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SUSTAINABLE FISHERIES MANAGEMENT PROJECT (SFMP)

ANNUAL PROGRESS REPORT

October 22, 2014 – September 30, 2015

THE UNIVERSITY OF RHODE ISLAND GRADUATE SCHOOL OF OCEANOGRAPHY | CRC COASTAL RESOURCES CENTER

Hɛn Mpoano

DO THE RIGHT THING Friends of the Nation

SNV SMART DEVELOPMENT WORKS

SSG ADVISORS Catalyzing Development Through Partnership

HELPING WOMEN ACHIEVE QUALITY FOUNDATION HELP THEMSELVES Daasgift

CEWEFIA UNITY & PROGRESS

DAA

SpS SPATIAL SOLUTIONS

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Cover photo: Fish landing site, Western Region (Photo Credit: Hen Mpoano)

ACRONYMS

AOR	Administrative Officer Representative
CCM	Centre for Coastal Management
CDCS	Country Development Cooperation Strategy
CEWEFIA	Central and Western Region Fishmongers Improvement Association
CoP	Chief of Party
CR	Central Region
CRC	Coastal Resources Center
CRCC	Central Regional Coordinating Council
CSLP	Coastal Sustainable Landscapes Project
CSO	Civil Society Organization
DA	District Assemblies
DAA	Development Action Association
DQF	Daasgift Quality Foundation
DFAS	Department of Fisheries and Aquatic Sciences
DO	Development Objective
EMMP	Environmental Mitigation and Monitoring Plan
FAO	Food and Agricultural Organization of the United Nations
FASDEP	Food and Agriculture Sector Development Program
FASDP	Fisheries and Aquaculture Sector Development Program
FC	Fisheries Commission
FCWCGG	Fisheries Committee for the West central Gulf of Guinea
FEU	Fisheries Enforcement Unit
FoN	Friends of the Nation
FSSD	Framework for Strategic Sustainable Development
FtF	Feed the Future
FWG	Fisheries Working Group
HM	Hen Mpoano
GCLME	Guinea Current Large Marine Ecosystem
GIFA	Ghana Inshore Fishermen's Association
GIS	Geographic Information System
GNAFF	Ghana National Association of Farmers and Fishermen
GNCFC	Ghana National Canoe Fishermen’s Council
GoG	Government of Ghana
GSO	Graduate School of Oceanography, University of Rhode Island
ICFG	Integrated Coastal and Fisheries Governance
ICM	Integrated Coastal Management
ICT	Information, Communications Technology
IEC	Information, Education and Communications
IEE	Initial Environmental Examination
IR	Intermediate Results
IUCN	International Union for Conservation of Nature
IUU	Illegal Unreported Unregulated
LOE	Level of Effort
LOGODEP	Local Government Development Program
LoP	Life of Project
MCS	Monitoring, Control and Surveillance
METASIP	Medium Term Agricultural Investment Program
METSS	Monitoring, Evaluation and Technical Support Services

MFRD	Marine Fisheries Research Division
MOFAD	Ministry of Fisheries and Aquaculture Development
MOU	Memorandum of Understanding
MPA	Marine Protected Area
M&E	Monitoring and Evaluation
NAFAG	National Fisheries Association of Ghana
NGO	Non-Governmental Organization
NC	National Committee
NRM	Natural Resources Management
PMEP	Performance Monitoring and Evaluation Plan
PMP	Performance Management Plan
PPP	Public Private Partnerships
RCC	Regional Coordinating Council
RFA	Request for Application
RPA	Rapid Partnership Appraisal
SFMP	Sustainable Fisheries Management Program
SMEs	Small and Medium Enterprises
SNV	Netherlands Development Organization
SpS	Spatial Solutions
SSG	SSG Advisors
STEP	Sustainable, Transparent, Effective Partnerships
STWG	Scientific and Technical Working Group
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	United States Agency for International Development
USG	United States Government
WA	West Africa
WARFP	West Africa Regional Fisheries Development Program
WR	Western Region

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1. PROGRAM OVERVIEW / SUMMARY

Program Name:	Sustainable Fisheries Management Project
Activity Start Date And End Date:	October 22, 2014 to October 31, 2019
Name of Prime Implementing Partner:	Coastal Resources Center, University of Rhode Island
Agreement Number:	AID-641-A-15-00001
Name of Sub-awardees:	Hen Mpoano Friends of the Nation SNV Netherlands SSG Advisors Spatial Solutions Central and Western Fish Mongers Association (CEWEFIA) Development Action Association (DAA) DQF Quality Foundation
Major Counterpart Organizations	Ministry of Fisheries and Aquaculture Development Fisheries Commission
Geographic Coverage	Ghana: Central Region, Western Region, Greater Accra Region, Volta Region
Reporting Period:	October 22, 2014 – September 30, 2015

1.1 Program Description/Introduction

The USAID/Ghana Sustainable Fisheries Management Project (SFMP), a five-year project (October 2014-October 2019) is aimed at rebuilding marine fisheries stocks and catches through adoption of responsible fishing practices. The project contributes to the Government of Ghana's fisheries development objectives and USAID's Feed the Future Initiative. Working closely with the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission, USAID/Ghana SFMP aims at ending overfishing of key stocks which are important to local food security through the 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 Organization, SSG-Advisors, Hen Mpoano, Friends of the Nation, and the Central & Western Fish Mongers Improvement Association in Ghana/CEWEFIA, DQF Quality Foundation, Development Action Association (DAA), and Spatial Solutions.

The project compliments and coordinates closely with two other sister 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, known locally as the *Hen Mpoano* (Our Coast) initiative. 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 will be supported. The project is also adopting deliberate steps towards reducing child labour and trafficking in the Central Region of Ghana.

Key government clients of this project include MOFAD, FC and the Regional Coordinating Councils and associated districts in the Central and Western Regions; the Marine Police are also being provided with direct support to build their capacity. Additional direct 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, lessons learned during for year 1(October 22, 2014 to September 30, 2015). It further explains how partners significantly 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

The project completed in its first year in FY 15 with the start-up of project operations through an Accra-based office and executing sub-recipient agreements and to get field work underway. Fisheries working groups were established in the Western and Central regions where workshops have identified ways to improve coordination among fisheries enforcement agencies and improve performance of the prosecutorial chain. Fifty marine police were trained in smart policing tactics and in understanding of the rationale behind fisheries laws, enabling them to educate fisherfolk as to why such laws are in place; all aimed at improving regulatory compliance. Over 700 stakeholders, both men and women, were involved in a series of regional dialogues facilitated with the Fisheries Commission which educated them on a range of management potential options to reverse the fishery decline. Results of the dialogues demonstrate that fishery stakeholders are supportive of change and agree with most of the regulations included in the draft management plan prepared by the Fisheries Commission.

Over the past year, 890 persons, seventy percent male, have been trained in natural resource management. This included a study tour to the Philippines for a group of 20 stakeholder leaders to learn of successes achieved on a USAID/Philippines fishery project where closed seasons and citizen watch programs have contributed to improvements in the fishery. Participants have been sharing their learnings with other stakeholders at various meetings in Ghana. SFMP also conducted a leadership training event with UCC for 25 stakeholder leaders, both government, private sector and CSO representatives. This training and the study tour have created a cadre of influential opinion leaders in the fisheries sector that have become strong advocates for change in Ghana and are assisting to build a broad based constituency in support of new measures needed to rebuild the fishery.

A scientific and technical working group was formed which conducted a stock assessment of the small pelagic fishery. This assessment clearly shows scientific evidence that overfishing has been occurring for over a decade and biomass of stocks of the small pelagics are at historic lows. This information strengthens the rationale for quick action being urged to reverse this decline. The SFMP is also working with UCC to conduct a similar assessment of demersal fish stocks in the Western Region, engaging graduate students in action oriented research in this process.

The SFMP developed a communications strategy to support efforts at: rebuilding fish stocks and prevention of IUU fishing, preventing illegal child labor and trafficking in fisheries, and a "healthy fish campaign" to build demand for quality and hygienic fish products that can provide price premiums to processors. Communication activities have included community drama, radio programs and dissemination in local media, radio and the press of over 20 information products on fisheries issues.

There have been 751 micro, small and medium businesses, mainly fish processors that are 95% female owned and operated, that have received business development services in the form of training in business management and partial grants for constructing modern, more fuel efficient and profitable fish smoking stoves. Two dozen pilot improved smoker stoves have been

constructed in targeted communities. Initial indications are that fish processors like these improved models more than the traditional smokers and the outlook for rapid and widespread adoption is positive. Table 1 below summarizes the standard USAID indicators showing results completed in FY 15 vis a vis targets. Significant deviations between results and targets are explained in Annex 1. Annex 1 shows both USAID standard and custom project indicators.

Table 1 Summary of Results to Date

Standard Indicators	**Base-line FY 2015**	**FY 15 Target**	**Results FY 15**	**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	N/A		N/A	
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)1	0	N/A		N/A	
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	Fish analysis Small pelagic analysis Child labor analysis	1	33%	N
Number of institutions with improved capacity to develop and implement managed access fisheries management plans	0	N/A		N/A	
Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	0	806	816	816 (101%)	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	0		N/A	
Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	0	4	4	4(100%)	Y

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

Standard Indicators	Base-line FY 2015	FY 15 Target	Results FY 15	Performance Achieved to the End of Reporting Period (%)	On Target Y/N
Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)	0	2	1	1(50%)N/A	N
Number farmers and others who have applied new technologies or management practices as a result of USG assistance (FtF 4.5.2)	0	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	560	751	751(134%) M=36 (5%) F=715 (95%)	Y
Value of new private sector investments in select value chains (FTF 4.5.2-38)	0	N/A		N/A	
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	3	2	2 (66%)	N
Number of members of producer organizations and community based organizations receiving USG assistance (S) (FTF 4.5.2(27))	0	180	164	164(91%)	Y
Number of public-private partnerships formed as a result of Feed the Future assistance (S) (FTF 4.5.2(12)	0	N/A	N/A	N/A	Y
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	404	890	890 (220 %) Male-621(70%) Female-269(30%)	Y
Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (4.8.1-29)	0	4040	9832	243%	Y

Note: The Results Performance Column depicts level of achievement expressed as a percentage of Actual versus Planned. Additional description and explanation is provided on each indicator as well as on indicators with high variance from the target in Annex 1.

2. ACTIVITY IMPLEMENTATION PROGRESS

2.1 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 a bottom-up and top-down approach. MOFAD/Fisheries Commission is mandated to spearhead all fisheries policy arrangements. The SFMP is working closely with the Ministry/Commission to facilitate effective marine resource governance.

1.1 Legislative reform for Fisheries Co-management

During Year 1 of the SFMP, a partial review of the Fisheries Act was already ongoing – commissioned by the World Bank WARFP. The report on the legislative reform was finalized. The Ministry of Fisheries (MOFAD) has planned a complete rewriting of the Fisheries Act which is scheduled after the next Presidential elections with anticipated submission to Parliament in 2018. The WARFP report lays out general recommendations but did not lay out detailed structures and management units. The SFMP will assist MOFAD and the FC to pick up where the WARFP reports ended, once final versions are released. No major activities on this task were undertaken in Year 1.

1.2 National Fisheries Dialogue

National Fisheries Dialogues are intended to provide a platform for all stakeholders in the fisheries sector to contribute to decision-making, enrich management discussions and create stakeholder buy-in and ownership.

Regional Public Stakeholder Consultations

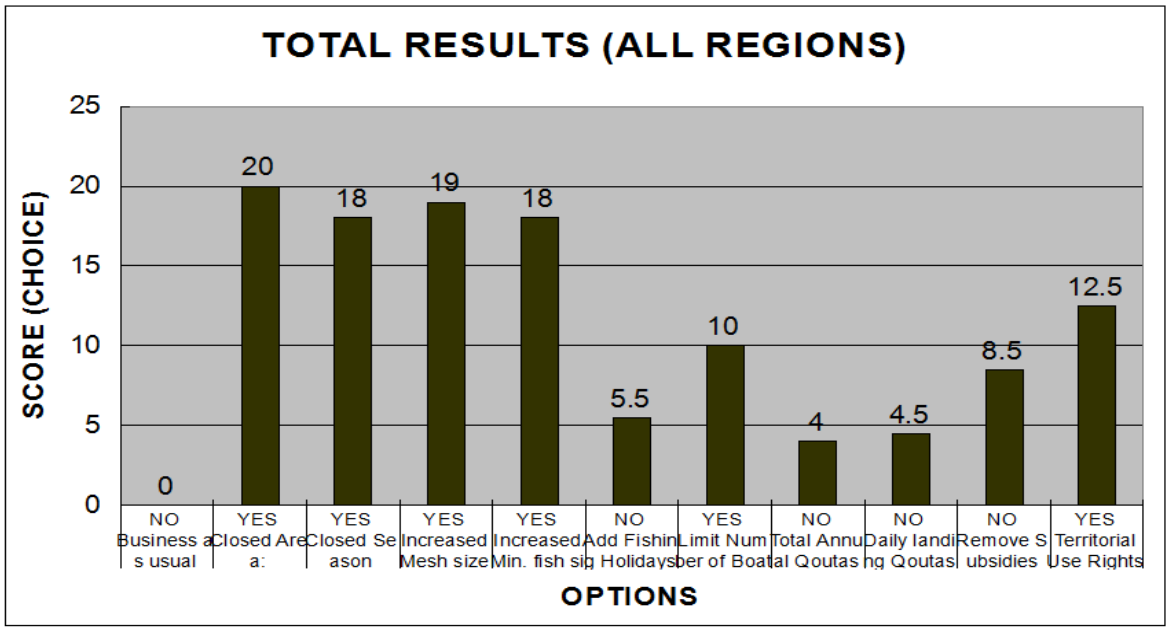
In Year 1, SFMP conducted a series of stakeholder consultations in all four coastal regions of Ghana – Western, Central, Greater Accra and Volta Regions. The first round of stakeholder engagements involved four (4) regional public open meetings where eleven potential management options were socialized with stakeholders in each of the four coastal regions. During these meetings the options were explained to participants using interactive power point presentation, market place discussions and communicative drama performances. In all the regions, stakeholders discussed the eleven options and selected their preferred options as it pertains to the small pelagic fisheries. The preferred options collated from all the four regional

Lesson: The use of communicative drama was noted as most effective tool for conveying the information on the need for the adoption of new management options, especially to the fishers. Nana Duncan the chief fishermen of Elmina noted:

"I have been impressed by the drama performance; I understood the need for rapid reforms to address the declining fisheries and the need to work together as fishers to achieve this. I also heard my colleagues, chief fishermen expressing same. I believe that, if this drama is performed in all fishing communities, on national TV and to all fisheries stakeholders, there will be a paradigm shift and a transformation in the attitude and response towards fisheries governance in Ghana".

engagements were: Closed Area, Closed Season, Increased Minimum Mesh size and Increased Minimum Fish Size. (See graph below for the scoring of the options)

Figure 1 Selected options with their respective scores for all the four regions



National Stakeholder Association Leaders' Meetings

Figure 2 Cross section of participants at the stakeholder meetings

Tema (Top left), Cape Coast (Top right) and Takoradi (Bottom)

The second round of engagements involved four (4) association leaders' caucuses meeting. These meetings were organized as follow-ups to the first round of meetings. For the caucuses meeting leadership of the various fisheries associations discussed the preferred options selected in the first round of engagement and provided reasons for selecting those options. They also provided recommendations for the possible implementation of the preferred options.

The stakeholder engagements were very useful as they presented the opportunity for participants to appreciate the need for the adoption and implementation of urgent fisheries management actions to address the rapid decline of Ghana's small pelagic fisheries.
The engagement also used a unique process that made participants to focus on possible solutions rather than the conventional problems and associated blame game.

National Fisheries Dialogue

Proceedings from the regional consultations were to feed into the National Dialogue event which was slated for last quarter of Year 1. The event was however postponed to first quarter Year 2 due to the urgent need for drawing synergies with the MOFAD/FC intended to focus dialogue discussions on the newly approved National Marine Fisheries Management Plan. This Plan was drafted and endorsed by cabinet and is pending with the Attorney General's office for gazetting. In Year 2, the SFMP will assist MOFAD towards the realization of the strategies contained in this plan to rebound the small pelagic fisheries and other marine stocks. The plan addressed other stocks including tuna and industrial fleets but the support from SFMP to MOFADS/FC on plan implementation will be focused on small pelagics and the main fleets that target these species – canoes, inshore and trawlers. The SFMP reviewed the draft document which was prepared by the Fisheries Commission prior to SFMP start up. SFMP held a series of meetings with MOFAD/FC to discuss the national dialogue and a committee was established for effective planning and coordination towards the dialogue event. .

1.3 Law enforcement

Strengthening law enforcement is noted as one of the key strategies that contribute to the adoption of responsible fishing practices in Ghana. IUU Fishing which is a major problem in West Africa and for which Ghana attained a Yellow Card status from the European Commission since 2013, has now become an issue of global concern and the need to combat it. In Year 1, SFMP conducted the following key activities intended to contribute to the process of strengthening law enforcement.

Fisheries Working Group meetings in Western and Central Regions

Friends of the Nation conducted a series of meetings for the Fisheries Working Group (FWG) established under the ICFG project in Western Region. A new working group was also formed in the Central Region in Year 1. The Working Group plays a significant role in enforcement and compliance strategies. Discussions at the meetings were geared towards improving fisheries enforcement and compliance in the respective regions. For example in the Central Region the role of traditional leaders in fisheries compliance and enforcement were highlighted and the Regional Fisheries Commission was advised to strengthen engagement with the traditional

leaders in this regard. Members of the FWG are selected from relevant fisheries institutions including Fisheries Commission, Women Processors, Fisheries Associations, the Enforcement Units, traditional authorities and the Environmental Protection Agency.

Prosecutorial Chain Workshop

A prosecution chain workshop was organized in Western Region within the period. This focused on reviewing past prosecution cases and developing a road map for tracking fisheries cases. To further enhance the prosecution process, weaknesses in the prosecution process were identified and recommendations were given to strengthen those areas. Weaknesses include: evidence gathering and presentation in Court, police prosecutors' and judges' low understanding of the fisheries laws, among others. Participants at this training included officials from the judiciary, police prosecutors and the Fisheries Enforcement Unit.

