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# USAID/GHANA SUSTAINABLE FISHERIES MANAGEMENT PROJECT



## YEAR 2 WORK PLAN

OCTOBER 1, 2015, TO SEPTEMBER 30, 2016



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**Cover photo:** Women parading with messages on placards at the child Labor Day celebration march in Elmina (Credit: CRC)

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## Acronyms

AG	Attorney General
AOR	Administrative Officer Representative
ASSESS	Analytical Support Services and Evaluations for Sustainable Systems
BAS	Business Advisory Services
Bmsy	Biomass to produce MSY
BOD	Biological Oxygen Demand
CEMAG	Community Environmental Monitoring and Advocacy Group
CCLME	Canary Current Large Marine Ecosystem
CCM	Centre for Coastal Management
CDCS	Country Development Cooperation Strategy
CEWEFIA	Central and Western Region Fishmongers Improvement Association
CFR	Code of Federal Regulations (USA)
CLaT	Child Labor and Trafficking
COMFISH	Collaborative Management for a Sustainable Fisheries Future
CoP	Chief of Party
CPUE	Catch Per Unit Effort
CR	Central Region
CRC	Coastal Resources Center at the Graduate School of Oceanography, University of Rhode Island
CRCC	Central Regional Coordinating Council
CSLP	Coastal Sustainable Landscapes Project
CSE	Child Sexual Exploitation
CSIR	Council for Scientific and Industrial Research
CSO	Civil Society Organization
CWOW	Citizens' Watch on Water
DA	District Authorities
DAA	Development Action Association
DQF	Daasgift Quality Foundation
DEC	Development Experience Clearinghouse (USAID)
DFAS	Department of Fisheries and Aquatic Sciences
DFID	<i>Department for International Development</i>
DO	Development Objective
DQF	DQF Quality Foundation
EBM	Ecosystem-Based Management
EG	Economic Growth
EMMP	Environmental Mitigation and Monitoring Plan
ERF	Environmental Review Form
ETP	Endangered, Threatened and Protected
FA	Fisheries Alliance
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
FCPHU	Fisheries Commission Post Harvest Unit
FCWCGG	Fisheries Committee for the West central Gulf of Guinea
FDA	Ghana Food and Drugs Authority
FEU	Fisheries Enforcement Unit

FHI	Family Health International
FMP	Fisheries Management Plan
Fmsy	Fishing Mortality at MSY
FoN	Friends of Nation
FSSD	Fisheries Statistical Service Division
FtF	Feed the Future
GC	USAID General Counsel
GCLME	Guinea Current Large Marine Ecosystem
GES	Ghana Education Service
GIFA	Ghana Inshore Fishermen's Association
GIS	Geographic Information System
GITA	Ghana Industrial Trawlers Association
GIZ	Gesellschaft für Internationale Zusammenarbeit
GLM	Generalized Linear Models
GNA	Gender Needs Assessment
GNAFF	Ghana National Association of Farmers and Fishermen
GNCFC	Ghana National Canoe Fishermen's Council
GoG	Government of Ghana
GSA	Ghana Standards Authority
GSO	Graduate School of Oceanography, University of Rhode Island
HFH	Hygienic Fish Handling
HM	Hen Mpoano
ICFG	Integrated Coastal and Fisheries Governance
ICM	Integrated Coastal Management
ICT	Information, Communication Technology
ID	Identification
IDA	International Development Association
IEC	Information, Education and Communication
IEE	Initial Environmental Examination
IFS	Improved Fish Smoking (project)
IFSS	improved fish smoking stove
IGERT	Integrative Graduate Education and Research Traineeship
INL	International Narcotics and Law Enforcement Affairs Bureau
IR	Intermediate Results
IT	Information Technology
IUCN	International Union for Conservation of Nature
IUU	Illegal Unreported Unregulated
JICA	Japan International Cooperation Agency
KM	Knowledge Management
KSA	Knowledge, Skills and Attitudes
LAN	Local Area Network
LEAP	Livelihood Enhancement against Poverty
LOE	Level of Effort
LOGODEP	Local Government Development Program
LoP	Life of Project
LTD	Limited
LTTA	Long Term Technical Assistance
LULC	Land Use, Land Cover
MAF	Marine Affairs Department, URI

MCS	Monitoring, Control and Surveillance
METASIP	Medium Term Agricultural Investment Program
METSS	Monitoring, Evaluation and Technical Support Services
MFD	Marine Fisheries Division
MFI	Micro-finance Institution
MIS	Management Information Systems
MFRD	Marine Fisheries Research Division
MOFAD	Ministry of Fisheries and Aquaculture Development
MP	Member of Parliament
MPA	Marine Protected Area
MOU	Memorandum of Understanding
MPA	Marine Protected Area
MSME	Micro Small and Medium Enterprises
MSP	Marine Spatial Planning
MSY	Maximum Sustainable Yield
M&E	Monitoring and Evaluation
NAFAG	National Fisheries Association of Ghana
NAFPTA	National Fish Processors and Traders Association
NGO	Non-Governmental Organization
NC	National Committee
NFMP	National Fisheries Management Plan
NITA	National Information Technology Agency
NOAA	National Oceanographic and Atmospheric Administration (USA)
NRM	Natural Resources Management
OCA	Organizational capacity assessment
PAH	Polyaromatic hydrocarbon
PHFP	Post-Harvest Fish Processing
PMEP	Performance Monitoring and Evaluation Plan
PMP	Performance Management Plan
PPI	French Small-Scale Initiatives Programme
PPP	Public Private Partnerships
QA	Quality assurance
QC	Quality control
RAVI	Rights and Voices Initiative
RCC	Regional Coordinating Council
RFA	Request for Application
RPA	Rapid Partnership Appraisal
RTC	Regional Training Center
SAMP	Special Area Management Plans
SDF	Spatial Development Framework
SFMP	Sustainable Fisheries Management Program
SMEs	Small and Medium Enterprises
SMS	Short Message Service
SNV	Netherlands Development Organization
SOP	Standard Operating Procedure
SpS	Spatial Solutions
SSG	SSG Advisors
STEP	Sustainable, Transparent, Effective Partnerships
STTA	Short Term Technical Assistance

STWG	Scientific and Technical Working Group
TBD	To be Determined
TDY	Temporary Duty
TOR	Terms of Reference
UCAD	University Cheikh Anta Diop
UCC	University of Cape Coast
URI	University of Rhode Island
USAID	United States Agency for International Development
USG	United States Government
VSLA	Village Savings and Loans Association
WA	West Africa
WACSI	West Africa Cooperative Security Initiative
WARFP	West Africa Regional Fisheries Development Program
WASH	Water, Sanitation and Hygiene
WR	Western Region

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## Project Overview

The United States Agency for International Development (USAID) has committed approximately \$24 million US Dollars to the implementation of the USAID/Ghana Sustainable Fisheries Management Project (SFMP). The objective of this five-year project (October 2014-October 2019) is to rebuild marine fisheries stocks and catches through adoption of responsible fishing practices. The project contributes to the Government of Ghana's fisheries development objectives and USAID's Feed the Future Initiative.

Working closely with the Ministry of Fisheries and Aquaculture Development and the Fisheries Commission, USAID/Ghana SFMP aims to end overfishing of key stocks important to local food security through a multi-pronged approach:

- 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 will benefit from this project.

USAID has selected the Coastal Resources Center (CRC) at The University of Rhode Island's Graduate School of Oceanography as lead implementer of the SFMP. In leading the project, CRC will work with The Ministry of Fisheries and Aquaculture Development and the Fisheries Commission along with a consortium of international and local partners, including SNV Netherlands Development Organization, SSG-Advisors, Hen Mpoano, Friends of the Nation, the Central & Western Fish Mongers Improvement Association in Ghana/CEWEFIA, DQF Quality Foundation Development Action Association (DAA), and Spatial Solutions. The project also will contribute to the strengthening of marine and fisheries management capabilities at the University of Cape Coast and coastal spatial planning capacity of districts in the Central and Western Regions. The SFMP builds on the accomplishments of the USAID-Ghana Integrated Coastal and Fisheries Governance (ICFG) Program. The USAID /Ghana SFMP will focus efforts on the small pelagics fisheries along the entire coastline as well as the demersal fisheries and essential mangrove fish habitat in the Western Region. The project will promote ecosystem-based and adaptive management approaches. Additionally, improvements in the value chain of smoked fish, important to tens of thousands of women fish processors and marketers will be supported. The project also will implement activities aimed at reducing child labor and trafficking in the fisheries sector in the Central Region of Ghana.

Life-of-Project Results in the M&E Plan include the selected highlights below:

- Recoup tens of thousands of metric tons of food protein supply lost due to severe overfishing and poor management.
- A rebound of key stocks, benefiting over 130,000 fishermen, 18,000 fish mongers.
- 735,241 hectares of natural resources and fish habitat under more effective management.

- Declines in Illegal, Unreported or Unregulated (IUU) fishing due to an increase in arrests and successful prosecutions.
- Improved voluntary compliance and active support of polices and rules by stakeholders.
- UCC producing management-relevant, science-based information used in decision-making.
- Information and communications technology (ICT) for mobile apps for fisheries management.
- Inclusive participation by under-represented groups, women and youth in decision-making.
- 13,000 people (a majority women) benefiting from improved livelihoods, access to micro-credit, adoption of more efficient and profitable fish smokers and fish product value-added.
- Several more climate-resilient fishing communities and strengthened capacity of District Assemblies (DAs) to promote and support resilient community policies and initiatives.
- A decline in child labor and trafficking in fisheries in the Central Region (CR).
- A Fisheries Act that allows co-management and use rights in Ghana’s fisheries to be realized.

### **Theory of Change (Development Hypothesis)**

The project purpose is to “Rebuild targeted fish stocks through adoption of sustainable practices and exploitation levels.” This project will forge a campaign that builds a constituency for change that captures the support of high-level decision makers and politicians as well as grass-roots fishermen, fishmongers and processors.

To achieve sustainable fishing practices and exploitation levels, reduced fishing effort or harvest must occur in order to end overfishing. This, over the longer term, will lead to safeguards of sufficient spawning biomass to produce higher and more sustainable fishing yields. This signals to stakeholders and beneficiaries a causal chain and time lag between ending overfishing and improved stock biomass, and ultimately, improved fish yields and profitability (household income).

IR 3 “constituencies and political will built” is critical to insure that the public is aware of the challenges ahead and becomes supportive of short-term restrictions to reverse the diminishing returns on investment in the fisheries sector.

For targeted stocks, effort control requires a suite of measures such as restrictions on the number of fishing units by limiting the number of licenses issued and restrictions on the amount of fish that units can land. Additional technical measures such as closed seasons, protected areas, fishing gear selectivity, and minimum size must be considered, each with their implications on the biological and socio-economic aspects of the fishery. In the long run, these are designed to ensure exploitation levels are controlled to maximum and sustained yields. However, world experience shows effort controls are a costly and difficult path to sustainability. Determined to be most effective are catch limits —e.g., an annual total allowable catch based on annual stock assessment—coupled with use rights such as collective quotas and transferable licenses. It is unlikely that Ghana will be able to move fully to catch limits over the SFMP Life-of-Project, but

some of the capacity needed to implement such a regime will start to be built. In the short-term, Ghana will have to rely more on effort controls and other technical measures.

Consistent with the Fisheries and Aquaculture Sector Development Program (FASDP) and West Africa Regional Fisheries Project (WARFP), the project strategy is to focus both on effort-control measures and managed access as first steps towards sustainability. Additional enabling conditions—legal amendments to the Fisheries Act as planned by the MOFAD and improved scientific capacity that set the stage for an eventual move to catch control strategies are being developed so this can be a future option for Ghana. These approaches will take longer than the life-of-project to fully implement and have full effect.

Enabling conditions for effective fisheries management require a legal framework supportive of policy statements made by the Government of Ghana (GoG) on collaborative management and use rights.

However, as noted by Martin Tsamenyi, a consultant for the ICFGP, WARFP and MOFAD: *“The existing legal framework in Ghana is not capable of supporting a co-management framework without amendment...”* Interim measures under the existing legislative framework can include “advisory groups”—de-facto co-management groups with advisory functions only. Once a new legislative framework is in place, these groups can transform into true co-management groups with decision-making authority.

When fishing mortality is reduced via effective management measures (i.e. closed season, closed areas, direct catch and effort reduction...etc.), there could be a rapid improvement in biomass and subsequent fish yields, particularly for short-lived species. However, if the fishery remains open access, increased high fishing mortality will occur and short-term gains will dissipate. Fishing effort and fishing capacity must be measured and taken into account in the context of long-term harvest control. Experience shows that simply limiting the number of vessels (fishing capacity) as proposed in Ghana’s fisheries policies will prompt fishers to focus on increasing the size and power of vessels and length of gear, all increasing rate of exploitation unless additional harvest control measures are also put in place.

Also needed is improved information for decision-making to help both estimate the optimum fleet sizes for Ghana’s fisheries and to set adequate harvest controls. To this end, the SFMP is also focusing on improving stock assessment capabilities within the Fisheries Commission/Marine Fisheries Statistical Support Division and local universities, emphasizing inclusion of the traditional knowledge of fishermen. SFMP is also promoting innovative technologies to improve data collection on landings and effort and to aid law enforcement in reducing IUU fishing through Public-Private-Partnerships.

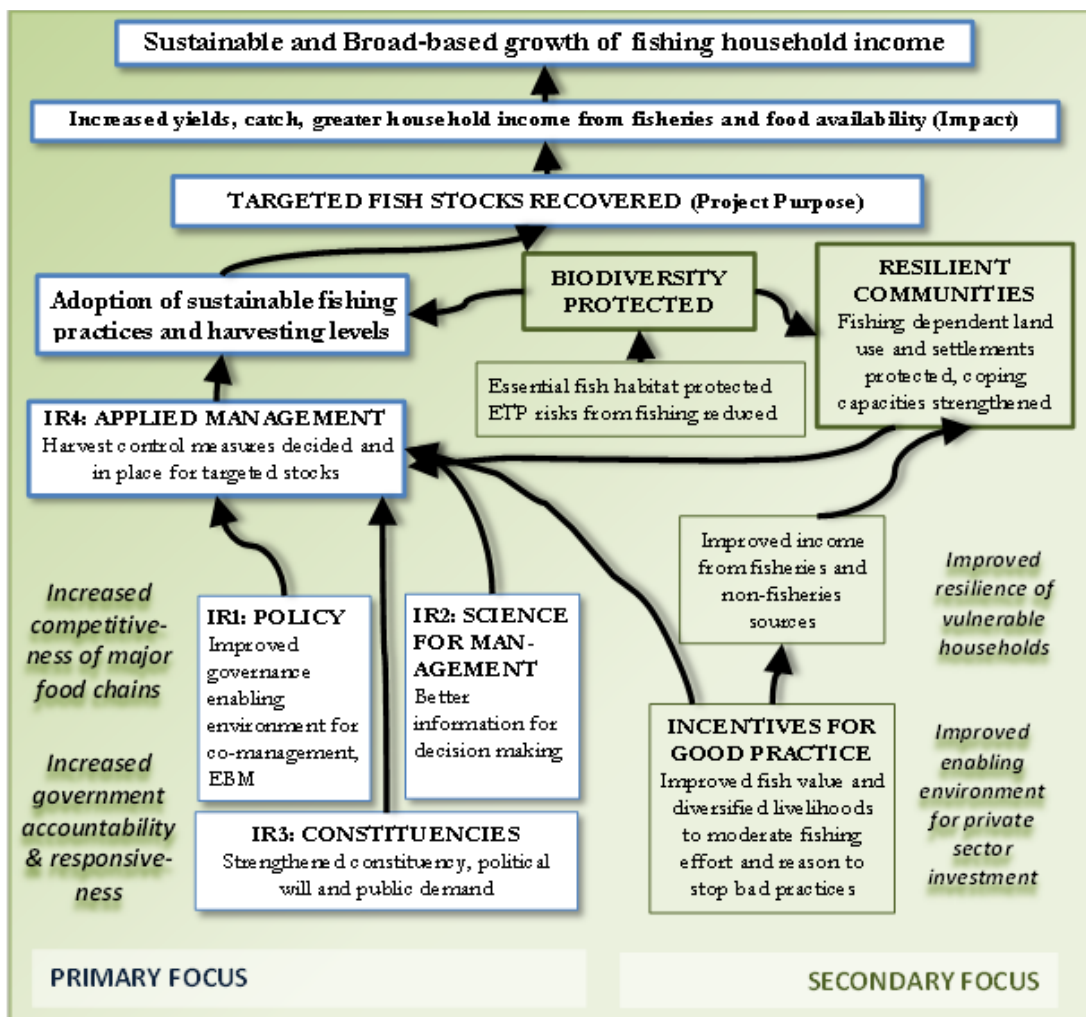
An integrated approach also requires a close look at shore-based components of the fisheries sector. All post-harvest fish handling, supply chain from sea to market and the infrastructure support for the fishing industry and fishing households occurs in a very narrow strip of the

**Fisheries Management Approaches Applied by the USAID/Ghana SFMP**

- From open access to managed access.
- From input controls to catch controls.
- From a commons to use rights.
- From top down control to co-management.
- From static to adaptive management.
- Managing at ecosystem scales.
- Integrating management of the resource with improvements in the value chain.
- Inclusion of women in management decision making and livelihood improvement.
- Integrating livelihood development and fishing community resilience.
- A stakeholder and process oriented approach.
- A focus on impact and documentation of results.

coastline. Without safe and secure places for men and women to live and work on the shore-based side of the industry, it is difficult to ask people to change behavior concerning unsustainable harvesting practices at sea. Reduction in fishing effort is likely to result in economic sacrifices in the short-term, so interventions are also needed to reduce impacts. These measures include creating safer, more secure and resilient fishing communities using spatial planning to identify the development needs of fishing communities and the exposure to natural hazards as well as threats to water-dependent fisheries uses. Community development programs are also needed to help fishers diversify their livelihoods, reduce dependence on fishing and reduce or eliminate the pressure to force their children into the illegal child labor trade. Other efforts include working to improve the fishery value chains and economically empower women involved in processing and marketing. Experience has shown that investing in organizational development and improved processing techniques, handling and infrastructure can lead to additional profits and a greater stewardship ethic. For instance, women fish processors in Cayar, Senegal, refuse to buy illegal, undersized fish, realizing that larger fish means larger incomes and long-term sustainability.

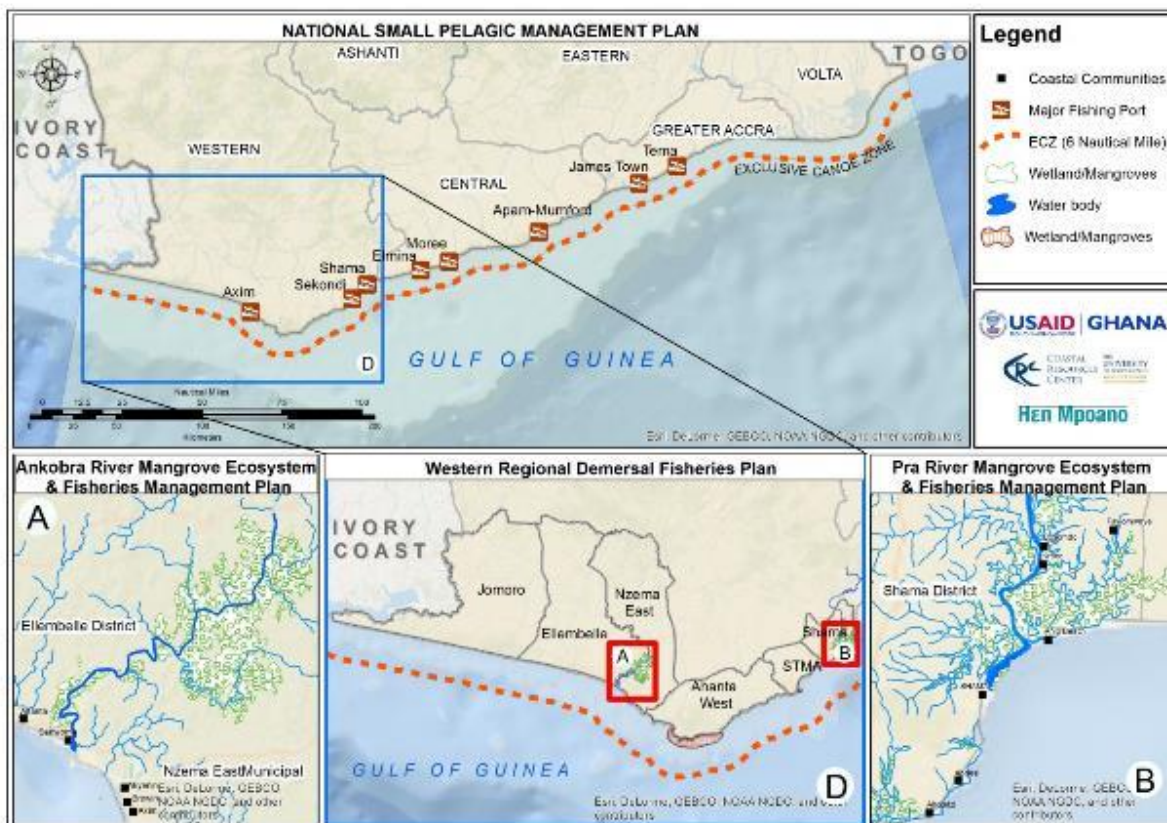
**Figure 1: Theory of Change showing causal links, sequences of interventions, intermediate outcomes and impacts, including linkage to USAID, FtF and DO2 intermediate result**



## Ecosystem and Geographic Scale of the Project

The SFMP is working at several ecosystem scales that encompass the diverse types of fisheries systems found in Ghana. It is focusing first on a national effort to end overfishing and rebuild the food security-critical small pelagic fishery that generates broadly shared economic benefits to hundreds of thousands of people; and to recoup tens of thousands of metric tons of lost food supply. This complex of species, due to their essential role in the ecosystem and their wide-ranging migration, requires management at a national scale linked to regional Guinea Current Large Marine Ecosystem (GCLME) and Fisheries Committee for the West Central Gulf of Guinea (FCWC) initiatives, and public participation that spans all four coastal regions of Ghana. The SFMP is also addressing the need for sub-national regional management of demersal fish stocks in an ecologically important shelf area off the Western Region. The SFMP also will pilot community-based approaches to fisheries within the Ankobra River and the Pra River estuaries and associated mangroves that serve as essential fish habitat for demersals. Within these ecosystems are priority fish landing sites such as Axim and Anlo Beach/ Shama town that are project areas of concentration for stakeholder engagement and livelihoods and value chain improvements. Additional project-focused fish landing sites engaging more intensively in the SFMP for child labor, community resilience and diversified livelihood activities in the CR include Elmina, Moree, Apam and Winneba. This multi-tiered governance approach is consistent with and is being coordinated with WARFP's community-based fisheries management approach.

Figure 2: SFMP applied management activity areas



## A. Activities and Results Expected per Intermediate Result (IR) Area

This section is organized around the four primary intermediate results areas described in the theory of change section and as illustrated in Figure 1 and also includes cross-cutting result areas in gender, strategic private partnerships and capacity development. For each IR, there are a number of Activity area headings. For each IR, anticipated Life of Project (LoP) results and overall strategy are described followed by a description of the key activities for Year2. For each activity area, a table is provided in Section D: Implementation Schedules where the main tasks and related outputs and results targets are shown, and sequencing of tasks over the year by month.

If we achieve the intermediate results described below, by the end of this project, we envision that the following overarching higher order project goal and resulting impacts are achievable:

- Over-exploitation of small pelagics reduced, overfishing ended, and stocks rebounding
- Yields and profitability returning for 130,000 people engaged in marine fisheries.

Indicator	Targets Year 2
<b>Goal: Rebuild targeted fish stocks via adoption of sustainable practices and exploitation levels</b>	
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)	Baseline established for small pelagic stocks on Fishing Mortality at Maximum Sustainable Yield (MSY) (Fmsy) and Biomass to produce MSY (Bmsy). Demersal stocks WR baseline ongoing.  No targets in Year 2.
Number of direct project beneficiaries (number), the percentage of which are female (percent) (International Development Association (IDA) Core Indicator) (Goal level indicator from Ghana Country Development Cooperation Strategy (CDCS))	Household and individual baselines collected in Year 1  No targets in Year 2.



## **IR 1: Strengthened enabling environment for marine resources governance**

The SFMP intends to achieve this result through a combination of policy initiatives carried out at the national level with MOFAD/Fisheries Commission and with significant stakeholder engagement. National activities, especially concerning small pelagic stocks, will also need to be coordinated at the Guinea Current Regional scale. Law enforcement and child labor and trafficking activities will take a two-track approach with national policy level components coupled to field efforts. Strengthening law enforcement capacities will reach down to each coastal region and the two enforcement command groups for the Western and Eastern coastal regions. With regard to the child labor and trafficking, the field focus is in the Central Region, where this practice is considered most pervasive.

SFMP will support arrangements of consultation processes for the development of policies as to what MOFAD and FC hope to achieve within the guidelines of the Fisheries Act (625) and its subsequent amendments.

Key outcomes and results expected over LoP as described in the Program Description include the following:

- Recommendations for the amendment of the Fisheries Act amended with explicit language for co-management and use rights
- Strategies for fishing capacity reduction and fuel subsidy phased-out debated and policy options presented to MOFAD/FC
- Policy recommendations concerning ways to reduce child labor and trafficking presented to the National Child Labor Steering Committee
- Significant decrease in IUU fishing through increase of arrests made and successful prosecutions that act as real deterrence and coerce more compliant fishing behavior
- Advances made toward fostering regional leadership to attain a harmonized trans-boundary response to small pelagics stocks.

During Year 1, a WARFP commissioned consultant report on legal reform was finalized. The timeline the Ministry of Fisheries (MOFAD) has outlined for a complete rewriting of the Fisheries Act 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. Hence SFMP will assist MOFAD and the FC to pick up where the WARFP reports ended, once final versions are released.

A National Marine Fisheries Plan was drafted and endorsed by cabinet and pending with the Attorney General's office for gazetting. In Year 2, the SFMP will assist MOFAD towards the realization of the quick hit strategies contained in this plan to rebound the small pelagic fisheries. The plan addressed other stocks including tuna and industrial fleets but the support from SFMP to MOFADS/FC on plan implementation will be on small pelagics and the main fleets that target these species – canoes, inshore and trawlers.

USAID approved a Life of Project waiver request for SFMP to conduct trainings for fisheries law enforcement personnel. The selection and completion of the vetting process paved the way for the training in the 4th Quarter of a first cohort of Marine Police and FC MCS personnel in Year 1. Vetting of the Navy personnel who will be seconded to the Fisheries Enforcement Unit (FEU) was yet to be completed. As all police recruited to the MP undergo training at the new MP academy, before deployment, this will be the focus of the SFMP efforts in Year 2, which will

include ongoing training of all marine police and development of competency assessments tools that define minimal core competences needed and which can serve as a basis for curriculum within the academy. Initial ideas to mainstream some fisheries curriculum into the larger police academy will not be pursued even though regular police are sometimes engaged in fisheries enforcement actions and cases. The emphasis of SFMP work will be on the marine police and FEU personnel.

Partners advanced work in Year1 toward reducing Child Labor and Trafficking (CLaT) in Fisheries. A scoping survey was carried out along with initial CLaT capacity assessments as well as training on assessment tools and good practices in gathering stories of interest to build awareness. Initial identification and training of CLaT champions in targeted communities was undertaken. Year 2 will start a concerted communications campaign focused on CLaT prevention strategies.

### **1.1 National Workshops on Key Issues in the Marine Fisheries Sector**

#### **1.1.1 National Workshop on Early Actions for the small pelagic fisheries**

**Activity Lead:** Kofi Agbogah

**Activity Team:** Mensah, Lazar, FoN, MFRD, MOFAD/FC

The SFMP delayed implementation of any major national dialogues in Year1. Early in Year 2, a national workshop will be held on gaining support for high payoff short-term actions contained in the National Fishery Management Plan to quickly turn around the collapse of the small pelagics fishery, due mainly to fleet overcapacity and overfishing. A general consensus building process on managing *Sardinella* and other key small pelagic stocks was undertaken among stakeholders in the Year 1 and as part of an educational process for stakeholders on a range of short and long term measures that can be used to manage the fishery. The national marine fisheries management plan has recommendations on a closed season for small pelagics and implementation actions now need to be worked out. SFMP will support the Ministry on development of an implementation plan including outreach and communications to stakeholders on how and when management measures will go into effect. Tackling the near collapse of the small pelagics is a high project priority and why this topic will be front and center in the national work in Year 2.

In Year 2, working closely with MOFAD and the FC, there will be engagements with stakeholders to discuss how the management measures already incorporated into the national marine fisheries management plan will be rolled out, and additional actions in the near, medium and long term that could also be implemented to rebuild the fishery. This extensive communications campaign back to stakeholders on the implementation of plan actions will help generate the public support and informed constituency for implementation and ensure high voluntary compliance.

In Year2, SFMP and the National Activities Manager will coordinate additional national workshops on issues of concern in the fishery. The workshop topics and agendas will be planned with MOFAD/FC. Potential topics include follow-up to WARFP consultant report on co-management, ways and means to develop insurance programs for fishermen and vessel owners, development of community-based surveillance group, and capacity reduction strategies. FoN will be responsible for stakeholder preparatory meetings and subsequent outreach back to stakeholders after these events.

