisheries - A growing coastal belt problem in Ghana	Oct 24, 2016
31	Spy News Agency	News Item	http://spynewsagency.com/the-invisible-fisheries-could-drive-nutrition-security-in- ghana/	Oct 25, 2016
32	News Ghana.com	News Item	https://www.newsghana.com.gh/oyster-business-booming-in-ghana/	Oct 25, 2016
33	Modern Ghana.com	Feature Article	https://www.modernghana.com/news/730163/the-invisible-fisheries-could-drive- nutrition-security-in.html	Oct 25, 2016
34	The Daily Dispatch, Pg 6 & 8	Feature Article	The invisible fisheries' could drive nutrition security in Ghana	Oct 26, 2016
35	The Ghanaian Observer, Pg 4	Feature Article	The invisible fisheries' could drive nutrition security in Ghana	Oct 26, 2016
36	Ghana Web.com	Feature Article	http://www.ghanaweb.com/GhanaHomePage/features/Winning-the-sand-and-losing-fisheries-a-growing-coastal-belt-problem-in-Ghana-480505	Oct 26, 2016
37	Daily Graphic, Pg 29	News Item	Fisheries committee trained in combating illegal fishing	Oct 27, 2016
38	Adacommunityonline.com	News Item	http://adacommunityonline.com/2016/10/27/nene-ada-calls-for-measures-to-sustain-fishing-in-the-lower-volta-basin/	Oct 27, 2016
39	Modern Ghana.com	Feature Article	https://www.modernghana.com/news/731160/the-myth-of-fish-test-kit-in-ghana.html	Oct 28, 2016
40	The Ghanaian Observer, Pg 4	Feature Article	The myth of fish test kit in Ghana	Oct 28, 2016
41	The Ghanaian Observer, Pg 11	News Item	Fishermen are not catching some species of fish as before - Agbogah	Oct 28, 2016
42	Citi FM online.com	News Item	http://citifmonline.com/2016/10/29/adb-donates-fishing-equipment-to-fishermen-hit-by-tidal-waves/	Oct 29, 2016
43	Ghana Web.com Feature Article http://www.ghanaweb.com/GhanaHomePage/NewsArchive/Ghana-can-benefit-from-Oyster-481433		Oct 29, 2016	
44	Ghana Web	Feature Article	http://www.ghanaweb.com/GhanaHomePage/features/The-myth-of-fish-test-kit-in-	Oct 29,2016

No.	Platform/ Media House	Segment Type	Topic/ Issue	Date
			Ghana-481776	
45	Citi FM online.com	News Item	http://citifmonline.com/2016/10/30/npp-government-to-establish-an-outboard-motor- assembling-plant/	Oct 30, 2016
46	News Ghana.com	News Item	https://www.newsghana.com.gh/fish-test-kit-myth-or-fact/	Oct 31, 2016
47	B&FT, Pg 23	News Item	ADB supports tidal waves victims	Oct 31, 2016
48	Daily Graphic, Pg 43	News Item	ADB supports tidal wave victims	Nov 1, 2016
49	Daily Graphic, Pg 62	News Item	7 Companies donate towards awards for fishermen	Nov 3, 2016
50	The Daily Dispatch, Pg 8	Feature Article	The myth of fish test kit in Ghana	Nov 3, 2016
51	The Ghanaian Times, Pg 4	Editorial	Ayeeko!! Galant farmers and fishers	Nov 4, 2016
52	The Ghanaian Times, Pg 9	Features	National Farmer's Day: Appreciating the toil of our farmers and fisher folk	Nov 4, 2016
53	Citi FM online.com	News Item	http://citifmonline.com/2016/11/05/ghana-to-import-10000-tons-of-fish-feed-in-2017/	Nov 5, 2016
54	Daily Graphic, Pg 68	Advertorial	Sustainable Fisheries Management Project (SFMP). Best Fisheries Practices Awards. Call for applications	Nov 7, 2016
55	The Ghanaian Times, Pg 10&21	News Item	Ghanaian farmers, fisher folk honoured	Nov 7, 2016
56	The Ghanaian Times, Pg 20	News Item	Ghana projects to produce 100,000 tonnes of fish in 2018	Nov 8, 2016
57	The Ghanaian Times, Pg 7	News Item	Motorised boat to operate on River Ankobra	Nov 9, 2016
58	The Ghanaian Times, Pg 11	News Item	Akufo-Addo promises landing beach at Ekumfi Otuam	Nov 11, 2016
59	The Ghanaian Times, Pg 27	News Item	3 Fish processors win award	Nov 11, 2016
60	Radio Ada	Discussion	Communities Forum	Nov 13, 2016
61	Joy online.com	News Item	http://www.myjoyonline.com/business/2016/November-20th/fisheries-ministry-partner- insurance-company-to-provide-insurance-for-fishers.php	Nov 20, 2016
62	Ghana News Agency	News Item	http://www.ghananewsagency.org/economics/government-takes-steps-to-grow-fisheries-sector-110385	Nov 21, 2016
63	Ghana News Agency	News Item	https://www.newsghana.com.gh/govt-to-ensure-one-million-fishermen/	Nov 22, 2016
64	GTV, Obonu, Jubilee Radio, Twin City Radio, Skyy Power FM	Discussion	World Fisheries Day 2016 discussions	Nov 22, 2016
65	Citi FM online	News Item	http://citifmonline.com/2016/11/23/one-million-fishermen-to-be-insured-next-minister/	Nov 23, 2016
66	ATL FM	News Item	http://www.atlfmonline.com/h-ot-events/item/7207-fishermen-sign-fisherman-to-fisherman-compact-agreement	Nov 24, 2016
67	Ghana News Agency	News Item	http://www.ghananewsagency.org/science/fishers-commit-to-responsible-fishing- practices-110588	Nov 25, 2016
68	Graphic Online	News Item	http://www.graphic.com.gh/audios/use-of-condoms-for-fishing-cause-	Nov 25, 2016

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			shortages.html#.WDhfJT53H_4.facebook			
69	The Ghanaian Times, Pg 32	News Item	Stop unauthorised fishing	Nov 25, 2016		
70	Daily Graphic, Pg 48 & 49	Special Feature	Developing fishing communities. The premix fuel factor	Nov 28, 2016		
71	Daily Graphic, Pg 44 & 53	Special Focus	Regatta 2016. WR Canoe fishermen and Tullow/TEN partners strengthen ties	Nov 28, 2016		
72	B&FT, Pg 24	News Item	Star Micro-Insurance to provide insurance scheme for fisher folk	Nov 28, 2016		
73	The Ghanaian Times, Pg 25	News Item	C/Region fisher folk receive ICT devices	Nov 29, 2016		
74	Daily Graphic, Pg 42		Two provide insurance cover for fisher folk	Nov 29, 2016		
75	Joy online.com	News Item	http://www.myjoyonline.com/news/2016/December-2nd/fisheries-ministry-to-launch-			
15	Joy onnie.com	news nem	fish-landing-site-project-in-anloga.php	Dec 2, 2016		
76	Daily Graphic, Pg 43	News Item	Anloga to get modern fishing landing site	Dec 6, 2016		
77	Daily Graphic, Pg 37	News Item	Innovative vegetable production for fishing communities	Dec 8, 2016		
78	GTV Life	Documentary	Towards a sustainable fishery	Dec 11, 2016		
79	Daily Graphic, Pg 41	Opinion Article	Child Labour. A global canker	Dec 20, 2016		
80	B&FT, Pg 15	News Item	Fish farming activities picks up in W/R coastal district	Dec 23, 2016		