Marine Police, FEU and MCS training in the Central Region

A 5-day orientation training on participatory fisheries enforcement was organized by FoN for the Marine Police, FEU and MCS officers. Participants for the training included 50 personnel of the Marine Police Unit and 10 MCS officers from Fisheries Commission, all members of the FEU. To facilitate learning, an adult education approach was adopted for the training; it involved short interactive power-point presentations with more structured discussion sessions after each presentation. As part of the training, participants embarked on a field trip to the Elmina fishing landing site to observe and interact with the local fishers. This provided a platform for practical learning and primary information gathering on the various issues in the fisheries sector.

The training provided participants with knowledge in fisheries laws and regulations, eco-system based approach to fisheries management, history of fisheries management and governance, International Monitoring Control and Surveillance (MCS), traditional fisheries management illegal fisheries practices, global experiences of fisheries management, etc.

There is the need for continuous orientation training for fisheries enforcement officers. Normally it is expected that fisheries officers would learn rapidly on the job, however the posture of enforcement officers limit their acceptability by fisher folks and therefore they do not benefit from exposure to relevant traditional and practical information to aid their work.

SFMP also held discussions with the Marine Police during a visit to their Academy at Ainyinase in the WR concerning ideas that will inform the next training sessions and to assess potential materiel support to the Academy with respect to outfitting of training halls. Subsequent training events can be held at this location once all facility renovations are completed and will potentially provide additional cost share and project expense savings by utilizing their facility. Curriculum developed for the training of the Marine Police during the ICFG is under review and will include the introduction of a competency-based professional development program. The marine police seem amenable to exploring the competency based approach. A review and revisions to the current curriculum will be incorporated as part of the competency development process whereby curriculum will be revised once core competencies have been defined.

Baseline of Fisheries Prosecutions

SFMP conducted a baseline of fisheries prosecutions. The information collated included summary of fisheries cases at the scale of the Western Region and the national level scale. Findings from the baseline data revealed the number of arrests made between 2007 and 2015, the nature of the offense, the mode of prosecution, the fines imposed and the payments made. It

further revealed that a total of GHS 4,056,476 and USD $ 800,000 were imposed as fines from the arrests made between the period.

Figure 3 Participants of at the fisheries enforcement Orientation Training in UCC, Cape-Coast

1.4 National Level Support for Small-Pelagics Management Plan – Study Tour

From May 25-30, SSG led a study tour to the Philippines for 20 critical stakeholders from the Ghanaian fisheries sector. The tour was jointly organized by SFMP and the WARFP.

Figure 4 Study Tour Participants

Participants included representatives of the Fisheries Commission and the Ministry of Fisheries and Aquaculture Development, chief fishermen, women fish processors, the marine police and FEU and the Fisheries Alliance. This tour presented a platform for participants to interact with key stakeholders in the fishing sector. Again, participants earned the opportunity to learn about the Philippine experiment with closed seasons, the participation of the private sector in sustainable fisheries management, and community-based co-management and enforcement initiatives, such as the *Bantay Dagat* system, a network of volunteer community patrols to enforce marine protected areas and closed seasons among several best practices which can be replicated in the Ghanaian context to revamp the fisheries sector.

Figure 5 Some participants on the Philippines Study Tour

Ghana is Ready for Change: The Stakes are High!

The Philippines Study Tour has resurrected, in its wake, a new hope for Ghana's fisheries management. Drawing from the Philippines experience of a fishery similar to that of Ghana, participants are hopeful that one of the crucial management measures necessary for rebuilding the stocks is the closed season. *"I believe a closed season is possible for Ghana to implement. If the Philippines that has a fishery similar to Ghana's, has been able to implement a closed season and seen results, then Ghana can follow suit"* – said Nana Duncan, Chief Fisherman of Elmina and Regional Executive of the GNCFC, in an interview with the SFMP Communications Specialist after the tour.

There are currently traces of changes in behavior as some tour participants and their corresponding groups whom past fisheries projects could not successfully engage, now see the need for the implementation of some quick actions to rebuild a collapsing fishery. Study Tour participants are now spreading the word; many of them willingly share their experiences with peers on diverse stakeholder engagement platforms and in their communities. Upon return from the trip, the motivated participants outlined a strategy to communicate lessons learned to their respective stakeholders.

"I believe the idea of closed season and closed areas is very feasible for Ghana. The right thing to do is to throw the idea to the fisher folks and take decisions with them; once they know it will benefit them, I think they'll buy the idea", said Mad. Cecilia Erzuah, Director of Finance and Administration - MOFAD

1.5 Harmonizing Regional Fisheries Policies

The SFMP had three meetings in Year 1 with representatives of the Fisheries Commission of the Western Central Gulf of Guinea (FCWC) to discuss areas of collaboration in fisheries management of small pelagics. The FCWC is engaged in coordinating regional fisheries management, focused primarily on shared stocks, of member countries from Liberia to Nigeria. Areas of collaboration included capacity building in stock assessment, fisheries management, DNA stock discrimination study and fisheries law enforcement. Coordination with the FCWC and CECAF focused on the stock assessment and fish stock discrimination study. A team of collaborators were identified at the recent 7th scientific working group of CECAF in Tenerife, Spain. The purpose of the study is to identify much needed stock genetics and boundaries of sardinella, which extends from Morocco to Namibia. Management of these shared stocks within the context of national boundaries do not often achieve the desired management objectives in the absence of understanding the range of the spawning population. The study will be conducted in Year 2 and involve the participation of scientists and partners from selected countries to provide adequate samples of fish landed within their country.

Figure 6 Regional meeting participants

The CECAF requested USAID/SFMP to provide expertise to build capacity in the area DNA genetic studies and share results in a regional workshop at the end of the study and examine fisheries management impact of the results, especially as member countries begin to discuss regional quotas of shared stocks.

1.6 Informing the U.S Government on Key Fisheries Policies Issues in Ghana

In Quarter 2, a brief was prepared on key messages and issues that the SFMP hopes to address and that are needed to reform the marine fisheries sector in Ghana and provided these to USAID along with additional background notes for the Mission Director in preparation for a meeting between the Mission Director and the Minister of MOFAD and for the SFMP National Launch event. A meeting was also held with the US Department of State TIP Office on SFMP initiatives on Child labor and Trafficking in Fisheries.

Figure 7 Regional meeting participants

1.7 Reducing Child Labor and Trafficking (CLaT) in Fisheries

The SFMP objective for activity 1.7 is to contribute to the prevention of child labor and trafficking in sourced communities in the Central Region through evidence-based information gathering and the implementation of behavioral change communications. Towards this, the following key activities were implemented in Year 1.

Literature Review on Child Labor and Trafficking in Ghana

SFMP conducted a comprehensive literature review on Child Labor and Trafficking (CLaT) in Ghana to understand the issues. Information gathered by the review revealed the existence of several forms of child labor in Ghana, especially in the Agriculture sector, Small Scale Mining sector, amongst domestic workers and many other areas. The literature review revealed that children work in a variety of fields as part of family enterprises, as unpaid family workers, self-employed or employed by others. In the agriculture sector, CLaT occurs in cocoa production, fisheries, aquaculture, livestock, forestry and other sub-sectors.

The review also identified about 78 key organizations and institutions working on Child labor and Child trafficking issues in Ghana as a database for future work.

The literature review revealed that *the occurrence of child labor and child trafficking are entwined in poverty and social injustices making it a problem that cannot be tackled in isolation.*

Child Labor and Trafficking Participatory Rural Appraisal

Participatory Rural Appraisal on child labor and trafficking was conducted in 35 communities in the Central Region. The process involved initial scoping visits to find out communities where the practice was pervasive. This was followed with over 800 individual household surveys in the 35 communities.. The Information collated revealed that CLaT activities were very intensive in the Central Region where children were given off for free or at very low fees to traffickers. Some of the perpetrators explained that the new caretakers were rather helping the poor families by reducing the burden of providing basic necessities for the children.

The information also revealed that children from the Central Region have been trafficked to work in other areas in Ghana, notable; the Volta Lake areas, as well as to neighboring countries; Ivory Coast, The Gambia, Senegal.

Information gathered from the survey participants revealed that the root cause of CLaT is poverty, deprivation, poor parenting and economic hardship, illiteracy and weak regulatory institutions were the underlying factors for widespread CLaT in central region. Also large family where the parents are unable to provide and control the children makes the children in the family susceptible to CLaT.

PRA Survey Validation workshop

A validation workshop was organized to certify the findings of the CLaT PRA exercise. Participants attending the validation workshop were drawn from various stakeholders' institutions and organization in Ghana; including Government institutions, Security Agencies, CSOs, Media, Traditional Leaders, Community leaders, SFMP partners, International NGOs, Fisher folks, academia, etc. Participants of the workshop discussed finding of the survey and corroborated the ongoing widespread CLaT practices in Central Region that served as source for child trafficking. Participants also stressed the need for a multi-sectorial approach to address the CLaT issues in Ghana. They noted that low capacity of regulatory agencies; inadequate manpower, financial and logistical resources to tackle CLaT issues was a major challenge.

Training for CLaT Community Volunteers

CEWEFIA identified 40 community champions; 20 each from Elmina and Moree in the Central Region where the practice persists. These champions were oriented to become anti-CLaT Advocates in the various communities. They were oriented on the concept of child labor; Population Health and Environment (PHE) and its linkages with CLaT, the Depletion of the Natural Resources and how it leads to CLAT, etc. The workshop also successfully contributed to equipping them with communication skills to engage well with targeted households. A refresher training was also organized for the advocates to share ideas, experiences and feedback from the community after the orientation (25th September, 2015).The meeting also aimed at giving insight on the distinction between child labor, acceptable child work and worse forms of Child Labor and behavioral change communications.

Figure 8 Under-age children working alongside adults on the beach

IR 2: Science and Technology Applied to Policy and Management

This component area seeks to improve fisheries management processes by engaging scientific research and findings as part of the driving forces and rationale for management.

2.1 Scientific and Technical Working Group

A Scientific and Technical Working Group was formed in Year 1 to provide information on status of stocks to inform decision-making. The group met four times during the year and the outcome of the first meeting included the election of the STWG Chairman (Professor Kobena Yankson from UCC) and Vice Chairman (Mrs. Patricia Markwei from FC-retired). In addition, a six member sub-committee for stock assessment was nominated including representatives of the artisanal fishers, inshore fishers association and women fish processors.

A summary was prepared on historical landings by month by gear from 1980 to 2014, fisheries independent biomass estimates by acoustic surveys, examination of environmental factors and preparing an overfishing definition for the stock(s). The sub-committee reviewed potential management options developed by SFMP which were then disseminated to stakeholders during consultation meetings.

The initial stock assessment was completed and reviewed by the STWG. The model used landings and effort data collected by the Fisheries Commission (FSSD). The effort data consisted of fishing trips by month of the artisanal small pelagics fishery. This consists of purse seines and encircling gillnets, known as Ali-Poli-Watcha (APW). The effort data presented a bias due to the significant changes occurring over time in the size and efficiency of fishing gear, canoes and technologies. The data will be standardized using the results from the historical perspective survey conducted by Hen Mpoano. An alternative measure of nominal effort was then used as the count of fishing canoes using purse seines. The main small pelagic fish species are the round sardinella (*Sardinella Aurita*), the Madeiran sardinella (*Sardinella maderensis*), anchovy (*Engraulis Encrasicolus*) and mackerel (*Scomber japonicas*).

Figure 9 Landings of most important small pelagics fish in Ghana (source FC/FSSD)

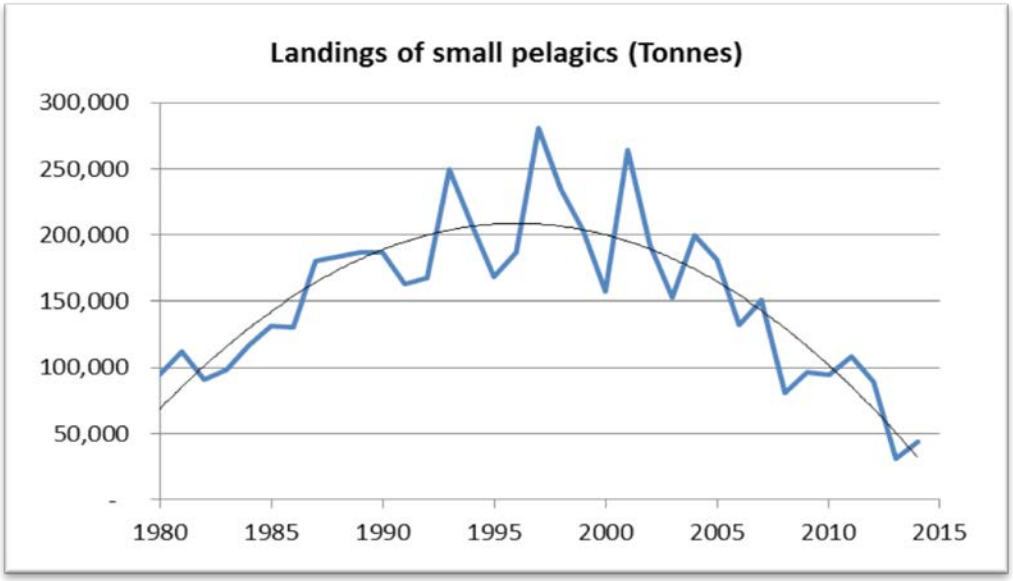
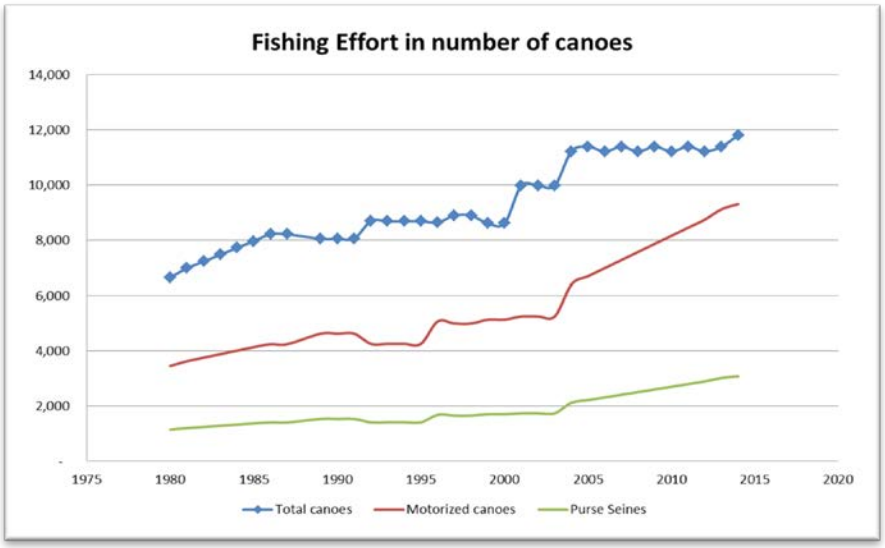


Figure 10 Effort in number of canoes recorded by frame surveys (source FC/FSSD)

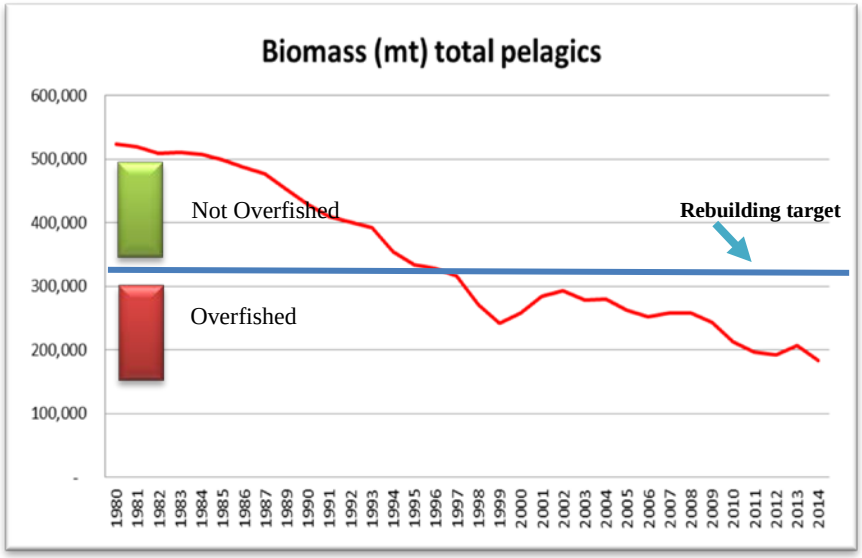


The stock dynamics of small pelagic were simulated using a biomass-dynamic model with observation error estimation. The exploited population was assumed to grow according to the (logistic) Schaefer model. Useful management quantities for sustainable fisheries can be derived from the logistic model parameters as follows:

Fmsy = r / 2 q = 0.40
Bmsy = K/2 = 310,476 MT

Results are preliminary subject to approval through the independent peer review panel anticipated to take place in Accra during the second quarter of Year 2. Results show that the small pelagic stock is severely overfished. Landings have declined precipitously and currently

Figure 11 Biomass rebuilding target



account for only 15% of the highest value recorded in 1997. The STWG recommends a swift management action which can reduce fishing pressure on the stock through various management measures (i.e. closed season coupled with a reduction in fishing effort, closed areas and control of illegal fishing). If management lags behind these trends, the population will be driven to collapse. Other considerations will be examined in Year 2 as such species are sensitive to environmental variability and need to be taken into account for a rebuilding strategy. The recommended reference target is to reduce fishing mortality from 0.7 to 0.4.

2.2 ICT Innovations for Effective Fisheries Management

Activities under IR 2.2 were largely delayed until Year 2. In Q4, however, SSG helped to form the ICT working group and held a first meeting, in which SSG presented (1) past SSG applications of ICT for development, (2) possible ICT partnerships for Ghana SFMP, and (3) a plan going forward for the ICT working group. In the first quarter of Year 2, SSG will hold a training on partnerships for the ICT working group, which includes key representatives of the Fisheries Commission and MOFAD, as well as a participatory workshop to design an ICT strategy for SFMP. Further, as part of the Rapid Partnership Appraisal under IR 6, SSG interviewed over 20 ICT companies and mobile carriers in Ghana in Year 1, laying the groundwork for ICT partnerships for Ghana SFMP and informing a future ICT strategy. SFMP and the FSSD of the Fisheries Commission developed a set of criteria to guide the ICT strategy for fisheries data collection. These criteria were based on timeliness, safe storage and easy access based on rules of confidentiality. A pilot project will be initiated in Year 2 to develop a paperless catch and effort data collection system.