### ***1.1.2 Fisheries Co-management***

**Activity Lead:** Kofi Agbogah

**Activity Team:** CRC (CoP, Communications Officer), MOFAD/FC. FoN, Attorney General's Office/Parliamentary committee responsible for fisheries

The SFMP will work closely with MOFAD and the attorney general's office on procedural processes and strategies for developing legislative amendments to the fisheries act. While the WARFP work on legislative reform is broad based and places some emphasis on co-management, SFMP will augment those efforts. Our strategy will focus on bringing stakeholders' participation and input into the process via various national meetings and workshops. Hen Mpoano will facilitate and coordinate the national level work needed for the legislative reform process with MOFAD, FC and WARFP and the Legislative Drafting Division and the Parliament select committee on Food, Agriculture and Cocoa Affairs (including natural resources and fisheries) and the (Parliamentary sub-committee on subsidiary legislation). Legislative changes such as on co-management will need to be bundled with a host of other WARFP supported revisions underway. The timeframe for submitting an amendment to the Fisheries Act to Parliament is in 2018.

In Year 2, SFMP will begin a processes of bringing stakeholders up to speed on what fisheries co-management is and how it could be implemented in Ghana as well as what institutional structures are necessary to ensure successful fisheries co-management as well as and prepare recommendations on how fisheries co-management can be structured in law as part of the legal reforms planned by MOFAD.

We will run a public engagement process (also see Communications section IR3) to insure fishers and the public are well informed and can voice their opinions and have inputs and say into the way co-management can best be implemented in Ghana, taking into consideration lessons learned from past efforts. Important in this process is the participation of women's groups as women play key roles in fish processing and marketing and many are also vessel owners. Legislative reforms on co-management must also acknowledge the role of women in fisheries and therefore formalize and ensure their role in co-management processes as well.

Another critical aspect of legal reform is incorporation of sustainable financing mechanisms for co-management. This was highlighted as a critical challenge that led to the failure of the first round of community-based management committees more than a decade ago.

### ***1.1.3 Policy analysis on potential alternative benefits for fishers compared to the fuel subsidy***

**Activity Lead:** Jim Tobey

**Activity Team:** URI CRC, CRC Accra, SSG, MOFAD/FC

In Year 2, The SFMP will undertake policy analysis work focused on potential options that could be provided as benefits for fisherfolk in comparison to the pre-mix fuel subsidy. The regional dialogues have demonstrated that there is growing support among stakeholders that this program should be eliminated but only if the fishing community received benefits in other ways. The GoG has also committed to the eventual phasing out and the level of price subsidy has already been somewhat reduced. This policy analysis will look at options such as cash transfer payments directly to fish workers linked to certain conditions such as attendance at school of children (to reduce potential for child labor and trafficking), or evidence of a visit to a primary care clinic

annually, or immunizations of children, compliance with closed seasons and not arrests for illegal fishing, etc. Other options to be examined will include linkages to the private sector partnerships related to insurance (e.g. accident, health, and vessel) and pension schemes for fishermen. Most of these programs will require some form of registry of fishermen and fish workers and therefore some form of individual registration scheme and linkages to the vessel registry system.

The analysis will include a top-level systems model to facilitate the comparison of options, impacts and implementation of risks. In addition, SFMP will complete the bio-economic analysis of the fisheries if the fuel subsidy is removed that was started under WARFP but remains incomplete; and impact it would have on stocks and fishing effort.

## **1.2 Strengthened Law Enforcement**

### **1.2.1 Training of FEU and Marine Police and strengthening the prosecutorial chain**

**Activity Lead:** FoN

**Activity Team:** FoN, HM, FEU, MP, FC

The SFMP is working with the police administration, Ghana Navy and the Ministry of Fisheries and Aquaculture Development to strengthen the capacity of the Fisheries Enforcement Unit (FEU). SFMP areas of support are focused more on shore based and community level MCS improvements and to a lesser extent on understanding and coordinating regional IUU fishing issues where other donors are quite active. Since the WARFP is providing a large investment in strengthening the FEU and MCS capabilities of the FC, SFMP support will be tailored carefully to unmet needs of the FC and the Marine Police. SFMP will provide limited material support to outfit the training facilities with furniture and other accessories for the Marine Police Academy at Ainyinase in the Western Region. Once the facility is furnished for conferencing and training, short refresher trainings will be run at the school for the Marine Police and other marine law enforcement agencies - FEU, MCS, etc.

The SFMP, via FoN will also train marine police and naval officers who are deployed to the Fisheries Enforcement Unit (FEU) and MCS personnel working out of Tema and Takoradi commands. FoN will continue to implement a series of workshops envisioned to strengthen coordination and the prosecutorial chain in fisheries law enforcement in the Western and Greater Accra Regions. Currently, the FEU has two commands, the Western (Takoradi) and Eastern (Tema) Commands where fisheries violations arrested offshore are prosecuted.

Fisheries Enforcement will be critical during the implementation of the preferred options or consensus reached at (e.g. closed seasons) for which the marine police and the FEU and other law enforcement agencies will be deployed to ensure compliance with and success of the order. The proposed hotline for reporting IUU will play a role in this regards (see Strategic private partnerships IR6).

There are still issues of effective coordination of the FEU operations relative to navy and police. As reported in the press, there are still issues with fishers in recent months where several incidences (assault, etc.) between naval officers and fisher folks have been reported. There will be the need to also facilitate an engagement process at the top of Navy, Marine Police and FC to address anticipated enforcement challenges for the quick action options to be implemented under the National Marine Fisheries Plan.

Working with the Marine Police (MP) and FoN, CRC will hold a workshop to develop a tool on how to use a competency based approach to assessing minimal knowledge, skills and attitudes (KSA) needed by fisheries enforcement officers. This will enable the MP, with support of FoN, to conduct rapid competence assessments of staff. A resulting report will identify competence gaps and recommended strategies to resolve them. This could then be applied to future performance assessments, capacity development strategies, rewarding staff (non-financially) for outstanding performance, such as certifications, and changes to the Human Resources systems of MP, to support long-term organizational change.

### ***1.2.2 Communications behavior change communications on good fishing practices***

**Activity Lead:** CRC Accra, Patricia Mensah

**Activity Team:** HM, FC, FoN

SFMP will provide particular importance to capacity building initiatives that can contribute towards lasting behavior change among stakeholders at all levels of governance to ensure the rational and responsible management of fisheries. This is why the project strategy includes an important component for identifying, promoting and integrating the *good management practices used at local level in efforts to help FC implement its National Fisheries Management Plan*.

In this regards, SFMP communications officer will work closely with HM to embark on coast-wide behavioral change communication campaign as a strategy to improve voluntary compliance with fisheries regulations and instigate adoption of best fishing practices. This communication campaign will involve the use of a combination of audio-visual aids including short videos on IUU fishing, engagement with fisher folk on impacts of IUU fishing on marine bottom and mid-water ecosystems and the *sardinella* fishery as well as posters communicating best fishing practices. Gender messages will be incorporated. This will be coordinated with the Fisheries Commission.

Parallel to this, an awards scheme will be instituted for fishermen engaged in good practices in selected landing sites. Fishermen will be selected by a committee composed of stakeholder and user group representatives. HM will facilitate peer to peer exchange among fishers to encourage widespread adoption of best practices along the coast of Ghana. This consists of wide advertising community based competition on best fishing practices. A group of judges will review and select winners in an open forum meeting in Accra to present the results and the awards. If successful, the scheme will be scaled up nationwide in subsequent years.

### ***1.2.3 Citizen Watch on Water program***

**Activity Lead:** SSG

**Activity Team:** Kofi Agbogah FC, MP HM, CRC (CoP, Communications Officer), MOFAD/FC.

SSG Advisors will draw on lessons from the USAID/Philippines ECOFISH project to help establish a citizen watch program in Ghana. In Year 1, SSG organized and led a study tour to the Philippines for key fisheries stakeholders from Ghana, and participants expressed a strong interest in replicating the Philippines' *Bantay Dagat* Citizen Watch on Water (CWOW) program in Ghana. The *Bantay Dagat* are a network of local fishermen in the Philippines working on a volunteer basis to aid the marine police in detecting, reporting, and deterring illegal fishing. They

have played an important role in educating local communities about marine laws and conservation, and they have improved enforcement of closed seasons and marine protected areas in the Philippines.

In Year 2, SSG and SFMP will start the work of building a comparable citizen watch program in Ghana. SSG will engage both Filipino and Ghanaian consultants to review the legal basis for such a program and to recommend and guide any needed changes in policy or law to allow for a citizen watch program. In Q2, SSG will bring an expert from the Philippines to Ghana for an intensive workshop, to lay the groundwork for a national-level framework for the program, build support among key stakeholders, and organize teams and plan activities for the coming months to get the program pilot-ready. In Q4, SSG will also plan a second trip focused on advising key stakeholders and implementing partners on operationalizing and piloting the program at the local level.

The sustainability of community-based surveillance groups can be enhanced via legislative provisions mandating the FC to support these groups (following a Philippine example) and possible private sector support via public-private partnerships. SSG will also work to create innovative ICT partnerships (see sections 2.2 and 6.1) to further promote civic engagement in marine protection and management.

Hen Mpoano will coordinate with SSG to develop a pilot design and plan for pilot fisheries citizen watch groups. HM will work with SSG to launch pilot for Citizen Watch group for Year 3. Plan trainings for Year 3. HM will also arrange for operational support for citizen watch groups for Year 3: uniforms, ID cards, binoculars, flashlights, fuel for sea patrols, radios or cell phones and minutes, etc.

#### ***1.2.4 Material support to law enforcement***

**Activity Lead:** CRC Accra

**Activity Team:** CRC, HM, MP, FC

The FC and the FEU/MCS will receive the following direct support from the SFMP to support beach level enforcement (also see capacity development 7.1):

***Construction of a FEU post in Elmina:*** The initial strategy to refurbish an existing structure has been abandoned as the old structure is too worn down and its location on the shorefront makes upkeep and maintenance too costly. The FC would like to see a small post structure constructed in Elmina where law enforcement officers can be assigned. This will be designed using green technologies (solar panels, rainwater harvesting, landscaping, etc.) This activity is a carry-over from Year 1 and work will not be started until the FC secures a plot of land for the facility. For such support SFMP will obtain the necessary environmental clearances from USAID.

Preparatory activities including hiring an architect to do designs, environmental reviews and approvals, work which will be completed once a plot is identified.

***Provision of vehicles for the regional offices for effective delivery of FC MCS/FEU activities:*** An assessment of needs will be undertaken, with equipment deliveries in Year 2, subject to approval by USAID.

***Provision of furnishings for the Marine Police Academy Training Center:*** The Marine Police Academy in Ellembelle will be provided with furnishings for its conference room so it can be

used for training of marine police in the future. The current facility is not yet ready for use. (See capacity development section 7.1)

### **1.3 Harmonizing Regional Fisheries Policies**

**Activity Lead:** Najih Lazar

**Activity Team:** Lazar, MFRD

*Sardinella* stocks are a trans-boundary resource that extends beyond the borders of Ghana from Nigeria to Liberia with highest abundance between Ghana and Cote d'Ivoire. Recent information on the status of stock reveals it to be severely overfished while the demand for fish continues to increase, making Ghana one of the largest importers of fish in the sub-region. Ghana however also harvests of 80 % of the small pelagics in the FCWC region.

While the overall strategy for SFMP is founded on a bottom-up fisheries co-management process focused on capacity building of stakeholders and local and national institutions, it is essential to link it with the regional research and management at the stock range level. It will be based on a process approach in which the bottom-up capacity building will be conducted in the first phases of the project while supporting on a parallel track of engagement of the FC and stakeholders with the regional efforts of the FCWC on fisheries research, and management. These are needed to address issues of broader management and contribute to the development of new and innovative regional policies for fisheries management.

Applied research in Year 2 will also focus on the status of the stock and the impact of climate change on the abundance and distribution of *Sardinella* stocks. The SFMP will also strengthen national institutions MOFAD and FC to engage and coordinate efforts on fisheries stock assessment and management with the FCWC. This will allow continuous feedback and coordination on the regional strategy with the management initiatives taken by Ghana on all aspects of fisheries research, and management.

The SFMP will support the participation of selected members of the Fisheries Commission and national scientific and technical working group at the regional meetings of the FCWC. This will strengthen the capacity of the scientific group, encourage exchange and coordination of information and management measures of *Sardinella* at the regional level and coordinate efforts to estimate and combat IUU fishing.

In Year 1, terms of reference were developed for a genetic study to delineate the spatial scale of populations of *sardinella* in West Africa. Information on stock identification for the purpose of proper assessment, monitoring and management has been lacking. The spatial structure is assumed to include, based on local knowledge, from the north to the south: the Saharan upwelling (Morocco), the West Africa province (Mauritania, Senegal, and The Gambia) and the Gulf of Guinea.

This study will be conducted in collaboration with the FCWC, UCC, FC-Research Division and fishing industry representatives to determine:

- Appropriate spatial scale for national and regional management of sardinella
- Appropriate shares and management responsibilities of countries exploiting same stock.
- Appropriate spatial scale for monitoring and assessment.
- Further enhance links between research, industry and management.

#### **1.4 Informing the U.S. Government on Key Fisheries Policy Issues in Ghana**

**Activity Lead:** CRC Accra

**Activity Team:** Crawford, Mensah

SFMP will brief senior officials in USAID, the Embassy and the FAS on critical policy issues and challenges affecting the economic health of the fisheries sector in Ghana so they are well informed in their discussions with high-level GoG officials and ways that USG assistance can and does support reforms called for in national policy documents and plans. Briefings will be prepared in three issue areas of interest to the USG: the effects of fishing pre-mix fuel subsidies, overcapacity in the fishing fleets, and combatting IUU fishing. SFMP will encourage the Regional Training Center (RTC) in Accra, established under the guidance of the International Narcotics and Law Enforcement Affairs Bureau (INL) at the Department of State and part of the support to the West Africa Cooperative Security Initiative (WACSI), to develop training sessions on IUU fishing which may be associated with transnational criminal syndicates and in of itself is considered by many to be a transnational criminal activity. Selected briefings will be targeted at the following groups:

- Economic Growth Office team
- Ghana Mission Maritime Security Group at the Embassy
- Development Partners Environmental and Natural Resources working group.

#### **1.5 Reducing Child Labor and Trafficking in Fisheries**

**Activity Lead:** SNV

**Activity Team:** FoN, CEWEFIA, SNV, Mensah

Discussions with the FC leadership (CR), the Department of Social Welfare in Accra and local implementing partners have highlighted the problem of illegal child labor in fishing—especially in the CR. This includes both hazardous fisheries work by children under age 18 and child trafficking. Especially vulnerable are single female-headed households with many children. Migrant fishers often leave women to fend for themselves and their children, without money for school fees or food. Agents come offering relief in the form of payments and promises to care for the children, but then force them into hard physical labor in the lake fisheries.

SFMP will implement a behavior-change communications initiative in the CR on the issue in an effort to make such practices socially unacceptable. Value chain improvements will work to include vulnerable households most likely to engage in such practices, under the premise that economic hardship is the root cause of the problem. We will engage the National Steering Committee on Child Labor in the design and roll out of the communications campaign.

In Year 1 a number of activities were implemented to lay the groundwork for a concerted communications and public engagement campaign starting in Year 2 aimed at prevention strategies to reduce of child labor and trafficking. SFMP will focus on prevention strategies as the Year 1 scoping and reviews revealed that there are a large number of organization involved in anti-CLaT activities, especially rescue and reintegration.



### ***1.5.1 National advocacy and policy on CLaT (SNV)***

SNV will strengthen the relationship and consultations with the National Steering Committee on Child Labor (NSCCL) to optimize the impact of SFMP on reducing child labor and trafficking in fisheries. For this purpose SNV will establish a working group that will support the NSCCL upon request with information and consultation support on CLaT. In consultation with NSCCL, FoN will be supported by the SNV Child Labor and Trafficking Expert.

SNV will produce a short film edutainment to teach about CLaT and the dangers involved including Child Sexual Exploitation (CSE).

Demonstration of the households at risk tool at Apam and/or Winneba and training of FoN and other interested parties to use the tool. SNV will train social welfare agencies on CLaT and how to identify the most vulnerable households to be able to better direct social services with the aim to avoid CLaT.

On 12 June 2016 (Sunday) or the following Monday (12 June), SNV and FoN will organize a Child Labor Day event to ask attention for the problem of CLaT. On that day a video will be launched in which grown-up victims share their compelling experience with child labor and in particular with child trafficking.

SFMP will produce a short film edutainment about CLaT and the dangers involved including Child Sexual Exploitation (CSE).

### ***1.5.2 Fisheries Commission strategy on CLaT***

SNV will work with the Fisheries Commission focal person on CLaT to formulate a strategy that translates how the national policy on CLaT can be mainstreamed within the FC initiatives and programs.

### ***1.5.3 Anti CLaT advocacy and campaigns in Apam and Winneba (DAA)***

DAA focus in Apam and Winneba will be on training of community champions and advocates. DAA will identify potential community anti-CLaT advocates (community champions/allies in Apam and Winneba areas. Effort within this activity will increase, depending on the conclusions of the child labor and trafficking study carried out in Activity 1.5, which will focus on the issue in the Central Region.

DAA will gather success stories of interest in Anti- CLaT in Apam and Winneba areas and provide information to the communications team for development of key messaging

DAA will embark on an Anti CLaT Advocacy including:

- Participate in Anti CLaT days celebration organized by SNV/FON
- Once a year, identified school in Apam and Winneba on Anti CLaT sensitization (organizing role plays, showing videos on CLaT)
- Developing communication materials on Anti CLaT messaging
- Semi Yearly radio program on Anti CLaT
- Traditional Leaders Meeting to discuss Anti CLaT

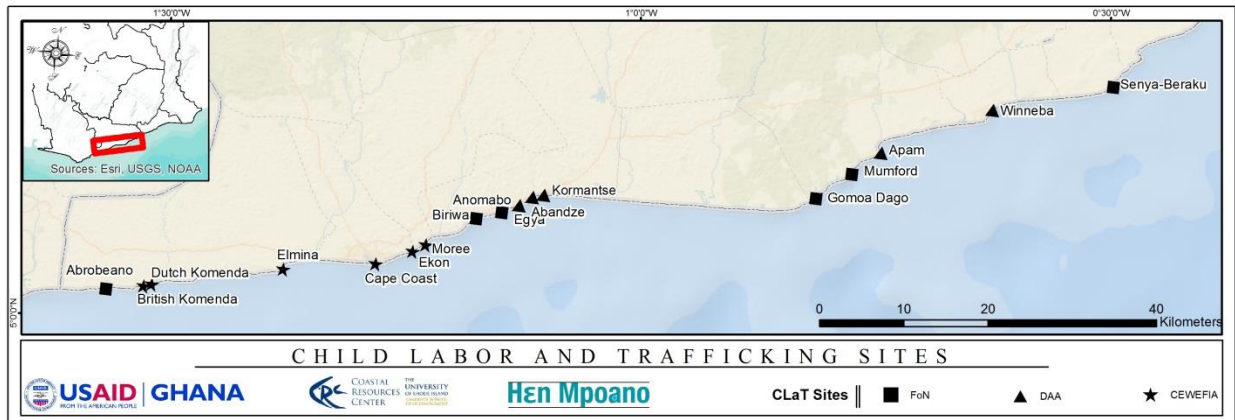
**1.5.4 Anti CLaT advocacy and campaigns in Moree, Elmina. (CEWEFIA)**

CEWEFIA will focus on Elmina and Moree in the Central Region. SNV will provide general support to CEWEFIA and DAA in implementing community based campaigns against CLaT. It will coordinate with livelihoods activities conducted by CEWEFIA and DAA, and SNV. They will work with community champions and advocates.

**1.5.5 Mass communications activities on CLaT in the Central Region (FoN)**

FoN will develop and implement mass communications campaigns on anti-CLaT. This will include community radio campaigns and development of other communications materials s on this topic. The community drama and radio series will be coordinated with DAA and CEWEFIA.

**Figure 3: Map of Communities for SFMP Focused anti-CLaT Activities**



**Key Year 2 Outcomes and Results for IR 1**

Indicator	Targets Year 2
<b>IR1: POLICY: Strengthened enabling environment for marine resources governance</b>	
<p><b>Ind 3:</b>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))</p> <ol style="list-style-type: none"> <li>1. Analysis</li> <li>2. Stakeholder consultation/public debate.</li> <li>3. Drafting or revision.</li> <li>4. Approval (legislative or regulatory).</li> <li>5. Full and effective implementation.</li> </ol>	<ul style="list-style-type: none"> <li>• Policies completing processes: Plan approved, implementation started</li> <li>• Co-mg policy analyzed</li> <li>• Policies completing processes: Fish Act : (2.) Stakeholder Consultation</li> </ul>
<p><b>Ind 5:</b> Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts</p>	<p><b>SSG</b> IR 1.2.2 20 days STTA (2 people = 1 Filipino legal consultant</p>

Indicator	Targets Year 2
or stakeholders (EG 4.8.1-28)	and 1 Ghanaian legal consultant) 15 days STTA (2 consultants) 3 international travelers (SSG, APM Facilitator, Filipino consultant) = 25 days STTA
<p><b>Ind 17:</b>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)</p>	<p><b>FoN</b> 40 Journalist orientation on CLAT (1.5.5) 160 Marine Police, MSC, FEU &amp; naval patrol officers trained to strengthen law enforcement (IR 1.2)</p> <p><b>HM</b> 60 People trained as citizen watch group (IR 1.2.2)</p> <p><b>SSG</b> 15 training workshop on citizen watch program with SFMP, FEU, Marine police ,FC,MSC &amp; stakeholders</p> <p><b>CEWEFIA</b> 40 benefit from refresher training on CLAT (20 Elmina &amp; 20 Moree)</p> <p><b>DAA</b> 3 new anti CLaT champions trained (IR 1.5)</p> <p><b>SNV</b> 10 people trained to use CLaT tool (IR 1.5.1) 30 participants selected from; Social Welfare, Police, Fisheries Commission, Traditional leaders, District Assembly Child Panels, GES, etc.) trained on CLAT (IR 1.5.1)</p> <p><b>Total : 358</b></p>

## **IR 2: Science and Research Applied to Policy and Management**

The SFMP seeks to improve fisheries management processes by engaging scientific research and findings as part of the driving forces and rationale for management. This will be achieved in several ways. Strengthening the FC-FSSD research and stock assessment capacities will allow it to collect and analyse data and present it to policy and decision makers. A science and technical working group was formed in Year 1 with the aim to provide sound scientific advice and analysis on proposed fisheries management measures and policies. Globally, ICT innovations are transforming the way fisheries information is collected and analysed, and Ghana can apply a wealth of experience in this area. Science-based fisheries management has proven effective in many countries by restoring abundance of fish and shellfish, thus creating jobs and wealth for their societies. In keeping with the science-based fisheries management approach, complexity in fisheries compels managers to consider all available data or relevance to a particular fisheries problem. Articles 42 and 43 of the fisheries Act 625 (2002) state that fisheries management decisions “shall be based on the best scientific information available” and “shall specify the information and any other data required to be given or reported for the effective management and development of fisheries”. These data require valuable resources and competencies but can be manageable if stakeholders can be affiliate to assist in data collection as part of their ongoing seasonal observations on the fishing grounds. This model of partnership between stakeholders and researchers, known as “cooperative research” is well established in the U.S. and some West Africa (Senegal and Liberia). As part of the SFMP programs, fisheries research and data are considered the primary “building block” of information in making an effective management decision.

Key Outcomes and results expected over LoP as described in the Program Description include the following:

- FSSD producing/delivering relevant science-based information in collaboration with UCC to convene trainings and workshops with the FC and stakeholders to promote science-based decision making
- Several ICT innovations for mobile apps being used in fisheries management
- Improving fisheries and GIS data, utilizing stock assessments in management processes
- A formalized science and technical committee advising the FC
- Competent UCC personnel provided to GoG and stakeholder groups, businesses.

### **2.1 Scientific and Technical Working Group (STWG)**

**Activity Lead:** Najih Lazar

**Activity Team:** FSSD Fisheries Scientific and Survey Division

During Year 1, a Scientific and Technical Working Group was established and approved by the Fisheries Commission. The 11-member task is to provide technical and scientific information required for the development of fisheries management decisions as required by the Fisheries Act (625). The STWG is comprised of representatives from the FC, FSSD, MCS, academia, stakeholders and other specialized personnel with scientific and technical expertise and knowledge in fisheries.

Chaired by Professor Yankson from the University of Cape Coast and co-chaired by a representative of the FSSD, the STWG initial tasks were to prepare a status of the stock for the

small pelagic stocks, establish rebuilding targets, peer-review the results, and provide future research recommendations. In addition the STWG prepared a status of the stock report on the fisheries' performance and assessed expected responses to short- and long-term management scenarios proposed by the FC National Management Plan.

The Chair was elected by members of the Group and will serve two-year term. The Chair facilitates meetings per the terms of the internal group's SOP, doing so in an objective manner and represents the viewpoints of all committee members. The Chair reports the final outcome of the STWG work to the FC, standing stakeholders groups and in the National workshops.

The STWG functions include:

- Evaluate and present results to managers for fish stocks in the Ghana marine waters.
- Develop an ongoing stock assessment process and strategy including peer-review process to promote transparency, public awareness and consensus building.
- Develop an action plan to improve data collection systems and use of data-poor methods
- Provide scientific advice on effects of measures to revitalize the small pelagic fishery and design an M&E system to monitor expected responses to short- and long-term action.

The STWG will seek an approval by the FC to make itself a formal committee similar to scientific committees established in other countries, including West Africa to support effective management decisions. A brief will be prepared and presented to the FC for review and considerations.

A formal peer-review process will be developed and implemented in Year 2. This is the critical evaluation by independent experts (national and international) that have no involvement, stake or input into the assessment to provide a judgement on the quality of the science used in the stock assessment.

The STWG will continue to assist the FC to update and validate the status of the stock for small pelagics and develop a fisheries monitoring plan in coordination with FC for management actions put in place by the FC. The fisheries monitoring plan will include performance report and an evaluation of management actions and propose appropriate adaptive management actions.

This plan will address, at a minimum, the following topics:

- Adequacy and achievement of the action goals and objectives (including targets and schedules specified by the M&E plan),
- Status of the stocks, status of the fisheries, status of implementation and enforcement, status
- Status of relevant research activities and other information relevant to management activities.

It will also begin data gathering and assessment of selected species for the demersal fisheries management actions consistent with National Fisheries Management Plan.

STWG activities also feed into the national consultations (see section 1.1) and sets the stage for Small Pelagics Management (see section 4.1).

## **2.2 ICT Innovations for Effective Fisheries Management**

**Activity Lead:** SSG

**Activity Team:** Lazar, FSSD, Agbogah

The development of partnerships in the information and communications technology (ICT) space will be critical to the fulfillment of SFMP objectives: ICT represents a priority sector for partnerships focused on vessel and fisher registration, and IUU enforcement. SSG will also explore opportunities with Vodafone Ghana to extend their innovative ‘Farmers Club’ to the fisheries sector. The product has been successfully implemented in many countries including Turkey, Kenya, Tanzania, and India. For the fisheries sector in Ghana, an adaptation of this product could potentially allow fishers to receive content via SMS and Voice on 1) weather alerts, 2) fish market prices, 3) nutrition tips, 4) best practices in fishing, and 5) notifications and events related to fisheries management.

SSG has been instrumental in developing ICT partnerships in the USAID/Philippines ECOFISH Project. In Year 2, SSG will deploy an ICT Specialist together with the Senior Fisheries Advisor and the Partnership Specialist to develop an SFMP ICT Strategy. Through this strategy, SSG will develop action plans for engaging mobile carriers, the National Communication Authority, and ICT firms to explore web-based and SMS solutions to address IUU fishing and other key fisheries management concerns. ICT partnerships developed under section 6.1 will be key components of the overall strategy. The strategy will be validated during a national workshop.

SSG will also support the design of a pilot project using electronic tablets to collect landings and biological information on the most important species for the FSSD, in collaboration with the regional directors of the FC. This system would be designed to speed up the quality control operations within FSSD and facilitate broader stakeholder engagement in data collection.

## **2.3 UCC/DFAS/CCM Capacity Development**

**Activity Lead:** Najih Lazar

**Activity Team:** UCC, Burroughs, URI-CRC

Following the successful partnership established by an MOU signed between URI and UCC, the SFMP will continue to assist in the exchange of faculty and students between the two institutions in marine fisheries and coastal management. This allows faculty and students to visit each other’s institutions to conduct joint-research and attend post graduate degree training.

The MOU went into effect in May 2015 to coordinate research activities between the two USAID sponsored projects for URI and UCC (SFMP and UCC Capacity Building project). Several activities have been completed in Year 1 under this memorandum.

In Year 2, SFMP will continue to strengthen the UCC capacity and build on accomplishments of Year 1. This will include:

**Exchange visits of high level officials, and faculty URI-UCC:** An exchange visit of high level officials of both universities will be done based on mutual agreement of time and availability of interested parties. The UCC will sponsor the visit of their high level delegation to URI while the SFMP will sponsor the counter-visit by the high level delegation of URI to Ghana. The purpose of these high level exchange visits is to foster the partnership by formal recognition of the MOU

and begin negotiations of specific terms of further collaboration and exchange of faculty and students. Continuing support will be provided to UCC in the form of a senior faculty advisor Dr. Richard Burroughs that will provide follow-up on strategic and business planning of the CCM and continue discussions and planning concerning student and faculty exchanges in subsequent years. Exchange visits between URI and UCC faculty and staff will continue in Year 2 to allow UCC to strengthen its capacity in marine fisheries, coastal management and scientific data for decision making. Themes with a research and education dimension to be explored in Year 2 include obtaining land cover/land use data from innovative sources to meet needs of spatial planning, hazard and climate vulnerability and ecosystem conservation, and research in support of environmental sanitation in economically important waterfronts, especially fish landing sites and fisheries value chains.

**Graduate Degree training:** SFMP will sponsor two additional UCC staff to attend URI in 2016 to pursue a MS in fish genetics and marine affairs and/or marine fisheries management. The selection process of qualified candidates from the Department of Fisheries and the Department of Chemistry is ongoing. Expected start date for studies at URI is Fall 2016 (September 2016). (Also see Capacity Development section 7.1)

In addition, a PhD candidate has been nominated (Mr. Evans Arizi) to apply to URI to pursue a 3-year graduate training in fish stock assessment at the University of Rhode Island. His application is currently pending a decision at URI. If accepted, he is expected to move to Rhode Island to attend classes in spring 2016 (January).