2.3 UCC/DFAS/CCM Capacity Development

The University of Cape Coast and the University of Rhode Island signed an MOU on March 5, 2015, establishing cooperative relations between the two academic institutions. The focus of the MOU is to develop academic and cultural interchange in education, research, and exchange of graduate students and faculty. Activities operationalizing the MOU include the flollowing:

<u>Cooperative research:</u>

Under the cooperative research and capacity building programs undertaken with the University of Cape Coast, Students from UCC completed eight months of continued monthly field sampling of selected demersal species indicators (*Galeoides decadactylus, Pseudotolithus senegalensis, Brachydeuterus auritus and Pentanemus quinquarius*) from March to September, 2015. A fisheries profile was also initiated to characterize the demersal fishing canoes and semi-industrial vessels fishing with hook and line, longlines, gillnets and trawl nets.

A group of 12 fishermen from major landings sites (Sekondi, Axim, and Ankobra) were trained in the data collection procedures as part of the citizen researcher program. This is a means to engage stakeholders to become involved in action research and collection of fundamental fisheries information to improve fisheries management.

<u>Graduate degree scholarships:</u>

UCC-CCM and DFAS announced, through a competitive process, the availability of fully funded PhD scholarship in fisheries stock assessment at URI. A research associate was nominated and approved by SFMP to apply to URI for doctoral studies with a focus on fish stock assessment.

The candidate submitted an application in early July 2015 and is pending a decision by the URI Graduate School.

SFMP formed a selection committee composed of members from SFMP, FC, UCC and an independent member who chairs the Committee from the University of Ghana. The Committee reviewed applications from staff of UCC and FC to award 4 MSc scholarships to URI in marine policy, fish genetics, stock assessment and resource economics. SFMP will prepare candidates to apply to URI before end of January 2016. The expected start date for the 2 year program is September 2016.

Fisheries leadership training:

Twenty one individuals, working throughout the fishery system in Ghana, and two from Malawi, attended a two-week course offered by the University of Rhode Island (URI) to develop competencies and a stronger team of leaders to improve the small pelagics fishery in Ghana.

Our Vision for Small Pelagics *Fisheries Leadership Course, August, 2015*

Our Sardinella, Our Livelihood, Our Heritage

We, as all stakeholders including fishermen, processors, fishmongers, managers, researchers, government and consumers, are working together towards the sustainability of the small pelagic fishery through:

- Eliminating the need for illegal fishing
- Targeting high quality fish
- Trading in good quality fish
- Ensuring food security
- Achieving high profitability, and

Figure 12 Fisheries Leadership Course participants

The "Leadership for Fisheries Management" course focused on the application of an ecosystem approach and a whole systems view to fisheries management as the overarching themes of this leadership development experience. The participants explored new and innovative concepts in fisheries management with a focus on small pelagics in Ghana that draw lessons from case studies around the world.

The course used a range of methods including lectures, field trips, small group work, simulations and case studies to create a robust interactive and dynamic environment to learn new insights and skills for managing fisheries more sustainably. Site visits were conducted to the major fisheries landing site of Elmina – Central Region, followed by a stakeholder meeting to practice new competencies and gather perceptions by the fishing community on rebuilding the small pelagics fishery.

At the conclusion of this course, the participants:

- Drafted a vision for rebuilding the small pelagics fishery in Ghana
- Developed strategies that included leverage points and quick wins with stakeholders across the fishery system
- Committed to working as a team informally to build off of their unique positions throughout the fishery system

Ghana's small pelagic fishery is crucial to its food security, and with SFMP, the timing is perfect for supporting a cadre of local people who can lead the country toward some tough decisions on how to reduce fishing effort in hopes of rebuilding fish stocks. For a renewed strategy to work, all stakeholders throughout the fishery system have to believe in the actions, despite low levels of trust and a history of ineffective management. Improved relations across the fishery system can make a new small pelagics fishery management plan more meaningful going forward.

> *"In all aspects of work there should be trust, love and system identification to make informed decisions and effective implementation, every system is in 'UBUNTU' (I am because you are) term therefore I don't have to overlook things but be part of it establishment"*
>
> Participant of the 2015 course

<u>UCC Training on USAID TraiNet</u>

Starting in April 2015 URI CRC worked with two University of Cape Coast staff (Esinam Attipoe and Godfred Asiedu) to train on USAID's required TraiNet policy. Since beginning of the training process, both have secured their log-ins for their perspective R1 and R 2 roles. Both have reviewed the guidelines and all forms required by TraiNet as well as completing sample forms required by TraiNet.

UCC Faculty Visit URI to Develop Climate Change course curricula.

Three faculty members from the Department of Fisheries and Aquatic Sciences at the University of Cape Coast spent two weeks at the University of Rhode Island and obtained training and technical support in the development of a Climate Change Adaptation curriculum. Dr. Noble Kwame Asare, Dr. Kobina Yanson, and Dr. Emmanuel Acheampong worked with CRC staff and Dr. Richard Burroughs of the Department of Marine Affairs to create undergraduate and graduate level courses on climate change and adaptation. They were also introduced to advanced teaching and curriculum design techniques inspired by URI's successful implementation of the principles of the National Science Foundation's Integrative Graduate Education and Research Traineeship (IGERT) initiative.

2.4 Improving FC Data Systems and Stock Assessment Capacity

Stock assessment training

Figure 13 Training on Fish Stock Assessment

SFMP conducted a training on fish stock assessment techniques at UCC. It was a one-week intensive program in fish stock assessment methods directed for career fisheries managers. It focused on theoretical elements in fish population dynamics and practical methods to put theory into practice in managing fisheries resources. The main goal of the training was to strengthen the capacity of the Fisheries Commission and UCC in fish stock assessment techniques and provide them with hands-on demonstrations, and exercises in fisheries stock assessment as applied to fishery resources. Participants developed references points, both biological and economic and provided management recommendations. The group concluded that small pelagic stocks are "severely overfished" and made the following management and research recommendations:

- End open access in the artisanal fishery and work to reduce fishing effort
- Close the fisheries during spawning season to rebuild the stocks for 2 years
- Train fishers and provide them with incentives for use of best fishing and processing practices
- Improve catch and effort data collection system and build capacity of staff

2.5 Understanding Fisheries Supply Chain from Net to Plate

In understanding fisheries value chain from net to plate, a sardinella value chain study was conducted which provided detailed knowledge on the value and supply chain for small pelagic fish. Possible areas have been identified for improving profits along the value chain. It was established that more profit is made after processing fish (32%) whereas the fishermen make far less profit (19.4%). The healthy handling of fish from the landing sites through hygienic processing and storage, attractive packaging and effective marketing skills could play a key role in improving profits along the value chain. The survey determined that post-harvest losses along the value chain are very low (<5%) as there is a market for sub-standard/waste fish for use in poultry and aquaculture businesses. The most loss is during storage and transportation to market centers or neighboring countries. The most critical issue is unhealthy handling practices along the entire chain which devalues the fish products. Most (98%) of the product is consumed locally whereas only 2% is officially exported. Poor record keeping at the local borders are a major drawback in estimating sardinella fish stocks and export values.

The study recommends that improved hygiene along the chain will be a major boost to the quality and value of the fish, collaboration and harmonization of stakeholder roles will also enforce regulations and create awareness to a large extent. Establishment of record/

documentation centers will help stakeholders make effective decisions to strength the fishery industry. Recommended project activities include the need to sensitize consumers, set up model fish processing centers, train as many fish processors as possible, and the need to undertake sustained research and extension services. A validation workshop was organized with 40 participants ranging from government agencies to civil society organizations, fisheries associations and individual fishermen. The workshop reviewed the document by chapter and was very useful in presenting a number of comments and inputs necessary to finalize the document.

A Ghanaian fuelwood value chain study was initiated in order to analyze the nature of economic agents, transactions and constraints along the value chain - to propose policy, development and research actions to ensure that fish smokers continue to have a supply of preferred wood species while protecting mangroves for use as fish nurseries. Results indicate that fuelwood is the primary source of fuel used by 98% of fish smokers along the coast. It is largely produced from natural sources such as dead and standing trees on farmlands including fallows (49%) as well as dead trees and logging residues from government forest reserves (22%). However, 29% of production is on private land in the form of mangroves (Volta), cassia (Central), neem (Greater Accra) and other plantations.

Results also indicate that approximately 90% of the fuelwood supplied and traded in the coastal regions is used for fish smoking. It was also observed that the fuelwood value chain for fish smoking is well developed. Although largely an informal sector, the economic agents involved in production, transporting, trading and consumption, and their respective enterprises, operate within a limited regulatory framework. A number of constraints were reported by actors along the fuelwood value chain. Inadequate financial resources for business, scarcity and unavailability of suitable hard and heavy density wood species, difficulty in the acquisition of official permits for harvesting fuelwood from government production forest reserves, as well as a lack of business management skills.

To protect the mangrove ecosystem for use as fish nurseries, it is proposed that community based management of mangrove areas using appropriate approaches be adopted, to be agreed with land or resource owners, local authorities and other institutions with a stake in the resource. It is also recommended that the scaling up of mangrove planting and management techniques be implemented in order to enhance maturity over a shorter duration. A workshop was conducted to validate and train stakeholders on the findings of the study. Recommendations and inputs from the workshop were fed into the final report.

2.6 Environmental Planning and GIS Data Hub

HM assisted Chris Damon of URI to complete organizational capacity assessments of Western and Central Region TCPD. In the Central Region TCPD, an additional material needs assessment was completed, resulting in identification of the minimum infrastructural upgrade as well as IT equipment required to maintain a functional GIS hub for training, data storage, processing and distribution. The equipment support and infrastructure upgrade will be provided in Year 2 to serve among others, 9 coastal districts in the central region to strengthen resilience planning for coastal communities. An exchange visit for planners from both western and central regions was organized. The exchange visit fostered peer-to-peer learning and sharing of coastal planning tools and methodologies and also demonstrated the successes and experiences from the western regional GIS Data Hub which was established under the previous USAID/Ghana ICFG.

IR 3: Creating Constituencies and Stakeholder Engagement

Creating constituencies is crucial to building the social capital and political will to support the project goal. Ownership of management processes relative to shared resources is key for changing behaviors and generating buy-in.

3.1 National Communications Strategy for the Sustainable Fisheries Management Project

A National Communications Strategy was developed during the period under review, led by the Communications Specialist in collaboration with a core Communications Team established in February 2015. The Communications Strategy comprises corporate and external communications. There were strategic meetings also between SFMP and the MOFAD/WARFP, which focused on outlining common areas in the respective project description where efforts could be strategically combined for rolling out joint communications outreach programs.

Corporate Communications

The SFMP in the first quarter developed a 2-page project brief that was distributed to all project partners and GOG counterpart agencies. Press releases were also prepared and distributed both in the US as well as in Ghana announcing the project award, its goal, results expected, implementing partner team, and key beneficiaries. The project also developed an initial document style and format template for the preparation of administrative and technical documents (e.g. Work plan, EMMP, M&E Plan and Progress Report) consistent with USAID co-branding guidelines and policies and the Project Marking Strategy and Branding Plan.

A project information and messaging '*song sheet'* was developed and shared with implementing partners and relevant stakeholders to facilitate community entry and consistency in messaging during outreach. Bi-Weekly Bullets, including photos, have been submitted to USAID/Ghana office, relative to project collaborations and field activities. A set of job aids including the 'hows' for writing press releases, news items, success stories, basic photo/ video shooting and guidelines for submitting FtF Bullets have been developed and shared with partners. Detailed orientation relative to the job aids among others will take effect in Q1 of Year2 for Communications Officers of the various partner organizations for effective branding and documentation of the SFMP.

International Day and other events – A National Launch Event was held in the Western Region on April 28 in close collaboration with the USAID/Ghana Mission to officially announce the project. The Minister of Fisheries who launched the event pledged the Ministry's support and called for close collaborations with the WARFP. Four mini-launches were also organized in four focal areas – Ankobra and Shama in the WR; and Apam and Winneba in the CR. Two international day events - World Environment Day 2015 and World Day against Child Labor were also celebrated in Winneba and Elmina (Central Region) respectively. These draw attention to the need to sustainably consume the shared fisheries resources for improved fisheries and living standards of households in order to discourage child labor and trafficking activities resulting from poverty, while encouraging enrollment of children into school.

Figure 14 SFMP Launch

From left to right: Hon. Essilfie (Shama MP/ Select Committee Chair – Food & Agric.); Hon. Darko-Mensah (Coastal MP – Takoradi); Hon. Alfred Gyan (Dep. Minister – W/R); Awulae Kpanyili (Paramount Chief – Eastern Nzema – W/R); Hon. Sherry Ayittey (Minister of Fisheries); Andy Karas (Mission Director, USAID/Ghana); Dr. Anton Post (Director, CRC-URI); Dr. Brian Crawford (Chief of Party, SFMP)

Other Communication Channels and mass media tools during Year 1 included:

- Participation in Elmina Festival on July 7 amidst a placard walk and exhibition of SFMP materials which won publicity for the USAID SFMP and a day's media orientation to encourage and heighten fisheries reportage in the media which yielded results with an informed media constituency and quality media reports on fisheries.
- Nine (9) community dramas/ skits, 5 Radio/television talk shows; 3 Press releases
- USAID-branded banners, 8-page small pelagics issue brief, 11 action optional briefs; project flyers, briefing packet (for policy makers), t-shirts, folders, etc.
- A large number of technical and training reports and other project related documents are being generated, many of which were due to the project at the end of Year1. A list of selected publications produced in draft and final form are presented in Annex 3.

The Communications effort for Year 1 is yielding dividends; a considerable number of stakeholders and constituents now understand the project goal and are ready to support rebuilding of the fisheries. For many fisher folks, the era of business as usual is fast phasing out.

The Elmina Festival which drew awareness for the project was demand driven – as the Chief Fisherman of Elmina (a Philippines study tour participant) invited SFMP to support the event which culminated in four radio and television interviews for the project to discuss fisheries management issues and the way forward for rebuilding the stocks. The project launches also brought together national and community level stakeholders including coastal members of parliament and other key stakeholders who play critical roles in decision-making, especially for rebuilding the stocks.

Figure 15 Public engagement event

Stakeholder Consultations/Policy Campaigns:
Eight regional-level policy campaigns were carried out in the Month of July; two in each of the four coastal regions where potential fisheries management options to rebuild small pelagic fish stocks were socialized with stakeholders for their views for improved management and to be discussed at the National Fisheries Policy Dialogue, originally scheduled in September but delayed at the request of the Ministry of Fisheries to November, 2015.

CRC produced a series of 11 action option briefs, each two pages, for partners to use to begin educating and engaging stakeholders throughout the fishing communities. Each brief highlighted a different action item and spelled out in layman's terms what the proposed action is, how it would work, what the pros and cons are, what would have to happen for it to be implemented, what impact it might have and how the outcome of that action would be measured. These action briefs complement a longer 8-page brief on the issues pertaining to management of the small pelagic fisheries.

FoN facilitated several media reports of SFMP activities, including; the small pelagic stakeholders' engagement meetings, the marine police training and CLaT field activities in collaboration with CEWEFIA and SNV.

3.2 SFMP Executive Level Communications

Early on, the SFMP held a series of briefing meetings with the Minister of Fisheries and Aquaculture Development about project description and synergies with the MOFAD-led WARFP. The various heads of divisions of the Fisheries Commission and ministry heads have also been briefed about the SFMP through a group presentation by the SFMP Accra office. On subsequent meetings in September, it was agreed that there would be bi-monthly meetings

between the Fisheries Commission and SFMP for project coordination with WARFP representatives in attendance.

Engagement with coastal members of parliament who attended the SFMP launch event and a briefing for regional directors of the Fisheries Commission were also conducted. An eight-page brief on the crisis facing Ghana's small pelagic fisheries and the role partners can play in addressing it, was produced and distributed at the national launch event.

Activity 3.3 Contact Management and Capacity Building

A contact management software CiviCRM has been installed and still under development. It will enable the project to record, manage and track interactions with people and organizations and to engage with constituents. The initial database compiled in Year 1 contains profiles of 1106 individuals and 44 organizations, which will be continually expanded in an ongoing basis. Templates for group mailings of SFMP news and events are being prepared. The efficiency and effectiveness of the online interface and functionality was tested in country by the URI CRC IT manager. There have been discussions with the Fisheries Commission relative to accessing the software for sending fisheries-related educational messages to fishers via the compiled canoe and semi-industrial registration databases. Data on about 715 individuals were used to develop an initial social network map of the SFMP constituency.

A two-day MIS internal training was conducted in the SFMP-Accra office to build capacity as training of trainers for the establishment of web-based network platforms intended to facilitate project knowledge document collection and exchange of partner policies. Programs such as Adobe Connect, Dropbox and Google Calendars have been established and in use, to be gradually extended to cover relevant partners and target groups.

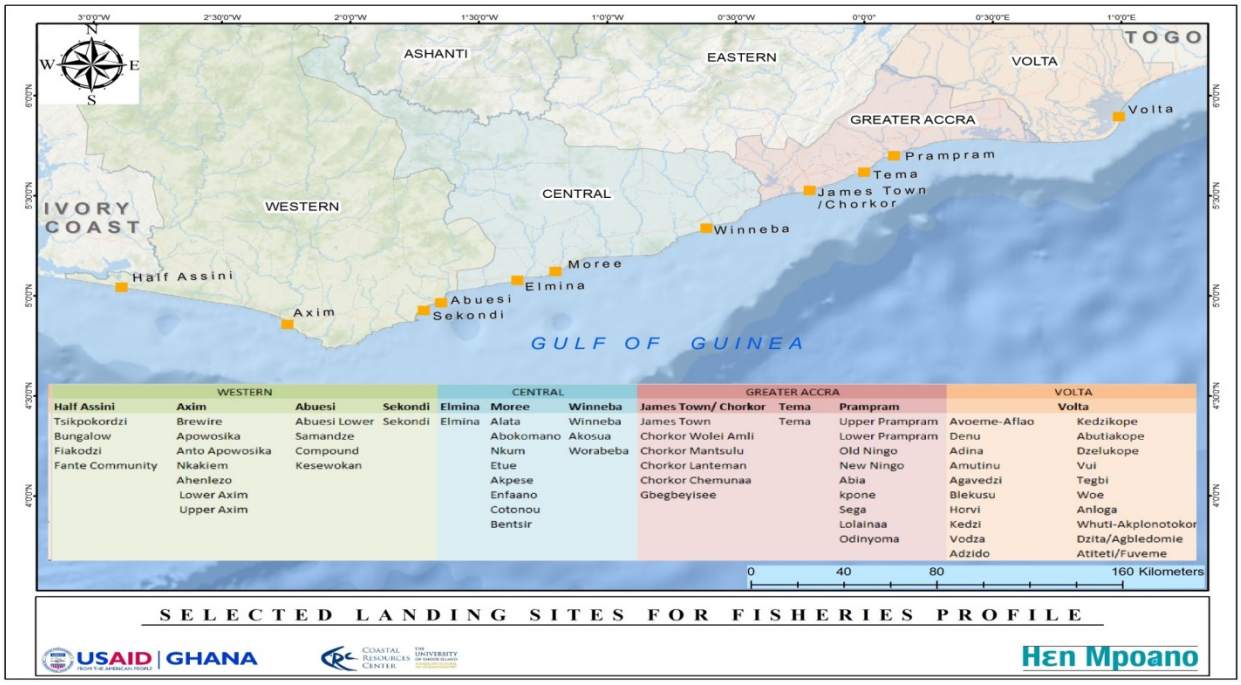
IR 4: Applied Management

4.1 Small Pelagic Fisheries Management

Training events for enumerators and field data collection exercises were completed as part of conducting a baseline profile for the small pelagic fishery. Eleven communities from the 4 coastal regions were selected using criteria such as catch quantity from the FC's canoe frame survey, species landed, size of landing beach and extent of commercial fishing operations. Twelve fisheries enumerators were selected from these communities, hired and given training in fishery survey techniques, gear technology, communication, basic sampling and data collection and processing. Data on the small pelagic fishery was collected from a total of 64 landing (figure 1) sites and the process was coordinated by FC M&E officers and HM personnel through periodic visits to landing sites to provide assistance and address field challenges. Data collection protocols were developed through the technical guidance of SFMP.

Results of fishermen surveys and historical perspectives were summarized by region and have been validated through 4 regional stakeholder meetings which provided the platform for SFMP to provide feedback to fisher folk as well as receive stakeholder reactions. A complete profile on the small pelagic fishery will be ready by end of Q1 of Year 2.

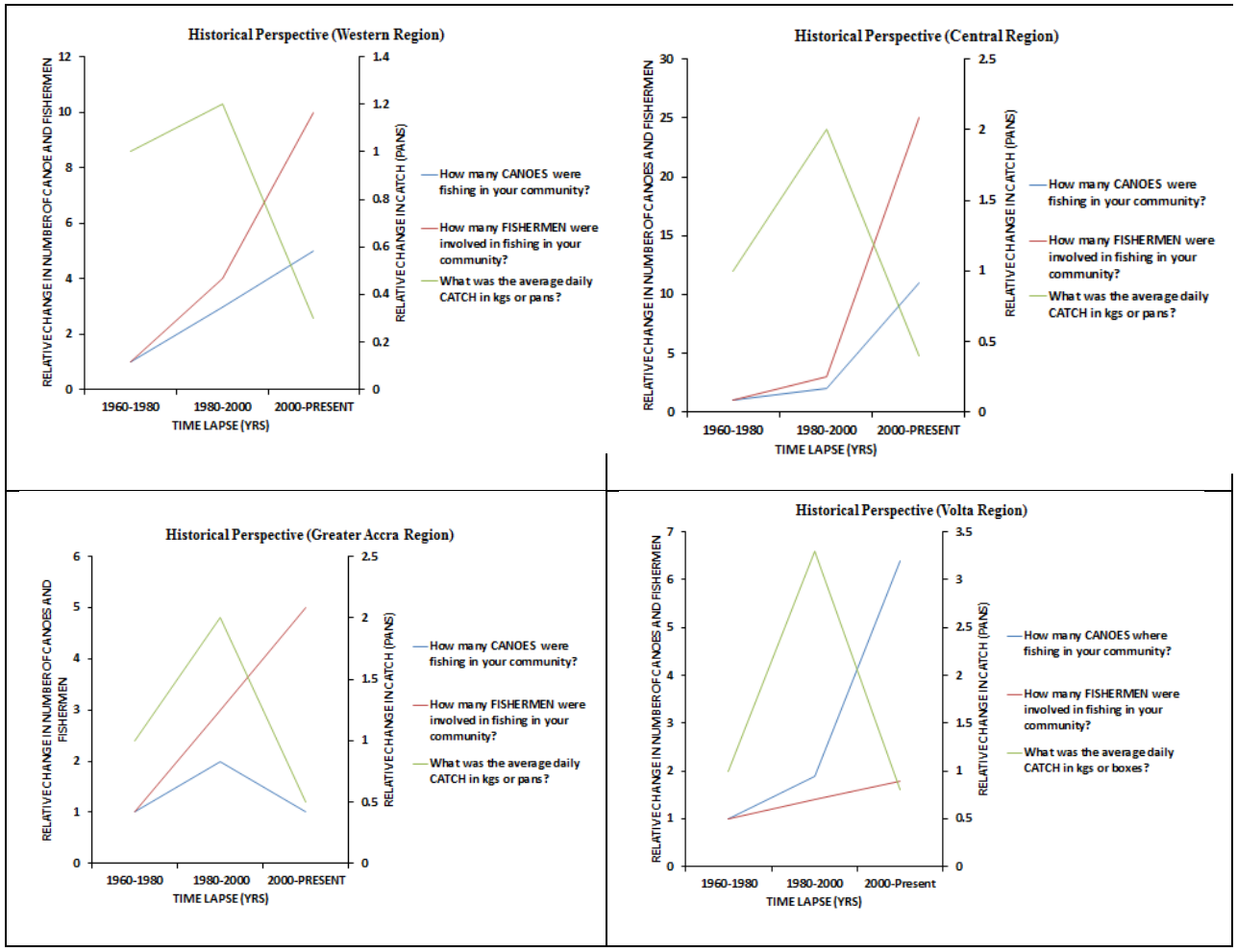
Figure 16 Small pelagic profile communities and landing sites



Highlights of selected results from profile

Results from the profile reveals that fisher folk perceive a general trend where decline in present fish catch is approximately four times less than what used to be the catch prior to 1990. While catch is in decline, they also perceive at the same time, an exponential rate of increase in numbers of canoes and fishermen from 1990. The declining trend means food insecurity for fisher folk households and communities.

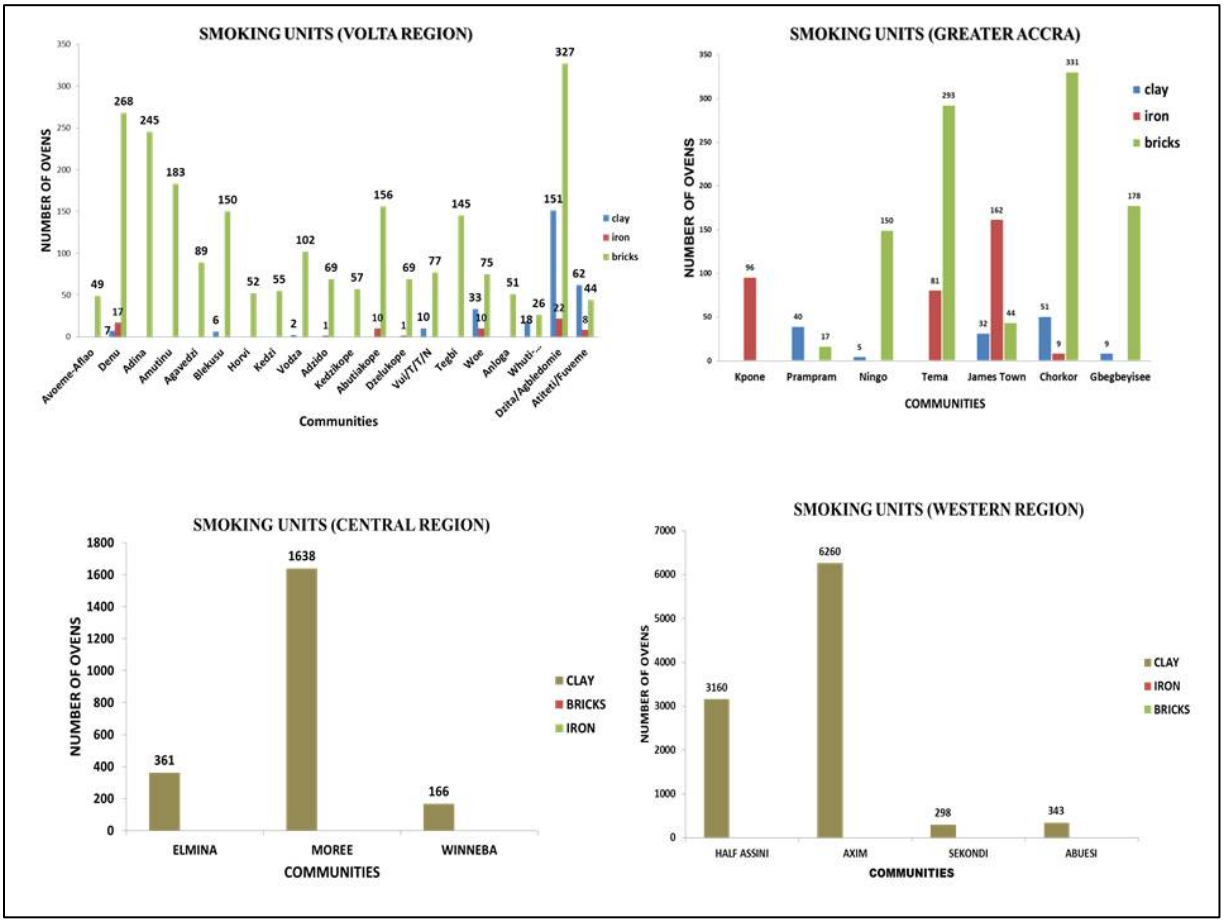
Figure 17 Fishermen perception of fish catch and numbers of canoes in four regions



Regional analysis of material for construction of fish smoking units revealed variation among locations and regions in terms of material preference. Generally, clay is the major component material for stove construction in Western and Central regions while in Greater Accra and Volta regions, bricks and iron are mostly preferred (see Figure). Factors such as local availability of stove construction material and shoreline space should be taken into account during scale-up of smoking oven technology since these may influence uptake and widespread diffusion. For instance, in fishing communities such as Kpone and James Town, it was revealed that preference for iron was to allow for easy mobility and address constraints of shoreline space which restricted the potential siting of permanent fish smoking ovens.

> *"In the Ga language, sardinella is referred to as 'maa' which connotes multitude or big crowd, thus they are meant to come in large quantities to feed a large number of people to avoid hunger. So if there is no sardinella, it means many people will go hungry. That is how God created it to be. It is fish for the multitude"* says Joseph Armah of James Town.

Figure 18 Material for smoking oven construction in four regions



4.2 Demersal fisheries management plan

Demersal fisheries in Ghana are severely overcapitalized and overfished. Marine mammal and sea turtle interactions with fisheries are known to cause mortalities, however the extent of fishing interactions with migrating humpback whales off Cape Three Points are yet to be documented. Coastal communities depend on fishing and farming livelihoods, both of which are in steep decline, resulting in greater poverty. Population growth increases fishing effort and damaging practices (e.g., light fishing, monofilament nets, dynamite, noxious substances).

A data collection on selected demersal species using length-based methods to provide a stock status was conducted in collaboration with UCC (see IR 2.3). This study is part of collaborative research programs conducted with UCC (graduate education).

The original project design assumed that a management plan at the sub-national scale within the Western region could be developed as an example of a smaller scaled ecosystem based management unit rather than national in scope. However, concerns have been raised by the Fisheries Commission that the area between the Pra – Ankobra as originally envisioned may be too small of a fish stock management unit. Due to these concerns, work anticipated to be undertaken on the demersal fisheries management may change significantly in Year 3.

4.3 Integrated Fisheries Management and Resilience Plan for Ankobra Estuary

Relevant climate vulnerability literature was successfully reviewed. Subsequently, HM organized an in-house workshop where methodology for carrying out vulnerability assessment was outlined. Results of the assessment were summarized for the 5 estuarine communities using coastal community vulnerability index (CCVI) as well as with charts, graphs and maps. These were subsequently validated during a stakeholder workshop at the district level. Highlights of selected findings from vulnerability assessment are provided below:

Non-climate stressors and sources of vulnerability.

Except for Sanwoma, land tenure problems are not a major contributory factor to vulnerability in the estuarine communities. However, food security, governance and institutions as well as demographic factors contribute highly to vulnerability in all communities. This is depicted by the corresponding low scores recorded by each community on these factors. There are also differences among the communities relative to the contribution of each factor to vulnerability as shown in fig. 15 below. Among the four factors, food security and governance and institutions are the major sources of vulnerability, as depicted by their values in the following figure. These results suggest that communities are made vulnerable by their high dependence on natural resources for food and income, as well as lack of effective natural resource management practices at the community level.

Coastal community vulnerability index.

While all the 5 estuarine communities recorded low CCVI, indicating high overall vulnerability, the case of Sanwoma requires special mention because of SFMP's focus on this site for fish processing technology dissemination. Unlike the other communities, land tenure insecurity, coupled with high cost involved in accessing land for farming and or resettlement is a major source of vulnerability in Sanwoma. This partly explains the reason resettlement will not be a viable adaptation option for the people of Sanwoma, at least, in the short to medium term. The limited availability of land and space, given the low elevation and physical vulnerability of this

community is a source of additional constraint on siting of fish processing facilities. The highest elevation in this community is 14 meters above sea level and over 341 buildings including fish smoking facilities lie within the riparian buffer of 300 meters from the Ankobra River.

Figure 19 Factor contribution to resulting vulnerability in 5 estuarine communities

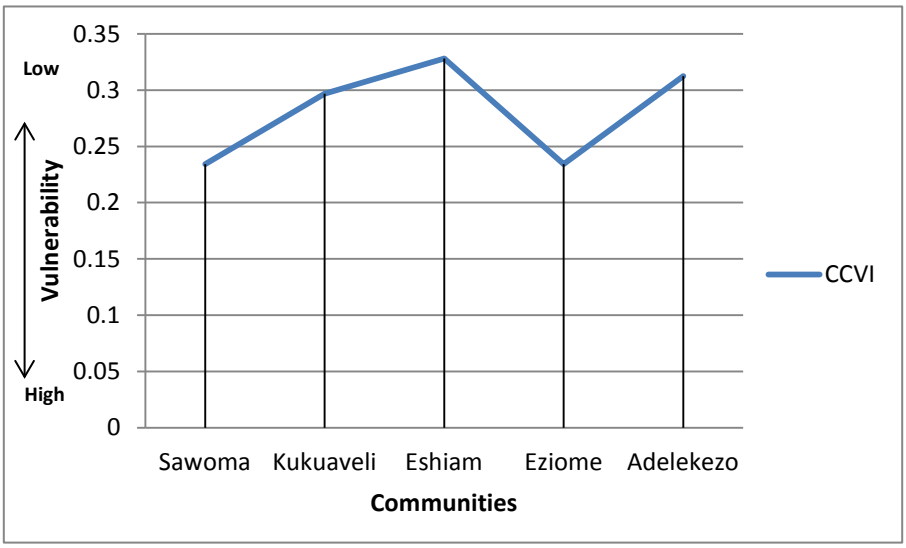
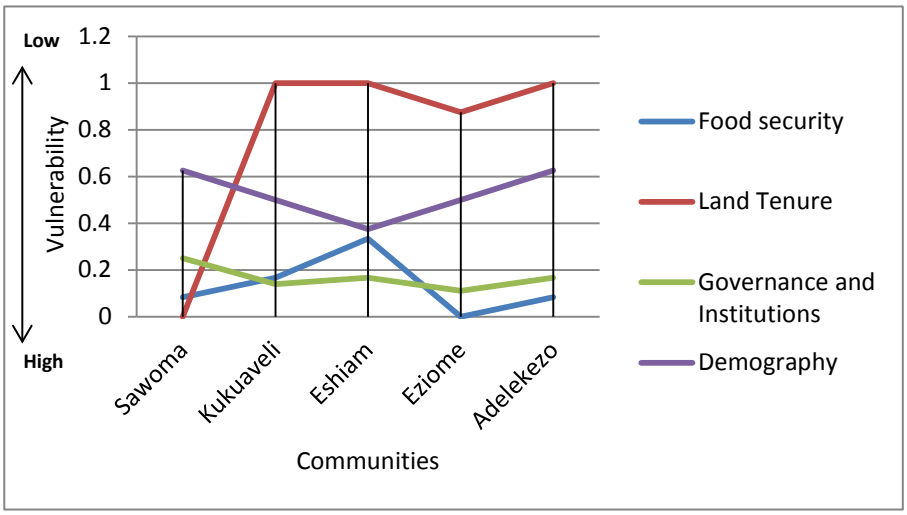


Figure 20 Resulting CCVI of 5 estuarine communities



Climate related hazards and livelihood vulnerability.