**Demersal fisheries assessment in Pra and Ankobra estuaries:** SFMP contracted two research assistants from UCC to engage in a demersal fisheries assessment in Pra and Ankobra estuaries in collaboration with stakeholders. This is an ongoing research to create research-fishermen partnerships and capitalize on expert knowledge of fishermen in at-sea operations, fish capture, fish behavior, and marine technologies. Researchers from UCC are bringing laboratory expertise and analytical tools and will disseminate results and findings to stakeholders. This research will continue in Year 2 with a focus on length-based assessment of selected demersal species, the characterization of the demersal fisheries and status of the stock.

**U.S. study tour by the Ghana Industrial Trawlers Association (GITA):** To meet the objectives of the National Fisheries Management Plan, the FC and SFMP will co-sponsor a study tour to the U.S. for the benefit of the Ghana Industrial Trawlers Association (GITA) (See section 7.2 capacity development). The trawl sector over a long period has come under major criticism for what is determined by the NFMP as unsustainable fishing practices. Trawl gear use small mesh size, unselective trawling, large heavy chains and doors. Recently, trawl fisheries modified its gear and fishing practice to target mid-water and pelagic species caused by the severe overfishing on most important demersal species.

The purpose of the study tour is bring together the trawl fishing stakeholders, introduce new ideas, and starting to create a shared foundation for action and apply new ideas and lessons learned from the study tour to the Ghanaian context. Follow-up applied research will be developed and executed in collaboration with the FSSD and UCC, starting in Year 3. The Department of Fisheries of the University of Rhode Island will organize and facilitate the study tour while the FSSD and UCC will work with participants to develop and execute lessons learned.

**Age and growth laboratory at UCC:** As fish age characteristics are necessary for stock assessments and to sound fisheries management plans, Ghana is the only country in FCWC

region which lacks a fish ageing and laboratory due to lack of resources and expertise. The FSSD conducts a biological fish sampling throughout the coastal landing sites but no age data is currently collected or analyzed. The FC identified this component as a research priority in the National Fisheries Management Plan (2015-2019). In addition, UCC is setting up a laboratory space dedicated for age and growth studies for research and education.

SFMP will support the initiatives and lead the setup of a national age and growth laboratory at UCC to serve a dual purpose for research and education and carry out fish age assignments on behalf of FSSD. Regional cooperation requires that countries provide a minimum number of age and growth samples for the purpose of regional stock assessment and monitoring programs of the effect of climate change on growth and mortality of major fish species.

The Senior Fisheries Advisor will work to setup the national laboratory at UCC in coordination with specialists from FSSD. This includes the purchase of scientific equipment for the laboratory that was not included in the UCC USAID project grant. This will be followed by a training in age and growth techniques for selected specialists from UCC, FSSD and other interested institutions. This collaborative and outreach program between the academic institution (UCC) and the GoG (FSSD) will develop a joint long term plan under an MOU to meet the demand of both institutions and fulfill the extension role of UCC.

**Regional Leadership training:** The first international fisheries leadership course was completed in Year 1 at UCC with the participation of the FC, UCC, and fisheries stakeholders. Per request of the FC and the FCWC, an advanced training will be offered in collaboration with member countries (Liberia, Cote d'Ivoire, Togo, Benin and Nigeria). The objective of the leadership in fisheries management is to address management challenges of shared stocks across political boundaries, socio-economic and cultural differences. FCWC will provide match support by funding the travel, per diem and lodging costs of regional participants while SFMP will provide trainers and materials and Ghana participant costs. The UCC role in the Year 1 course was mainly as course participants and observers, UCC will start to take on logistical support and co-training responsibilities in Year 2. In addition, the University of Rhode Island will design competencies for leadership training in fisheries management for UCC staff and prepare a scope of work to train the trainers of UCC for one week prior to the regional leadership training. The purpose is for UCC to gain competency and build its capacity to organize and host future leadership trainings in fisheries management nationally and regionally.

## **2.4 Improving FC Data Systems and Stock Assessment Capacity**

**Activity Lead:** Lazar

**Activity Team:** Lazar, Bowen, STWG, FSSD, SSG

The SFMP senior fisheries advisor will work closely with Fisheries Statistical Services Division (FSSD) of the FC in Tema and with UCC. Staff will be trained on fish stock assessment methods, baseline fisheries and biological data collection, fisheries extension and catch reconstruction methods.

**Piloting Mobile technologies for fisheries management:** The research team will be actively involved in designing and piloting mobile technologies for collection of landings and effort data. The advisor will also work with the vessel registration team to assess mobile technology for registration of vessels and fisherman (and possible integration with insurance schemes) and will work with the MCS and FEU groups in Tema on the use of ICT for improved information and



analysis of IUU fishing. Some of this work will be coordinated with FAO to ensure standardized reporting of Ghana contribution to global fisheries statistics. The URI Fisheries Advisor will lead these activities in coordination with SSG Advisors and the CRC MIS specialist. (See 2.2)

**Port/landing sites FC agent training:** A training of FC agents at the major port/landings sites will be organized and offered in coordination with the FC and its FSSD on basic bio-statistics, fisheries sampling, recording fish lengths and weights, biological samples and boat trip information. Agents will be trained in data entry and recorded information into the main FC maintained database. The purpose of the training is to engage field agents to work together to maintain standards in data collection and identify technical and administrative challenges they face. Subsequent refresher training will follow-up on a regular basis and in coordination with FC and its FSSD.

**Evaluation and Improvement of Fishery Information Systems.** It is difficult to get a clear picture of the status of the stocks at the present time. The basic information is not readily available and there is no sufficient directed governmental budget line item to sustain the national research institution (FSSD) to collect and maintain databases. There is an urgent need to have good fisheries data readily available to provide sound advice for managers. Given this context, the project will work with FSSD and partners to develop a process to identify gaps in data, establish research priorities and develop a collaborative research agenda. The project will engage discussions with universities, NGOs, fishermen, and processing sector for enhanced data collection system. The STWG will serve as the forum for these consultations and recommendations.

One of the results of these efforts will be an assessment of the quality of FSSD landings and effort data. A specific aim will be to provide information that can standardize effort from the various fleets and gear types so that adjusted data sets can be used for updated and more accurate stock assessments and effort reduction strategy. These activities will also determine training needs for FSSD in data collection and management, stock assessment, ecosystem approaches, and risk assessment.

A successful model for fisheries data collection system was established in the Northeast of the U.S., names the Atlantic Coastal Cooperative Statistics Program (ACCSP). This is a collaborative program between federal and states agencies that design, implement and conduct marine fisheries data collection programs. Key staff of the FSSD will participate in an exchange visit to Washington DC and RI to receive short training in the design and management of fisheries data.

**IT Support to FSSD:** The FSSD headquarters in Tema will be equipped with a modern computer network to improve the quality of fisheries landings and sea sampling data. The access to a centralized server with secured access by regional directors and specialized staff will improve data entry and processing. It will also provide a system to enter and process data at the regional level so that data becomes available in a timely fashion to meet fisheries management demands and action. This program will sponsor a short term training of an IT specialist of the FSSD prior to the installation so as to allow ownership of the maintenance of the networking systems. In addition, a training in MS Access will follow to benefit staff of the FSSD involved in the data entry and processing.

**Advanced stock assessment training:** Following up on the success of the first stock assessment training offered at UCC, a second and advanced training will be offered at the FSSD to

strengthen the capacity of the Fisheries Commission, UCC and partners in advanced fish stock assessment techniques. This will prepare a select group of fisheries professionals to take the next steps in stock assessment and see the direct application in fisheries management planning and evaluation. Participants will use new techniques to deal with data poor situations and be familiar with fisheries management indicators and reference points, both biological and economic by using simulation models.

## **2.5 Fishing Capacity Assessment**

**Activity Lead:** Najih Lazar

**Activity Team:** FC, MOFAD

To reverse overfishing and rebuild the depleted stocks, fishing effort may have to be reduced temporarily below what would normally be considered necessary to obtain maximum yields. This could result in short-term loss in yields before the rebound kicks in. Business as usual with the absence of effort control measures means stocks will continue to decline with diminishing economic returns leading to further deterioration of social conditions. The FC has begun to address this with the support of the World Bank by registering small artisanal canoes, with more than 10,000 registered as of July 2015 while semi-industrial and the industrial fishing vessels are theoretically capped. The National Fisheries Management Plan is calling to control effort for all fisheries, including canoe owners and operators. A licensing scheme will be developed in 2016 along with vessel registration program to assist the FC in measuring fishing capacity.

Fishing effort, however, is more than a just a boat count. The term “capacity management” is defined as the implementation of a series of policies and technical measures aimed at ensuring a desired balance between fishing inputs and fish production. It is the product of fishing effort and its level of activity to harmonize the harvesting potential of the fleet with the desired level of output from its fisheries.

In Year 2, the SFMP will conduct a training workshop on fishing capacity assessment for the STWG and fisheries managers. A great deal of preliminary work on estimating effort has been carried out in Ghana on artisanal and industrial fisheries but no single accepted method for estimating fleet capacity has yet been identified. The goal of the workshop is to recommend an appropriate and an accurate fishing capacity assessment approach for the small pelagics fisheries.

SFMP will then conduct a fishing capacity assessment for fisheries in Ghana (canoes, semi-industrial and trawlers) for each of the three sectors by gear type, region and by standardized units. While these are not standardized, they can be calibrated using modern statistical methods to provide a standardized and unbiased measure of fishing effort. Once quantitative assessments of fishing capacity are better understood and stock assessments are available, the level of fishing effort that produces maximum yields, a goal of Ghana’s national fisheries policy, can be ascertained. In Year 2, after the training, SFMP will introduce this concept via a regional workshop on capacity assessment and catch reconstruction. This information, combined with the outputs of other activities will help map out a strategy to reduce fleet capacity to more sustainable levels. Such strategies will also be incorporated into National Workshops on Key Management Issues (see section 1.1)

## **2.6 Environmental Planning Data Hubs and Capacity Building Center for the Western and Central Regions**

**Activity Lead:** Stephen Kankam

**Activity Team:** Hen Mpoano, Robadue, Damon, UCC, Spatial Solutions

Coastal district assemblies and regional coordinating councils make important land use decisions that affect the quality of life of fishing families, the efficiency of fish landing and processing sites and the condition of fish habitat including mangrove ecosystems, lagoons and near shore waters.

In Year 1, an assessment by URI's GIS expert recommended that the CR TCPD office be developed as the Community Planning Data Hub, for regional planning activities and information rather than relocating their data off-site in another facility such as UCC. With specialized software and an existing national government mandate to undertake regional planning activities, the CR TCPD office is in the best position to meet both GoG and district needs. Subsequently, material needs assessment for the CR data hub was completed and resulted in the identification of the minimum hardware and software required to maintain a functional central point for data storage, sharing and management to best serve the CR Coordinating Council.

Lessons from the exchange visit for CR and WR planners indicate that capacity to use GIS software vary among planners. Training needs assessment will be conducted by SpS supported by HM to unearth the differences in training needs and develop a tailored approach to GIS training for coastal planning. Coastal and fisheries data will have to be organized and consolidated for the central region data hub. This will be tied into training activities designed to capture, store and process such data relevant for the central region's coastal ecosystems and key fish habitats. This approach will draw heavily on, and be consistent with planning tools and methodologies utilized by the TCPD. This approach will lay the groundwork for participatory development of guidelines and tool kits for coastal planning and management to be initiated during the last quarter of Year 2. The tool kits will be developed with planners in an iterative process to facilitate uptake and usability. HM and Spatial Solutions will facilitate another learning event between central region and western region planners to ensure ongoing peer learning and exchange of good practices and lessons as well as track progress in the central region. The learning event will specifically focus on coastal climate vulnerability and adaptation planning. The lessons will draw heavily on Ankobra, Axim and Pra assessments.

This will benefit not only the CR RCC but all nine coastal districts in the CR. This maximizes Town & Country Planning Department's intensified efforts to improve spatial planning in coastal districts. Because USAID is also investing in GIS capabilities at UCC, in Year 1 the SFMP assessed the potential viability of strengthening and maintaining a permanent UCC CCM Data Analysis and Visualization Lab, drawing on the lessons of University of Ghana's Centre for Remote Sensing and Geographic Information System (CERSGIS) and ICFG's WR experience.

New information generated by the three USAID coastal programs on fisheries, coastal landscapes, seascapes and marine and coastal fisheries habitat will be added and openly shared following USAID open information policies, including the expanding SERVIR program for West Africa, to be housed in Accra via CRC's ASSESS program. Led by SpS and assisted by HM, the concept of the ICM toolkit prepared for the WR under ICFG will also be adapted and prepared for use by the CR coastal districts in Year 2.

**Key Year 2 Outcomes and Results for IR 2**

Indicator	Targets Year 2
<b>IR2: SCIENCE &amp; RESEARCH: Increased use of science and applied research to inform decision-making, law enforcement and the implementation of management plans</b>	
<b>InD5:</b> Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	<b>SSG</b> IR 2.2 15 days STTA (ICT consultant and Partnership Advisor - 2 trips for ICT consultant) 10 days STTA
<b>InD 17:</b> 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)	<b>SSG</b> 12 Workshop with SFMP ICT working group to develop ICT strategy (IR 2.2) <b>CRC (123)</b> 3 students at URI for postgraduate degrees (2 masters marine policy and fish genetics & 1 PhD stock assessment) (IR 2.3) 25 Fisheries leadership course at UCC (IR 2.3) 5 equip and train up staff/faculty/students for an age/growth lab 10 Advance stock assessment workshop (IR 2.3) 60 persons second phase of training for FC for port agents,2 events (30 persons each) (IR 2.4) 12 persons trained for MS Access and data management of FSSD (IR 2.4) 1 person trained on IT specialty 20 persons trained on fish capacity assessment (IR 2.5) <b>SP</b> 20 Planners trained CR (IR 2.6) <b>HM</b> 20 Planners on refresher training (IR 2.6) 30 participate in learning event for Western and Central Region TCPD <b>Total: 218</b>

### **IR 3: Creating Constituencies and Stakeholder Engagement**

The objective of this component area is to build constituencies and draw political and public support for rebuilding the fish stocks. Implementation of the communications component will be guided by a 5-year SFMP Communications Strategy developed in Year 1 in coordination with implementing partners, the WARFP and FC communications staff.

Year 2 Communications work will build on initial gains made in Year 1 and will focus greatly on a national level campaign targeted at stakeholders to implement early actions called for in the national fisheries management plan for rebuilding the small pelagic fishery. A series of communications tools and channels will be employed to reach out to both national level and community level stakeholders, focusing on messages that meet the needs of diverse target groups relative to the fisheries management options that will be implemented.

Year 2 will also focus on other behavior change communications for reducing child labor and trafficking activities in the Central Region as well as for enhancing best practices in post-harvest fisheries activities.

The SFMP Communications Team will be expanded at the beginning of Year 2 to include communications focal persons of project implementing partners. This will enhance coordination and effective communications amongst partners while enriching SFMP communications with diverse innovative ideas and capacity building opportunities for consistency in SFMP branding and documentation.

#### ***3.1 Strategic Communications Campaigns in support of MOFAD/FC policy initiatives for the small pelagic fisheries (see section 1.1)***

**Activity Lead:** Patricia Aba Mensah, Communications Officer

**Activity Team:** CRC-Accra, Friends of the Nation, MOFAD/FC, CRC-URI, SNV, CEWEFIA, DAA

Year 2 Communications will focus on a series of mass media campaigns to draw the public support and political will for implementing early actions intended to rebuild the small pelagic stocks. The national fisheries management plan will define the messaging for the media campaigns and will be carried out in close collaboration with the MOFAD/Fisheries Commission focal persons to ensure consistency with the National Marine Fisheries Management Plan. Activities include media outreach campaigns, stakeholder communications forums, fisheries best practices competitions, international day events, and electronic mobile applications.

Year 2 will expand with informational briefings to relevant Members of Parliament. Friends of the Nation will develop briefing packets in consultation with the Accra office for the regional and field level engagements. They will organize a series of community landing-site-level engagements and targeted at landing sites along the coast that are not being fully reached by representation at the regional forums and national events. SFMP will work with MOFAD/FC to assess other communications needs for subsequent development and production of IEC materials that support implementation of the NFMP. This will include potential support to MOFAD/FC to produce a high quality layout version and production run of the Marine Fisheries Management Plan for distribution. SFMP Accra will also have discussions with WARFP and coordinate the reproduction of some aspects of the ICFG radio drama series on illegal, unregulated and unreported (IUU) fishing to heighten enforcement and compliance of fisheries laws as new management measures are instituted.

While the Accra office facilitates national media engagements Friends of the Nation will also conduct a series of radio and television discussions with media houses in the Western and Central Regions. Partner SNV will explore the Ghana Journalist Awards program organized in August to award the *Best Fisheries Report of the Year*. CRC/URI will also explore the potential need for a special program or training opportunity for environmental journalists, in order to equip selected SFMP media ambassadors to report effectively on fisheries policy issues of national concern. SFMP will also provide logistical support to some media houses to facilitate field activities pertaining to coverage of fisheries issues.

***Hotline Communications Strategy (see section 2.2)*** – A special plan for the design and implementation of a proposed pilot 819 Hotline for reporting fisheries infractions will be done in collaboration with the MOFAD/Fisheries Commission and the service provider as well as some stakeholder consultations with fisher folks. A communications plan in Year 2 will focus on diverse multimedia tools including radio jingles, billboards, posters, etc. to advertise the program if and when it is established. This will also be linked to the *Citizens’ Watch on Water (CWOW)* initiative.

***Events*** – SFMP will also participate in and number of events to create more visibility on fisheries issues and the way forward through participation in the Elmina festival in July 2016, international day events such as World Fisheries Day in November. DAA will also organize World Rural Women’s Day in October. DAA will mobilize the women stakeholders to make pressing statements and issue a communique on Farmers Day in December to raise awareness of fisheries issues affecting the sector and the role of fish in food security. Hen Mpoano will pilot a best practices competition for some selected 15 coastal fishing communities – in collaboration with other partners — in the SFMP focal sites where anti-IUU campaign is being carried out. This effort is intended to encourage voluntary compliance with fisheries laws and best practices and especially with respect to those laws affecting small pelagic fisheries. Hen Mpoano will design a behavior change communications strategy that employs the use of tools such as video documentaries on best practices, community drama, posters and the mass media to sensitize stakeholders in target communities on IUU.

### ***3.1.1 Campaign on Child Labor and Trafficking (See also 1.5)***

**Activity Lead:** FoN

**Activity Team:** CRC, FoN, SNV, CEWEFIA, DAA

This special plan will focus on behavior change communications to reduce child labor and trafficking activities in fisheries. Activities will include community drama and development of a child labor factsheet and other IEC materials, which will be disseminated largely by the CLaT ambassadors that CEWEFIA and DAA will have trained. The project will observe the World Day against Child Labor in June to be led by SNV with support from FoN, CEWEFIA and DAA. SNV will also produce and distribute the fact sheets on child labor /trafficking

### ***3.1.2 Healthy Fish Communications Campaign (Best Practices) (See also 1.2)***

**Activity Lead:** SNV

**Activity Team:** SNV CEWEFIA, DAA, DQF, FC

The Healthy Fish Communications Strategy for Year 2 will start with the development of four factsheets will be produced by SNV post-harvest work with communities and SMEs activities.

This activity in Year2 will be small in scope as the project design called for more significant scale up in the second half of the project starting in Year3. While SNV will produce materials for healthy fish communications, DAA, CEWEFIA and DQF as well as SNV will work on community level trainings on improved handling and processing practices (see section 4.5)

### ***3.1.3 Gender Strategy Outreach (Referenced by 5.2.2)***

**Activity Lead:** SNV

**Activity Team:** Torell, HM (Owuzu), Mensah, DAA

Gender mainstreaming via behavior change communication messages will also be conducted as part of the projects gender strategy. SNV will formulate messages into communications materials (leaflets, policy briefs, etc.) in the form of leaflets and posters. This will be used to create awareness among both men and women groups in the SFMP communities. Gender mainstreaming communications materials will be distributed during meetings, workshops, and special events. The project will also use general communications products, such as the newsletter, as vehicles to communicate gender mainstreaming lessons learned and success stories.

The World Women's Day which falls on 8 March 2016 will be celebrated under the Project—and it will be a good place to launch the gender behavior change communications materials developed for local communities. The focus of the celebration will be the role of women in halting illegal fishing practices.

### ***3.2 Executive Level Communications***

**Activity Lead:** Patricia Aba Mensah

**Activity Team:** CRC-Accra, Hen Mpoano, SNV, CRC-URI

#### ***3.2.1 Briefings of Key National Level GoG MOFAD/FC, MPs***

There will be periodic informational briefing sessions with The Fisheries Commission board/council and select committee chairman on food and agriculture and coastal MPs in order to keep them apprised of project activities and issues in the sector. Especially important will be monthly meetings with MOFAD/FC to them appraised of and coordinate with them on key events and activities.

#### ***3.2.2 USAID communications requirements***

SFMP Communications Team will also organize quarterly internal meetings to strategize and build capacity of members to meet USAID communication needs, such as development of quarterly Success Stories, bi-weekly Feed the Future bullets and production of quarterly progress and annual reports. The Accra office will develop briefing packets for USG officials as and when needed.

**Key Year 2 Outcomes and Results for IR 3**

Indicator	Targets Year 2
<p><b>IR3: CONSTITUENCIES: Constituencies and political will for policy reform &amp; implementation built, supporting &amp; demanding sustainable use and conservation</b></p>	
<p>Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).</p>	<p><b>CRC/SFMP</b>            18 – Itemized below            4 Press releases            8 Talk shows on TV and radio towards dialogue            1 Issue brief            4 radio jingles  <b>CEWEFIA</b>            4 Community drama</p>



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

SFMP will work at three ecosystem scales of management for three types of fisheries stocks. Priority in the first two years will be on the small pelagic fisheries, with a demersal fisheries and marine spatial plan in the WR linked to community-based estuarine management plans in following years. Integrated community resilience and marine biodiversity conservation actions will be implemented. The nested approach to design and implementation will enable a synchronized and mutually reinforcing flow of information across national, regional, district and local levels. Improvements in the smoked and dried fish value chain will be undertaken in targeted communities in the Central and Western region.

Key outcomes and results expected over LoP as described in the Program Description include the following:

- Four fisheries management plans developed and/or adopted and implemented at different ecosystem scales (national small pelagics plan, Western Region Demersal Plan, Community based plans for the Pra and Ankobra estuarine/mangrove systems)
- Approximately 3,000 people, a majority of whom are women, benefiting from diversified livelihoods, access to micro-credit, adoption of more profitable fish smokers and product value additions
- Several fishing communities more resilient to climate impacts
- Capacity of more than a dozen district authorities to promote and support resilient community policies and initiatives.

##### **4.1 Small Pelagic Fisheries Management**

**Activity Lead:** Najih Lazar

**Activity Team:** CRC/Accra, Friends of the Nation, Hen Mpoano, URI/CRC

As noted in IR1, the initial priority is to engage stakeholders to *consider immediate actions to turn around this fishery on the verge of collapse.*

MOFAD and FC developed, in consultation of stakeholders, a National Fisheries Management Plan (2015-2019) as one of the outputs under the ongoing West African Regional Fisheries Project. The plan has been reviewed and approved by cabinet within the legal framework of the Fisheries Act (625). Many of the proposed actions of the NFMP coincide with the short and long-term strategies outlined by SFMP to end overfishing, cap effort and rebuild major depleted fish stocks in Ghana. However, the NFMP provides a general framework for managing all marine species but did not address an efficient framework for implementation of proposed measures and their bio and socio-economic impact by fisheries sector.

The SFMP will coordinate with MOFAD and FC to provide the impact assessment, establish an operational plan and support its execution for the components relevant to SFMP's "quick hit" strategy within the framework of the Fisheries Management Plan (i.e. seasonal closure, area closure...etc.). This "quick hit" strategy will be accompanied by a longer term adaptive fisheries co-management planning process focused on small pelagic complex at the national level. The implementation of the "quick hit" strategy requires a "quick monitoring and evaluation" strategy. This will allow managers to measure the effectiveness of compliance followed by an assessment of the biological gain through an annual update of the stock assessment. Measures of Fmsy and Bmsy by end of 2016 using updated catch and effort data will allow us to measure biological

gains and fishing pressure exerted on the stock. It will not provide a measure of compliance. The SFMP will coordinate with the FC and FEU to establish additional resources to strengthen monitoring and control at each of the major landings sites. The SFMP is providing an avenue using hotline for stakeholders to report violations. In addition a series of education and outreach will be added by Hen Mpoano and Friends of the Nation. The SFMP will provide field coordinators in most important landings sites to maintain a continuous engagement with and for the stakeholders. This will provide an avenue of neutrality for the monitoring and evaluation process. Terms of reference will be developed in coordination with the M&E officers of the FC and with FEU units.

Parallel to the implementation of the “quick hit” strategy, a national small pelagic fisheries management plan will be developed in close coordination with MOFAD, FC and stakeholders to account for special considerations of this important sector. The plan will be coordinated with the FCWC to account for the stock boundaries and regional differences in fisheries, fish migration, essential habitat and stakeholder needs. The national small pelagic fisheries management plan will be submitted for approval within the legal framework of the F.A. (625), either as an amendment to the NFMP or a stand-alone species-specific FMP. In this national plan, we will introduce the concept of Ecosystem-Based Fisheries Management to take into account the variability of the ecosystem and its influence on fish abundance and species composition. A conservation equivalency model will also be introduced. It is simply a fisheries management process by which regional (sub-national) management bodies are allowed limited management flexibility in order to take into account seasonal variabilities in fishing conditions and regional guiding policies and principles.

As SFMP is developing arrangements to support the implementation of the NFMP and/or the “quick hit” strategy under the framework of the Fisheries Act (625), an adaptive co-management framework will be developed in coordination with MOFAD, FC, WARFP, FCWC and Key stakeholders. This will be a follow-up on the initiate scoping document completed by the WARFP. The SFMP will hold a national conference to develop a framework and key recommendations for a forward strategy for establishing fisheries co-management legal framework in Ghana.

The SFMP will work with MOFAD and the FC to establish a stakeholders’ Regional Advisory Groups, chaired by the FC (allowed under Article 9 of the Fisheries Act) to provide input and early engagement for fisheries co-management actions consistent with the national policies. It will serve at the sounding board in each region to serve as a non-binding body for implementation of management measures proposed by the NFMP and engage in the development of the co-management structures at the regional level. The introduction of regional engagement through these advisory groups is consistent with the philosophy behind key legislation governing fisheries management. However, existing laws and policies do not specifically refer in detail to a co-management concept and the delegation of authorities but it recognizes the differences between regions in the decentralization policies and the opportunity to accommodate specific socio-economic conditions. This will gradually introduce the concept of regional jurisdictions and afford the opportunity to introduce models of property rights in fisheries consistent with key legislation. FoN will facilitate the Fisheries Working Group (FWG) in planning and attendance at stakeholder meetings at the regional level. For its part the FWG will be communicating to key officials and stakeholders in their respective regions.

Most of the stocks in Ghana are believed to be data poor. There may be limited knowledge available in the scientific format about basic life history parameters and history of exploitation patterns. Local Ecological Knowledge (LEK) is a valuable tool to start to fill in knowledge gaps, however the challenge has been in combining the two types of knowledge in a quantitative way for use in stock assessment models and monitoring activities. SFMP will work with project's partners, particularly HM to develop a system of gathering local knowledge in a useful manner for inclusion in the stock assessment and management plans. This includes participatory mapping of fisheries activities, migration of fish and fishermen, spawning areas, key fishing grounds and other biological and environmental information.

#### **4.2 The Western Region Demersal Fisheries Management Initiative**

**Activity Lead:** Najih Lazar

**Activity Team:** HM

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. During the ICFG, Blue Ventures characterized the rocky reef habitat area of Cape Three Points as a strong candidate area a no-take fisheries reserve. 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).

In Year 1, 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 with UCC (graduate education).

In Year 2, stock assessment work will be concluded and analyzed. Management units will be determined for priority demersal stocks of economic and food security importance as part of the work of the STWG. The original 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, there are concerns that 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 about appropriate scale of the management unit, work anticipated to be undertaken on the demersal fisheries management may change significantly in Year 3. The intent in the design here was to have a sub-national (sub – regional) scale fisheries management unit piloted. If the management unit is national in scope, we may decide to drop this entirely as the small pelagics work provides an example of a national plan already and a national plan expands the time and resources to do it properly, beyond what was originally anticipated in the project design. Work will be redesigned in Year 3 after conclusions on appropriate management units are determined via the STWG. (See section 2.1)

### **4.3 Integrated Community Fisheries Management and Resilience Plans for the Ankobra River Estuarine and Mangrove Ecosystem**

**Activity Lead:** Stephen Kankam

**Activity Team:** Hen Mpoano, Spatial Solutions, URI/CRC, UCC

An ecosystem-based fisheries management and community resilience plan will be prepared for the Ankobra river estuarine ecosystem. HM is leading the Ankobra management planning effort whereby DQF is leading the value chain improvement efforts in this same area. The lessons learned and planning procedures will be shared with the work planned for Year 2 in the Pra River estuary. (See 4.4 below). This effort will build on and leverage work underway by Adamus Resources Ltd, a mining company in the Nzema East district.

#### **Accomplishments in Year 1.**

Through collaborative research activities with UCC (see IR 2.3 above) environmental characterizations within the Ankobra and Pra coastal stretch focused on the estuaries' role as nursery grounds to demersal fish stocks and estuarine fisheries.

Led by Hen Mpoano, seven data collectors were trained and engaged in resource mapping and vulnerability assessment. This included district Planners, Technical Officers, and community leaders. The group collected data in 5 river communities on factors including physical, socio-economic, livelihood and climate related vulnerability.