The Ankobra river estuary permeates all facets of socio-economic life in the estuarine communities. Flooding is a major source of climate related vulnerability in all the estuarine communities due to low elevation and poor land use decisions. Annual flooding was identified to impact significantly on all the livelihood options. Quotes from community folks highlighting livelihood vulnerability and associated flooding impacts have been attached (*See appendix)*

Figure 20 Livelihood vulnerability of men in Eshiem

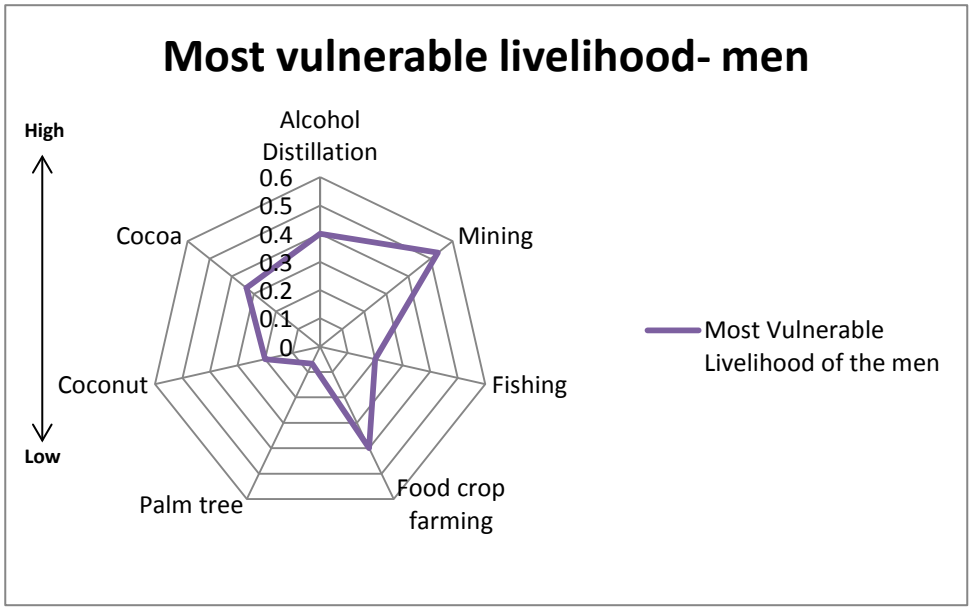
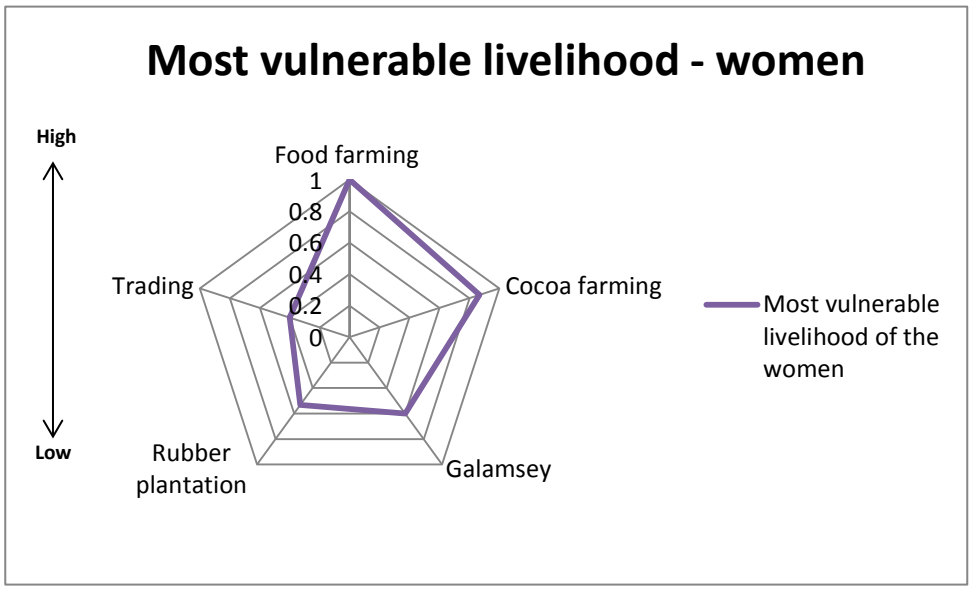


Figure 21 Livelihood vulnerability of women in Eshiem

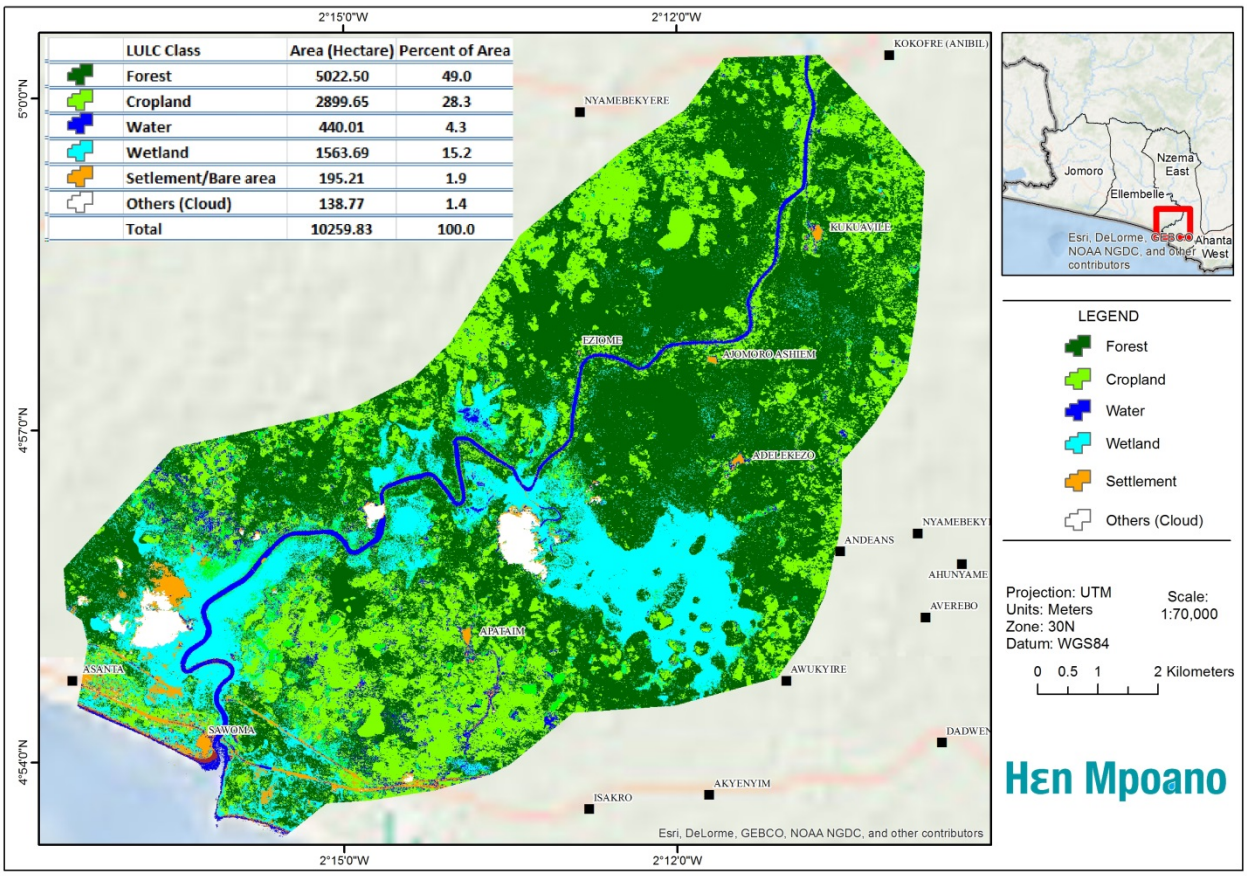


Rapid land cover classification.

Initial classification of the RapidEye image for the Ankobra ecosystem identified six main cover types. The classes were forestland comprising mostly of terrestrial forest stands; cropland which consist of both food crop and cash crop farms; settlement including rock outcrops, bare areas and sandy beach; wetlands including mangroves; water bodies and the cloud. It is important to note that the cloud cover and haze from the image acquisition process presented some challenges. For

instance, some areas covered by clouds and their shadows were misclassified as settlements. Cropland constituted 28 percent (2900 hectares) of the total area while forestland and wetland constituted 49 percent (representing 5023 hectares) and 15 percent (representing 1564 hectares) respectively. This is a very rapid classification of the area and does not include any validation of the classes. Field visits will be conducted to ascertain the accuracy or otherwise of the classification process. The land cover mapping did not discriminate mangroves from the other wetland vegetation. This will be done later after a GPS survey of mangroves is conducted. The classified map serves as a base map of cover types in the area which can be modified with a cloud free imagery. It could also serve as the basis for estimating changes in land cover over time with some additional historical data.

Figure 22 Ankobra Land Cover



Field data collection was accomplished in collaboration with the eight planners from both Ellembelle and Nzema East District Assemblies. They were trained on different methods of data collection particular on participatory mapping which most of them were experiencing for the first time. The planners also for the first time had the opportunity to visit the rural communities by boat and experience the type of activities taken place in an area which is cut off due to lack of water transport.

The district planners have decided to use the demographic information collected by the project team in the preparation of their district socio-economic and spatial plans. The data collected by the project team are current and realistic than projections to be made from 2010 census data.

Local community participants on these field trips learned a lot from the project team on some of the sensitive ecological areas that out of ignorance were being damaged by the communities. These included farming and other human activities on riparian lands and sustainable methods of bamboo cutting/logging.

An add-on to IR 4.5 is a Vulnerability Assessment for Axim Coastal Communities and Landing Sites. The project started concurrently with the Ankobra River project. Field data collection exercises have been undertaken as planned. Initial data analysis done in collaboration with the fisher folks of Axim indicate that land is a major constraint to the development of the fish industry in the area. Field visits and data collection are completed and analysis as well as report drafting is ongoing and expected to be completed and handed over to CRC/URI by the end of October 2015.

4.4 Integrated Community Fisheries Management and Resilience Plans for the Pra River Estuarine and Mangrove Ecosystems.

FoN participated in the activities organized by HM for the Ankobra Estuary resilience planning. This enabled FoN to learn the process and procedure for replication in the Pra estuary area in Year 2.

4.5 Central and Western Region Livelihood Development

Post-harvest Loss Reduction Study

A detailed study was carried out in four coastal regions with a focus on the activities of fishermen, fish processors, traders, transporters of fish and at the landing sites and harbors. 48 landing beaches in 13 districts across the coast were surveyed. Information gathered shows that there were smaller losses from sea to landing, but that processing and transportation stages incur higher loss rate which is also different per district. Losses were quantified by volume and monetary terms through a reduction in the selling price of fish, as one important loss factor is low quality of fish as a result of poor handling factors and illegal fishing practices such as the use of chemicals.

Evaluation of demonstrated stoves

This activity has been moved to Year 2 of the project with the project team's agreement, so that a better quality survey can be carried out with the involvement of all key partners including the Post Harvest Unit of the Fisheries Commission.

DAA and SNV collaboration in Apam and Winneba

DAA worked in closely with SNV to identify and list field enumerators for the conducting a survey on the stock of existing knowledge on post-harvest processing in Ghana. DAA also assisted in the training of the field enumerators and provided key community knowledge to the enumerators. Two sensitization workshops were carried out at Apam and Winneba to formally introduce and educate stakeholders and community members to the project concept and the year one plan. These workshops provided a good platform to create awareness on the project. About 360 people participated in both workshops. Out of the workshops the project has collaborations with Challenging Heights (in the area of child labor and livelihood provision for socioeconomically poor households at risk of child labor and trafficking), Microfin plus (small

loans for accessing the Morrison stoves and general improving business as well as training in business management and savings).

Organization and sensitization of women-led groups. This activity was carried out in cooperation with DAA. The team identified five existing groups at Winneba and two at Apam. These groups were characterized and a plan developed to strengthen the groups during the second year of the project. In year 2, all groups will be registered with the Business Advisory Council as cooperatives and they will be taken through important training sessions on healthy handling, value addition, business management, savings etc. They will also have consistent mentoring and coaching assistance from both SNV and DAA. More importantly, they will be engaged in programs and activities that keep their membership engaged.

Baseline survey. A baseline survey was carried out in Apam and Winneba to better understand the fisheries value chain in the selected project communities. The survey collated information on the fishery industry, the economic and social standards of the people, alternative livelihoods to Fisheries and health and sanitation issues in the communities. The main fish processing stoves that were identified are the round clay and the Chorkor fish smoking stove.

Figure 23 Clay round stove and Block Chorkor Stove

Some important recommendations by the report are as follows:

- There is the need to establish improved methods of landing fish to reduce losses.
- There is the need for training and sensitization of fish processors in the areas of personal hygiene, healthy fish handling, improved methods of smoking and storage and in business management.

Survey of post-harvest processing technologies

Eight improved fish smoking ovens were identified during a scoping survey and energy audits and process characterization activities have been conducted. A comparative test was carried out to assess the performances and efficiencies of the Morrison and Chorkor, AWEP, another type of Chorkor, KOSMOS Oven, Tullow Oven, KOSMOS Chorkor and FTT stove technologies. The workshop for Post-harvest building consensus was organized on the 5th of August, 2015. The findings and power point presentations were made on the following deliverables;

- Post-Harvest Scooping Study on Post-harvest fish processing techniques
- Post-harvest characterization studies on identified fish processing techniques
- Energy audits Results on identified fish smoking stoves.

PAH study in smoked fish and stove types

SNV also carried out a study on PAH levels of fish smoked on different identified stoves. Findings indicated that the PAH of fish smoked on the Morrison stove was higher than the Chorkor baseline, which itself was higher than the traditional smoking stove. The study further revealed that none of the stoves tested can be said to produce healthy fish in terms of their PAH content except with the FAO-FTT stove. In addition, none of the wood fuels tested produced healthy fish in terms of their PAH content. Demonstration units of the Morrison fish smoking stove should be built whilst technology development options are carried out in Year 2 to reduce stove production of PAH levels.

Construction of demonstration stoves and 50 commercially subsidized stoves

Seven demonstration stoves have been constructed in both Winneba and Apam, as SNV and DAA decided all the existing processing groups should host one demonstration stove each. In doing this two carpenters and two masons were trained in both communities on how to construct the Morrison stove. This is to ensure that there was skilled labor available in the communities to assist the main stove construction company, Morrison Energy Ltd and also provide maintenance services where necessary. Construction of the 50 stoves has started in Apam and Winneba at the time of writing, with two companies, Morrison Energy Services and AWEP, contracted to carry out the construction work.

Training of women groups on the use of the Morrison stoves

A total of 6 training sessions were held for all seven fish processor groups, on how best to use the Morrison stove to their benefit. An existing training manual from the DGIS funded SNV Improved Fish Smoking Project was adopted for the training, and covered information on the various components of the stove, its benefits, and the essentials of fish smoking. Information on the financial viability of the stove and the pay-back time was also presented to the women along with environmental and health and safety concerns. In total 383 women benefited from the training sessions.

DAA Training Center

A needs assessment and business development plan were developed for the DAA Fisheries Training Center. A consensus building workshop was held on the 25th of August 2015, with 45 DAA members to inform them of the outcome of the needs assessment and the business plan and to get their final inputs to the reports. The workshop also presented the proposed design for the center and its related budget. Some of the key findings of the needs assessment were that most of the women groups and the fishermen showed interest in the training and stated their areas of interest (improved processing skills, literacy, profit calculation, savings and business management), with a few of them willing to pay for the service. Most of them also prefer onsite training by one of their own group. Government agencies were interested in end user training and refresher courses for fisheries officers at the landing sites.

DQF-led Fisheries value chain improvements and livelihoods in Western Region.

DQF is focusing on Ankobra estuary and Shama Old Town areas. DQF successfully conducted the sanitation assessment at the Ankobra Estuary. It also identified, screened and selected fishery-based MSMEs in Shama Old town and Ankobra and assessed training needs of MSMEs

in Shama old town, Ankobra, to inform capacity building strategy. A local forum was organized on improved smoking technologies for users in Shama Old town, Ankobra (Town Hall meeting).

DQF also provided business development and management training for selected fishery-based MSMEs and finally started with the construction of identified smoking technologies for users in Shama old town and Ankobra estuary. Construction of a demonstration Fish Smoking Stove began in the second week of September, 2015 and is ongoing, and will be continue into Year 2.

CEWEFIA Led value chain improvements

CEWEFIA designed a common tool for the identification and screening of the Micro Small Medium Enterprises (MSMEs) in the targeted communities along with DQF (15th May, 2015). Three hundred (300) MSMEs were identified and reduced through screened to 180 in Elmina, Moree and Anlo. The needs of the screened MSMEs were assessed to identify the areas for the business development training. The interview revealed that 90% needed to be trained in the following areas: financial management, records keeping, business management, business set up, calculation of profit, health and safety, product packaging, pricing, marketing and selling, negotiation skills and improved methods of processing fish.

CEWEFIA collaborated with SNV to provide business development support service training to the selected MSMEs. Forty-five (45) MSMEs were trained in Anlo from 10th – 15th August 2015, 61 MSMEs were trained in Elmina from 17th -22nd August, 2015 and 58 MSMEs were also trained in Moree from 24th – 29th August 2015.

In order to promote the improved smoking technologies, CEWEFIA participated in a workshop organized by SNV in August, 2015 to introduce the energy efficient smokers.

A forum was organized by CEWEFIA for women on the Improved Fish Smoking Technologies in Elmina, Moree and Anlo. A total of 98 women participated in the forum at Elmina, 107 women participated in Moree and 94 participated in Anlo. The contributions and the questions asked indicated their willingness to adopt the new technology.

Constructions of new improved smoking ovens are ongoing in the targeted communities. CEWEFIA has monitored the activities of the trainees (trained MSMEs and community advocates) in the three targeted communities.

SNV supported CEWEFIA with Small Business Management Training capacity to train 164 fish processing MSMEs/women in business development and management. SNV provided support in terms of training materials and a qualified CEFE-qualified trainer. The training was comprised of detailed interactive sessions in sustainable enterprise development and management, delivered using the CEFE action-oriented and experiential learning methodology and covered critical skill gaps identified in the Training Needs Assessment i.e.:

- Entrepreneurial Skills
- Financial Management
- Workplace Health and Safety

IR 5: Gender Equality and Empowerment

CRC, HM, and SNV collaborated to develop a number of Gender issue documents that will help the project mainstream gender into fisheries management. The Ghana Gender Fisheries Analysis

is based on a literature review of gender roles in Fisheries in Ghana followed by a questionnaire for primary data collection. The administering of the questionnaire was done through focus group discussions and key informant interviews in Elmina, Apam and Winneba in the Central Region and Axim in Western Region. The team also visited landing sites and fish processing site where they observe the gender roles and behavior of men, women and children in the abovementioned landing sites. The Ghana Fisheries gender analysis report was validated at a workshop held on August 2015.

Local partners assisted in mobilizing men (Fishers) and women (fish Processors and traders) for focus group discussion on gender strategies at fish landing sites. In all project activities (Town Hall meetings, Local Socialization event) female participation has been higher than males

IR 6: Public Private Partnership Development

SSG hired and mobilized its Partnership Specialist for SFMP, as well as a Ghana-based Strategic Partnership Consultant. With support from the SSG home office, the Partnership Specialist and Strategic Partnership Consultant conducted over 70 interviews with the private sector and other organizations in Ghana (see appendix), to assess and identify possible partnership opportunities for Ghana SFMP. In these interviews, SSG sought to understand current business challenges and aspirations, as well as any key areas of overlap where the goals of the company and the Ghana SFMP project align. SSG also conducted similar interviews with Ghana SFMP project partners and other Ghana SFMP stakeholders, to better understand the project's goals and challenges, as well as what the project might have to offer to its potential private sector partners. Rapoid Partnership Appraisal interviews were completed and in July 2015 (Q4), SSG presented these ideas at a 2-day Partnerships Training / Prioritization Workshop for Ghana SFMP technical teams and stakeholders. At this workshop, participants ranked SSG's early-stage partnership ideas, to guide SSG as it moves forward with partnership development in Year 2 ***(see appendix)***.

IR 7: Local Capacity Development

Local Capacity Development is an evolving process and crucial for organizational growth, SFMP initiated a capacity development component within the project to support the development of key local partners, including 8 Civil Society Organizations (CSOs)[2] and 9 Government of Ghana (GOG) Units[3]. The objectives of this capacity support area is to enhance implementation by SFMP local partners, improve the quality and sustainability of the services provided to their constituencies, and position local civil society organization partners to be ready and capable of receiving direct funding from USAID and other donors in line with the USAID Forward initiative. Highlights in Year 1 include:

For the CSOs Organisational Capacity Assessment (OCA) tools were reviewed by SNV/URI. Participatory self-assessment tools by SNV/CRC-URI were then applied by local partners' staff and constituencies served by our partner organizations. The components of USAID OCA tool were adapted to benchmark each organization at the beginning, midpoint and end of the project. An Orientation Workshop for local partners on the OCA process was organized to get local partners to familiarize themselves with the OCA tools. This was intended to help local partners

[2] DAA, DQF, CEWEFIA, FoN, HM, NCFC, FA, NAFPT.

[3] MCS, FSSD, MFD, PHU, UCC/CCM, UCC/DFAS, RCC-WR, RCC-CR, FEU

understand the need for OCA and to help them in filling the self-assessment and also give them clear expectations regarding the on-site assessment. The orientation workshop also helped partners understand the processes involved in the OCA including the development of action plans and to assure local partners that the process was intended to help in their organizational growth and support them to qualify for the USAID forward initiative.

Baseline OCAs were completed for FoN, HM, DAA, CEWEFIA, DQF, GNCFC and FA: Key lessons learned and of high priority to the project is the need to strengthen; a.) the financial systems of local CSO partners and, b.) financial and organizational sustainability, including succession planning. A report synthesizing crosscutting CSO OCA findings and themes will be finalized in Year 2. Preparation of an Organizational Development Manual for training selected organizations is based on the results of the baseline report developed for each organization, a draft outline for the contents of the OD manual is in place and SNV together with the services of OD expert and input from URI/CRC will develop a user friendly Organizational Development manual for the project. Organizational manual development will be completed in Year 2.

SNV supported DAA's Business Development planning process through the organization of an initial needs assessment for DAA and preparation of 2015 plan of operation for the organization. Areas under which the organizational needs assessment and planning focused included *Governance, Administration Needs, Office Space, Office Equipment, Financial System, External Relationships (DAA's Partners& Clusters).*

For the GOG Units, a qualitative assessment tool was designed to provide a baseline, mid-term and final overview of perceptions by leaders, staff and key informants of each GOG unit's core purpose and approach to achieving that purpose. The survey aims to identify perceptions of each unit's key strengths and challenges. Their vision for collaboration with SFMP and the outcomes such collaboration might achieve. It used semi-structured interview format conducted with focus groups and/or key informants. For the GOG and public University units, SFMP has intentionally chosen not to apply the more comprehensive and standardized, quantitatively scored USAID OCA used for CSO partners.

A baseline OCA for 9 GOG Units was completed: The assessment was conducted during the period from March – August 2015 by URI/CRC with SFMP Ghana staff. Targeted needs and capacity assessments conducted by URI Technical Specialists in GIS and IT during this period were also considered. The World Bank WARFP Organizational Capacity Review of the Fisheries Commission conducted for its Mid-Term Review was shared with SFMP in March 2015 and considered in the assessment. Review of the WARFP report revealed that WARFP and SFMP findings and planned areas of support for Government capacity development in MOFA are complimentary. In addition to its specific focus on 9 units (including 4 FC units, the FEU interagency body, 2 UCC units and 2 RCCs), SFMP is well positioned to address weaknesses identified in the WARFP report including communication with, delegation to and engagement of Regional Offices by the central headquarters, and of communities and CSOs by the Regional Offices. SFMP will also contribute in the area of inter-institutional linkages and capacity development of CSOs, Community based management institutions and the private sector. These GOG OCA findings will inform decisions about priority SFMP support to these units in Year 2.

2.2 Implementation Challenges

On the programmatic side, coordination and communication issues emerged among the partners in the first half of Year 1 once field activities were just starting up, especially among those working in the Western and Central regions and with Accra-based partners. A problem-solving meeting was held in Takoradi and a number of recommendations made were implemented to resolve those issues.

There were some initial coordination challenges with the Fisheries Commission regarding involvement in planning and implementation activities. The coordination issues were resolved in a meeting with the Fisheries Commission where it was made clear of the need to be supporting Fisheries Commission mandates and responsibilities and the desire for closer cooperation and endorsement of activity led processes and meeting agendas.

There were some challenges in forecasting whether targets set for support to medium and scale enterprises would be met for the year given a late start up of field activities. In the end targets were exceeded even though number of demonstration stoves constructed was below expectations. There was concern especially from the Fisheries Commission post-harvest unit that only appropriate technologies that they endorsed be extended and that those had to be vetted via a workshop on smoker technologies. However, the team decided to move forward as planned on development of pilot Morrison stove technologies which are known to be better than the most prevalent used style—the Chorkor smoker. This will provide some early trial experience. Evaluations will take place early in Year two with involvement of the FC Post Harvest Unit before more wide-scale extension of these technologies or more stoves are built to ensure they are appropriate and desired by processors in the Western and Central region as smoking in these areas varies somewhat from where the Morrison design which was first introduced and widely adopted – in the Volta region.

A challenge early in startup during the first year for most subcontractors was a funding delay which resulted in late timing and implementation of field activities. As a result, most partners found that they had to initiate some activities in later months than planned. In certain cases, such as the Ankobra estuarine vulnerability assessment, addressing this challenge meant that effort levels have to be increased to ensure timely completion of field work and report writing. Another source of challenge was some ambiguity or vagueness in partner terms of reference. More detailed terms of references are being used for Year 2.

The late start of SSG's work on the project and resulting shifts in timelines for the RPA scoping exercise and the partnership Prioritization Workshop led to delays in a number of SSG's activities and deliverables. Because of these delays, much of SSG's work on the ICT strategy was deferred to Year 2, and the first MOU and the additional Partnerships Trainings was also be shifted to Year 2.

Partners continue to raise concerns about co-dependency and coordination during implementation of field activities. On the one hand, it is understandable that to meet individual deliverables and targets, partners do not want to be surprised by delays or difficulties in obtaining needed inputs from other groups. On the other hand, the entire design of the SFMP, reflects in miniature the great need for collaboration and coordination in Ghana's fisheries management. A central aim of the project is to create a strong set of government, NGO and private sector partners that can function effectively as a governance network. SFMP leadership

will continue to challenge the implementing partners to move toward a deeper understanding of the importance of a collaborative model of fisheries and coastal resources management. At the same time, we have moved in Year2 to carefully look at the number of partners involved in any given task or activity area and have attempted to minimize the number involved to help reduce transaction costs and communication / coordination challenges.

2.3 M&E Plan & Implementation Update

All M&E officers for each implementing partner were taken through the approved Monitoring and Evaluation Plan in March 2015 after its final approval. This was done per-organization. Reporting forms were customized for each indicator and partner and which are used for monthly and quarterly reporting.

In line with the project impact assessment strategy, household survey data collection was successfully conducted across the 10 sampled communities along the four coastal regions. A mobile app (kobol Toolbox) was used to collect and upload data from the coastal communities to the server on a daily basis. Over 450 households and over 700 individuals were surveyed. GPS coordinates of the various households were collected to ensure that during mid-term and final evaluation the same households will be visited. Data cleaning, analysis and reports will be generated in FY 16 first quarter. Findings will shared through a series of meetings and after peer review. While the baseline report was expected to be completed at the end of Year1, the length of time to complete the household surveys, longer than anticipated, means the Baseline report has been delayed until Year1 Q1. Consultants from BIRD/KNUST were brought in to assist with the baseline field work. For this task, a significant amount of effort was put into the selection and design of a paperless survey system and also resulted in some delay in the start of field work. However, the upfront investment in a paperless survey system has resulted in significant time and cost savings in data entry and reduction in possible transcription errors and missing fields. It will also greatly increase speed at which the mid-term and final surveys can be undertaken in Year3 and 5 respectively.

The STWG has also produced a baseline on the status of fish stocks. The preliminary results are being shared and a final report prepared in FY 16 after peer scientific review.

3. INTEGRATION OF CROSSCUTTING ISSUES AND USAID FORWARD PRIORITIES

3.1 Gender Equality and Female Empowerment

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

3.2 Sustainability Mechanisms

Emphasis is placed on:

- Involvement of relevant government officials in project planning and implementation to ensure continuity.
- Continued capacity building and development of local stakeholders and partners will greatly assist project sustainability.

HM leveraged existing partnerships and good relationship with local authorities in the Western region during field activity implementation. Opportunities for tailoring interventions to support implementation of district MTDPS and spatial plans were explored with beneficiary district assemblies and regional coordinating councils. Furthermore, hiring of local leaders from fishing communities for data collection has fostered improved communication and buy-in of fisher folks into project objectives (refer to success story below).

SpS has actively involved people from the communities and the district assemblies as field officers who assisted in data collection and in the data analysis. It is envisaged that this process of local involvement will create ownership for the project and it sustenance will be on a sound footing.

3.3 Environmental Compliance

All training documents and training curricula were reviewed to ensure that they were environmentally sound. The points outlined in the mitigation measures were also strictly followed. CEWEFIA has also monitored the activities of the MSMEs. The monitoring revealed that some MSMEs were using the safety measures they acquired from the training.

The environmental compliance officer visited some of the sites selected by partners and women beneficiaries for construction of demonstration stoves. There were a few problems with site selection as noted below and partners are being re-trained and reminded of environmental mitigation measures required in the EMMP.

To ensure that environmental compliance measures are in place, CEWEFIA in collaboration with the Environmental Compliance Officer (Hen Mpoano) visited the sites where the construction and renovation of the smokers would be done. The Project team visited Moree on 5th September 2015, Elmina on 31st August 2015 and Anlo on 31st August 2015. In Moree, the site proved not to be environmentally feasible and therefore a new site is being looked out for, to enable CEWEFIA to construct a demonstration oven for the women. Elmina and Anlo sites meet the Site Selection Criteria and were approved by the Environmental Compliance Officer. Construction of the improved smoking ovens is ongoing in Elmina. The compliance officer ensured that all safety and health measures were followed.

3.4 Global Climate Change

Please see section IR4.5 Pra and Ankobra Resilience plans for information on activities directly related to this issue.

3.5 Policy and Governance support

Please see section IR1 which describes SFMP's substantial policy and governance support initiatives.

3.6 Local Capacity Development

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

3.7 Public Private Partnerships

See section IR 6 for information on activities directly related to this issue.

3.8 Science, Technology, and Innovation

Please see section IR2 for descriptions of activities of the science and technical working group on fisheries, collaborative research undertaken with UCC, and development of an ICT strategy for the project. In addition, of particular note is SNV's interest in promoting improved cook stoves that produce a healthy food product. With this in mind, a PAH study was conducted on selected fish and tree species on the three most used stoves for smoking fish: the Barrel, Chorkor and Morrison stoves. PAHs are toxic chemicals that are formed during the incompletion combustion/burning of organic matter. Structurally they are Aromatic hydrocarbons with more than 1 benzene ring and usually exist in mixtures, with more than 600 PAH compounds having been identified. Examples include Benzo (a) pyrene, Benzo (a) anthracene and Benzo (b) fluoranthene. Benzo (a) pyrene has been established to be carcinogenic in humans and hence the need for the study to better understand the production of healthy fish. The main aim of the study was to establish the possible levels of PAHs in smoked fish on the Ghanaian market with the below objectives:

- Investigate the effect of stove design on the PAH content of smoked sardinella
- Investigate the effect of wood fuel type on the PAH content of smoked fish
- Investigate the effect of fat content in fish species on PAH content

The study was carried out using different fish and tree species on the 3 stove types, with results indicating that none of the stoves tested producing healthy fish (meet EU standards) in terms of their PAH content, except the FAO-FTT stove. Also none of the wood fuels tested can be said produce healthy fish in terms of their PAH content. It was recommended that the study be replicated with a wider scope and using a more scientific approach. The study will enhance technology development under the project and also ensure the production of healthy smoked fish for human consumption.

4. STAKEHOLDERS PARTICIPATION AND INVOLVEMENT

Stakeholder participation and involvement is a key pillar of the SFMP approach and a central means to achieving intermediate result 3; building constituencies and political will for policy and legal reform, as well as behavior changes needed to restore Ghana's marine fisheries to a healthy and sustainable state. Examples of the participatory approach and stakeholder involvement are described in Annex 6.

5. MANAGEMENT AND ADMINISTRATIVE ISSUES

The original design for the management of the SFMP incorporated a matrix style of management for the technical side of the program, complemented by compact URI-based and Accra-based financial management units. Experience in Year 1 revealed several limitations of this design which have been partially corrected during the year, but require additional modifications to the management approach in Year 2.

The original plan for in-country administration and finance included the Chief of Party, a finance and administration officer, one office assistant a driver, a communications specialist (originally seconded from Hen Mpoano) and the M & E specialist. By the end of Year 1, the Accra office had added two additional finance assistants, a second administrative assistant, and an assistant shared between the M&E and Communications specialist, who will begin in Q1 of Year 2. This is still not likely to be sufficient to carry out all of the detailed subcontract monitoring (financial, M & E, and document management) required by the University of Rhode Island. This is driven mainly by the volume of work required to ensure proper compliance among the many local implementing partners with sub-recipient agreements.

On the URI side, a part time senior program manager, one full time grants assistant and a portion of the CRC business manager were allocated. Shortly after the award was granted, the CRC grants assistant left for another position, forcing CRC to utilize small portions of other administrative staff to cover the startup phase as well as manage all of the subcontracting and CRC Accra Office finances through the URI system while a replacement was found. It took an entire year for URI to create an appropriate new position, international coordinator, then recruit and hire a qualified individual. The new coordinator begins work at the outset of Q1 of Year 2, and will immediately begin focusing on strengthening and accelerating financial management systems for CRC Accra and subcontractors.

The process to complete the initial sub-agreements, receive initial invoices for operational advances and receipt of initial funds for those eligible (local sub-recipients) for an advance for implementing partners took much longer than anticipated. For most of the sub-agreements, this was not accomplished until the end of the second quarter of project Year 1. A simple sub-recipient tracking system was created that will provide Ghana based project managers information on an ongoing basis in terms of the status of transactions with each partner and ability to keep the administrative and approval processes moving in a more efficient manner.

There have been a number of issues concerning billing formats, inadequacy of supporting documentation by subcontractors, and addressing VAT waiver issues. The Accra-based finance

team has coordinated with all the partners through a series of visits and meetings to work out these issues. In addition, monthly billing is proving to be cumbersome in the volume of paperwork and tracking of payments as almost all sub-agreements report on expenses (and program progress) with detailed supporting documentation monthly required. Monthly reporting allows the finance team to review and internally audit partner expenditures (for those considered high risk by URI and therefore those who require copies of all supporting documentation –HM, FON, SS, DAA, DQF, CEWEFIA).

Quick Books software for financial management procurement and set up was well underway at the end of Q4 and will be ready for use at the outset of Year 2 Q1. Both the SFMP Accra office and local implementing partners (HM, FO, DAA, DQF, CEWEFIA) will start using this software in the first quarter of Year2 and is anticipated to greatly streamline invoicing and reporting processes. The SFMP Accra office inventory database is fully up to date. Vehicles were successfully procured and delivered to partners. The CRC Accra office suffered several security system failures. These have all been addressed and remedial action taken. The office building also required numerous refurbishments of air conditioners, water pump and a back- up generator system, prolonging office start-up longer than anticipated. Daily power outages up to 12 hours per day on average have also impacted the project by significantly increasing fuel bills over what was initially budgeted to maintain electrical and internet capabilities and security systems at the compound.

On the technical side, the success of the concept of “one team” reporting to a senior management group itself comprised in part by members of the implementing partners depended a great deal on the ability of senior leaders of partners to divide their time between assurance of their own organization’s performance and overall management duties. Most partners, however, encountered substantial challenges in ramping up staff and internal systems and learning to prepare accurate invoices and follow spending and accounting procedures, thus constraining their involvement in overall project management. For example the Program Manager for Field Activities needed to be released from that role in order to focus on completing technical activities in his home organization.

Lead partners, for example SNV, experienced changes in staffing, for example Renewable Energy Sector Leader Enno Heijndermans was finishing his contract in Ghana and was phasing out his role over time replaced by Mr. James Robinson who was on board in the fourth quarter and engaged fully in the preparation of the Year 2 work plan. One administrative aide in CRC Accra resigned to pursue another opportunity. A replacement will be made in Q1 of Year 2.

As this first annual report illustrates, the SFMP partners and CRC Accra-based team have endeavored to carry out the majority of their activities as quickly and diligently as they can, and the program overall has made great strides in building a constructive, supportive relationship with both stakeholders and the Government of Ghana agencies such as the Ministry of Fisheries, the Fisheries Commission, Town and Country Planning and many others to carry out GoG fisheries policies and plans.