The reconnaissance effort revealed that residents along the Ankobra estuary are highly dependent on mangroves, forests, and the local fishery for livelihoods and subsistence. Climate-related impacts were strongly in evidence, including frequent river and coastal flooding, extreme rainfall and rapid and extensive coastal erosion. These impacts threaten both livelihoods and biodiversity. In addition, human generated threats pose a serious risk to the integrity of the lower Ankobra. These include illegal mining activities, rapid expansion of rubber plantation, mangrove exploitation, widespread bamboo harvesting, and felling of forest trees. This is coupled with difficulty in physical accessibility which becomes worse during periods of rain and river flooding. There have been very limited prior interventions by the District Assemblies as well as community based organizations in the Ankobra river communities, so their characteristics and needs are largely unknown.

Spatial Solutions led a scoping mission and reported on field surveys to Ankobra and selected villages undertaken as part of the vulnerability assessment. Planning and Technical Staff of Ellembelle and Nzema East Districts were trained to assist in the information gathering. Data including maps, reports, satellites images, and demographics were gathered and the analysis of data completed. Reports from these efforts will become available early in Q1 of Year 2.

In the technical arena, there is considerable difficulty in accessing current data (for example satellite images) that have cloud free scenes or up to date land use / land cover information. As a result, efforts to characterize the extent of ecosystem features, threats and development trends may have to be based on information sources whose accuracy can easily be challenged, for example in places where illegal activities related to resource use remain undetected.

The fish landing site in Sawoma and five landing sites in Axim are facing major physical change threats from sea due to wave, tidal and long-shore current impacts causing rapid erosion and

damage. Poor waste water and sanitation facilities at the fish landing sites has created unhygienic fishing handling and processing conditions that require urgent attention. The study tour to Senegal by women groups will provide an opportunity to initiate early actions on shoreline sanitation improvements in Axim and Sawoma.

The contributions of partners has been important to the Ankobra ecosystem based management effort. DQF has carried out extensive contact and communication with Sawoma and Axim, identified and trained a large number of micro, small and medium sized enterprises in preparation for fisheries value chain improvement projects such as the adoption of improve fish smoking technology. SNV included the Ankobra in its coast wide analysis of the wood supply value chain for fish smoking. The Coastal Sustainable Landscapes Project began work on mangrove conservation and restoration within the lower watershed/mangrove system area.

Activities in Year 2 will take place on the following:

#### ***4.3.1 Complete characterization and vulnerability assessment reports***

Year 2 activities will first of all involve completion of the ecosystem characterization and the coastal vulnerability assessments early in the first quarter. This is carry-over work not fully completed in Year 1. More detailed profiles of the characteristics of estuary resource users and their use patterns will be completed.

#### ***4.3.2 Information sharing and engagement for vulnerability assessment and estuary characterization***

The assessment and associated information for the Axim and Ankobra areas will be shared with Nzema East Municipal Assembly through a workshop with the District in an effort to build support for joint district management of shared natural resources along the Ankobra.

#### ***4.3.3 Initiating governance mechanisms***

A proposal will be made to establish an estuarine management committee that can oversee and act as a discussion forum for the ongoing progress and options for management and adaptation. Among the key topics for the committee is exploring the establishment of a Joint District Planning Group with Nzema East and Ellembelle District Assemblies. At the same time, the project will continue to seek dialogue with Adamus Resource both to share information and foster engagement with the District and any potential Joint Development Planning Area

Detailed analysis of satellite imagery will be conducted to build upon initial effort in year one to produce land use land cover data for the Ankobra estuary ecosystem. The land cover will be extracted from 2013 RapidEye imagery and will follow the same protocol that was used during the ICFG initiative. The land cover data will provide the baseline for detailed mangrove mapping in the Ankobra estuary. The products from these mapping efforts will support improved management and lay the ground for updating the spatial plans for both Nzema East and Ellembelle districts to incorporate uses that are conservation oriented and support the fishery habitat.

#### ***4.3.4 Early actions for community resilience***

An early action that can be helpful to the five isolated river communities is to pilot Village Savings and Loan Associations in coordination with the CSLP. The CSLP has already initiated

mangrove reforestation in the broader Ankobra landscape, and this is a promising activity and strategy for empowering the five river villages to participate in community-based management processes for the estuarine resource.

A Pilot Mangrove Forest Restoration effort led by HM will be designed, based on a Study Tour to the Volta Region which is a model example that offers valuable lessons for replication. Transportation to the river communities has proven a major obstacle to the three implementing partners for this activity. A small boat and motor, appointed with all necessary safety equipment, will be obtained by HM to provide logistics for the groups working on the activity.

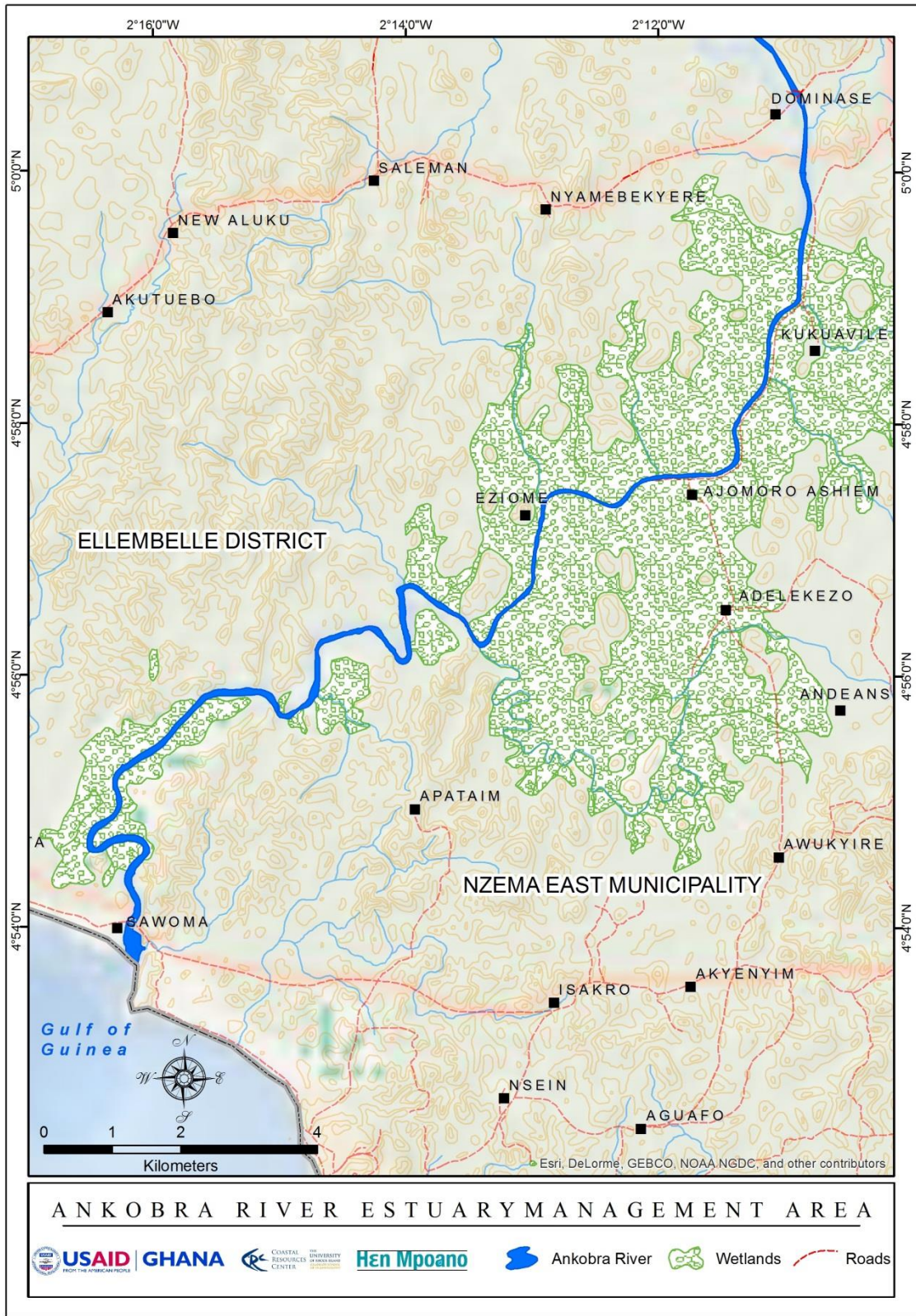
#### ***4.3.5 Initiate the ecosystem management planning process for Ankobra***

A management plan for the estuary and mangrove ecosystem will be drafted taking into account community-based decision making for sustainable fishing and mangrove protection. A permanent community-based management committee will be proposed and policies will be included in district spatial plans for Ellembelle and Nzema East districts.

#### ***4.3.6 Adaptation action options for vulnerable fish landing sites in Sawoma and Axim***

Sawoma and its residents are vulnerable to hazards, notably flooding and evolving sea level rise. Information from the vulnerability assessment suggests that resettlement is a gradual process and long-term option for adaptation to these stressors. Furthermore the assessment revealed that impact of flooding on fish processing as a livelihood option is disproportionately high. SpS in coordination with HM and CRC will facilitate the development of flood risk and hazards plan to inform the siting of fish processing facilities prior to widespread dissemination of adopted stove technologies by women processors. Areas for siting these facilities will be designated to district spatial and land use plans to ensure long term protection of these sites as water-dependent uses.

**Figure 4: Map of the Ankobra Estuarine Area**



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

**Activity Lead:** Friends of the Nation

**Activity Team:** Friends of the Nation, Spatial Solutions, SNV, DQF, URI/CRC, UCC, HM

The previous USAID sponsored Integrated Coastal and Fisheries Governance project initiated a number of information gathering and spatial planning efforts for the lower Pra estuary including the fish landing site in Shama Old Town and the entire coast of the district. These included shore classification, land use mapping, and flooding assessment in the Anankwari sub-basin, mangrove and coastal zone use designation, and livelihood activities in the Anlo Beach area. Subsequently, Friends of the Nation advanced community based conservation in the Anlo Beach region working closely with the Shama District Assembly to develop the 2014-2017 DMTDP which elaborately provide resources for development and piloting of eco-tourism plan for the Pra River Estuary. Most recently Friends of the Nation has collaborated with the Coastal Sustainable Landscapes Project (CSLP) to advance mangrove conservation in Anlo beach towards the strengthening of community conservation groups, development of communication materials on mangroves and future piloting of woodlot plantation in the Anlo beach area.

While similar in overall purpose to the Ankobra estuary management and resilience effort, information availability and governance arrangements instituted by the Shama District assembly are considerably advanced. Additional technical information will be acquired to update and extend the understanding of the shoreline and estuary wetland distribution, use patterns and dynamics. Existing mechanisms for shore and wetlands will be utilized and strengthened during this activity.

##### ***4.4.1 Workshop to learn lessons from Ankobra on socio-ecological profiling.***

Both the Pra River estuary and the Ankobra has some similarities relative to treats to gold Mining, wetland degradation and community dependence on the mangroves. Therefore understanding the socio-ecological profiling process in the Ankobra which started in Year 1 will be useful to provide some practical information for stakeholders in Pra. Also cross learning and lessons sharing for the District managers, planners, community leaders, etc. in both areas will be necessary to promote joint learning, problem analysis and the development best conservation approaches for the areas. Therefore in Year 2 a lessons learning workshop will be organized to enhance information sharing. HM, DQF and Spatial Solutions will participate in this workshop to-share of experiences.

##### ***4.4.2 Capacity strengthening workshop on PRA resilience planning.***

There will be the need for a capacity strengthening workshop on resilience planning for the Pra River area for Year 2. The proposal is that the workshop will have participants from the District and Regional Planning unit, key leaders from the Pra River area including traditional leaders, Assembly members, Community leaders, and other stakeholders. This workshop will seek to review past and present conservation interventions in the Pra areas and work with participants to develop synergies with planned future interventions especially, tailoring the existing wetland management plan and local management committees into the eco-tourism plan.



The key output for this workshop will be the development of specific action plan towards the completion of the Pra estuary eco-tourism plan.

#### ***4.4.3 Initiating governance mechanisms with Shama District***

The governance mechanism within the Shama District is crucial for the sustained conservation of the Pra River Estuary. SFMP will therefore strengthen the governance mechanism in the District utilizing the existing District Coastal Management Committees, Anlo Beach mangrove committee, existing bye-laws, town and country planning program and GIS capability within the Shama District Assembly. The various roles and responsibilities of the committees and the planning units would be outlined and a strategy developed to coordinate their activities to work towards the integration the community Fisheries Management and Resilience Plans into the eco-tourism plan.

#### ***4.4.4 Profiling of the PRA. Socio-ecological profile***

Profiling of the Pra lower estuary area will be done in Year 2. This socio-ecological profile will cover the ecosystem characteristics of the area, the use patterns including the resource users and provide more detailed information about the physical and ecological vulnerabilities of the area.

This information will be a useful tool for improved decision making for the conservation of the ecosystem. FoN will lead this effort with HM providing guidance on developing of instrument for the profiling. The Shama District Assembly planning unit and key community actors will be deeply involved in the process.

#### ***4.4.5 Mapping and spatial analysis***

Spatial Solutions will provide technical support for the development of maps and spatial analysis to support the conservation management of the Pra area. Specifically, Spatial Solutions will provide two vulnerability assessments Maps for Anlo and Shama Old Town respectively, in the same style as the ones in preparation for Sawoma and Axim. Chris Damon of the URI Environmental Data Center and HM will provide GIS support in terms of products and training for FoN and Shama Assembly planning unit staff.

The Shama District SDF will be updated by Spatial Solution with new information from the Pra Estuary including mangrove wetlands identification, Climate vulnerability assessment for Anlo and Shama Old Town, Spatial Analysis for coastal belt and GIS data layers for district TCPD

A key product will be a complete GIS data layers for Shama District that is organized in such a way that it is workable using a free (but robust) ArcGIS Explorer. Friends of the Nation technical staff will be provided training on how to become productive in using this software to generate basic graphics and maps needed throughout the planning process.

#### ***4.4.6 Early Actions: Piloting mangrove forestry management. and woodlots plantation in the lower Pra mangrove system***

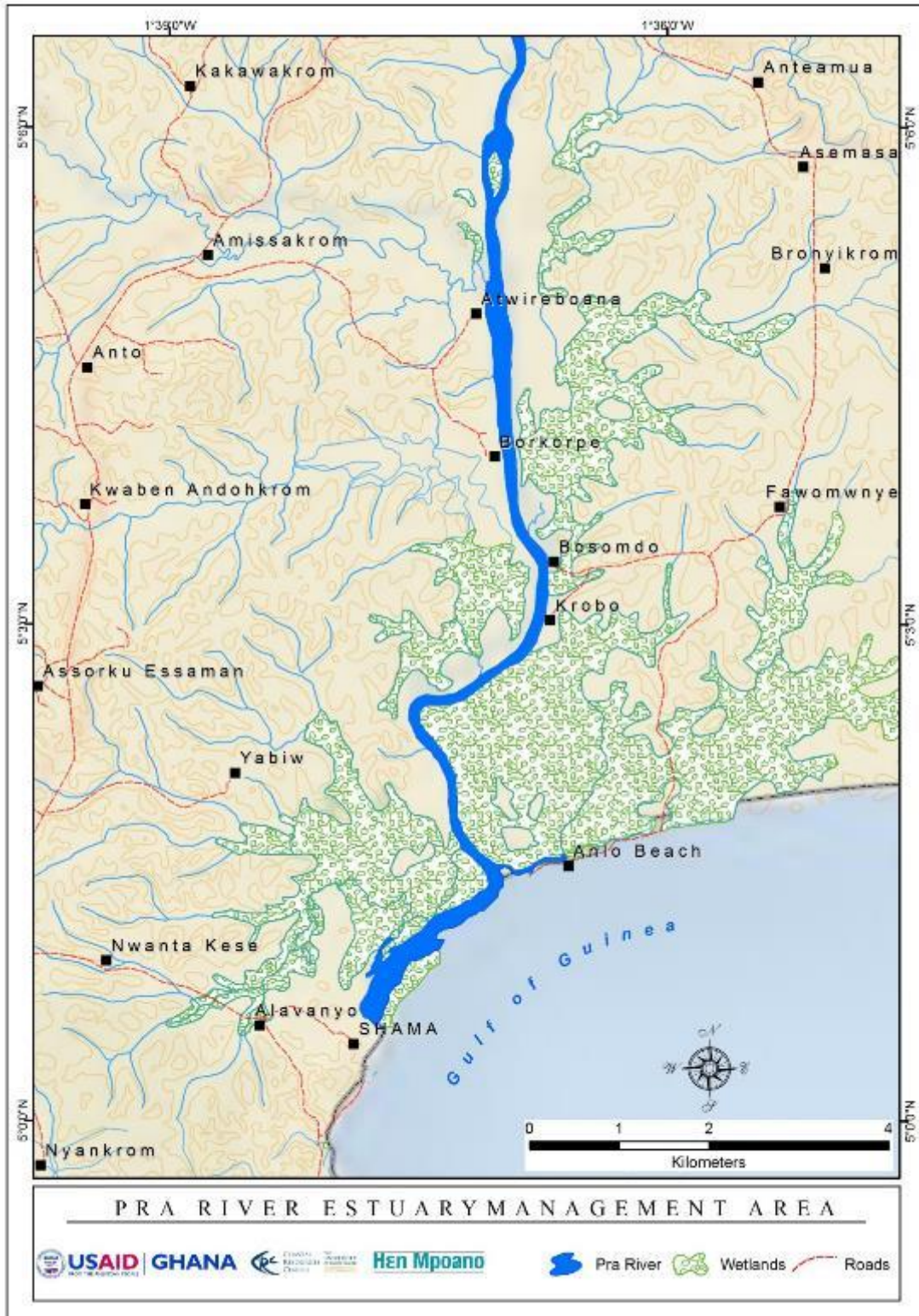
Friends of the Nation in collaborated with the Coastal Sustainable Landscapes Project (CSLP) has initiated a process for piloting of Mangrove forest management and woodlot plantation in the lower Pra mangrove system since early 2015. Land for the woodlot plantation has been provided by landowners, site for nursery of seedlings have been identified and CSLP has in possession thousands of seedlings for the woodlot plantation.

In Year 2 both FoN and CLSP will engage the various process and the relevant stakeholders to advance the woodlot plantation. This will include; customary arrangement and documentations with the landowners to fully secure the land, followed by the formation of the woodlot plantation local committee to develop the benefit sharing arrangement and the woodlot management plan.

***Work with women group in Anlo Beach on implementation of improved and energy efficient fish smoking stoves***

Friends of the Nation under a PPI project worked with the women groups in Anlo beach and also provided a pilot energy efficient fish smoking oven in Anlo Beach. Plans are underway for the construction of other energy efficient stoves via activities of CEWEFIA. SNV will bring in its extensive experience in Ghana on sustainable mangrove utilization including undertaking wood supply chain studies for the WR and CR to insure that fish smokers continue to have a supply of preferred wood species while protecting mangroves as fish nurseries. This will combine with future use of wood from the woodlot plantation through the collaboration of FoN and CSLP. Also CSLP will provide technical support for sustainable forest harvesting practices and will monitor and evaluate the effectiveness of the overall effort. SNV, along with UCC student researchers, will document energy budgets and comparative economics of processing techniques. See 2.5 and 4.8.

Figure 5: Map of the Pra Estuary



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

**Activity Lead:** SNV

**Activity Team:** DQF, CEWEFIA, DAA, SNV

As SNV will be working in all targeted areas for the value chain and post-harvest improvements, an SNV staff member who will meet with URI CoP on a frequent basis to provide updates into the overall portfolio of activities undertaken by local partners and highlight any coordination issues that may arise

##### ***4.5.1 Post Harvesting Processing Knowledge Development, Dissemination and Consensus Building: An Extension Strategy for Widespread scale up of improved smoker technologies coast-wide***

**Activity Lead:** SNV

**Activity Team:** FC, SSG, DAA, CEWEFIA and DQF, SSG Advisors, UCC

In Year 1, SNV worked in collaboration with local implementing clients (CEWEFIA, DAA, DQF) to take stock of existing knowledge on post-harvest processing in Ghana and obtained missing data, information and knowledge. This activity was closely coordinated with WARPF/FC post-harvest unit.

SNV also conducted a detailed literature review on existing post-harvesting processing in Ghana and internationally with a special focus on different and improved fish smoking stoves, but also including fish storage, fish handling, traceability from nets to table and Healthy Fish processing. The knowledge gathered by SNV, local implementing clients and others was shared in a Post Harvesting Processing Knowledge Sharing Workshop.

In Year 1 a *Sardinella* value chain analysis was conducted, with main findings including post-harvest losses at landing sites and during processing. Smoking of fish is the main post harvesting method used in Ghana. Due to high demand and limited supply smoking is no longer done in the first place to extend shelf life but to provide the required flavor characterized by the color of the fish. The main fish smoking stove used today is the Chorkor smoker introduced in the 1970s by FAO. There are new alternatives that are more efficient and cleaner but a recent study found that polycyclic aromatic hydrocarbons (PAHs) remain an issue in all lower cost stoves. The new stoves have been promoted by a number of organizations, including SNV, DQF, DAA and CEWEFIA. Most have been installed with the support of SNV under the Improved Fish Smoking (IFS) project funded by the Government of the Netherlands. Under the IFS project 200 improved fish smoking stoves have been installed by the end of September 2015. SNV together with the Fisheries Commission also introduced the FAO FTT stove to Ghana.

Energy audits and financial viability assessments conducted in Year 1 confirmed the cost saving potential of improved fish smoking stoves. In year one, 50 improved fish smoking stoves have been constructed in Apam and Winneba. With a coastal market of approximately 30,000 fish smoking stoves, predominantly of the Chorkor type, SFMP aims to stimulate the adoption of improved smoking stoves in a nominal 20% of the market, or some 6,000 improved fish smoking stoves, over the life of the project. As part of this phased growth, in Year 2 early adopters / key influencers at the village level will be targeted for the installation of 600 improved fish smoking stoves by private sector stove builders.

In order to firmly establish a private sector led supply chain, it is vital to facilitate sustainable growth in a market where there is sufficient business for the private sector companies, healthy competition and a match between supply and demand. Under SNV's IFS Project, a strategy for commercial adoption of improved fish smoking stoves was pursued. This strategy has so far proven successful in fish processing communities in the Eastern coastal areas of Ghana and will be adapted and implemented in the Western and Central regions. A mixed-models approach will be adopted to allow for the smaller-scale roll-out of artisan constructed stoves in partner areas, while allowing for the majority of the target 600 stoves to be built using the more commercial approach.

Activities in Year 2 are focused on further research, training of partners and the early scaling of improved fish smoking stove numbers. More generally the consensus building element of the post-harvest work under SFMP will be concluded by end of Year 2.

#### **4.5.1.1 Strategy, business model and tools development with training for SFMP partners**

SNV will work with partners to develop a strategy for the scaling of stoves in coastal areas that both fits the requirements for achieving scale as well as the local developmental initiatives of partners. Business model options will be developed and partners trained to help their understanding and to ensure an effective implementation.

SNV will also undertake a market segmentation study, utilizing baseline data gathered in Year 1 to gain a more detailed understanding of the socio-economic conditions in which stove users operate and to use this to help guide project activities. Validation workshops will be held for the business model, strategy and market segmentation study.

Working with partners, including the Fisheries Commission post-harvest unit, SNV will develop and then offer training on a common set of tools for those working on livelihood development value chain and post-harvest improvements including: an investment assessment tool that allows for the measurement and tracking of a stove user's finances/ business before and after the introduction of a stove or training; data gathering, other M&E tools; and training packages for women's groups.

In addition a common shared platform will be developed where partners can cooperate on planning, communications, training and M&E.

#### **4.5.1.2 Focused research and technology development**

Based on available knowledge gathered under both the IFS Project and SFMP, such as PAH levels and stove efficiency results, further development work will be undertaken on existing designs and the open source stove as a next step in the roll-out of improved stoves. This will be done in both Q1 and Q3 of Year 2 with the support of international stove experts.

In addition, a demonstration stove evaluation will be conducted on the 50 existing stoves, a Year 1 activity that was postponed to Q1 Year 2 for reasons of data quality, as this allows the women smokers more time to adapt to the new technology before the assessment.

Newly developed open source stoves and other new/improved stoves will be field tested with fish processors. Demonstration units will be built for selected women processors in the Western and Central regions. Feedback on ergonomics and energy efficiency as well as PAHs will be analyzed and fed back into the stove development process. This will be done in close cooperation

with UCC, Ghana Standards Authority, CSIR and the FC. After agreement has been reached on the open source technology, a wider awareness creation activity will be undertaken in project locations using those who have benefitted from the demonstration stoves as Community Champions and Demand Aggregators. An exchange program will be conducted for stakeholders (fish processors, MFIs, state institutions, partners) in the Western and Central region to visit the Eastern coastal areas to have a first-hand view of the successes of SNV's IFS model, to help gain a better understanding of the multiple issues at hand.

#### **4.5.1.3 Support to improved fish smoking stove builders**

Strategies at developing the stove supply side will take the following approach. One of the lessons learnt from the Improved Fish Smoking (IFS) project is that to reach scale, training of artisans is insufficient. A private sector lead approach is required that sees the construction of improved fish smoking stoves as a viable business.

The number of Improved Fish Smoking Stove (IFSS) builders will be gradually increased to ensure a sustainable and healthy market with sufficient competition to keep costs affordable. For this reason SFMP intends to add only 3 IFSS builders towards the third quarter of Year 2, and at the same time re-train the existing IFSS builders. All IFSS builders must be formally certified before they can build IFSS under SFMP. Partners will provide business development training for private sector stove builders.

Under the SNV commercial model, demand creation is the task of the private sector IFSS builders. However, to support the IFSS builders in the scale-up phase, SFMP will help the private sector IFSS builders by training 10 demand aggregators to be employed by the private sector IFSS builders.

#### **4.5.1.4 Financial resources for stove installation**

SNV will work financial institutions in project areas to establish commercial partnerships for lending to women for stove purchases. This will be based on knowledge gathered on the proper structuring of such arrangements under SNV IFS Project. The results achieved in Year 2 will be expanded in the subsequent years.

SNV will also develop a business models for the commercial roll out of stoves. SFMP partners will be trained on these models. Where private partnerships are required, SSG will be brought in to broker the necessary relationships. The community awareness creation campaign will be supported by well-developed materials outlining the economic benefits and margins of switch. The strategy will also include establishing PPPs with Banks, MFIs and VSLAs for financing improved smokers. Working with partners and MFIs, a market segmentation document will be developed by SNV taking into account stove user's needs and financial situation. This will help SNV and the MFIs to develop a gradual subsidy program for stove adoption. In this instance, CLaT victims identified during Year 1 activities will be given some focus in the implementation of the subsidy program for stove adoption. This is a way of providing some diversified livelihoods opportunities for these households.

To encourage fish smokers to adopt the new technology, SFMP will offer an incentive that will decline and phase out over the project period. The incentive in Year 2 will be 30% of the cost of the stove for 300 stoves, declining to 20% for the next 300 stoves. The project partners will support the construction of IFSS by private sector builders by awareness creation and promotion

among their constituencies using materials developed by SNV in consultation with project partners, aiming to reach 600 fish smokers by end of Year 2 and 6,000 by end of project.

#### **4.5.1.5 Hygienic fish handling and production**

Improved hygiene, processing methods, product quality, packaging, labeling and marketing significantly increase the value of smoke/dried fish products and shelf life, allowing better penetration to domestic markets, where demand is strong, as well as to neighboring countries. In Year 2 a number of healthy fish activities will be implemented. SNV will work with UCC to carry out research into the production of smoked fish with low PAH levels. Also with UCC, SNV will conduct microbiological profiles on smoked fish to assess contamination levels.

Based on existing information (from FAO and others) SNV in consultation with project partners and national stakeholders (Fisheries Commission, Ghana Standards Authority and Food and Drugs Authority) will develop smoked fish production protocols to reduce contamination of smoked fish. SNV will provide training for business partners on the implementation of these protocols so that they in turn can train fish smokers. SFMP will work with regulatory bodies to assess the need to develop required regulations to make adopting of the protocols compulsory.

As the development and implementation of the required regulations will take time, adopting the protocols will initially need to take place on a voluntary basis, with the fish smokers more likely to do this if value is added to their product as a healthy fish. According to DAA, DQF and CEWEFIA, end users are willing to pay that premium. SNV and SSG Advisors will assess the feasibility of producing healthy fish using the SFMP protocols and provide recommendation how this could be implemented.

SNV will strengthen capacity of fish processing associations through Training of Trainers on different aspects of fish processing including Leadership Training. This will be done in collaboration with FC, NAFPTA. The ToT will be conducted for partners who will intend carry out these trainings for fisheries groups they work with. One recently identified fish processing association, the Central Regional Fishermen and Fish Mongers Association (CENFA), will have their capacity developed via a training workshop for members and leaders. SNV will conduct a post-harvest fish processing workshop for partners and other outreach organizations at UCC with a focus on options other than fish smoking (November 2015).

In addition, some activities involved with the Fisheries Training Centre from Year 1 have been moved to Year 2, including the equipping of the building, staff recruitment and training.

#### ***4.5.2 DQF-led Fisheries Value Chain Improvements and Livelihoods in Ankobra Estuary, and Shama Old Town landing site***

**Activity Lead:** DQF

**Activity Team:** CRC Accra, URI CRC, FC, SNV,

Livelihood activities will add value to the products/services of small to medium-sized businesses; and will provide training in micro-credit, entrepreneurship and marketing. DQF will lead this activity, including fish landing sites and communities in Nzema East, Ellembelle and Shama.

The focus is on Ankobra estuarine communities of Axim, Sawoma, Apoaso, Eshiam, Eziome, Adefekezo, and Kokofri as well as Shama Old Town. This strategic network of sites will maximize potential for rapid auto-diffusion to larger scale successful livelihood ventures as well as cost efficiencies by initially concentrating activities in a few sites. Assessments of the communities carried out in Year 1 as part of Activities 4.4 and 4.5, a community-based fisheries plan for the Ankobra estuary and mangrove ecosystem will provide opportunities for entry into communities and evaluate the potential for livelihood activities, including fish smoking and other value chain improvements, solar energy and products from materials recycling.

#### **4.5.2.1 Business model training**

Two or more smoking technologies identified from the local forum will be set up as demonstration in selected communities. This will precede training on use and maintenance.

DQF will also:

- provide technical support services for 100 existing HFH/MSMEs in relation to identified technical needs - fire and safety, packaging/branding and review on business development training
- Mobilize and train 100 new fishery based MSMEs on Business development and Management
- Identify 10 model processors each in Shama, Ankobra and Axim. Influential operators serve as model stove users.
- Establish 10 model processors as Demonstration businesses, rehabilitated and used for processor to processor demonstration and training centers in Sawoma, Axim and Shama Old.
- Establish 2 Demonstration sites each in other five core targeted SFMP communities, Kukwaveli, Ezoame, Adelekazo, Eshiem, Ekpoazo.
- Organize 3 community meetings each in 9 landing sites to orient and sensitize for adaptation of improved smoking stove.

#### **4.5.2.2 Improved fish smoking stove production**

DQF will

- Train 60 Artisans on Improved Smoking Stoves
- Exchange Programs- Organize 5 community members from each of the 8 communities for exchange programs

#### **4.5.2.3 Financial resources for stove installation**

DQF will:

- Construct 100 Improved Smoking Stoves
- Financing for Stove projects managed by DQF. Financing determined centrally.
- Awareness Creation on Micro Finance Processes and VSLA concept in core SFMP communities
- Provision of Micro finance services to 150 established MSMEs/Entrepreneurs.
- Establish solar light/solar phone charging business in 8 communities to provide Alternative livelihood.



#### **4.5.2.4 Hygienic fish handling**

There are many ideas for HFH that need District Assembly engagement, investments in fish landing site sanitation. Fundraising is needed by the District; landing site improvement projects by FC/World Bank. The SFMP does not have direct funding, but awareness building, documenting, leveraging resources from others is entirely appropriate.

DQF will:

- Provide 100 existing HFH/MSMEs in relation to identified technical needs - fire and safety, packaging/branding and Create Awareness.
- Mobilize and train 100 new HFH fishery based MSMEs on Hygienic fish handling.
- Conduct Stakeholders meeting to share Sanitation assessment report in Ellembelle – Sawoma (see 4.3).
- Conduct Stakeholders meeting to share Sanitation assessment report in Axim (see 4.3).
- Conduct Stakeholders meeting to share Sanitation assessment report in Shama Old Town (see 4.3).
- Awareness creation on Hygienic fish handling in All the SFMP core communities

#### **4.5.2.5 Engagement in national dialogue and communications**

DQF will

- Participate in national workshops.
- Preparation and distribution of communication materials on current sanitation issues at landing sites.
- Participate in national events, festivals and programs of partners.
- Organize radio programs on hygienic fish handling and improved smoking stoves.

#### **4.5.2.6 Activity 7.0 Capacity Development**

In cooperation with CRC, DQF will:

- Capacity building for 7 member BoD of DQF
- Capacity building for 11 member staff based on the recommendations of the organization capacity assessment report for DQF.

### ***4.5.3 CEWEFIA-led Fisheries Value Chain Improvements and Livelihoods in Pra River Estuary (Anlo) and Elmina and Moree, Central Region***

**Activity Lead:** CEWEFIA

**Activity Team** SNV, CRC Accra, URI CRC, FC

CEWEFIA will focus on livelihood improvements in Elmina, Moree and Anlo Beach. This strategic network of sites will maximize potential for rapid auto-diffusion to larger scale successful livelihood ventures as well as cost efficiencies by initially concentrating activities in a few large sites. SNV will assist in developing business plans and models and attracting private sector financing for scale-up and allowing diffusion to be catalyzed by market driven private financing rather than reliance solely on project subsidies and grants.

Two or more smoking technologies identified from the local forum will be set up as demonstration in selected communities. This will precede training on use and maintenance.

#### **4.5.3.1 Business model training**

CEWEFIA will identify model processors in each of the targeted communities. These influential operators can serve as model stove users. Demonstration businesses will be rehabilitated and used for processor to processor demos and training. Demonstration sites will be identified in core targeted SFMP communities. Awareness creation will be carried out with fish mongers in Anlo, Elmina and Moree. Monitoring and evaluation of small businesses will be ongoing.

#### **4.5.3.2 Improved fish smoking stove production**

The goal is to create the capacity for 30 stove builders, a total of 10 per community.

#### **4.5.3.3 Financial resources for stove installation**

The aim is to see the construction of 100 improved stoves, as well as train 180 new smoker users. SNV will manage the financing element of stove construction. Business, microfinance and technology. CEWEFIA will lead in planting woodlots of 10 hectares in each of the 3 communities as part of value chain improvement.

#### **4.5.3.4 Hygienic fish handling**

HFH training will take 2 days and include 3 events that will reach 100 individuals.

CEWEFIA will proceed through all the steps required leading to construction of a processing shed, 10 ovens, and a storage facility.

#### **4.5.3.5 Engagement in national dialogue and communications**

Effort within this activity will increase, depending on the conclusions of the child labor and trafficking study carried out in Activity 1.7, which will focus on the issue in the CR. SFMP ANTI CLAT project activities are described in 1.7.

CEWEFIA and its stakeholders will participate in National Dialogues, and help in Preparation and distribution of Communications materials related to fisheries policy and hygienic fish campaigns. CEWEFIA will also engage in selected National Events, Festivals, and Programs of Partners, and work with partners such as FoN to organize local radio programs

#### **4.5.3.6 Activity 7.0 Capacity Development**

Capacity building for board of CEWEFIA and capacity building for staff on skills and systems as determined by the organizational capacity assessment carried out in Year 1.

### ***4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV***

**Activity Lead:** DAA

**Activity Team:** SNV, CRC Accra, URI CRC, FC

#### **4.5.4.1 Business model training**

SNV will assist in rolling out this component in the CR on large landing sites at Apam and Winneba as a best practice guide for the other implementing clients. For sustainability and local capacity development, SNV will closely involve DAA to work at the Apam and Winneba landing sites, providing on the job training. In addition, SNV will support DAA with organizational development and business planning.

DAA will participate in knowledge exchanges for women involved in post-harvest processes using fora organized with partners DQF and CEWEFIA. Training will include a Special Campaign and Promotion of Improved Stoves, as well as Construction of Stoves- Site Selection/ Monitoring

Quarterly Review Meetings will be held with Fisher folks in Apam and Winneba (One of such Quarterly review an internal exchange visit)

Training on Business skills and Advocacy will include a focus on the orientation / training for liaison officers and champions of new stoves.

Strengthening of women groups at Apam and Winneba will include

- Basic advocacy training for women groups leaders and members
- Training women in improved methods of fish handling and smoking, storage, packaging, etc.
- Increase groups member by attracting new women fish processors

#### **4.5.4.2 Improved fish smoking stove production**

DAA with the support of SNV will identify influential model processors in each of the targeted communities to act as Community Champions. A special Campaign and Promotion of Improved Stoves. Stove demand aggregation and awareness creation. DAA will assist with stove M&E activities including with evaluation 50 stoves built in Year 1.

#### **4.5.4.3 Financial resources for stove installation**

The aim is to build women groups to access finance/credit in the adaptation of new /improved technologies.

Coordinate with SNV led Construction of stoves for early adopters of improved fish smoking stoves. Financing of stoves will be managed by SNV.

DAA will identify 10 CLaT vulnerable households to receive a fully subsidized stove and identify sites for 6 demonstration stoves. Apam and Winneba Early stove adaptation surveys (SNV and DAA)

DAA will help conduct a field survey on previous adopted stoves in Year 1 and first half of year 2. Such feedback from these fish mongers will inform any change in work plan.

Stakeholder engagements (Apam and Winneba): DAA will engage stake holders identified in Year 1 and build close partnerships with relevant stakeholders such as the Business Advisory Services (BAS), and other local financial institutions in providing business and financial assistance to women in fish processing.

#### **4.5.4.4 Hygienic fish handling**

DAA will provide local support to the national Sanitation Campaigns- Education on/ Erection of Fish drying platforms.

DAA will take the lead in training women fish processors in various HFH processes including good sanitation practices.

#### **4.5.4.5 Engagement in national dialogue and communications**

DAA will play a continuing role insuring that women stakeholders increase their engagement in the Year 2 national dialogues and communication campaigns.

Hold a durbar on world rural women's day for advocacy on access to land by women.

Participate in world fisheries day.

Annual meeting with the Minister of Fisheries for advocacy on issues affecting women at the grassroots.

Participate in National Farmer's/ Fishermen's day celebration.

Issues Dialogue at the Regional and Districts for advocacy on Fisheries law enforcement.

DAA will explain and educate women groups in relevant portion of the fisheries policies/laws in the local language especially those relating to illegal fishing methods and reporting ("short code198").

#### **4.5.4.6 DAA Fisheries Training Center**

In Year 1, a needs assessment was conducted for a fisheries training center. This included the needs from those using the services of the training centers and those that want target groups to be trained. As a follow-up a Fisheries Training Center Business Plan has been prepared and presented at a consensus building workshop with different stakeholders. The Business Plan was accepted and based on the approved business plan, SNV and DAA developed of the fisheries training packages and training materials.

The fisheries training center will be constructed at the DAA compound. Until the fisheries DAA will engage qualified artisans and take the lead in constructing improved drying sheds for women in post-harvest process (salted fish) especially in Apam. This intervention will mainly be implemented in communities with groups with large women processes in salted fish processing. DAA will lead various activities that will inculcate good maintenance culture among the individual women who benefit from this intervention.

For Year 2, SNV will focus on the construction of the DAA Fisheries Training Center. It is the intention to construct a "green" building. SNV will conduct the necessary environmental review and obtain the needed review and approval of USAID/Ghana and local permitting.

Temporary Center Training (Staffing/recruitment, equipment, training courses).

During the duration of the building of the training center, SNV will rent a temporal building to house the center. SNV will recruit qualified staffs as well as stock the building with required furniture. Various training modules will also be developed.

#### **4.5.4.7 Activity 7 Organizational Capacity Development**

DAA will work with SNV to implement priority recommendations based on the assessment completed in Year 1.

DAA will coordinate with SNV on coaching, mentoring and technical assistance based on needs identified in the assessment. DAA will organize a quarterly review meeting among women groups in Apam and Winneba to share experiences and draw from the lessons learned from the past months. This meeting will serve as the platform to solicit suggestions from group leadership for smooth SFMP implementation in Apam and Winneba communities.

Figure 6: Map of Districts and priority sites for value chain improvements



**Key Year 2 Outcomes and Results for IR 4**

Indicator	Targets Year 2
<b>IR4: APPLIED MANAGEMENT: Improved management of marine resources to conserve bio- diversity &amp; provide other benefits</b>	
<b>InD 1:</b> Number of hectares of biological significance and/or natural resources under improved natural resource management as a result of USG assistance (4.8.1-26)	HM 20 hectares
<b>InD 7:</b> Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	2 RCCs WR & CR 2 Districts - Nzema East and Ellembelle Total: 4
<b>InD 9:</b> Improvement in fisheries enforcement and prosecutorial chain to counter IUU fishing (increase/decrease in prosecutions and percent that lead to conviction) (project indicator)	Baselines established in Year 1 CR and WR
<b>InD 10:</b> Number of climate vulnerability assessments conducted as a result of USG Assistance (4.5.1-21)	2 (Axim & Ankobra) carryover from year 1 1 Pra
<b>InD 11:</b> Number farmers and others who have applied new technologies or management practices as a result of USG	

Indicator	Targets Year 2
assistance (FtF 4.5.2-5)	
<p><b>InD 12:</b>Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2-37)</p>	<p><b>HM</b> 100 VSLA in 4 river state communities</p> <p><b>SNV</b> 30 people trained on business model options (IR 4.5.1) 8 IFSS Builders trained (3 new IFSS builders train and re-train 5 existing IFSS builders)(IR 4.5.1) 10 demand aggregators trained)(IR4.5.1) 10 trained on demo stove (IR 4.5.1.3) 20 participated on TOT training on fish processing business management and leadership (IR 4.5.1) 2 officers of DAA trained to managed the training center (IR 4.5.4.6)</p> <p><b>DQF</b> 200 MSME received technical training on fire and safety, packaging /branding and review on business development training (IR 4.5.2) 200 new fishery based MSME trained on Business development and management (IR 4.5.2) 50 people trained on improved smoking stove (IR 4.5.2.1) 60 Artisans trained on improved smoking stoves (IR.4.5.2.2) 40 processors participate in exchange program (IR 4.5.2.2) 300 fish smokers trained on healthy protocol (IR 4.5.1.4) 200 community members educated on Micro finance processes and VLSA (IR 4.5.2.3) 200 HFH/MSMEs provided with refresher training on technical needs (IR 4.5.2.4) 200 established MSMEs receive technical/refresher /review training (IR 4.5.2.4) 200 MSME trained on HFH (IR 4.5.2.4)</p> <p><b>CEWEFIA (IR 4.5.3.3)</b> 180 New smokers users trained in business, microfinance and technology 300 fish smokers trained on healthy protocol (IR 4.5.1.4)</p> <p><b>DAA</b> 100 women trained in business skills and advocacy (IR 4.5.4.1) 5 community liaisons trained in grass root communication and advocacy (IR 4.5.4.1) 20 women benefit from exchange visit (IR 4.5.4.2) 250 women benefit from basic advocacy training (IR 4.5.4.2) 14 Artisans trained (7 in Apam &amp; 7 in Winneba) (IR 4.5.4.2) 100 women in post-harvest fish processes trained in</p>

Indicator	Targets Year 2
	improved fish processing (IR 4.5.4.4) 160 people trained at the training center (IR 4.8.4.6) 300 fish smokers trained on healthy protocol (IR 4.5.1.4)
<b>InD 13:</b> Value of new private sector investments in these select value chains (Ghana CDCS IR 2.2; and USAID FTF 4.5.2-38)	TBD
<b>InD 17:</b> 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)	<b>SNV</b> 20 people trained on ecosystem based sustainable mangrove forest management 50 people trained on mangrove fuel wood value chain and value chain optimization 50 people trained on establishing mangrove plantations using the SNV mangrove plantation establishment manual <b>HM</b> 14 people participating in characterization and vulnerability assessment in Ankobra (4.3) <b>FON</b> 40 people to participate in a workshop to learn lessons from Ankobra and Socio-ecological profiling (IR4.4.) 6 people data collectors attending capacity strengthen workshop (IR 4.4.2) 40 processors in exchange visit (IR 4.5.2.2) <b>Total: 3495</b>

## 5. Gender

**Activity Lead:** SNV

**Activity Team:** HM, Elin Torell

While Ghana has implemented gender legislation, policy reforms and other enabling conditions for men and women to realize their full rights, gender inequities remain. Gender roles are delineated clearly, in general, with men often holding the greatest influence and authority over decision-making at all levels. That said, in fisheries, women play an influential, but less visible, role in the value-chain as processors and traders who connect products to markets. Owing to this less-visible role, women often have low representation on co-management committees.

Yet, SFMP sees opportunities to break out of “business-as-usual.” Because many women in Ghana own the fishing vessels and finance the fishing trips, they could wield considerable power over fishing decisions and influence changes in behavior that could have a positive impact on the fishery. What they are lacking is a nationally organized association like the GNCFC. Until they organize themselves into such a group, SFMP will work through DAA and CEWEFIA, who are engaged intensively with women in fisheries. Because women fish processors are also large consumers of fuel wood, of which mangrove is preferred, women could play a critical role in promoting sustainability of this supply. SFMP will also ask men and women in the target project areas for their ideas on how to strengthen men’s and women’s roles in co-management to the benefit of fishing communities and households.

In Year 1, the SFMP developed a gender analysis of the fisheries sector, which provided a detailed assessment of gender roles and needs in the fisheries sector and value chain. The analysis revealed that men have more control over fisheries resources than women. The control women have is directly related to the assets they own. Marginalized groups are women and men who do not own fishery resources such as boats, engines, nets or even processing equipment. The gender analysis identified a number of recommendations for how to increase the productivity and empowerment of women who are engaged in the fisheries sector. Following up on the gender analysis SNV conducted a gender needs assessment of SFMP pilot communities (Winneba, Apam, Elmina and Axim) and prepared a gender mainstreaming strategy for the project.

The gender needs assessment (GNA) was conducted to identify the needs of women and men fish processors and fishermen engaged in fisheries in the Project’s pilot communities. It was designed to inform the development of gender sensitive actions and activities and the implications of these on men and women engaged in the fisheries sector. Identified needs include improved fish smoking technologies which emit less smoke and heat, reduce drudgery, and require less fuelwood. Other needs include provision of training on fish handling, development of cold storage facilities and ice plants to reduce post-harvest fish loss, the need to gain access to other markets such as malls and export, the need to strengthen associations; and provision of access to finance.

The gender analysis and GNA provided a basis for the development of an SFMP mainstreaming strategy. The strategy will be implemented through an iterative process, which begins with planning of interventions, followed by implementation. Monitoring and Evaluation of the interventions will generate best practices and lessons learned to improve the next planning phase.



Gender mainstreaming will be tailored to the project's beneficiary communities, implementing partners, and other CSOs working in fisheries.

During the Year 2 work planning sessions it became clear that the Fisheries Commission desired to apply a similar approach for developing its own national level gender strategy.

### **5.1 Gender strategy for the Fisheries Commission**

The gender analysis and GNA provided a basis for the development of an SFMP mainstreaming strategy. As part of the findings of the gender analysis, while the Government of Ghana has a gender policy and strategy, there is no equivalent policy or strategy concerning gender at the Fisheries Commission level. SNV will work with the FC to prepare a gender strategy for the Fisheries Commission, led by the Monitoring and Evaluation Unit (Doris, Matilda). The strategy development will be implemented through deliberative, participatory process. The will be considerate of the strategy being adopted as policy by the Ministry.

### **5.2 Gender strategy implementation within SFMP and Fisheries Commission**

The SFMP will implement its gender strategy while SNV assists the FC on development of its own gender strategy since FC. As part of that process, SFMP will involve the FC in the implementation of the Project's strategy as outlined below.

#### **5.2.1. Social organization and engagement**

SNV will lead the formation of a gender network of SFMP, Fisheries Commission and other stakeholder partners, which will hold semi-annual meetings (annually in August and October). The group will be involved in gender mainstreaming learning activities as outlined and meet to discuss progress and challenges.

SNV will work with FC and NAFPTA to encourage the participation of women in SFMP's policy advocacy fora. Prior to these fora, the women participants would be given training on policy advocacy and enlightened on issues to be discussed during the fora as part of efforts to encourage them to partake in decision making.

#### **5.2.2 Gender strategy outreach (See 3.1.4)**

CRC will develop gender mainstreaming behavior change communication messages for awareness creation. Details are shown in 3.1.4.

#### **5.2.3 Capacity building**

The SFMP team began developing a gender mainstreaming manual in Year 1. The manual, which focus on gender mainstreaming in fisheries co-management, will be completed by the end of 2015. SNV will organize a gender training in Accra for partners on the mainstreaming manual (February 2016). They will also train selected organizations/partners to train communities on gender issues/concerns.

The leadership of women groups will be trained in policy advocacy in the fisheries policy development process. This is to equip women to actively partake in and contribute to policy reform.

DAA and CEWEFIA would undergo a trainer of trainees program on the "honam" dialogue. This dialogue is a channel for women to have informal peer discussions on issues affecting them

(including CLaT) and to solicit support from each other. Informal discussion on leadership would also take place to encourage them to take up leadership roles.

#### **5.2.4 Gender strategy monitoring**

To ensure that the project assesses the impacts of its gender work and learns from experience, the project will develop a gender mainstreaming learning agenda. As part of the learning agenda, the team will review the SFMP monitoring and evaluation plan to map out how to process and use the gender disaggregated data that will come out of the project’s routine monitoring. If the gender team finds that there are gaps in the routine monitoring, it will develop complementary gender monitoring activities. One such activity will be conducting a baseline study on women in leadership roles within SFMP fisheries stakeholder groups. The gender mainstreaming lessons learned will be communicated through policy briefs, newsletter articles, and the project’s general quarterly reports.

#### **Key Year 2 Outcomes and Results for IR 5**

<b>Indicator</b>	<b>Targets Year 2</b>
<b>IR Activity 5 Gender Mainstreaming</b>	
<b>InD 17:</b> 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)	<b>SNV</b> 20 people trained on the gender mainstreaming manual and training modules for SFMP Partners and selected organizations  10 people trained on Trainer of Trainees program for DAA and CEWEFIA on “honam” dialogue

## 6. Public-Private Partnerships

SSG is providing tailored guidance and technical assistance to Ghana SFMP for the development of innovative partnerships with the private sector. The private sector has a critical role to play in SFMP efforts. Strategic Partnerships bring together SFMP project resources with leading multinational and Ghanaian companies, business associations, foundations and government agencies in a collaborative effort, to advance SFMP project goals. Resources from both SFMP and partners may come in the form of funding, expertise, technology, and brand leverage. Concept notes will outline overall partnership goals, resource contributions, responsibilities and partnership governance, while Memoranda of Understanding (MOUs) will formalize agreements between SFMP and partners. Throughout SSG’s engagement on the project, the SFMP Partnership Specialist will gather data on resource contributions and partnership activities quarterly.

### *SSG Year 1 Partnerships Overview*

In Year 1, 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, to assess and identify possible partnership opportunities for Ghana SFMP. In July, to finalize SSG’s fieldwork, the Ghana-based team was joined by SSG’s Partnership Specialist on the USAID ECOFISH project in the Philippines, the head of SSG’s Finance for Development practice, and the SSG Partnership Analyst for Ghana SFMP. Together, the team conducted remaining interviews and follow-up interviews for the Ghana SFMP Rapid Partnership Appraisal (RPA) and developed 10 initial partnership ideas for the project.

In July 2015, SSG presented these ideas at a 2-day 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.

Priority partnerships for SFMP included:

- A partnership with Millennium Insurance to extend affordable life and vessel insurance to fishermen and fish processors;
- A partnership with Vodafone to develop a suite of mobile-based services for fishermen (including weather alerts, market updates, nutrition tips, and education on best practices);
- A partnership with the National Communication Authority, Esoko (an ICT firm), 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 months of Year 1, SSG will complete the RPA and Prioritization Report detailing its fieldwork and company interviews, as well as the results of the partnership prioritization exercise.

### **6.1 Partnership Development Activities**

**Activity Lead:** SSG

**Activity Team:** SSG, CRC/CoP

**Conduct Preliminary Partner Negotiations:** Starting at the end of Year 1 and continuing into Year 2, SSG will conduct negotiations with potential partners—public and private—regarding

resource contributions, proposed activities, and partnership goals for priority Strategic Partnerships.

***Conduct Due Diligence on Potential Partners:*** Once private sector partners are identified for strategic partnerships, SSG will also conduct due diligence analyses in order to uncover any questionable activities or reputational risks for USAID. SSG will use templates developed as part of its STEP methodology. As needed, SFMP will then present finished due diligence documents (3-5 pages) as a key stage in the Strategic Partnership development process.

***Conduct Stakeholder Consultations:*** As needed, SSG will conduct brief consultations with community leaders or other key stakeholders regarding the goals of a partnership. By providing prior consultation, SFMP will ensure transparency in the partnership process.

***Conduct Partnership Forums:*** To support partnership development, SSG will facilitate up to 3 partnership forums for potential partners and key stakeholders. Drawing on SSG's STEP Advanced Participatory Methods, these forums will be partnership-specific and will focus on bringing SFMP and the private sector partner(s) together to outline goals, activities, and expected contributions for the partnership. As appropriate, these forums will be used to develop a Strategic Partnership Concept Paper, to build a common vision for this key document.

***Prepare Strategic Partnership Concept Papers:*** As needed, SSG will prepare Partnership Concept Papers. These brief documents (3-5 pages) serve to develop and refine partnership goals among SFMP, USAID, government, private sector, and other partners. These Concept Papers will begin to define the resource contributions—funding, technology, equipment, expertise, etc.—that each partner will bring to the SFMP partnership.

***Prepare and Negotiate Draft MOUs:*** When partners reach agreement about the goals, roles, and activities defined in the Strategic Partnership Concept Paper, SSG will prepare a draft MOU, which will serve as the foundational document for the partnership. Using templates prepared by USAID/IDEA and USAID/GC, the Partnership Team will draft at least one MOU, which will define resource contributions, partnership activities, roles, responsibilities, and partnership governance. The MOU will then be reviewed and revised by partners prior to signature.

***Develop Overall SFMP Partnership Strategy Document:*** In Q1, SSG will develop an overall guiding document, defining strategic partnerships and outlining how such partnerships can add value across SFMP project activities. This document will also distinguish between core, project-wide partnerships, which will be prioritized by SSG, and secondary partnerships. Secondary partnerships will be facilitated by SSG but managed and “owned” by a project implementing partner or the University of Cape Coast, with support and guidance from SSG.

***Oversee Partnership Management and M&E:*** Once partnerships have been established, SSG will play an active role in managing and coordinating core partnerships, tracking partner resource contributions, and monitoring partnership outcomes.

***Support Communications and Outreach:*** The SFMP Partnership Specialist will support ongoing project Outreach and Communications efforts by providing information about partnership opportunities for use in newsletters, success stories, Twitter/Facebook feeds, website, press releases, etc.

**Key Year 2 Outcomes and Results for IR 6**

Indicator	Targets Year 2
<b>IR 6 Public Private Partnerships</b>	
<b>Ind 5:</b> Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	20 STTA + 260 LTТА = <b>280 days</b>
<b>Ind. 16:</b> Number of public-private partnerships formed as a result of Feed the Future assistance (S)(FTF 4.5.2(12))	1 partnership
Number of public-private partnerships formed as a result of Feed the Future assistance (S)(FTF 4.5.2(12))	1

## 7. Capacity Development of Targeted Government of Ghana, Civil Society Organization and Key Partner Institutions

### 7.1 GoG Capacity Development

**Activity Lead:** URI

**Activity Team:** SNV, Post Harvest Unit/FC

As part of efforts to strengthen local GoG partner organizational capacity to effectively implement sustainable fisheries initiatives, and to improve the quality and sustainability of services they provide to their constituencies, URI in Year 1 undertook a baseline organizational capacity assessment for nine participating GoG and research university units, as follows:

1. Monitoring, Control and Surveillance unit of the Fisheries Commission (MCS/FC)
2. Fisheries Scientific Survey Division of the Fisheries Commission (FSSD/FC)
3. The Post-Harvest unit of the Fisheries Commission
4. The Marine Fisheries Division of the Fisheries Commission (MFD/FC)
5. The Univ. of Cape Coast/Center for Coastal Management (UCC/CCM)
6. The Univ. of Cape Coast/Department of Fisheries and Aquatic Science (UCC/DFAS)
7. The Western Region Regional Coordinating Council (RCC)
8. The Central Region RCC
9. The Fisheries Enforcement Unit (FEU), an interagency body.

Based on the findings and recommendations of assessments and the work planning process with partners, planned capacity development activities for these units have been maintained or adjusted in the relevant IR sections of this work plan. Significant support is being provided in: organizational development, staff development through training opportunities, and material support (equipment and capital). The tables below provide highlights of the capacity development support for Year 2 in order to provide a more holistic picture of the sum total of support provided. The details for many of these items are described in other work plan sections and others are only noted here. These tables are not meant to be an exhaustive list of every training and other support that will be provided but help give a sense of the overall package.

#### Highlights of material support for GoG Units

Description	Receiving Unit
Vehicle: (Ford pick-up trucks - 4)	FC Regional offices: Western, Central, Greater Accra, Volta for MCS personnel and multipurpose use in the regional offices (IR1.3)
IT upgrades: LAN system and central server	FSSD (see IR2.4)
MCS/FC Post (small building) in Elmina	FC Central Region (see IR1.2.4)
IT upgrades : Computers, central servers and assorted computer equipment	Regional Offices Central and Western Region (see IR1.2.4)
Refurbishing of Computer and GIS training room for district planners – Air conditioners, security upgrades, GIS computer hardware and software	CR Town and Country Planning (see IR 2.6)
Outfit training classroom with furnishings etc.	Marine Police Academy (see IR 1.2)
Scientific equipment for a fish age and growth studies lab and computer	DFAS/UCC (se IR 2.3)

### Highlights of the Organizational and Staff Development Activities for GoG Units

Description	Receiving Unit
Gender strategy	Fisheries Commission (see IR 5)
CLaT strategy	Fisheries Commission (see IR 1.7)
Post-Harvest Unit strategy/strategic plan	Fisheries Commission Post Harvest Unit (see 4.5)
Graduate degree training (at URI) (Masters for 2 persons, topics TBD)	Fisheries Commission
Graduate degree training (at URI) (PhD 1 person, fish stock assessment, Masters for 2 persons, topics TBD)	UCC (see IR2.3)
Leadership course	Fisheries Commission (Second tier staff and zonal officers) (see IR 2.3)
Short term training on data collection, stock assessment, fishing capacity assessment, data enumerators, stock assessment.	Fisheries Commission (FSSD and field data enumerators (see IR 2.4)

**Graduate degree for FC and UCC:** The SFMP and the FC will establish a small selection committee to identify early to mid-career professionals of the agency who qualify to pursue a MS or PhD in fields such as fisheries policy and management, stock assessment, etc. that are deemed priority needs by the FC. The purpose of the program is to increase FC capacity in fisheries management. The potential candidates will receive degrees from URI with a research topic relevant to fisheries issues of Ghana. Candidates must be FC staff and return to positions at the FC after studies.