A combination of early experience in partner financial administration and the organizational capacity assessments, have yielded insights and recommendations for strengthening, some of which are common to most partners, and others that are unique to particular organizations. The Year 2 work plan incorporates activities to follow-up on the key recommendations. This will involve considerable training and mentoring of local in-country partners.

6. LESSONS LEARNED

During Year 1 the pace and number of project activities being undertaken increased rapidly as the fundamental building blocks of systems, procedures and strategies are were in place. Coordinating a large number of implementing partners (eight total including URI as lead) is proving to be a complex undertaking requiring careful coordination and frequent and effective internal communications. There have already been several meetings and discussions for how to address these challenges and management systems are evolving as these challenges have emerged.

The SFMP project is developing close linkages to senior leadership in the Fisheries Commission at the Division level and within the regional offices, especially in the Western and Central regional zones of influence. FC is actively participating in an increasing number of activities and requesting more involvement. They have provided excellent recommendations for undertaking current activities and making suggestions for inclusions in Year 2 activities. This bodes well for creating a demand driven program supporting our main government client needs and for fostering learning within the Fisheries Commission itself and supporting we hope, greater sustainability of accomplishments made beyond life of project. Opportunities for closer collaboration with the World Bank supported WARFP activities is also occurring and additional opportunities emerging, creating optimism of good synergies being achieved between the two projects over the next several years.

Based on its early experience in Year 1, SSG has decided to add a new element to its partnership building approach in Year 2. SSG will, for each potential partnership, hold a Partnership Forum to bring the prospective partners and relevant stakeholders (e.g., the Fisheries Commission) together to jointly design the partnership concept paper.

Some of the key emerging issues from the on-site organizational assessments from 5 local implementing organizations are:

Need for acquisition of accounting software: although some organizations have basic excel applications, it will be of great benefit if they are able to have specialist accounting software applications that will help them in financial management.

The development of succession plans: some organizations need to develop succession plans. Although current senior leadership of partner organizations are competent and abreast with issues in the development sphere, it is important that they develop clear succession plans to ensure continuity and quality within the organisation.

Over Reliance on Donor Funds: All five organizations are extremely donor dependent. Though this may not necessarily be a negative position, it may have strong financial sustainability implications when donor funds/projects end.

Understanding and Usage of Strategic Plans: Some organizations have very good strategic plans developed for them by external consultants but their use in developing annual plans can be improved.

Engagement of Board of Directors: Although all organizations had Boards of Directors, engagement between the organization and board is not always effective.

Review/ Usage/Development of Organization's Constitution: Constitutions define the dos and don'ts of organizations and this important issue should not be down played in fledgling organizations. All organizations' constitutions need review. This will help align, prescribe and proscribe pertinent development occurrences and streamline organizations in their quest to growth and sustainability.

Strong organizational Leadership: This is one of the strengths of all five organizations assessed. However, there is also a need to strengthen SOPs and to ensure that staff executive leadership and the BOD are familiar with, understand and implement them.

Additional important lessons learned for the period included the following:

- Consensus building for rapid reforms for the fisheries sector can be achieved if stakeholders are consulted through a participatory approach. This is true and has been validated by the stakeholder engagement processes in Year 1. Fisheries managers and Ghana's policy makers are engaging stakeholders to some degree but are yet to fully exploit the benefits of using a more robust bottom-up participatory process to generate consensus for national level policies and actions. This participatory bottom-up stakeholder engagement process is recommended especially where there are large numbers of Artisanal fishers and who operate from widely spread landing sites along the coast. Reaching out to this dispersed constituency however is also a challenge where the Fisheries Commission has limited staffing and resources.
- SFMP's ability to reach out to remote and seemingly inaccessible communities along the Ankobra River has provided a valuable opportunity to gain deeper insights into livelihood vulnerability issues while stimulating dialogue between communities and district authorities to explore opportunities for building livelihood resilience and implementing adaptation measures.
- Hen Mpoano has found it to be quite a challenge to bring stakeholders on board on issues related to ecosystem sustainability particularly if they are involved in impacting the environment. Endeavor Mining Company (formerly known as Adamus Resources) has been reluctant to share information on how their activities in the Ankobra basin are sustainable. They finally offered their report on Bio-Diversity Action Plan after intensive perseverance.
- Generally, partners have often found it difficult to obtain data from Ghanaian government organizations. One has to rely on alternative means of which internet research and community meetings play a key role.

Across the board, partners are finding that effective stakeholder engagements through communication (one-on-one discussion, focus group discussions) promote high participation in project activities. This is laying the groundwork for more targeted 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 SFMP.

Effective collaboration with community facilitators enhances the implementation of project activities

- Adopting a participatory approach during meetings sustains the interest of the participants.

- Difficulty to access some communities selected which require provision of important safety gears and insurance for officials working in those communities.
- Implementation of various activities under the project have resulted in government agencies and departments wanting to build collaboration with DQF, for example, the Department of Community Development, Department of Agriculture, Fire Service, Environmental Health, Social Welfare and Non Formal Education Division of the three districts, Axim, Ellembelle and Shama have opted to adopt and work with identified MSMEs.

ANNEXES

Annex 1. Summary Results to Date

This summary includes all standard USAID indicators as show as well in Section 1.2 as well as two additional custom indicator the project uses.

Standard and SFMP custom Indicators	Baseline FY 2015	FY 15 Target	Results FY 15	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	N/A		N/A	
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)4	0	N/A		N/A	
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	Fish analysis Small pelagic analysis Child labor analysis	1 small pelagic analysis	33%	N

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

Standard and SFMP custom Indicators	Baseline FY 2015	FY 15 Target	Results FY 15	Annual Performance Achieved to the End of Reporting Period (%)	On Target Y/N
Number of institutions with improved capacity to develop and implement managed access fisheries management plans	0	N/A		N/A	
Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	0	806	816	816(101.2%)	Y
Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).	0	20	18	18	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	0		N/A	
Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	0	4	4	4(100%)	Y
Improvement in fisheries enforcement and prosecutorial chain to counter IUU fishing (increase/decrease in prosecutions and percent that lead to conviction) (Project Indicator)	0	Baseline establishe d			
Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)	0	2	1	1(50%)N/A	N
Number farmers and others who have applied new technologies or management practices as a result of USG assistance (FtF 4.5.2)	0	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	560	751	751(134%) M=36(5%) &F=715(95%)	Y

Standard and SFMP custom Indicators	Baseline FY 2015	FY 15 Target	Results FY 15	Annual Performance Achieved to the End of Reporting Period (%)	On Target Y/N
Value of new private sector investments in select value chains (FTF 4.5.2-38)	0	N/A	N/A	N/A	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	3	2	2 (66%)	N
Number of members of producer organizations and community based organizations receiving USG assistance (S) (FTF 4.5.2(27))	0	180	164	164 (91%)	Y
Number of public-private partnerships formed as a result of Feed the Future assistance (S) (FTF 4.5.2(12)	0	N/A		N/A	Y
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	404	890	890 (220 %) Male-621 (70%) and Female-269(30%)	Y
Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (4.8.1-29)	0	4040	9832	9832(243%)	Y

EXPLANATION OF INDICATORS

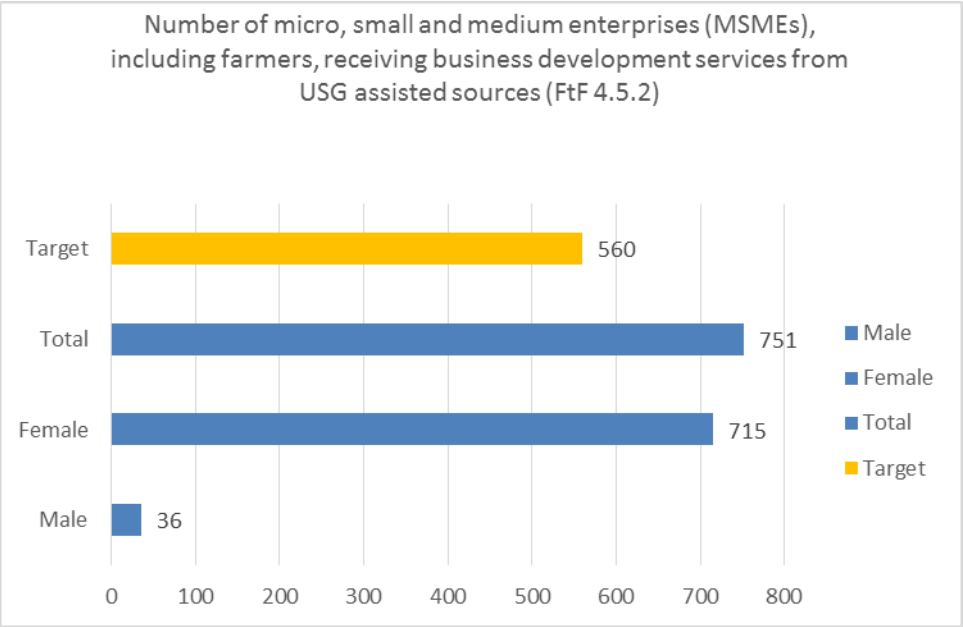
- **Number of agricultural and nutritional enabling environment policies completing the following processes/steps of development as a result of USG assistance in each case:**
  The initial target was 3.However, early on in Year1 MOFAD asked us not to undertake any work on legislative reform and analysis of the fisheries act was not done and this target moved to Year2. Initially, an analysis of child labor policies was programmed but also dropped from year1 activities until all the initial scoping an assessments ware completed. An analysis of the stock statue and profile of the fisheries was conducted along with stakeholder consultation on preferred management measure needed to address overfishing of the stock.

- **Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)**
  For the year under review, number of technical /program experts from URI and SSG spent 816 days providing assistance to the project. Experts from SSG spent couple of days to facilitate workshops on strategic partnership and prioritization. Private sector partnership specialist is contracted to provide support to the project who is the link between SFMP and SSG head office. Expertise from URI provides technical assistance to the project in various areas such as GIS, organizational assessment, program management and capacity development among other technical assistances

- **Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)**
  Assessment for Ankobra was completed and the draft report undergoing final edits. The vulnerability assessment for Axim has been delayed due to late start up and will be completed in Year2 Q1.

- **Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2)**
  At the end of FY 15, a total of 751 MSMEs were trained (constituting 95% females and 5% male) against a target of 560.The training covered various sectors of business management skills and post-harvest fishery improvement. Through these trainings fishmonger's in SFMP targeted communities acquired skills and some inputs to support their business activities. Result was greater than anticipated in initial targets as more participants attended training programs than were planned. This target has a large number of female beneficiaries as most of the targeted enterprises are women processors and marketers in the fishery post-harvest sector.

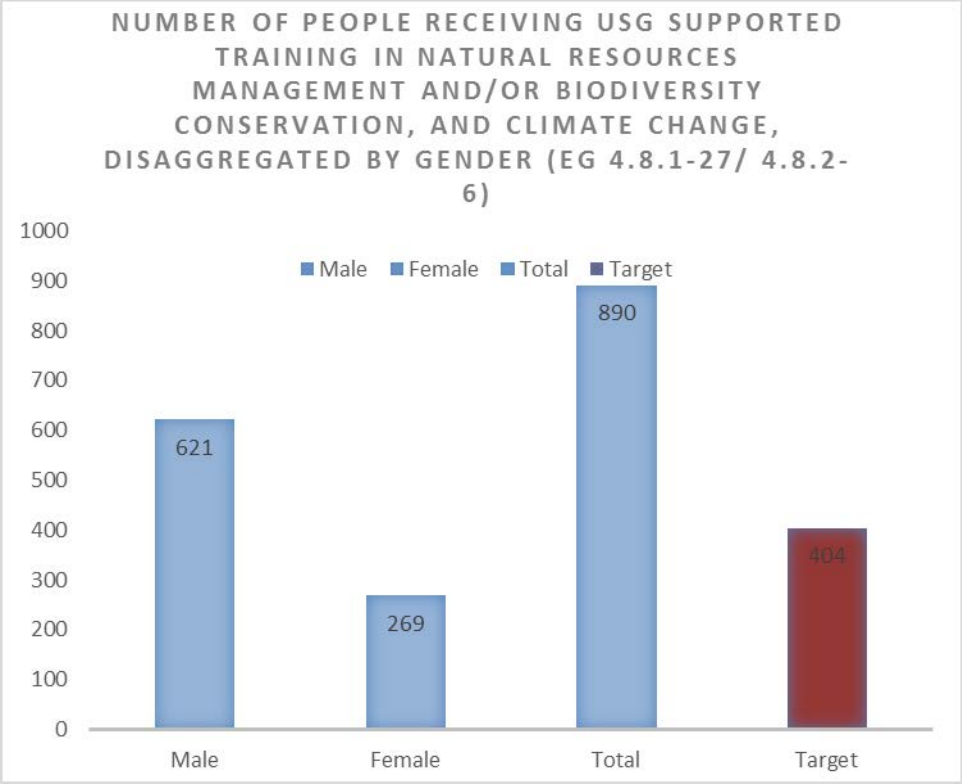
Figure 24 Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources



- **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))**
  Both DAA and CEWEFIA have received substantial USG assistance I the form of grants for implementation of organizational mission objectives related to objectives of the SFMP, several trainings benefiting members, and material support I the form of a vehicle an, computer and office equipment that enables them to more effectively carry out their organizational goals. The NCFC (National Canoe Fishermen's Council) was also targeted. They have participated in numerous stakeholder meetings, and a few members have participated in the fisheries leadership course, Philippines study tour and other trainings, and SNV has conducted an organizational assessment as well. However, no institutional level support has been provided in this fiscal year and will be provided based on the organizational assessment completed in Year1.
- **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)**
  Series of capacity building activities were executed during FY 15, implementing partners were trained on strategic partnership. Marine police, FEU and MCS officers from fisheries commission were also trained on participatory fisheries enforcement. There were other forms of trainings for various target groups including child labor and trafficking and stock assessment To date 890 people (Male-621 and Female-269) representing 220% against a target of 404 benefitted from the various forms of trainings. Below is a graph showing the result of the number of people receiving USG supported

training in natural resources management and/or biodiversity conservation, and climate change, disaggregated by gender**.** This result is substantially over target as a conservative definition of training events was used in work planning. Several workshops where assessments studies have been presented for validation and as educational sessions for stakeholders resulted in the increased numbers over target. Female participation is low as many institutions invited to events tend to be male dominated so the pool of female applicants is low. This points to a need for more effort at identifying qualified female participants in these workshop events and trainings.

Figure 25 Number of people receiving USG supported training in natural resources management and/or biodiversity conservation, and climate change



- **Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (4.8.1-29)**
  Over target substantially. See above indicator for explanation.

Annex 2. TraiNet Report

This report includes trainings that count towards two indicators: Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2), 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

Program Name	Start Date	End Date	Total Budget	Total Actual	Total Male Participants	Total Female Participants	Total Participants	USAID Budget Per Participant
Child labor and child trafficking workshop-SNV	3/26/2015	3/27/2015	1488	1488	15	8	23	65
MCS and marine police training on fisheries enforcement-FON	9/15/2015	9/19/2015	34813	34813	53	15	68	515
Data collection and reconnaissance survey	7/7/2015	7/8/2015	455	455	7	0	7	65
M and E training system - CRC	6/26/2015	6/26/2015	760	760	6	2	8	95
Business and management training - SHAMA APO-DDASGIFT	8/4/2015	9/29/2015	5053	5052	1	29	30	168
Orientation workshop for Anti CLAT Advocate-Cewefia	3/8/2015	5/8/2015	9414	9414	28	12	40	235
Business and management training -- AXIM-DAASGIFT	8/5/2015	10/8/2015	3026	3025	0	20	20	151
leadership for fisheries management-CRC-Cape Coast	8/2/2015	8/14/2015	19759	19759	21	12	33	599
Training of MSMEs in Anlo-Cewefia	8/10/2015	8/10/2015	3000	3000	0	45	45	67
M&E training on fulcrum	7/6/2015	7/6/2015	200	200	6	2	8	25
Fish stock assessment workshop	7/6/2015	7/10/2015	6820	6820	17	2	19	359
Prosecutorial chain workshop in western region	5/19/2015	5/19/2015	332	332	17	2	19	17
Western Region small pelagics fisheries profile validation workshop-HM	9/15/2015	9/15/2015	3129	3129	47	27	74	42
Media orientation workshop cape coast-C/R-CRC	7/28/2015	7/28/2015	9000	9000	21	15	36	250
Training of data collectors for climate	7/6/2015	7/8/2015	897	897	7	0	7	128

Program Name	Start Date	End Date	Total Budget	Total Actual	Total Male Participants	Total Female Participants	Total Participants	USAID Budget Per Participant
change vulnerability assessment								
Post-harvest fishery improvement training-SNV-CENTRAL REGION	8/21/2015	9/11/2015	1515	1515	20	155	175	9
Exchange visit for TCPD staff-western region	6/29/2015	6/30/2015	4397	4397	26	4	30	147
Training of MSMEs in Moree-Cewefia	8/24/2015	8/29/2015	6323	6323	0	58	58	109
small pelagics fisheries profile validation workshop(Greater Accra)-HM	9/15/2015	9/15/2015	3175	3175	45	29	74	43
Small pelagics fisheries profile validation workshop (Keta)-HM	9/22/2015	9/22/2015	3123	3123	48	30	78	40
Training of IPs on strategic partnership-SSG	7/21/2015	7/22/2015	7339	7339	15	7	22	334
Small pelagics fisheries profile validation workshop in Central Region -HM	9/22/2015	9/22/2015	1383	1383	52	12	64	22
Business and management training - ANKOBRA-DDASGIFT	8/6/2015	10/6/2015	5458	5458	0	68	68	80
fisheries profile enumerators training - phase 2	6/26/2015	6/26/2015	3852	3852	22	3	25	154
workshop on partnership prioritization -SSG	7/22/2015	7/22/2015	7339	7339	15	6	21	349
STUDY TOUR TO PHILIPPINES	5/25/2015	5/30/2015	35508	29269	12	8	20	1463
Business and management training - AXIM FISHERIES OFFICE-DAASGIFT	8/5/2015	8/10/2015	5291	5291	0	61	61	87

Program Name	Start Date	End Date	Total Budget	Total Actual	Total Male Participants	Total Female Participants	Total Participants	USAID Budget Per Participant
Anti CLAT validation workshop-FON	9/14/2015	9/14/2015	40148	30731	55	28	83	370
Training of MSMEs in Elmina-Cewefia	8/17/2015	8/21/2015	3763	3764	0	61	61	62
validation workshop for fuelwood value chain-SNV- American house-Accra	9/3/2015	9/3/2015	2962	2962	26	10	36	82
Business and management training - SHAMA BENSIR-DDASGIFT	8/5/2015	9/30/2015	4171	4171	0	25	25	167
sardinella value chain study training-SNV- Accra	9/4/2015	9/4/2015	3193	3193	25	12	37	86
Post-harvest fishery improvement training-SNV-CENTRAL REGION	9/1/2015	9/2/2015	623	623	15	193	208	3
Household baseline for enumerators training -CRC	7/29/2015	8/1/2015	3515	3514	2	3	5	703
small pelagics fisheries training -HM	5/4/2015	5/5/2015	4730	4729	14	4	18	262
Vulnerability assessment validation workshop-Axim	9/15/2015	9/15/2015	2674	2674	37	11	48	56
Environmental mitigation and monitoring protocols-WR	6/11/2015	6/11/2015	51	51	3	2	5	10
Environmental mitigation and monitoring protocols-GR	6/16/2015	6/16/2015	51	51	2	1	3	17
Vulnerability assessment workshop	6/11/2015	6/12/2015	1531	1531	8	0	8	191
Total			250261	234602	688	982	1670	7627

Annex 3. Selected List of Publications (Year1)

IR 1: Strengthened enabling environment for marine resources governance

National Policy

Coastal Resources Center (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Issue Brief One on Status of Small Pelagic Fishery / Importance of Food Security in Ghana / Regionally, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014COM003.