SFMP will sponsor 3 UCC staff to attend fisheries and ICM related fields of study for graduate degree training. The selection process of qualified candidates from the Department of Fisheries and the Department of Chemistry is ongoing. Candidates must be faculty or staff at UCC and return to positions at UCC after studies. Topic areas are those identified by UCC as priorities for strengthening their fisheries and ICM research and teaching capabilities.

In addition to the above degree training activities, a CRC adjunct faculty member in Marine Affairs will run a seminar course for the Ghana students that will focus on developing their skills in working in multidisciplinary research teams, and with fisheries and ICM managers as well as developing problem centered research with stakeholders that has direct policy, management or economic benefits to clients of such research. This will include sessions on the theory and application of diffusion of innovation and strategies for developing effective extension programs.

## **7.2 CSO Capacity Development**

**Activity Lead:** SNV

**Activity Team:** URI working with DQF, FoN, HM, DAA, CEWEFIA, Kent

As part of efforts to strengthen local CSO partner organizations' capacities to effectively implement SFMP to improve the quality and sustainability of services they provide to their constituencies and to be ready and capable of receiving direct funding from USAID and other donors, SNV together with URI in Year 1 undertook organizational capacity assessments of five local partner CSOs that are SFMP sub-awardees. These CSOs are HM, DAA, DQF, CEWEFIA and FON. Three additional local civil society membership organizations, the Ghana National Canoe Fishermen's Council (GNCFC) and the Fisheries Alliance (FA) and National Fish Processors and Traders Association (NAFPTA) will also benefit from capacity assessment in Year 2.

Year 2, key capacity development activities include completing the additional assessments and following up on the CSO OCA findings to provide capacity development services as follows;

***Undertake organizational assessment for NAFPTA, GNCFC and FA:*** A scoping study will be undertaken for these organizations to assess their capacity strengths, weaknesses and gaps for SFMP support. The NAFPTA scoping study will emphasize their regional branches as well because the FC and WARFP are expected to focus on the national level.

***Preparation of individual organizational baseline OCA reports for each CSO and a Synthesis OCA report for Partners.*** To promote information sharing, documentation and ownership of the OCA process, SNV will produce OCA reports per organization and validate the content of the report with the partners to enhance ownership and acceptance of the results for improvements in the organizational operations. Key issues and trends that cut across the organizations will be captured in a synthesis report.

***Finalize preparation of an Organizational Development Manual for training selected organizations:*** Based on the results from the OCA assessment developed for each of the CSOs, SNV will develop a detailed, tailor made implementation manual to guide the implementation of organizational development for these organizations. The manual will cover issues relating to organizational development such as (governance, administrative framework, financial and resource management) and the services the organizations deliver, including quality design, implementation, monitoring, evaluation and learning for community-based development and other core activities. The manual will also contribute to the sustained application of organizational development mechanisms after the completion of the project.

***Piloting and Finalization of Manuals:*** The manual will be piloted by SNV in one CSO in Year 2 to ascertain its appropriateness for the other organizations in subsequent years. Feedback from the pilot will then be integrated into the final manual for use by the other CSOs in Year 2. This manual will be validated by partners, reviewed and adapted annually to accommodate any internal changes or growth that occurs in these organizations.

***Training of Partners on the Organizational Development Manual.*** To promote leverage and enhance ease of usage of the organizational development manual, SNV and URI will train the local partners on the content of the manual. Efforts will be put in place to make the manual user friendly.



***Development of organizational business plans for CSO partner organizations:*** To support and strengthen the five CSO partner organizations, SNV and URI will support these organizations to develop medium-term organizational development and business plans to guide and ensure auditable processes are incorporated into their day-to-day operations and that they are planning strategically and developing the capacity needed for sustainability. Four organizations will be supported in the second year.

***Support implementation of selected process and systems improvements:*** SFMP will provide technical and financial support and training for selected process and systems improvements recommended as a result of the OCAs. These may include financial, administrative, organizational development, board development and M&E systems. SFMP will provide and train up financial staff of local CSO implementing partners (HM, FoN, CEWEFIA, DQF, DAA) on QuickBooks to improve reporting and accounting of project funds provided via sub-recipient agreements from URI.

***Organization of periodic coaching and mentoring for selected organizations:*** SNV and URI will foster a working relationship with the selected organizations through periodic coaching and learning. Peer learning, mentoring, and exchange programs will be promoted among the partners. The SNV, URI and SSG will also serve as an on-call team of resource persons to assist CSOs who request these services to finalize quality proposals for funding opportunities that they identify. SSG will help set up appointments to potential private sector partners with selected implementing partners that wish to pursue on their own selected opportunities that are not selected as part of the SFMP strategic private partnership priority.

***Organizational fiscal audits:*** external fiscal audits by an outside firm will be conducted for the five partner CSOs in Year 2 as part of this component.

***U.S. study tour by the Ghana Industrial Trawl Association (GITA):*** To meet the objectives of the National Fisheries Management Plan, the FC and SFMP will co-sponsor a study tour to the U.S. for the benefit of the Ghana Industrial Trawl Association (GITA) (Also see section 2.3 capacity development). The purpose of the study tour is bring together the trawl fishing stakeholders, introduce new ideas, and start to create a shared foundation for action. The goal is that the participants return to Ghana motivated to take action and apply new ideas and lessons learned from the study tour to the Ghanaian context. Follow-up applied research will be developed and executed in collaboration with the FSSD and UCC, starting in Year 3.

***Regional Study Tours on Women's empowerment and post-harvest improvements in the value chain:*** A study tour to Senegal and The Gambia will be conducted to expose Women-led and oriented CSOs to peer organizations with similar missions that have developed successful community-based strategies for sustainable fisheries management and value chain improvements. This will be organized by URI in Year 2. Participants will include members of NAFPTA, DAA, CEWEFIA, DQF and FC Post Harvest Unit and FC Gender focal point. This study tour will highlight lessons learned from USAID project investments and partnerships in fisheries in Senegal and The Gambia over the last five years

The table below highlights the key activities and associated milestones for Year 2

**Key Year 2 Outcomes and Results for IR 7**

Indicator	Targets Year 2
<b>IR 7 Capacity Development</b>	
<p><b>InD4.:</b> Number of institutions with improved capacity to develop and implement managed access fisheries management plans</p>	<p>No Target</p> <p>Monitoring of inputs and outputs semiannually by K.Kent to ensure attribution of changes in Capacity to be assessed in Mid and final years of project</p>
<p><b>InD 17:</b>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)</p>	<p>SNV</p> <p>20 Training on org dev manual for partners <i>20by 20h=400hours/per</i></p> <p>20 NAFPTA regional branches trained <i>20 hours per 20 persons=400hours/person</i></p> <p>CRC</p> <p>8 participants for Study tour to US 10 participants for Study tour to Senegal/Gambia Degree training FC 2 persons Sept 2015 3 Appiah CSFMP</p> <p>8 IP staff trained on QuickBooks <i>( No of hours per day is 8 by 20hrs=160hrs/per person)</i></p>

## **B. SFMP Project Management**

### **B.1 The SFMP Implementation Team**

**The Coastal Resources Center (CRC)** of the Graduate School of Oceanography at the University of Rhode Island (URI) leads the cooperative agreement to implement the USAID/Ghana Sustainable Fisheries Management Project (SFMP). URI is both a Land Grant and Sea Grant institution, with more than 16,500 students. The Coastal Resources Center, created in 1971, utilizes its experienced staff in combination with other university and external partners to develop plans, processes and policies for managing marine and coastal environments and resources. Since 1985, CRC has been working in partnership with USAID and other donors worldwide and in Africa to advance improved marine and coastal resources management, including Tanzania, Zanzibar, Senegal, The Gambia and Malawi. CRC-URI and the team of core implementing partners for SFMP described below, are building on the gains and lessons learned by the USAID/Ghana ICFG initiative implemented from 2009 to 2014. The Primary government counterpart agency for the SFMP is the **Ministry of Fisheries and Aquaculture Development** and its **Fisheries Commission**.

*Hen Mpoano* is a Ghanaian non-governmental organization (NGO) established in 2013 to provide technical, policy and extension support to coastal communities, emerging civil society groups, traditional authorities, government institutions and the private sector to ensure inclusive and integrated management of Ghana's coastal and marine ecosystems. The organization combines bottom-up with top down actions and engages stakeholders during every phase of its activities. Its role on the SFMP encompasses activities in all of the SFMP results categories with a major contribution to the technical work needed for fisheries management planning, GIS mapping and support services, and environmental compliance functions, as well as key national activities related to legislative reform and law enforcement capacity development initiatives. It is the primary technical lead in national fisheries policy development for the demersal fisheries management plan. Working in conjunction with Spatial Solutions it will identify and vulnerability to impacts of development, coastal hazards, and climate change in communities in the Nzema East and Jomoro Districts and the Ankobra river mangrove ecosystem.

**Friends of the Nation (FoN)**, established in 1993, is a socio-environmental advocacy, non-profit, non-governmental development-oriented organization based in the STMA of the Western Region. FoN is committed to enhancing citizenship participation, social accountability and promoting human rights in resource governance. A philosophy guided by a rights-based and eco-based approach to sustainable development employing the principles of Technology of Participation (ToP). The core functions of FoN under the SFMP are to: support grass-roots communications and outreach campaigns, lead constituency building for fisheries legislative reforms, facilitate stakeholder engagement for improved fisheries governance, mobilize fishers support for early actions on small pelagic fisheries management, lead the FEU, MCS, Marine Police and the prosecutorial chain training, lead studies on child labor and trafficking issues in fisheries in the Central Region and conduct a behavior change and advocacy campaign on this issue.

**SNV Netherlands Development Organization** is a not-for-profit international development organization. Founded in the Netherlands over 50 years ago, SNV has a long-term presence in 38 countries in Africa, Asia and Latin America. SNV's mission is to promote inclusive development, systemic change, local ownership and contextualized solutions. SNV's team works

with local partners to equip communities, businesses and organizations with the tools, knowledge and connections they need to increase their incomes and gain access to basic services. Our wide range of services includes advisory, knowledge networking, evidence-based advocacy and value chain development. Since 2012, SNV has focused its activities in three main sectors; agriculture, renewable energy and water, sanitation & hygiene. SNV's contribution to the SFMP includes support to promote ecosystem-based and adaptive management approaches, knowledge development of the value chain of small pelagics with focus on sardinella, reduce child labor and trafficking in the fisheries sector in the intervention areas, provision of capacity development services, contribute to project communication and stakeholder engagements,

**DQF Quality Foundation (DQF)** is a financial non-governmental and community development organization with microfinance as its core business. DQF seeks to empower the poor and needy, especially women and youth, through the facilitation and provision of micro loans, micro business development services, renewable and energy efficient solutions, awareness creation on climate change, alternative energy solutions, environmental sustainability, youth career programs as well as employable skills training. Under the SFMP Project, DQF will lead fisheries value chain improvements and livelihoods in the Ankobra Estuary and Shama. Livelihood activities will add value to the products/services of small to medium-sized businesses; and will provide training in micro-credit, entrepreneurship and marketing in fishing communities in Nzema East, Ellebelle and Shama Districts. DQF will promote plastic waste recycling and trashy bag business development opportunities, mobilize fishery-based MSMEs in Shama Old town and Ankobra for capacity building and promote adoption of selected new fuel-efficient fish smoking technologies.

**CEWEFIA** is a local NGO which focuses on issues affecting women and children especially in the fishing communities. Under the SFMP, it plays a lead role in livelihoods, small business development and household resilience activities at Elmina, Moree, and Anlo communities. CEWEFIA's activities include, improved fish storage, post-harvest fish handling and fish processing and promotion of fuel efficient and profitable fish smokers. CEWEFIA will assist in documenting instances of child labor and trafficking in fisheries, help alter family decision-making and provide support services to the affected families with the aim to reduce this practice in the Central Region.

**DAA** is a federation of grassroots associations registered in 1998 as farmer based non-profit organization which seeks to promote self-reliance, participatory and sustainable development in the agriculture and fisheries sector. DAA operates in Greater Accra, Central and Eastern Regions of Ghana where most of its beneficiaries are rural women with low formal education. Its main areas of operation are food security including but not limited to fish processing and fish production. DAA activities involve promotion of good farming and fishing practices. DAA was a strong advocate for the translation of the fisheries law into five local languages and supports its members to improve their entrepreneurial skills leading to improved income and livelihood. DAA implements activities that empower women including capacity building in financial management and giving voice to women. Under the SFMP, DAA will organize women in Apam and Winneba and support them with training in improved methods of fish processing and use of improved stoves. It will also support advocacy for responsible fishing at the local and national level.

**SSG Advisors** is an international development consulting firm based in the US. Since 2005, SSG has completed assignments in more than 50 countries. SSG is a recognized thought leader in the

area of public-private partnerships: to date, SSG has catalyzed over 130 partnerships in sustainable fishing, ICT, climate-smart development, enterprise and workforce development, and food security. SSG has worked extensively in public-private partnership development across the African continent and is highly experienced in building the capacity of diverse stakeholders to enter into sustainable and high-impact partnerships. SSG activities in the SFMP are to develop strategic partnerships with leading multinational and Ghanaian companies, business associations, foundations, civil society groups, and government agencies to advance the goals of SFMP and will place a particular emphasis on the development of partnerships with mobile carriers and ICT firms to unlock innovative technology solutions for addressing illegal fishing, improving data collection efforts, and supporting local livelihoods.

**Spatial Solutions Ltd (SpS)** is a planning firm tasked under the SFMP to offer technical support on marine spatial planning and related land management issues within the coastal and ecologically sensitive areas in the Western and Central regions. This includes the river Ankobra and Pra estuaries where an analysis and assessment of options for conservation for the mangrove ecosystems will be undertaken. SpS work will also include vulnerability assessment of the Axim coastal community and their fish landing sites. This will culminate in a coastal spatial plan that will emphasize on permissible and non-permissible land uses along the ecologically sensitive areas important as fish nurseries and to secure the land use needs for shore-based activities of fishing communities. SpS will also offer technical support in capacity building for MMDAs and Regional Coordinating Councils in the Central and Western Regions and provide the necessary tools that will aide spatial planning in the coastal districts of the two regions. CRC-URI leads a SFMP consortium of strategically selected local and international implementing partners.

## **B.2 SFMP Staffing**

The SFMP team is led by the CoP Dr. Brian Crawford. CRC-URI manages core implementing partners with a “one team” approach. Staff, regardless of organizational affiliation, report to the CoP or other senior personnel. While each partner takes a lead on implementation of activities in their geographical and/or technical area, the core project management team conduct strategic and project-level decision-making—ensuring coordinated activities and reporting (see figure below).

The URI Sustainable Fisheries Management Advisor reports to the CoP and is a senior technical position and responsible for major activity components under IR2. He works with the FC MFRD and FEU and provides technical support to UCC, donors and implementing partners on scientific and technical aspects for develop of fisheries management plans. The communications and public relations expert report to the CoP. She leads program communications at the national level and development of the program communications strategy in coordination with SNV, and acts as the main communications liaison with USAID’s communications team. The Monitoring, Evaluation and Learning Specialist reports to the CoP. He prepares sets up data collection and DQC processes for the project including local and international implementing partners.

## **B.3 SFMP Office Locations**

The SFMP will have its main office in East Legon, Accra, where the CoP, National Activity Program Manager, and other core personnel will be located. This allows staff to work closely with MOFAD and the FC and coordinate with WARFP and USAID/Ghana. Field operations will be managed out of the respective implementing partner’s offices. However, for the WR, the HM Takoradi office will serve as secretariat as needed for other partners needing space and logistical

support. Meeting facilities are also available at the FoN offices in Sekondi and Cape Coast as needed. Partner staff and technical advisors working on assignments in the Cape Coast area will work out of their respective offices. However, similar to HM in the WR, the FoN office in Cape Coast will serve as secretariat as needed for other partners needing temporary space and logistical support. Since implementing partners have vehicles purchased under the project, these will be tasked for priority use of the partners project activities, and if available, as a courtesy and on request, for use by other implementing partners without vehicles in that respective location.

#### **B.4 Internal Coordination and Project Management**

The CoP is the primary liaison with USAID/Ghana and main point of contact for the USAID/Ghana AOR, with the National Program Manager acting in his absence on programmatic matters. The CoP will also be the main liaison with the URI home office and the project steering committee. The Communications Officer will coordinate with the USAID communications unit in providing success stories, preparing briefing packets for USAID visits to project sites, etc. The CRC Ghana Administrative Coordinator will provide oversight of the in-country fiscal and administrative team, and coordinate with the in-country team on managing cash flow and advances. The CRC fiscal team provide necessary accruals to the AOR and process payments to sub-recipients through URI. Internal communications among partners are maintained in part via quarterly and annual meetings and will include a MOFAD/FC liaison. Communications is further facilitated via email and Skype as well as through web-based project management and file sharing software.

#### **B.5 Reporting Requirements**

As per the URI Cooperative Agreement, the following reporting schedule to USAID will be implemented. Quarterly progress reports will be approximately 20 pages. The first, second and third quarterly reports are due to the AOR by the last working day of December, March, June, respectively.

The fourth quarter progress report will be an Annual Activity Report with a descriptive analysis of activities conducted during that USG fiscal year, a quantitative and/or qualitative description of actual achievements versus planned activities for the year, in both narrative and in data performance table formats. The Annual Activity Report must report against all indicators established in the PMP, and the data performance table will include accomplishments for the fiscal year against that year's targets. The Annual Activity Report is due to the AOR by the last working day of October following the work plan year.

CRC will provide USAID/Ghana with an electronic copy of other project products and core reports on studies, trip reports, and technical reports prepared by short-term consultants or implementing partners.

#### **B.6 Corporate Communications and Support Services**

The SFMP communications team will be expanded in the first quarter to include all communications officers of the various partner organizations. The team will meet quarterly in Year 2 to share the Communications Strategy in detail and provide capacities for meeting USAID branding and marking requirements and coordinate overall project document production and distribution. This will also allow for harmonizing SFMP activities and ensure improved

coordination and communication among partners. Corporate communications and support services include the following:

***Success Stories*** – The project will produce one success story every quarter for the project. All partners will produce at least a success story every quarter and work with the Communications Specialist to produce good stories for the project and USAID. A training on how to write good success stories, FtF bullets and 508 Compliance will be organized in October for all communications officers.

***Feed the Future Bullets*** – All partner organizations will submit bi-weekly bullets of their field activities to the Communications Officer in Accra every other Monday by close of business for review and onward submission to USAID.

***Compilation of contact management database:*** The CiviCRM Contact Management Database was created in Year 1. Work in the 2<sup>nd</sup> year includes entry of contact details and other particulars of stakeholders. The robust software, which allows SMS messaging and analytical purposes relative to the level of benefit and disaggregation of stakeholder groups, will be employed to send educational and informative messages to stakeholders as and when required. This tool will be used to facilitate the SFMP's small pelagics policy campaign on early actions and will enable the project to record, manage and track interactions with people and organizations and to engage with constituents. The CRC-Accra Communications Officer will mine stakeholder contact information from field activities and other engagements to populate the database. The communications team will support these efforts and submit all contact information of stakeholders gathered during field work to the SFMP Communications Officer on a monthly basis for onward submission to the CiviCRM Database manager at CRC/URI.

Partners will coordinate their contacts with participating individuals and organizations; allowing for “opting-in” to receive and send communications using a variety of media and identify individuals who are well placed to bring in under-represented stakeholder groups and opinions. To measure behavior change, the M&E and learning strategy assembled impact baselines in Year 1 and conduct periodic appraisals on child labor, outreach, and legal awareness.

***SFMP Social Network Platform*** – SNV will create an SFMP social network group using WhatsApp Mobile platform to allow for effective and quick dissemination of information and discussions requiring urgent feedback.

***SFMP Google Calendar*** – All Communications Officers will provide inputs to the project Google calendar and the SFMP communications officer will relevant information pertaining to their activities on the calendar, on a weekly basis, to allow for effective coordination, mobilization of resources and planning of all SFMP activities.

***SFMP Photo Bank*** – SFMP has created a photo bank (in Year 1) and will work extensively with all communications officers to assemble and organize all photos of field activities of the various partner organizations for storage at a central point in Accra, which will be accessible to all partners. All partners will collect geo-referenced and clearly described and dated pictures during field trips to be housed on the photo bank.

***Document production and distribution*** – The SFMP Communications and M&E Assistant will implement the SFMP document production and distribution plan and ensure effective and holistic distribution of all project documents to relevant stakeholders. The Assistant will review and improve on the SFMP mailing list and delivery methods plan for proper distribution of

products; both electronic and hard. An internal digital system will be created to manage the document review process. Hard copies of all progress reports to Minister, USAID/Ghana EG office, Director of FC, Heads of Divisions, regional directors, key stakeholder groups, head of select committee on Food and Agriculture, etc. The Officer will work with the M&E Specialist to ensure that all SFMP documents are 508 Compliant and track progress of all project deliverables to ensure timely submission and accurate reporting.

### **B.7 Coordination with MOFAD, other GoG Agencies and Key Donor Projects**

The SFMP will coordinate closely with MOFAD and the FC and World Bank WARFP staff through periodic meetings, proposed monthly. MOFAD and the FC each have designated a project point of contact to serve as the main liaisons with the project and this coordinator is invited to attend monthly meetings and to receive all project reports. However, project staff will have interactions on a regular basis with a number of staff depending on the activity and the Accra central headquarters Division or regional office involved.

SFMP supports implementation of several components of the NMFP which are described in the various sections of the work plan are summarized in Appendix A.

### **B.8 Monitoring and Evaluation Plan**

**Activity Lead:** M&E Specialist, CRC-Accra

**Activity Team:** CoP CRC-Accra, URI/CRC Project Team (Robadue, Torell)

The detailed Monitoring and Evaluation (M&E) Plan, including a Performance Monitoring Plan (PMP) and a Knowledge Management and Learning Plan (KM&L Plan) is a separate stand-alone document that was approved in March 2015. The project M&E Plan uses a three-pronged learning-based approach to methodologically evaluate and communicate its relevance, effectiveness, efficiency, impact and sustainability. First, is the performance monitoring and plan (PMP) and its associated indicator reporting, which is tied to the project's goal and intermediate results. The PMP is a tool that allows for effectively implementing the M&E plan. Second is a KM&L Plan or strategy based on adaptive management, sound science for management, stakeholder participation and periodic self-evaluation. The KM&L Plan is designed to capture the "why" behind the obtained outcomes and results and is related to but different from the PMP. Lastly, the knowledge management strategy is designed to share information, results and lessons—and solicit input and feedback for adaptive management. The communications strategy for the project will include activities for dissemination of project lessons and results.

This approach will optimize the project's performance and ensure accountability to USAID and the Ghanaian and American people. The detailed M&E Plan attached as Annex I to the work plan provides more details on the M&E strategy, learning approach, associated indicators and targets over the LoP.

As part of the M&E activities, the SFMP collaborates with the Monitoring and Evaluation Technical Support Services (METSS) project, an external evaluation team, which assisted in the process of designing a robust, high-quality and efficient M&E system that can adequately support the data needs of USAID/Ghana and a mandatory formal external evaluation process over the LoP.



The M&E plan covers the entire period of performance of the SFMP and adjusted annually during the work planning process. Changes are based on any changes in planned activities and lessons learned during implementation that may require adjustments and with the approval of the SFMP AOR. Each indicator in the PMP have a brief narrative, which includes the following:

- Data collection method
- Data reliability and timeliness (i.e., intrinsic data quality);
- Indicator validity (i.e., the relationship between the indicator and the desired
- Output or result)

USAID/Ghana utilizes a performance management information system, called AidTracker Plus, to track activities for all mission-funded projects at the national, regional, district, and village levels. The purpose of the database is to track performance results more precisely and efficiently, to map geospatial coordinates, and to reduce USAID and implementing partners' staff time in aggregating information and generating reports for USAID and interested parties. These interested parties are USAID/Washington, Congress, implementing partners, GoG, other donors, and stakeholders. This reporting process supports the bilateral agreement between the USG and GoG by sharing information on USAID/Ghana's Mission-funded activities.

The SFMP provides information (including, but not limited to, performance results, geospatial coordinates, success stories, and photographs) on the activities funded under this assistance agreement by entering this information into the AidTracker Plus Partner Portal. The M&E Specialist for the SFMP performs this function. He enters information via an Internet website; where USAID provides the URL address or Access Database, and a user ID/password. USAID/Ghana trained the Monitoring and Evaluation Officer on the AidTracker Plus Partner Portal. Subsequently, the M&E specialist trained sub-recipients on the M&E system and set up the procedures and protocols required for submission of information in the AidTracker Portal. The SFMP M&E Specialist is the only authorized user entering data into AidTracker. The SFMP M&E Specialists is appointed as the AidTracker Plus Point-of-Contact to aid in communication and implementation.

The PMP is designed to help track progress on the project in relation to its stated goal and IRs. As a living document, it is used internally for routine monitoring, learning and adaptive management and externally as a tool to engage stakeholders in analyzing and understanding data—and to inform management questions and decisions. The project PMP folds into the mission-wide PMP, which includes Goal and Development Objective (DO) level indicators from the CDCS Results Framework, which include a number of standard FtF indicators. The SFMP also uses standard indicators that contribute to USAID's biodiversity and climate change objectives. The indicator reporting contributes to the effectiveness of performance monitoring by assuring that comparable data will be collected on a regular and timely basis. This is essential to the operation of a credible and useful performance-based management approach.

The project will routinely monitor 18 indicators to measure performance annually and at the end of the program, with baselines and targets for each indicator. The full list of indicators, disaggregation, proposed data sources and targets is in the stand-alone document Performance Monitoring and Evaluation Plan.

Baselines were established in Year 1 for all of the indicators proposed in the PMP. These include many of the impact indicators on status of fish stocks and other socio-economic indicators the

SFMP will track over LoP to gauge impacts. Year 2 targets based on this work plan are provided in Appendix 1. This appendix shows targets per this work plan relative to targets in the initial PMP. These changes represent an amendment to the PMP targets for Year 2 and subsequent implications for changes over LoP.

## **B.9 Environmental Compliance and Management**

The project complies with host country environmental regulations unless otherwise directed in writing by USAID. The Environmental Monitoring and Management Plan (EMMP), approved in March of 2011, describes how the SFMP will, in specific terms, implement all IEE and/or EA conditions that apply to proposed project activities within the scope of the award. It specifies mitigation actions as needed for different activities, outlines how implementation of activities will be monitored to ensure compliance with required conditions and their effectiveness and specify timelines and responsible parties for monitoring of the mitigation measures.

This EMMP complies with 22 CFR 216, and is based on the approved Initial Environmental Examination (IEE) of the USAID Ghana Economic Growth Portfolio. (Hereinafter, such documents are described as “approved Regulation 216 environmental documentation.”). The EMMP covers all activities currently anticipated under this work plan as well as over LoP.

The EMMP conforms to IEE requirements regarding negative determinations with conditions. Environmental screening and review procedures for project activities that do not fall under a categorical exclusion have been adopted. No activities with moderate, unknown or high risk are foreseen at this time. However, the project will use an environmental review form to screen proposed activities not fully covered in the IEE and take action as appropriate. Screening forms or if required an IEE amendment, will be submitted to USAID for approval before carrying out activities not covered by the IEE.

No activities proposed in this work plan are outside the scope of the approved Regulation 216 environmental documentation. However, as some proposed construction activities are planned, the SFMP will prepare specific framework documentation for USAID review and approval that covers these activities, specifically for building construction. These construction activities will not be undertaken prior to receiving written USAID approval. While not planned for construction in Year 2, rehabilitation of the FC office in El Mina will be designed and planned in Year 2. The DA Training Center, originally planned as a rent to own option will not be directly constructed by the project. SFMP will submit supporting documentation photo USAID for approval and for inclusion/ amendment in the cooperative agreement list of allowed construction activities. This work will include as well, environmental review and documentation for USAID review and approval prior to any construction planned to take place in Year 2.

All sub-grantees are required to comply with USAID environmental policies and the PSDFMP EMMP. For any new activities not included in the work plan and the EMMP, sub-grantees will use the USAID Environmental Review Form (ERF) and Environmental Review (ER) checklist to screen grant proposals to ensure the funded activities will result in no adverse environmental impact, to develop mitigation measures, as necessary, and to specify monitoring and reporting. As noted earlier, this is particularly important for those sub-grantees conducting value chain improvement activities that include construction or rehabilitation of smokers and drying sheds and woodlots. While CRC is responsible for ensuring that mitigation measures specified by the ERF or ER checklist process are implemented, compliance with approved measures will be

required by all sub-grantees as part of the standard provisions of their URI sub-award. Quarterly reports and the annual report will be submitted as noted above.

Adiza Ama Owusu serves as the SFMP environmental compliance officer, based at HM's Takoradi Office. She is responsible for training all partners on conditions of the IEE, the EMMP reporting, screening and review processes. She works with partners proposing activities not covered under the IEE to complete proper reviews for submission and approval to USAID. This will be especially important for proposed and limited small-scale construction activities and other diversified livelihood activities. When developing applied management activities, or livelihood activities, the project also has strict requirements for what activities are allowable or not. For example, subsidies for fishing inputs will not be purchased with USAID funds and when implementing fish smoking activities, measures will be taken to ensure that it does not lead to over exploitation of fuel wood.

## **B.10 Sustainability Considerations**

The SFMP sustainability strategy components budgeted includes significant material resources to build the capacity of the FC, selected local government institutions, and local partners (see Section 7) in addition to a heavy investment in human resource development as well. Additional resources are allocated to strengthening activities targeted at UCC. NGOs and women's groups also receive substantial benefits via training, provision of material support, mentoring and a learning-by-doing approach. This includes capital purchases of vehicles, computer equipment and office furnishings, some building refurbishing and small office construction. Hardware support is necessary to implement project activities and ensure local partners can sustain their capabilities beyond project end. For the FC, this includes support to several units: vehicles for the MCS unit for mobility in shore-based patrolling; a building in Elmina Port for a full-time surveillance presence to deter rampant illegal fishing and improve data collection; vehicles and computers for regional offices in the CR and WR to enable more effective stakeholder dialogues, to maintain fishing vessel registries, and to more efficiently collect landing and effort information. (See section 7). As WARFP also is providing substantial material support to the FC, a needs assessment was conducted in Year 1 to prioritize where USAID investment is best made and does not duplicate WARFP efforts. SFMP contributions to the National Marine Fisheries Management Plan are summarized in Appendix 2.

There is also material support budgeted in Year 2 to set up an environmental data hub (computers, printers, plotters) in the CR RCC—similar to what was established in the WR under ICFG. No equipment is proposed for the WR RCC and districts as they received substantial support under ICFG.

We also are assisting DAA in its capital construction campaign for a Women's Training Center. A feasibility study and business plan were developed in Year 1 and this activity supported only if it proves institutionally and financially viable.

SSG advisors will also be working on strategic private partnerships, which can also help to ensure sustainability of efforts started under the SFMP. This includes three partnerships that were prioritized in Year 2 (see Section 6). Preliminary information suggests that improved and more fuel efficient smokers are expected to provide excellent and quick returns on investment. As such, while beneficiaries may receive some reports to set up pilots and field demonstrations, we will produce information and packaging that encourages rural banks and microcredit

institutions to directly fund these investments via loans to women and women's groups. (See section 4)

### **B.11 Marking Strategy and Branding**

The approved marking strategy and branding plan as contained in the URI Cooperative Agreement. All implementing partners are required to follow the plan and is contained in the standard provisions of their sub-awards. Additionally, the SFMP communications team has developed standardized templates for all SFMP reports, administrative reports, technical reports and special publications, to ensure that the all documents have a standard look and feel as well as to ensure they conform to the USAID co-branding policies and guidelines. Implementing partners were oriented on the marking and branding plan and on use of report templates as well as building base documents in a way that facilitates ease of preparing final PDFs that are "508 compliant" prior to submission to USAID and DEC. An additional training will be held on these processes and policies in the first quarter of Year 2.

## C. Budget

The following tables are summaries of the USAID budget by standard cost accounting categories and summary estimates allocated to each Project Intermediate Result (IR) category. For the table by IR, project management costs are distributed proportionally to these activities.

### C.1 Budget by Line Item

Item	USAID (US\$)	Cost Share (US\$)	Total (US\$)
URI Personnel	605,586.23	84,198	689,784.58
URI Fringe	273,873.83	34,904	308,778.12
SFMP In Country Staff	333,196.01		333,196.01
Consultants	22,643.79		22,643.79
Other Direct Costs	1,346,013.83	513,400	1,859,413.83
Travel	222,230.11		222,230.11
Subcontracts	2,685,971.81	835,709	3,521,680.78
Capital Equipment	134,803.57		134,803.57
Total Direct	5,624,319.20	1,468,212	7,092,530.81
Indirect	225,335.80	30,966.69	256,302.49
<b>Total</b>	<b>5,849,655.00</b>	<b>1,499,178.30</b>	<b>7,348,833.30</b>

### C.2 Budget by Program Element

Item	USAID (US\$)	Cost Share US\$)	Total (US\$)
Strengthened enabling environment	1,260,377.21	310,910.29	<b>1,571,287.50</b>
Science and research applied	1,182,641.19	549,124.09	<b>1,731,765.28</b>
Creating Constituencies	557,921.59	35,048.88	<b>592,970.47</b>
Applied Management	1,239,041.97	415,225.43	<b>1,654,267.40</b>
Gender Approach	151,699.08		<b>151,699.08</b>
Public-Private Partnership	186,610.29		<b>186,610.29</b>
Capacity Development	1,271,363.67	188,869.62	<b>1,460,233.29</b>
<b>Total</b>	<b>5,849,655.00</b>	<b>1,499,178.30</b>	<b>7,348,833.30</b>

### C.3 Capital Procurement Plan

The following equipment will be procured in Year 2 and is consistent with the capital procurement plan in the Cooperative Agreement and complying with source and nationality requirements in 22 CR 228 for the procurement of commodities.

Recipient	Vehicle Description	# of Units	Estimated Unit Cost	Total (US\$)
Fisheries Commission Regional Offices	Ford Ranger	4	\$36,000	144,000

**C.4 International Program Management and Technical Assistance Travel Schedule:  
October, 2015 to September 2016**

The following table shows all international travel; and the purpose (related to the work plan IR) and quarter in which that travel will occur.

<b>Traveler</b>	<b>Purpose (IR)</b>	<b>Total # of trips</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Research Associate IV-Damon	2.6	3	1	0	1	1
Research Associate IV-Castro	2.3	2	0	1	0	1
Professor, MAF-Burroughs	2.3	1	0	1	0	0
Marine Research Associate III-Glenn Ricci	1.3, 2.3	3	0	1	1	1
Assoc. Coastal Resources Mgr-Tobey	1.2	1	0	1	0	0
Marine Research Associate IV-Karen Kent	7	2	1	0	1	0
Coordinator URI CRC SFMP	8	2	0	1	0	1
Coordinator, URI CRC -Moreau	8	2	1	0	1	0
Specialist, URI CRC/Public Info & Communications-McCarthy	3	2	1	0	1	0
Marine Research Specialist V-Bowen	8	3	1	1	1	0
Assoc Coastal Resources Mgr-Robadue	4,8	4	1	1	1	1
URI senior officials visit to UCC	2.3	2	0	2	0	0
Professor, GSO Collie	2.1	1	1	0	0	0
NOAA TDY to Ghana	2.1	1	1	0	0	0
Study Tour to Senegal, The Gambia (Kent)	4	10	0	10	0	0
Exchange Visit to Washington DC., ACCSP	2.4	2	0	0	0	2
SSG International Consultants and Staff (5 people)	6.0, 2.2, 1.23	16	4	6	2	4
Director, URI CRC (Dr Anton Post)	2	1	0	1	0	0
Director, Office of Sponsored Projects (Winnie Nguru)	8	1	0	1	0	0
Computer Department Graduate Student	8	1	0	0	1	0
SFMP Fin. Mgr to URI	8	1	1	0	0	0
Graduate Student K. Beran	1.2	1	0	0	1	0
	<b>TOTALS</b>	62	14	27	11	11

## D. Implementation Schedule

The following tables show the implementation schedule of the various work plan activities and tasks along with associated outputs and results targets where applicable. The table also shows the lead implementer and/or person responsible, and supporting partner institutions.

### Activity 1.1 National Workshops on Key issues for small pelagic fisheries

Lead	Supporting Partner	Activity 1.1 National Workshops on Key issues for small pelagic fisheries	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC	FC, HM	National Workshop on small pelagics fisheries management				X										
CRC (Lazar)	MOFAD/ FC	Assist FC draft a recommendation and justification of actions for small pelagics management including the biological and socio-economic impacts and a monitoring plan with biological impact assessment of action, short and medium plan to the Chairman of FC (Board).		Ind.3: Number of policies completing processes: Plan approved, implementation started	X	X	X									
CRC/ Mensah	FC/HM/ FoN	Implement a mass communications strategy back to stakeholders through mass media and brochures (broad based) on timing of implementation of the NMFP process, etc. with the FC and continuing contributions from FoN. Results of the STWG stock assessment disseminated. Monitoring plan (STWG see IR2) to assess response of stocks to measures implemented FON will review and provide input to content of materials/briefs produced for the mass communications strategy FoN will disseminate the materials produced at the stakeholder meetings noted below	Briefs	Number of mass communications events held			X	X		X	X	X		X		
FoN	FC regional offices	Continue to foster stakeholder engagement processes at the local level via regional fisheries working groups to outline implementation processes and strategy, with leadership from the FC. 4 regional working groups meeting held (one in each of the Region)	2 Meeting summaries List of FWG members.					X	X	X	X	X				

Lead	Supporting Partner	Activity 1.1 National Workshops on Key issues for small pelagic fisheries	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FoN		Coordinate with national associations such as the Fisheries Alliance and other CSOs in a participatory process for CSOs input the policy making process Two 1-day meetings held	Meeting summaries					X								
FoN	FC regional Offices	Communication back to stakeholders through four regional stakeholders meeting at large. Follow up to Year 1 national dialogue on early actions, Assume that basic policy choices have been made, then Implementation plan drafted. Stake holder processes at major landings sites and with local organizations	4 Meeting summaries of the 20 landing site meetings held, reports by region or quarterly.		X	X	X	X	X							
Lead Partner	Supporting Partner	Activity 1.1.2 Fisheries Co-management	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
HM	FC	Consult with the Minister and Fisheries Commission (Board) and seek their approval for creating an Informal Working Groups. Establishing an informal working group, AG/MOFAD/FC/ Parliament, assuming agreement on need for Working Group	Memo with charge and membership of the planning group		X											
FC	HM	Parliament committee briefings	Participant list signed			X				X			X			
HM	MOFAD, FC, FoN	A national workshop to discuss fisheries co-management models and experiences around the world and recommendations on what is applicable to Ghana and follow up action needed to put new arrangements in place. FON will present proceedings in caucuses/meetings and assist in facilitation of workshops.	Proceedings of the National Workshop on co-Management and action plan implementation	Number of policies: Co-management policy analyzed				x				x				
HM	FC CRC	Determine legal public consultative requirements and incorporate into the process and strategy for drafting co-management amendment sections and schedule of public meetings							x				x			



Lead	Supporting Partner	Activity 1.1 National Workshops on Key issues for small pelagic fisheries	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FoN	DAA, CEWEFIA, FC	Stakeholder caucuses (FoN) and hearings at major landing sites: (coordinating with the FWG) (broad landing site meetings 5 meetings Tema, El Mina, Axim, Secondi, Keta)	1 Meeting summary of the 5 meetings	Ind.3: Number of policies completing processes: Fish Act : (2.) Stakeholder Consult				X	X	X						
FoN	FC (Regional)	Hold specific meetings with regional FWGs to discuss their role in co-management and to determine whether FWG can start to become an ad hoc co-management committee. Or their specific role in piloting co-management initiatives (FWG meetings budgeted under 1.1.1 and this is another agenda point of the 8 FWG meetings )	Meeting report on the Drafted roles and strategy for FWG in any co-management structure (part of meeting reports captured in 1.1.1)		X		X		X							
CRC	FC	Coordinate with FC to develop working relation and MOU to formalize SFMP and FC collaboration on SFMP activities.	Signed MOU		X											
FC	HM	FC organizing legal requirements and hearings for public consultation. (coordinating with the FWG)	Meeting summaries	Ind.3: Number of policies completing processes: Fish Act 2. Stakeholder Consultations				X	X					x	x	
CRC	MOFAD, FC	Multimedia Communications campaign on co-management as described in IR 3										X	X	X	X	X
HM	MOFAD, FC, CRC	Semi-annual High level briefing/retreat of the FC board on SFMP, dialogue outputs and legal reform needs	Meeting agenda and participant list			X						X				

Lead Partner	Supporting Partner	Activity 1.1.3 Policy analysis on alternatives to the fuel subsidy	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC	MOFAD/FC/SSG	Economic analysis on potential options for transforming the fuel subsidy – insurance, conditional cash transfers, etc. (Jim Tobey as CRC lead with URI resource economist a local consultant and SSG playing a minor role on linking to strategic private partnerships in insurance and fisher registration )	Concept paper	Ind.3: Number of policies completing processes: policy on pre-mix analyzed and concepts discussed with the Minister			X	X	X	X	X	X				

**Activity 1.2 Training of FEU and Marine Police and strengthening the prosecutorial chain**

Lead Partner	Supporting Partner	Activity 1.2 Training of FEU and Marine Police and strengthening the prosecutorial chain	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FON		Additional training events (4) for Marine Police, Navy and MSC, (FEU) 1.2.1	TraiNet Forms	120 people trained				X		X		X		X		
HM (Kofi)	FC, FoN	Coordinate with FC, Marine Police and the Naval command to design code of responsible conduct of fisheries enforcement. Participate in the meetings and review code and bring in inputs from field and trainings of MP.	Code of conduct for fisheries enforcement					X		X		X				
HM (Kofi)	COP	List for Leahy vetting of Navy FEU personnel If there is turnover of personnel in subsequent periods, FoN will cord with Navy to get new names for vetting.	List of names and required data submitted to CoP FON – new lists of names as required.		X	X										

Lead Partner	Supporting Partner	Activity 1.2 Training of FEU and Marine Police and strengthening the prosecutorial chain	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC (Ricci)	FoN	Develop the tool to be used by MP to Assess the competence of MP and Navy staff seconded to FEU and develop recommendations for improving performance. Workshop to review with MP, Navy and FEU FoN set up meeting workshop for the development of assessment tool Two 2 day events. FoN to advocate for integration of tool w/ MP academy and in HR systems	Assessment tool (Glenn / FoN inputs)							X						X
FoN	FEU	Continue tracking and sharing meetings with Prosecution chain for both the Western and Eastern area	Summary data on number of arrests successful prosecutions for the two commands.	Indicator on changes in arrests etc.				X			X			X		

Lead Partner	Supporting Partner	Activity 1.2.2 Behavior change communications	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC Accra	HM	Prepare and vet audio-visual aids HM will produce the video, SFMP provides oversight and approves messaging	Short videos on IUU fishing	1	X	X	X									
HM		Roll out beach level behavioral change communication campaigns in 15 communities on IUU and good practices						X	X	X	X	X	X			
CRC Accra	HM	Develop criteria for best practices in fisheries awards			X	X	X									
HM	CRC	Selection and composition of panel and selection of awardees	List of panel members						X	X	X					

<b>Lead Partner</b>	<b>Supporting Partner</b>	<b>Activity 1.2.2 Behavior change communications</b>	<b>Output (product/report/ etc.)</b>	<b>Result Target per indicator</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>
HM	CRC	Advertisement and media involvement		Number of mass communication events and products produced							X	X	X			
CRC Accra	FC/ HM	Presentation of awards	Awards											X	X	
FoN	CRC	Monitoring of arrest, prosecution and arbitration cases in the eastern and western	Summaries of cases	Data summary	X					X						X
<b>Lead Partner</b>	<b>Supporting Partner</b>	<b>Activity 1.2.3 Citizen Watch Program Designed</b>	<b>Output (product/report/ etc.)</b>	<b>Result Target per indicator</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>
HM (Kofi)	SSG, FC/MP	Coordinate assistance to MOFAD/FC on the development and roll out of a fisheries citizen watch program			X	X	X	X	X	X	X	X	X	X	X	X
SSG	HM, FC/MP	Hire legal consultants in both Ghana and the Philippines. Conduct a review of relevant policies and regulations to assess legal foundations for the program and advise on any needed policy changes.	Legal review completed, with recommendations	10 days STTA (2 people = 1 Filipino legal consultant and 1 Ghanaian legal consultant)		X	X	X								
SSG	HM, FC/MP	As needed, support drafting of new policies or regulations to support co-management and citizen watch.		15 days STTA (2 consultants)				X	X	X						

Lead Partner	Supporting Partner	Activity 1.2.2 Behavior change communications	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SSG	HM, FC/MP	Conduct design workshop with SFMP, FEU, Marine Police, Fisheries Commission MCS and fisheries stakeholders on the citizen watch program, to create a common vision and tailor the program to Ghana. Workshop will start to outline a national framework for the program, identify next steps and develop teams for advancing the program over the coming months.	Program design and next steps identified in Workshop Report. TrainNet forms.	3 international travelers (SSG, APM Facilitator, Filipino consultant) = 15 days STTA Training: 1.5 day workshop for 12 people = 1.5 x 12 x 8 = 144 training hours					X	X						
SSG	HM	Depending on progress on policy foundations and program design, the expert from the Philippines and SSG will return to Ghana to conduct a second working session focused on operationalizing and piloting the program at the local level. The team will visit potential pilot sites and interview a range of stakeholders.	Workshop report with recommendations on operationalization	3 international travelers (SSG, APM Facilitator, Filipino consultant) = 15 days STTA										X	X	
HM	SSG	Coordinate with SSG to develop a pilot design and plan for pilot fisheries citizen watch group												X	X	X
HM	SSG, FC/MP	Work with SSG to launch pilot for Citizen Watch group for Year 3. Plan trainings for Year 3.														
HM	FC/MP	Arrange for operational support for citizen watch group for Year 3: uniforms, ID cards, binoculars, flashlights, fuel for sea patrols, radios or cell phones and minutes, etc.														

Lead Partner	Supporting Partner	Activity 1.2.4 Material support to law enforcement	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
HM	CRC Accra/FC	Coordinate selection and design of a FCS outpost in Elmina. Conduct environmental review and prepare submission for approval to USAID	ToR for architect, Environmental review submitted to USAID and approved			X		X	X		X	X		X	X	
CRC Accra/ CoP		Hire an architect to do a building design, do environmental review, approval of building and environmental review by USAID.	Design plans					X	X							
CRC Accra	FoN/MP	Equip MP academy with some material support for their training facility; basically outfitting the training conference hall with projector, chairs and desks etc...(SEE CAPACITY DEVELOPMENT)								X	X					
CRC Accra	FC	Material support to the FC/MCS/FEU/MP (SEE CAPACITY DEVELOPMENT (1 vehicle per region)			X	X	X									

### Activity 1.3 Harmonizing Regional Fisheries Policies

Lead Partner	Supporting Partner	Activity 1.3 Harmonizing Regional Fisheries Policies	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FC	CRC	Regional fisheries management coordination. FCWC lead sample collection and coordination within the FCWC. FCWC and SFMP trip to Dakar to coordinate collection of samples within the CCLME sub-region.	Trip report													
CRC	UCC/FCWC	Stock identification study implemented with FC, FCWC and UCC/URI collaborative research. (see IR2.2 UCC strengthening)	Stock genetics study report													

**Activity 1.4 Informing the U.S. Government on Key Fisheries Policy Issues in Ghana**

Lead Partner	Supporting Partner	Activity 1.4 Informing the U.S. Government on Key Fisheries Policy Issues in Ghana	Output (product/report/ etc.)		O	N	D	J	F	M	A	M	J	J	A	S
CRC Accra		Targeted briefings for selected USG groups on national and regional fisheries issues of concern	Briefing packets			X				X			X			

**Activity 1.5 Reducing Child Labor and Trafficking in Fisheries**

Lead Partner	Supporting Partner	Activity 1.5 Reducing Child Labor and Trafficking in Fisheries	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	FoN	<b>1.5.1 National advocacy and policy on CLaT</b>			X	X	X	X	X							
SNV		Establish dialogue with National Steering committee on Child Labor (NSCCL)		Policy on CLaT in Fisheries analyzed	X	X	X									
SNV	FoN, CEWEFIA, others	Working group to support NSCCL established and operational					X			X			X			X
SNV	FoN	Coordinate with National Steering committee on Child labor and FC focal Person for Child labor on Policy issues, Challenges and Recommended Actions. FoN to participate				X	X	X	X							
FoN	CRC	Implementation of a behavior change communications strategy on CLaT in the CR strategy Community drama. Posters.														
SNV	FoN, CEWEFIA	CLaT film edutainment with Ghanaian celebrity	CLaT video/ edutainment			X	X	X								
SNV	FoN, CEWEFIA, DAA	Video telling the CLaT story to be launched at Child Labor Day FoN to assist in script	Video Documentary	Media product produced					X	X	X					
SNV	CEWEFIA, DAA, FoN	Child labor Day event (also see Comms. IR3) FoN Participation in the event_														

Lead Partner	Supporting Partner	Activity 1.5 Reducing Child Labor and Trafficking in Fisheries	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	DAA	Development of and demonstration of the households at risk tool at Apam and/or Winneba and training of other interested parties to use the tool.	Tool; document	10 people trained			X									
SNV	FoN	Training of FoN, CEWEFIA, DAA, social welfare agencies and others on the use of the “Households at Risk Tool”. This is capacity strengthening training for stakeholders. Others may include Police, Fisheries Commission, Traditional leaders and District Assembly Child Panels. DAA participates in training and in tool development FoN to participate in meeting and act as resource persons as needed	People trained	20 people from partner and other organizations (10 males, 10 females) trained.				X								
		<b>1.5.2 Fisheries Commission strategy on CLaT</b>														
SNV		Establish a good working relationship with FC on CLaT	4 Quarterly Meeting Reports	I			X		X				X			X
SNV	FoN	Work with the FC lead on CLaT to develop a FC strategy/policy statement on CLaT FoN to provide input into the strategy – recommendations review														
		<b>1.5.3 Anti CLaT advocacy and campaigns in Apam and Winneba</b>														
DAA	SNV	Targeting vulnerable households for improved fish smoking stoves. DAA to provide SNV w/ the targeted part list. See section 4.5.1 for post-harvest	Part list						X						X	
DAA		Community outreach via community champions and advocates		10 people trained	X	X	X	X	X	X	X	X	X	X	X	
DAA	SNV	Meetings with traditional authorities and queen mothers on anti-CLaT								X	X	X				
DAA	CRC	IEC materials distributed by DAA but provided by CRC.					X	X	X	X	X	X	X	X	X	



Lead Partner	Supporting Partner	Activity 1.5 Reducing Child Labor and Trafficking in Fisheries	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
DAA	SNV	Anti-CLaT meetings with parents and schools									X		X		X	
DAA	SNV	Community radio programs on CLaT (2 times in the year)					X			X						
DAA	SNV	Targeting vulnerable households for improved fish smoking stoves. DAA to provide SNV w/ the targeted part list. See section 4.5.1 for post-harvest	Part list					X						X		
DAA	SNV/FON/HEAD OFFICE	<i>Embark on an Anti CLaT Advocacy</i> 1. Participate in Anti CLaT days celebration organized by SNV/FON 2. Once a year, identified school in Apam and Winneba on Anti CLaT sensitization (organizing role plays, showing videos on CLaT ) 3. Developing communication materials on Anti CLaT messaging 4. Semi Yearly radio program on Anti CLaT 5. Traditional Leaders Meet to discuss Anti CLaT	Anti CLaT day celebration report Schools visitation reports	100 school children benefited from key Anti CLaT messaging						X		X	X			
		<b>1.5.4 Anti CLaT advocacy and campaigns in Moree, El Mina.</b>														
CEWEFI A	SNV	Targeting vulnerable households for livelihoods and smokers. Strategy to get them into the targeted part list. See section 4.5.1 for post-harvest	List of identified households, Report		X	X	X	X	X	X						
CEWEFI A	SNV, FoN	Formation of 2 Child Protection Committees in Elmina and Moree	Report, Pictures of inauguration 2 Committees Instituted (1 per community)			X				X			X			X
CEWEFI A	SNV, FoN, DAA	Community outreach via community champions and advocates (Community fora, Placard walk, float) 12 programs held	Report, Pictures		X	X	X	X	X	X	X	X	X	X	X	X
CEWEFI A	SNV	Refresher Training for Anti-CLaT Advocates	Report, Pictures	40 trained in NRM			X			X			X			X

Lead Partner	Supporting Partner	Activity 1.5 Reducing Child Labor and Trafficking in Fisheries	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
		<b>1.5.5 Anti-CLaT communications campaign in the Central Region</b>														
FoN	CRC, SNV	Implementation of a communications strategy on CLaT behavior change strategy for Western Region focus only using Community radio drama,				X		X		X		X		X		
FoN	SNV CRC	Journalist orientation in Western Region on CLaT. Organize press conference and radio programs on CLaT.	Training report	20 journalist trained			X			X						
FoN		Identify and work with them in communications strategy implementation community anti-CLaT advocates in 8 selected communities (community champions/allies)	List of advocates per community	3				X		X						
FoN		Orientation in Central Region on CLaT. Stakeholder action planning meetings w/ traditional leaders	Training report				X			X						

### Activity 2.1 Scientific and Technical Working Group

Lead Partner	Supporting Partner	Activity 2.1 Scientific and Technical Working Group	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
Lazar, CRC	FC	Present the Stock Assessment results at the second and third national dialogues (Chair and 3	Draft report				X	X								
Lazar, CRC	FC	Peer review meeting with international experts on stock assessment report (small pelagics) (Collie, NOAA, Brad Brown). Meeting at FC – 20				X	X									
Lazar, CRC	FC	Review draft report of stock assessment and released by FC.	Final report					X	X							
Lazar, CRC	FC	Review management units for demersal fisheries stocks and stock assessment (4 meetings)	Assessment report						X	X	X	X	X	X	X	X

Lazar, CRC	FC	Begin consultations with the Fisheries Commission to establish long-term sustainability of the STWG (prepare a brief) incorporate into legal revision of the Fisheries Act					X	X	X										
Lazar, CRC	FC	Write background biological info, stock assessment, and monitoring sections in the small pelagics management plan	Sections of the management plan				X	X	X										

**Activity 2.2 ICT Innovations**

Lead Partner	Supporting Partner	Activity 2.2 ICT Innovations	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SSG	Lazar, FSSD	Conduct a workshop with the SFMP ICT working group to develop ICT strategy for fisheries management	Draft ICT strategy report	10 days STTA (ICT consultant and Partnership Advisor) Training: 1 day workshop for 10 people = 1 X 10 X 8 = 80 training hours	X	X	X									
SSG	Lazar, FSSD	Present ICT strategy at a National Stakeholder meeting for validation.	ICT strategy presentation	10 days STTA					X							

**Activity 2.3 UCC/DFAS/CCM Capacity Development**

Lead Partner	Supporting Partner	Activity 2.3 UCC/DFAS/CCM Capacity Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC Post/	UCC	Exchange visits of high level officials and faculty of URI and UCC (signing of MOU on exchange of research and education opportunities)	Trip report					X								
Burroughs	URI CRC, EDC	Development of research / education themes such as spatial planning, hazard and climate vulnerability and ecosystem conservation, and research in support of environmental sanitation	Memos and discussion papers					X		X				X		

Lead Partner	Supporting Partner	Activity 2.3 UCC/DFAS/CCM Capacity Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC Lazar	UCC	Graduate degree training: PhD in stock assessment		1 person trained 9 months			X	X	X	X	X	X	X	X	X	X
CRC Lazar	UCC	Graduate degree training: MS in marine policy MS in fish genetics		2 persons 1 month											X	X
CRC Lazar	UCC	Cooperative research and extension: Baseline study of demersal species in Pra and Ankobra	Final report	2 persons. X days	X	X	X	X	X	X	X	X	X	X	X	X
CRC Castro		US study by GITA to on trawl fishing and fisheries management. URI Fisheries will host the tour. FSSD and UCC will develop research agenda for follow-up cooperative research.	Trip report	11 persons 7 days		X										
CRC Lazar	UCC	Age and growth laboratory at UCC Research partnership between FSSD and UCC	Age and growth manual						X	X	X	X	X	X	X	X
CRC Ricci and Castro	FC, UCC	Regional leadership training (Ricci and Castro)	Training report	15 persons trained										X		

**Activity 2.4: Improving FC systems and stock assessment capacity**

Lead Partner	Supporting Partner	Activity 2.4: Improving FC systems and stock assessment capacity	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
Lazar	FSSD	Piloting mobile landings data collection and registration systems. Group designs a system, consider involvement with NITA. Meetings with NITA, FSSD. Incorporate collaboration with UCC				X	X	X	X	X						
Lazar	FSSD	Second phase of training for FC for port agents (2 events 30 persons each)	TraiNet forms	60 persons									X			
Lazar	FSSD	Evaluation and improvement of fisheries data information systems.							X							

Lazar	FSSD	Advanced stock assessment course ( smaller subset of what was done in Year1)		10 persons																	X		
Lazar	FSSD	Exchange visit to the US to receive training in the fisheries data collection and management (visit to the ACCSP program)		2 persons																			
Lazar	FSSD	Short-term training of FSSD staff in MS Access and data management.																					
Lazar	FSSD	Short-term training for an IT specialist of the FSSD				X	X	X															
Bowen	Lazar , FSSD	Design and install a computer network at FSSD in Tema.								X	X	X											

**Activity 2.5 Fishing Capacity Assessment**

Lead Partner	Supporting Partner	Activity 2.5 Fishing Capacity Assessment	Output (product/ report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
Lazar	FSSD	Local training workshop on fishing capacity assessment	Capacity Assessment report with recommendations	Number of persons trained in NRM - 15						X						
Lazar	FSSD	Regional workshop on fishing capacity including IUU, catch reconstruction, open access and challenges of effort reduction. Workshop organized by FCWC, SFMP and FSSD	Workshop report	(Ind. Policy implementation recommendations/analysis Recommendations for a strategy on capacity reduction								X				

**Activity 2.6 Environmental Data Centers and Capacity Building Center for the Western and Central Regions**

Lead Partner	Supporting Partner	Activity 2.6 Environmental Data Centers and Capacity Building Center for the Western and Central Regions	Output (product/ report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
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Lead Partner	Supporting Partner	Activity 2.6 Environmental Data Centers and Capacity Building Center for the Western and Central Regions	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC	HM, TCPD	Equip TCPD CR Community Planning Data Hub with laptops, battery backup, networking, equipment repairs and software HM to develop scope of work and supervise contractor to do building refurbishment, and IT contractor, SFMP to hire contractor and do procurement of equipment. IT contractor to install LAN and computer stuff.	Material inventory		X	X	X	X								
SpS	HM	Training needs assessment of CR planners in terms of skill levels with MapMaker and Q-GIS	Report			X	X									
SpS	HM	Training of CR planners to address priority needs	Report, Training manual	20 person trained on NRM					X	X	X	X	X	X		
HM	SpS	Refresher training for WR planners	Report, Training manual	20 trained on NRM				X	X							
SpS	HM	region wide coastal use guidelines and tool kit for CR	ICM tool kit for coastal districts in the CR	Draft tool kit outline and identification of data sources										X	X	X
HM	SpS	Organize learning event for Western and Central Region TCPD	report	30 persons trained on NRM											X	