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP) Stakeholder Association Leaders Meeting of Small Pelagics Options. , Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 21p. GH2014.

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Summary of Public Stakeholders Meeting, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014POL003.

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Fisheries Working Group Meeting in Central Region, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Friends of the Nation (2015). USAID/Ghana Sustainable Fisheries Management Project (SFMP), Western Regions Fisheries Working Group. Proceeding of Maiden Meeting, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Law Enforcement

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Baseline of fisheries prosecutions in the Central Region, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Prosecutorial Chain Workshop Western Region, Proceedings, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PW002. 110p.

Child Labor

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Anti Child Labor and Trafficking Field PRA Survey Report. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 90p

Friends of the Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), CLaT in Fisheries Overview of the Ghanaian Situation, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Child Labor and Trafficking (CLaT) Assessment Tool Workshop Report. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Child Labor and Trafficking (CLAT) Training on Tools and Issues, 2015. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), CLaT World Day Against Child Labor, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Stakeholder Engagement Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization and Friends of Nation (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Partners Capacity Needs Assessment for CLaT Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Central and Western Region Fishmongers Improvement Association (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Community Champions / Advocates Orientation Guide on Child Labor and Trafficking (ClaT), Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014POL031.

Central and Western Region Fishmongers Improvement Association (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Story of Interest on CLAT at Elmina, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

IR 2: Science and Research Applied to Policy and Management

Hen Mpoano (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Central Region Data Hub Assessment, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014SCI013.

Hen Mpoano and Spatial Solutions (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Exchange Visit for Town and Country Planning Department Officers: Workshop Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

IR 3: Creating Constituencies and Stakeholder Engagement

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP) Communications Strategy COM001, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014COM001. 46p.

Coastal Resources Center. (2014) USAID/Ghana Sustainable Fisheries Management Project. In Brief. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 2 pp.

Coastal Resources Center Accra (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), World Environment Day Event Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014COM012.

Mason, B. (2015) Lives in the Balance: Protecting Our Planet's Coastal Communities. Momentum: Research and Innovation. University of Rhode Island Division of Research and Economic Development. 5 pp.

IR 4: Applied Management

Central and Western Region Fishmongers Improvement Association (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Report on MSMEs Small Business Development and Management Capacity Building Training Workshop at Shama Anlo Beach, Elmina and Moree from 17th-29th August, 2015, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Central and Western Region Fishmongers Improvement Association (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Report on Needs of MSMEs in Elmina, Moree and Anlo, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014ACT012.

Daasgift (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), MSME Training Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Daasgift (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Report on Sanitation Assessment, To Explore Opportunities and Viability of Trashy Bag Business at Ankobra Estuaries., Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Central and Western Region Fishmongers Improvement Association (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Improved Fish Smoking Technologies Central Region Forum Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014ACT010.

Small Pelagic Fisheries Management

Hen Mpoano (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Small Pelagics Fisheries Data Collection: Orientation Manual, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Integrated Community Fisheries Management and Resilience Plans

Hen Mpoano and Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Ankobra River Estuarine Climate Vulnerability Assessment 2015. Hen Mpoano, Windy Ridge Extension, Takoradi. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014. 78p.

Spatial Solutions (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Analysis Spatial Planning Options Ankobra, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Spatial Solutions (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Vulnerability Assessment Axim, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Fishing Community Livelihood Development, Value Chain and Post-Harvest Improvements

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Fuel Wood Value Chain Study Validation Workshop Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014SCI012.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Fuelwood Value Chain Analysis Literature Review Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014SCI010.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Post-Harvest Processing Value Chain Literature Review Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014ACT004

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), MSME Small Business Development and Management Training, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Post Harvesting Processing Scoping Study Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014ACT004.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Post-harvest Processing Stove Performance Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Sardinella Value Chain Analysis Literature Review Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014SCI007.

IR 5: Gender

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Gender Mainstreaming Strategy, 2015, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014GEN002, 110p.

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Gender Needs Assessment Report, 2015, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PW002. 24p.

Torell, E., Owusu, A., and Okyere Nyako, A. (2015). USAID/Ghana Sustainable Fisheries Management Project (SFMP), Ghana Fisheries Gender Analysis, 2015, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014GEN001, 21p.

IR 6: Public-Private Partnerships

SSG Advisors (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Rapid Partnership Appraisal Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PP001.

IR 7: Capacity Development

Netherlands Development Organization (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Government of Ghana and Public University Units Baseline Organizational Capacity Assessment Report. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014.

Netherlands Development Organization and Coastal Resources Center (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Organizational Capacity Assessment Report for CSOs, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014CAP001.

Project Management

Coastal Resources Center. (2014) Branding and Marking Plan. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 7p.

Coastal Resources Center. (2014). The USAID/Ghana Sustainable Fisheries Management Project (SFMP) Partners Meeting Report, February 25-26, 2015. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. 18p.

United States Agency for International Development (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Award Document, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG001.

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Year One Work Plan, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG004.

Coastal Resources Center Accra (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), SFMP Year1, Quarter 1 Progress Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG007.

Coastal Resources Center Accra (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), SFMP Year1, Quarter 2 Progress Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG007.

Coastal Resources Center Accra (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), SFMP Year1, Quarter 3 Progress Report, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG007.

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Monitoring and Evaluation Plan, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. GH2014PMG002.

Coastal Resources Center. (2015). The USAID/Ghana Sustainable Fisheries Management Project (SFMP), Environmental Monitoring and Mitigation Plan, Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island.

Annex 4. Quotes from Livelihood Vulnerabilities

‘‘The floods are getting worse by the year. Attempts to cope with the floods by deepening natural drains never worked’’

‘‘The harvest coincides with the raining season which is also in June-July thus making cocoa farming very difficult as we are unable to transport to the market centre’’

“The flooding wasn’t this serious. It intensified as a result of the destruction of a drainage system at the bank of the river during the construction of the main road 30 years ago. The frequent floods are also the result of filth and the off-shore oil and gas activities”.

“Our drinking water is not good. We will be very happy if you can help us get a pipe. Our water tastes salty at times (especially when the temperatures are high) which makes drinking very difficult”

“During the floods, we walk for five miles before we get to (Dadwen) the community where we can get car to continue our journey because no car comes here. We sometimes use woods to create a raft to cross the waters”

‘’Even though cocoa harvest is in June –July, access to market site is not possible due to the floods, leading to losses and the inability to raise money.’’

‘‘Food is generally scarce in June-July because of the floods which greatly affect our movement. However fish is always in abundance and is our major source of livelihoods during the floods’’

Annex 5. Public-Private Partnerships

Table 1. Organizations Interviewed by Sector

Sector	Organization
Agriculture	B-BOVID
	Greenwave (nonprofit social enterprise)
Banking and Finance	Ecobank Ghana
	UT Bank
	Prudential Bank
	Western Rural Bank
	Awutu Emasa Rural Bank
	Gomoa Rural Bank
	Akatakyiman Rural Bank
	Agricultural Development Bank
	Eximguaranty
	Venture Capital Trust Fund
	Injaro
	I&P
	Serengeti Capital
	Merson Capital
	Databank
	USAID DCA Ghana
Capacity Building & Development Centers	Ankobra Beach Resort
	Skills Development Fund
	Central Region Development Commission (CEDECOM)
Development Projects	Enterprise Development Centre
	Western Region Coastal Foundation Project
	World Bank West Africa Regional Fisheries Project
	USAID Supply Chain Project
Fish Processing	Raanan Fish Feed
	West Africa Fishery Products and Marketing Limited
ICT	Intercom Programming and Manufacturing Co. Ltd (IPMC)
	Think Data Services
	mPedigree
	Voto Mobile
	Syecomp
	Internet Solutions
	Esoko
	Techcom Visions
	Linkworld Solutions

Sector	Organization
	Image AD
	SMS Gh Solutions
	Subah Infosolutions
	Mobile Content.Com
	Techaide
	Silky IT Production
	Bsystems
Insurance	Millennium Insurance
	Star Assurance
	Enterprise Insurance
Media	Origin 8
	Global Media Alliance
	Abromedia
	KYZZ FM
Mining	Gold Fields Ghana
	Ghana Chamber of Mines
	Newmont
	Adamus Reources Limited
Oil & Gas	Schlumberger
	Kosmos Energy Ghana
	Tullow Ghana
Telecom	Expresso Ghana
	Bharti Airtel
	MTN
	MTN Foundation
	Vodafone Ghana
	Tigo Ghana
Supermarkets	Max Mart Shopping Centre
	Melcom Store
Transportation & Haulage	Vehrad Transport Services
Government Agencies	Data Centre of Ministry of Fisheries & Aquaculture
	Centre for Remote Sensing and Geographical Information
	Monitoring & Surveillance Unit of Fisheries Commission
	Fisheries Commission - Marine Fisheries Division
	National Communication Authority

The following graphic shows breakdown of companies interviewed as part of the SSG RPA, organized by sector.

Figure 26 companies interviewed as part of the SSG RPA

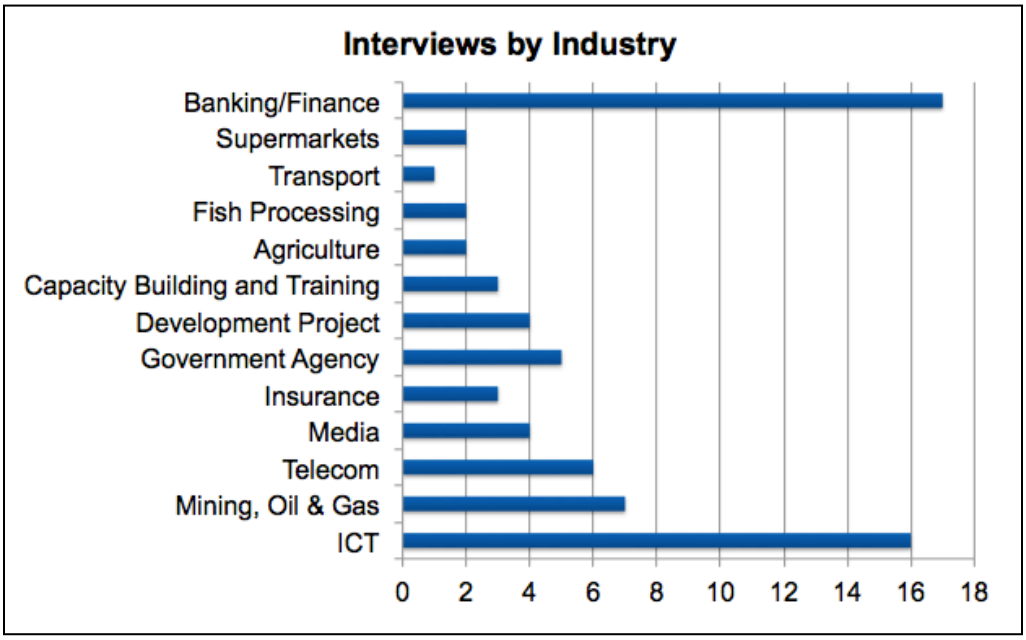


Table 2. The Three Partnerships Prioritized for SFMP

Partnership Name	Possible Private Sector Partner(s)	Partnership Goal
Insurance for Fishermen	Millennium Insurance	To extend affordable life and vessel insurance to fishermen and fish processors
Vodafone Fishers' Club	Vodafone	To develop a suite of mobile-based services for fishermen (including weather alerts, market updates, nutrition tips, and education on best practices)
SMS Hotline for IUU Enforcement	Esoko and other ICT and/or telecom partners	To develop a short code to allow community members to send free SMS reports on illegal fishing directly to the marine police

In the final month of Q4, SSG completed the RPA and Prioritization Report detailing its fieldwork and company interviews, as well as the results of the partnership prioritization exercise. It also submitted a due diligence report for Millennium Insurance and a draft Strategic Partnership concept paper for the potential partnership with Millennium.

Annex 6. Examples of Participatory Approaches

SSG led engagement of private sector companies operating in Ghana through the Rapid Partnership Appraisal (RPA). The RPA involved in-person interviews with over 70 companies and organizations relevant to Ghana SFMP. In addition, for the Partnerships Training / Prioritization Workshop in July, SSG included four representatives of the Fisheries Commission among the participants, to ensure that the Government of Ghana is represented in partnership development and planning for Ghana SFMP. The Fisheries Commission and other key government bodies will also be consulted and involved in each step of the partnership-building process in Year 2.

Further, the ICT Working Group will involve strong representation from MOFAD and the Fisheries Commission, to allow for joint planning for ICT activities for Year 2, as well as eventual government ownership over ICT innovations. For both the public-private partnerships under IR 6 and the ICT strategy, government buy-in and ownership will be critical to ensuring sustainability beyond SFMP. SSG and SFMP will thus prioritize coordination with the government throughout partnership and ICT strategy development.

Finally, in Q3, SSG led a study tour to the Philippines in which 20 key SFMP stakeholders—SFMP staff, MOFAD, the Fisheries Commission, fish processors, members of the marine police and FEU, a leader of the Fisheries Alliance, and chief fishermen—met with government representatives and fisheries sector stakeholders in the Philippines. This ensured that a range of perspectives and viewpoints would be reflected during the tour itself and that lessons learned from the study tour could be broadly shared with diverse stakeholder groups in Ghana.

The involvement of stakeholders in every development process is important to sustaining development interventions. The Chief of Party for SFMP Brian Crawford with the Communication officer Aba Mensah and some SNV staff participated in Development Action Association's (DAA) kick off meeting at Tsokomey near Bortianor in Ga South on the 17th of March 2015. The intention of the meeting was to inform members of DAA's board, the association's members, and women fish processors from Apam and Winneba on the objectives of SFMP, the capacity support to be delivered by SNV and the handover of SFMP's vehicle given to DAA to enhance mobility regarding the project. Stakeholders expressed their appreciation and willingness to support SFMP.

SNV together with DAA organized two sensitization workshops on SFMP and post-harvest losses at Winneba and Apam in the Central Region on 26th May and 2nd June 2015 respectively. About 200 people participated in both workshops comprising traditional authorities and elders, local government officials, fishermen, fish processors, fishers associations and the general public. During the sensitization program, SNV together with SFMP and DAA set the tone for media engagements. Radio Peace in Winneba organized an interview program on SFMP and its benefits to the community.

In addition, SNV in collaboration with SFMP secretariat, the US State Department, A Rocha and the Wildlife Society commemorated the World Environment Day by organizing a breakfast show on 5th June 2015 on TV3 where the significance of the environment and the SFMP was shared with the general public. The World Environment day was celebrated at Winneba on 6th June 2015 by planting 1000 red mangroves at the Muni Ramsar Site leading to the organization of a durbar on environmental protection which saw 350 people participating.

Lastly, a draft newsletter has been developed for communication and dissemination to local and international stakeholders on key issues in the fisheries sector and project activities. This newsletter will inform stakeholders about the SFMP project, implementation status, successes and challenges.

In Year 1, FoN engaged extensively with stakeholder during activity planning and implementation. Stakeholders from Government included the following; Fisheries Commission (National, Regional and local Officers), District Assemblies in the four coastal Regions, Ministry of Gender and Social Welfare, The Social Welfare Department, etc. Other stakeholders included but not limited to the following:

- Community leaders, fisher folks, fishmongers, fisheries input dealers, etc.
- Print and Electronic Media (National and local Media),
- Traditional leaders across the four (4) coastal regions,
- Security Agencies (Ghana Police Service, Ghana Navy and Air force),

The TCPD at both the national headquarters and the regional offices of the CR and WR have been effective collaborators on this project. The head office has provided GIS data to aid SpS spatial analysis of the Ankobra. The two district assemblies bordering the Ankobra have provided all the needed secondary data particularly the spatial development framework (SDF) to SpS as a form of assistance and have been actively involved in all the field work of SpS and HM.

During the period, Fisheries Commission personnel, district assembly officials, community leaders and SFMP partner organizations were involved in field activities. Specifically, regional FC M&E focal persons were involved in small pelagic fishery training as resource persons and in data collection as supervisors; planners at the district and regional level were involved in training events and participatory field data collection processes. Finally, community leaders and SFMP partner organization staff participated in field implementation.

The Town Hall meetings and the local socialization event organized engaged stakeholders in the targeted communities. There was a high turnout of the stakeholders comprising of Members of Parliament, Officials of the District Assembly, Traditional Authorities, fish processors, fishers association, media and the community members.

CEWEFIA organized an end of year multi stakeholder meeting. In participation were the representatives of the Food and Drugs Authority, Fisheries Commission, Member of Parliament, Local government, Traditional Authorities, Fishers Association, Environmental Protection Agency, Fish processors and Media.

Figure 27 Stakeholder meeting