### Activity 3.1 SFMP National Strategic Campaigns on small pelagics

Lead Partner	Supporting Partner	Activity 3.1 SFMP National Strategic Campaigns on small pelagics	Output (Product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC-	MOFAD/FC	Reproduction of National Fisheries	100 copies		X	X	X									
CRC-Accra	MOFAD/FC	Development and Production of other IEC materials on NFMP				X	X	X								
CRC-Accra	SNV, Comms Team	Follow-Up Media Outreach	Workshop Report		X					X						

Lead Partner	Supporting Partner	Activity 3.1 SFMP National Strategic Campaigns on small pelagics	Output (Product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC-Accra	FC/ All partners	National workshops	Dialogue Report, Press release	Number of IEC materials												X
CRC-Accra	FoN	Media Engagements	8 Talk shows/ news items	Number of IEC materials	X			X	X	X				X	X	X
SNV		Ghana Journalist Award													X	
CRC-Accra	Comms Team FoN	Radio Jingles towards early actions	Jingles	Number of IEC materials			X						X			
CRC - Accra	SSG	Production and airing of Radio jingles towards Hotline	1 radio Jingle on hotline	Number of IEC materials								X	X	X	X	X
CRC-Accra	SSG , SNV	Production of Posters on Hotline	Up to 3 posters specific to Hotline, for wide release								X					
CRC-Accra	SSG	Billboards – production and mounting	20 billboards on Hotline									X	X	X	X	X
CRC-Accra	SNV	World Fisheries Day (21 <sup>st</sup> November)	Press Release, Event Report	Number of IEC materials		X										
CRC-Accra	CEWEFIA, FoN, HM	Elmina Festival CEWEFIA to participate												X		
DAA	CRC Accra	World Rural Women’s Day (15 <sup>th</sup> Oct) celebration – focus on land issues exhibition and citations of women for good practice	Agenda of event		X											
DAA	CRC	Farmers Day Celebrations at the district level. Advocacy by giving awards to women showing exemplary practices in advocating responsible fishing and post handling practices.	Agenda of event	Number of media releases - 1			X									
DAA	CRC	Annual DAA meeting with the Minister of Fisheries and Aquaculture Development	Agenda of event	Number of media releases - 1								X				

Lead Partner	Supporting Partner	Activity 3.1 SFMP National Strategic Campaigns on small pelagics	Output (Product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S	
DAA	SNV	DAA to conduct regional and district policy dialogues in the Central Region and SFMP target areas topics will follow key actions arising out of the national policy dialogues. Via community radio programs and meetings with local leaders, and also advocacy on the laws	Agenda of event														
HM	CRC/ Accra	Design of pilot best practices award program								x	x						
HM	CRC/ Accra	Implementation of best practices award scheme in 11 communities	awards										x	x	x	x	x

		Activity 3.1.1 Child Labor			O	N	D	J	F	M	A	M	J	J	A	S
SNV	CEWEFIA, FoN, DAA	World Child Labor day event CEWEFIA to participate		1 mass media events		x										
FoN	CRC	Media Engagements	4 Talk shows/ news items		x			x	x	x				x	x	x
SNV	CRC Accra	Fact sheet on CLaT	Fact sheet													
DAA, SSG, DQF	SNV	Posters on child labour, hotline, safe handling of fish														
CEWEFIA	CRC Accra	Community drama		4 – Mass media events Press		x			x				x			

		3.1.2 Healthy Fish Campaign			O	N	D	J	F	M	A	M	J	J	A	S
SNV	DQF	Facts sheets on post-harvest issues DQF to review and provide inputs into draft fact sheets.	Fact sheets													
DAA, SSG, DQF	SNV	Posters on safe handling of fish														



		<b>3.1.3 Gender Strategy Outreach</b>				O	N	D	J	F	M	A	M	J	J	A	S
CRC Accra	SNV , HM	Development of gender mainstreaming behavior change communications messages. And materials HM to assist in development of materials with partners	Printed communication materials 2,000 pieces of materials						X								
HM	SNV	Distribution of gender materials [HM]							X								
SNV	HM	2016 World Women’s Day Celebrations Partners and Fisheries Commission HM to help in program design, and assist in facilitating event	Event report							X							

**Activity 3.2. SFMP Executive Level Communications**

<b>Lead Partner</b>	<b>Supporting Partner</b>	<b>Activity 3.2. SFMP Executive Level Communications</b>	<b>Output (product/ report/ etc.)</b>	<b>Result Target per indicator</b>	O	N	D	J	F	M	A	M	J	J	A	S
CRC Accra, Mensah	MOFAD	Semi-annual meeting with select committees	Briefing packets			x						x				
CRC Accra, Mensah	MOFAD	Semi-annually with Minister or as needed as issues arise	Briefing packets		x					x						x
CRC Accra	FC	Orientation for the fisheries commission. (*Board)	Briefing packets			x			x			x			x	
CRC Accra	IPs/FoN, HM	Quarterly meetings with communications team			x			x			x		x			x
SFMP Mensah	DAA	Quarterly Communications Team meetings			X				X			X			X	
SFMP Mensah	DAA	Success Stories	4 success stories (1 per quarter)					X		X			X			X
SFMP - Accra	Comms Team DAA	FtF bullets	Bi-weekly 2 bullets		X	X	X	X	X	X	X	X	X	X	X	X



Lead Partner	Supporting Partner	Activity 4.1 Small Pelagic Fisheries Management	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FoN	FC	FoN facilitating FWG in planning and attendance at stakeholder meetings at regional level. FWG communicating to key officials and stakeholders in their respective region	Meeting summaries		X	X					X	X			X	X
Lazar CRC	MOFAD, FC	writing the draft plan to be revised and submitted for approval/adoption targeted in Year 3	Draft plan										X	X	X	X

**Activity 4.2 The Western Region Demersal Fisheries Management Initiative**

Lead Partner	Supporting Partner	Activity 4.2 The Western Region Demersal Fisheries Management Initiative	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
(Lazar, CRC)	FSSD/UCC/STWG	Complete demersal stock assessment WR and do analysis (see 2.3 )	Stock assessment report													
(Lazar, CRC)	FSSD/STWG	Assess and determine management units for various demersal species/complexes. Can there be WR scaled demersal management plans and management units or does it need to be nationwide?	Report on recommendations for species specific plans/mg units for demersal stocks	Ind 3 policies: analysis on stocks and mg units completed												

**Activity 4.3 Integrated Management and Resilience Plans for the Ankobra Ecosystem**

Lead Partner	Supporting Partner	Activity 4.3 Integrated Management and Resilience Plans for the Ankobra Ecosystem	Output (product/ report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
HM	SpS	4.3.1 Complete characterization and vulnerability assessment reports carry forward from Year 1	Profile report Spatial options report	7		X										

Lead Partner	Supporting Partner	Activity 4.3 Integrated Management and Resilience Plans for the Ankobra Ecosystem	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
HM	SpS	Carry over from Year 1 on vulnerability assessments and planning	V&A reports	1 Ankobra 1 Axim	X											
HM		Training in NRM and data collection for profile	Training report	7 persons trained												
HM	SpS	4.3.2 Information sharing	Workshop report				X									
HM	SpS	4.3.3 Initiating governance mechanisms	LULC maps Report for Ankobra	2	X	X	X	X				X			X	
HM	SpS DQF	4.3.4 Early actions for community resilience	Report List of VSLA associations Maps of areas restored	50 beneficiaries establish revolving funds) Number of hectares under improved mgt (mangrove replanted. 20 Hcts)	X			X	X	X	X				X	X
HM		Study Tour to Volta region	Study tour report	7 people trained												
SNV	HM	Training on ecosystem based sustainable mangrove forest management	Training report	20 people trained									X			
SNV	HM	Training on mangrove fuelwood value chain and value chain optimization	Training report	30 people trained (15 males and 15 females)										X		
SNV	HM	Training on establishing mangrove plantations using the SNV mangrove plantation establishment manual	Training report	30 people trained (15 males and 15 females)					X							
SNV	HM	Training for project partners and others on the fish smoking fuelwood value chain with special attention to the role of mangroves	Training materials and training report	30 people trained (15 males and 15 females)		X										
HM		4.3.5 Start the ecosystem management planning process for Ankobra	Draft management plan	1 plan drafted for Ankobra											X	

Lead Partner	Supporting Partner	Activity 4.3 Integrated Management and Resilience Plans for the Ankobra Ecosystem	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SpS	DQF HM	4.3.6 Adaptation action options for vulnerable fish landing sites in Sawoma and Axim	Flood risk and hazards plan	1						X			X			

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

Lead Partner	Supporting Partner	Activity 4.4 Integrated Community Fisheries Management and Resilience Plans for the Pra River Estuarine and Mangrove Ecosystems	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
FoN	HM	4.4.1 Workshop to learn lessons from Ankobra on socio-ecological profiling. HM participate to sharing of experience and any survey instruments used to collect data, FoN leads workshop e	Workshop report	Number of persons trained in NRM = 30		X	X	X								
CRC	FoN HM	4.4.2 Capacity strengthening workshop on PRA resilience planning. (Chris Damon or Don Robadue to implement)	Workshop report		X	X										
FoN	HM, SNV	4.4.3 Initiating governance mechanisms with Shama District	Governance strategy document					X	X	X	X	X				
FoN	HM	4.4.4 Profiling of the PRA socio-ecological profile HM - developing of instrument	Survey Instrument Profile report			X	X	X		X						
SpS	Friends of the Nation	Pra estuary vulnerability assessment	V&A report	1										x		
HM	Spatial Solution	4.4.5 Mapping and spatial analysis maps delivered to FoN	Spatial maps						X							
FoN	CSLP	4.4.6 Early actions piloting mangrove forestry management and woodlots plantation in the lower Pra mangrove system, engage the various process and the relevant stakeholders to advance the woodlot plantation														

Lead Partner	Supporting Partner	Activity 4.4 Integrated Community Fisheries Management and Resilience Plans for the Pra River Estuarine and Mangrove Ecosystems	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	CEWEFIA	4.4.6 Training for Anlo Beach women group and others on fuelwood value chain	Training report	30 people (20 females, 10 males) at Anglo Beach trained 30 people			X									
SNV	CEWEFIA, UCC	4.4.6 Energy expenditure survey (using UCC students) and assessment of the economics of fish processing at Anlo Beach	Report 1 Knowledge Product Produced						X	X	X					
CEWEFIA	SNV FON	Work with women's group in Anlo Beach on implementation of Improved and energy efficient fish smoking stoves FoN and CEWEFIA to discuss and coordinate	Meeting summaries			X		X		X		X		X		

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

**Activity 4.5.1 Post Harvesting Processing Knowledge Development, Dissemination and Consensus Building**

Lead Partner	Supporting Partner	Activity 4.5.1 Post Harvesting Processing Knowledge Development,	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
		<b>4.5.1.1 Strategy, business model and tools development with training for SFMP partners</b>														
SNV	DAA, CEWEFIA, DQF	“Business Model Options Report” [Fish smokers Scaling Up Strategy ] DQF inputs and part in any meeting	Strategy document	1 report		X	X									
SNV		Market Segmentation Study	Knowledge Product	1 report		X	X									
SNV	DQF	Partner training on business model options and the private sector option to be used under SFMP. DQF inputs and part in any meeting	Knowledge Product	20 participants trained (10 males, 10 females) MSMEs benefiting				X	X							
SNV	DAA, CEWEFIA	4.5.1.1 Livelihoods Options Report	Knowledge Product Report			X	X									

Lead Partner	Supporting Partner	Activity 4.5.1 Post Harvesting Processing Knowledge Development,	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV		4.5.1.1 Investment Impact Assessment Tool	Tool/Report			X	X									
		<b>4.5.1.2 Focused research and technology development</b>														
SNV	FC	4.5.1.2 Low PAH Open Source Improved Fish Smoking Stove Design Development	New Stove Design report		X	X	X	X								
SNV	FC, GSA	4.5.1.2 Construction and testing of the Low PAH Open Source Improved Fish Smoking Stove	Testing report					X	X							
SNV	DAA, CEWEFIA	4.5.1.2 Evaluation 50 stoves built in Year 1	Evaluation report			X	X									
		<b>4.5.1.3 Support to improved fish smoking stove builders</b>														
SNV		4.5.1.3 Training and certification of 8 Stove SMEs (3 new 5 existing) in building the Low PAH Open Source Improved Fish Smoking Stove	Training report and 8 companies trained	8 MSMEs benefiting strengthened				X	X	X						
SNV		4.5.1.3 Business development training for IFSS producers	Training Course Training Report	8 SMEs strengthened						X	X					
SNV	Stove Builders DAA, CEWEFIA	4.5.1.3 Construction of 12 demonstration stoves in the Central and Western Regions by selected certified stove builders	12 Low PAH Open Source Improved Fish Smoking Stove constructed	12 MSMEs benefiting from Low PAH Open Source Improved Fish Smoking Stove					X	X						
SNV	DAA, CEWEFIA	4.5.1.3 M&E /validation of IFSS installations and SMEs	Feedback reports								X	X			X	X
SNV	DAA, CEWEFIA	4.5.1.3 Training of 20 demand aggregators	Training report	20 MSMEs benefiting people trained (10 female, 10 male) 10 Demand Aggregators jobs created				X	X							

Lead Partner	Supporting Partner	Activity 4.5.1 Post Harvesting Processing Knowledge Development,	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	SOG Advisors	Develop strategy to establish commercial stove financing (lending) relationships with financing institutions	Stove Financing strategy and MoUs	1 financial relationship developed. with women starting to												
SNV	SOG Advisors	Business development training for IFSS producers	Training Course Training Report	20 People Trained			X									
		<b>4.5.1.4 Financial resources for stove installation</b>														
SNV		4.5.1.4 Design and implement incentive scheme to promote adoption of 450 IFSS	450 IFSS Installed and used	450 IFSS constructed MSMEs benefiting benefiting 450 fish smokers				X	X	X	X	X	X	X	X	X
SNV		4.5.1.4 Financial Facility for MFIs operational. Final incentive scheme to be determined during strategy development in 4.5.1.1	450 stoves financed	(same as above so not counted here)				X	X	X	X	X	X	X	X	X
DAA, CEWEFIA and DQF	SNV	Awareness creation on the benefits of IFSS and promotion of IFSS	Increased awareness and enhanced capacity to make informed decisions	4,000 Fish Smokers with increased awareness and enhanced capacity				X				X				
SNV	DAA, CEWEFIA, DQF	Establishment of demonstration stoves CEWEFIA, DQF to coordinate with SNV on participant selection	Demo stoves	10 stoves			X			X			X			X
		Fishery Commission Stoves	(# to be determined)													
		<b>4.5.1.5 Hygienic fish handling and production</b>														
SNV	UCC	4.5.1.5 Continued Research on PAH Levels and microbiological profiles in Smoked and salted Fish	Research Report					X	X	X						
SNV	SSG	4.5.1.5 Assessment of the Feasibility of Producing Healthy Fish for the Ghanaian Market	Assessment Report									X	X			
UCC	SNV	Study on fish storage and marketing	Knowledge Product	Increased Knowledge and 5 students capacity enhanced						X	X	X				



Lead Partner	Supporting Partner	Activity 4.5.1 Post Harvesting Processing Knowledge Development,	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
UCC	SNV	Develop microbiological profiles on smoked fish to assess contamination levels	Knowledge Product	Increased Knowledge and 5 students capacity enhanced						X	X	X				
SNV	FAO	Develop smoked fish production protocols to reduce contamination of smoked fish	Smoked Fish Production Protocols	Increased hygiene, better quality smoked fish and increased income							X	X	X			
SNV	FC	Training of trainers (project partners) on the implementation of these protocols	Project partners trained	Good understanding on healthy fish protocols										X		
DAA, CEWEFIA and DQF	FC	Training of fish smokers on healthy fish protocols	Fish smokers trained	900 Fish Smokers Trained											X	
SNV		Assess feasibility of producing healthy fish using the SFMP protocols	Feasibility report	Feasibility known												X

**Activity 4.5.2 DQF-led Fisheries Value Chain Improvements and Livelihoods**

Lead Partner	Supporting Partner	Activity 4.5.2 DQF-led Fisheries Value Chain Improvements and Livelihoods	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
DQF		<b><u>4.5.2.1 Business model training</u></b>														
		Provide technical support services for 100 existing HFH/MSMEs in relation to identified technical needs - fire and safety, packaging/branding and review on business development training	training report	100 MSME Received Technical training				X								
DQF		Mobilize and train 100 new fishery based MSMEs on Business development and Management	Training report	100 new fishery-based MSMEs trained						X	X					



				processes and VSLA concept															
DQF		Provision of Micro finance services to 150 established MSMEs/Entrepreneurs	Credit worthiness Report on MSMEs/Entrepreneurs	150 MSMEs provided with financial support															X
DQF		Establish solar light/solar phone charging business in 8 communities to provide Alternative livelihood	Improve communication among communities and an alternative livelihood for 24 people	24 solar light/solar phone charging business established in 8 communities														X	X
		<b><u>4.5.2.4 Hygienic fish handling</u></b>																	
DQF	SNV	Provide 100 existing HFH/MSMEs in relation to identified technical needs - fire and safety, packaging/branding and Create Awareness	Contract document prepared and signed with Consultants. Training report	100 established MSMEs receive technical/refresh/review training			X	X	X										
DQF	SNV	Mobilize and train 100 new HFH fishery based MSMEs on Hygienic fish handling	Report on training.	100 MSMEs trained on HFH				X	X	X									
DQF	SNV	Conduct Stakeholders meeting to share Sanitation assessment report in Ellebelle – Sawoma (see 4.3) Feedback from Stakeholders documented and the document shared with the District Assemblies.	Sanitation Assessment Report				X												
DQF		Conduct Stakeholders meeting to share Sanitation assessment report in Axim (see 4.3) Feedback from Stakeholders documented and the document shared with the District Assemblies.	Sanitation Assessment Report				X												
DQF		Conduct Stakeholders meeting to share Sanitation assessment Report in Shama Old Town (see 4.3) Feedback from Stakeholders documented and the document shared with the District Assemblies.	Sanitation Assessment Report				X												
DQF		Awareness creation on Hygienic fish handling in All the SFMP core communities Awareness creation and distribution of flyers					X		X				X						X

		<b><u>4.5.2.5 Engagement in national dialogue and communications</u></b>	-	-															
CRC-Accra	DQF	Participate in National Dialogue Contribute to issues and discussions				X	X												
DQF	HM CEWEFIA	Preparation and distribution of Communications materials, communicate/educate and inform stakeholders				X	X	X	X	X	X	X	X	X	X	X	X	X	X
All Partners	DQF	Participate in National Events, Festivals, and Programs of Partners				X			X			X		X					X
DQF	CEWEFIA	Organize Radio Programs. Request that CRC Accra develop jingles on better stoves, etc.				X			X			X		X					
		<b><u>4.5.2.6 Activity 7.0 Capacity Development</u></b>																	
	DQF	Capacity building for 7 member board of directors of DQF	Capacity building report	7 Member BOD capacity built through training					X										
Appiah SFMP	DQF	Training and outfitting of local Implementing Partners on QuickBooks. 2 DQF people participate in training				X	X	X											

**Activity 4.5.3 CEWEFIA-led Fisheries Value Chain Improvements and Livelihoods**

Lead Partner	Supporting Partner	Activity 4.5.3 CEWEFIA-led Fisheries Value Chain Improvements and Livelihoods	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
		<b><u>4.5.3.1 Business model training</u></b>														
CEWEFIA	SNV	Identify model processors in each of the targeted communities (INFLUENTIAL OPERATORS, MODEL STOVE USERS) Demo businesses are rehabbed and used for processor to processor demos and training. Demo sites in core targeted SFMP communities	List of potential model processors provided to SNV					X	X	X	X	X	X	X	X	X
CEWEFIA	CRC	Awareness creation Fish Mongers 500 women	Report, Pictures		X	X	X	X	X	X	X	X	X	X	X	X

Lead Partner	Supporting Partner	Activity 4.5.3 CEWEFIA-led Fisheries Value Chain Improvements and Livelihoods	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
		sensitized														
CEWEFIA	CRC	Monitoring and evaluation of small businesses.180 MSMEs monitored	Monitoring Report		X	X	X	X	X	X	X	X	X	X	X	X
SNV	CEWEFIA	Assist in the production of the market segmentation study and livelihoods synthesis report.	Market segmentation study and Livelihoods synthesis report			X	X									
SNV	CEWEFIA, DAA	Tools validation workshop and training	Workshop report					X	X							
SNV	CEWEFIA	Build 100 stoves	Pictures, Report	100 stoves constructed	X	X	X	X	X	X	X	X	X	X	X	X
SNV	CEWEFIA	Cross Reference ANTI CLAT in 1.7	Report, Pictures	100 Stoves constructed				X	X	X						
		<b><u>4.5.3.2 Improved fish smoking stove production</u></b>														
SNV	CEWEFIA	30 stove builders total 10 per community	Training Report	30 stove builders trained MSMEs benefitting	X	X	X									
		<b><u>4.5.3.3 Financial resources for stove installation</u></b>														
CEWEFIA	SNV	Identify 10 CLaT vulnerable households to receive a fully subsidized stove							X			X				
CEWEFIA	SNV	Identify sites for 6 demonstrations stoves						X	X							
CEWEFIA	SNV	Train new smoker users 180 Business, microfinance	Training Report	180 women trained MSMEs		X	X	X	X	X						
CEWEFIA		Training in use and maintenance of smoking technologies	Training report	180 carry year from year 1 plus 100 new												
CEWEFIA	Hen Mpoano, FoN	Training of youth for Woodlot plantation	Report	150 youth trained (50 per community) trained in NRM benefitting	X	X	X									
CEWEFIA	Hen Mpoano, FoN	Plant woodlot 10 hectares in 3 communities	Report, Pictures Letter granting permission to use land by woodlot groups	30 hectares of Acacia planted	X	X	X	X	X	X	X	X	X	X	X	X
		<b><u>4.5.3.4 Hygienic fish handling</u></b>														
CEWEFIA	SNV	HFH training 2 days, 3 events x 60 per event	Report	180 women trained in HFH				X	X	X						
CEWEFIA	SNV, Hen	Training on gender policy advocacy	Report, Pictures	90 women trained			X									

Lead Partner	Supporting Partner	Activity 4.5.3 CEWEFIA-led Fisheries Value Chain Improvements and Livelihoods	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
	Mpoano			(30 per community) Training in NRM												
SNV	CEWEFIA	CEWEFIA processing shed, 10 ovens, storage facility	Report, Pictures	10 ovens and 1 storage facility constructed	X	X	X	X	X	X						
		<b><u>4.5.3.5 Engagement in national dialogue and communications</u></b>														
CRC	CEWEFIA	Participate in National Dialogues	Pictures	National Dialogues attended		x		x								
CEWEFIA	CRC	Preparation and distribution of Communications materials	Report	Communication materials distributed	X	X	X	X	X	X	X	X	X	X	X	X
CRC	CEWEFIA	Participate in National Events, Festivals, and Programs of Partners	Report, Pictures	events attended	X	X	X	X	X	X	X	X	X	X	X	X
CEWEFIA	FoN, CRC	Organize Radio Programs	Audio of discussions, Report 24 Radio Programs held		X	X	X	X	X	X	X	X	X	X	X	X
		<b><u>4.5.3.6 Activity 7.0 Capacity Development</u></b>														
SNV	CEWEFIA	Capacity building for board of CEWEFIA	Capacity of Board members built		X	X	x									
SNV	CEWEFIA	Capacity building for staff	Capacity of Staff members built		X	X	X									

**Activity 4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV**

Lead Partner	Supporting Partner	4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
		<b><u>4.5.4.1 Business Model Training</u></b>														
DQF	DAA	DQF- Participate in Forum - Improved Smoking, (DQF determines date and venue)	Summary of participation report													
DAA	CEWEFIA, DQF	DAA members share experience with other groups on smoking methods - two events hosted by DAA		100 people MSMEs benefiting		X								X		

Lead Partner	Supporting Partner	4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CEWEFIA	DAA	Participate in CEWEFIA Forum - Improved Smoking														
SNV	DAA	DAA Assist in the production of the market segmentation study and livelihoods synthesis report.	Market segmentation study and Livelihoods synthesis report		X	X										
SNV	CEWEFIA, DAA	Tools validation workshop and training. DAA to participate	Workshop report				X	X								
DAA	SNV/FC	Special Campaign and Promotion of Improved Stoves	Summary report on campaign events		X						X					
DAA	SNV	Construction of Stoves- Site Selection/ Monitoring	Construction and monitoring report			X			X					X		
DAA	SNV	Quarterly Review Meetings with Fisher folks in Apam and Winneba (One of such Quarterly review an internal exchange visit)	Quarterly meeting reports	20 women benefit from knowledge build-up of best fish Handling practices		X		X				X				X
DAA	SNV	Training on Business skills and Advocacy	Training report	100 women benefited from training in business skills			X				X					X
DAA	CEWEFIA & DQF	Organize Knowledge exchange with CEWEFIA, DQF forum for women involved in post-harvest processes	Report on Forum	20 women from Apam and Winneba to benefit from knowledge exchange on HFH			X									
		<b>4.5.4.2 Improved fish smoking stove production</b>														
DAA	SNV	Identify influential model processors in each of the targeted communities to act as Community Champions	List of community champions				X	X	X							
DAA	SNV	Special Campaign and Promotion of Improved Stoves. Stove demand aggregation and awareness creation	List of 100 customers identified				X				X					

Lead Partner	Supporting Partner	4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	DAA	DAA to Assist with stove M&E activities including with evaluation 50 stoves built in Year 1						X	X			X	X			
		<b>4.5.4.3 Financial resources for stove installation</b>														
DAA	SNV	Identify 10 CLaT vulnerable households to receive a fully subsidized stove	Vulnerable household list					X				X	X			
DAA	SNV	Identify sites for 6 demonstration stoves	Demonstration site justification document	6				X	X							
DAA		Stakeholder engagements(Apam and Winneba)(engage stake holders identified in year 1 and build close partnerships with relevant stakeholders such B.A.S, local financial institution in providing business and financial assistants to women in fish processes	Meeting reports and list of participants To begin in 1 <sup>st</sup> quarter of second year					X	X		X					
		<b>4.5.4.4 Hygienic fish handling</b>														
DAA		Sanitation Campaigns- Education on/ Erection of Fish drying platforms	List of beneficiaries	20 MSMEs benefiting								X	X			
DAA	SNV	Training Post-Harvest Fish handling and Processing	Manual on improved post-harvest fish processing	250 women in post-harvest fish processes trained in improved fish processing						X				X		
		<b>4.5.4.5 Engagement in national dialogue and communications</b>														
DAA		DAA will play a continuing role insuring that women stakeholders increase their engagement in the Year 2 national dialogues and communication campaigns.														
DAA		Hold a durbar on world rural women’s day.														
DAA		Participate in world fisheries day.														
DAA		Annual meeting with the Minister of Fisheries														
DAA		Issues Dialogue at the Regional and Districts														



Lead Partner	Supporting Partner	4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
DAA		<b>4.5.4.6 DAA Fisheries Training Center</b>														
SNV	DAA	Construction of Temporary Training Center at Chokomey	Temporary Center constructed		X	X										
SNV	DAA	Develop and Implement Training packages for training center based on need assessment report			X											
SNV	CRC	Decision on a go/not go on the center building based on feasibility	Official Communication	Decision received	X											
SNV	DAA	Staff recruitment for Training Center SNV to coordinate recruitment and DAA to approve staff selected	Staff recruited. Appointment letter given	2 staffs recruitment				X								
SNV	DAA	Training of recruited staffs, DAA to assist	Training report	2 conducted for 2 staffs				X								
SNV	DAA, HM	Environmental Review for the Training Center	ER report	ER report received and approved		X										
CRC	DAA	Approval of center by USAID	Approval letter	Approval letter received			X									
SNV	CRC	Building of Training Center	Contract Award letter. Building completion certificate	Building completion certificate/report				X	X	X	X	X	X	X	X	X
SNV	DAA	Equip building				X	X								X	X
DAA	SNV	Training starts for DAA not in SFMP targeted communities	Training report	160 trained MSMEs benefiting		X		X		X		X		X		X
SNV	CRC	Decision on a go/not go on the center building based on feasibility	Official Communication	Decision received	X											
		<b>4.5.4.7 Activity 7 Organizational Capacity Development</b>														
SNV	DAA	Work with SNV to implement priority recommendations based on assessment	Report on assessment													
SNV	DAA	Coordinate with SNV on coaching, mentoring and technical assistance based on needs identified in the assessment														

Lead Partner	Supporting Partner	4.5.4 DAA-led Fisheries value chain improvements and livelihoods in Apam and Winneba, Central Region assisted by SNV	Output (product/ Report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
CRC	SNV	Exchange visits and study tour for fish processors in Ghana/W. Africa etc., for mentoring, best practices	1 SNV person participates													

### Activity 5 Gender Mainstreaming

Lead	Team member	Activity 5 Gender Mainstreaming	Output (product/ report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	CRC (Torell)	5.1 Gender strategy for the Fisheries Commission	Strategy paper					X								X
		5.2 Mainstreaming gender strategy within the SFMP and its partners														
SNV	HM	5.2.1 Social organization and engagement														
SNV	HM	Conduct semi-annual gender network meetings. In Y2, the meetings will focus on the preparation of an action plan for the development of a declaration for strengthening women in fisheries	Meeting reports	20 people in Gender Network				X							x	
HM	SNV	Preparatory training of women towards the participation of women leaders in the SFMP policy advocacy forum	Training report	20 women participated in training							X					
HM	SNV, FC M&E unit	Participation of women leaders in SFMP policy advocacy forum	Workshop report	20 women participated in workshop								x				
		5.2.2 Gender strategy outreach (SFMP then FC) see 3.1.4		Strategy applied	X											
		5.2.3 Capacity Building														
CRC	HM, SNV	Finalize Gender Mainstreaming Manual started in year one					X									
SNV	CRC, HM	Develop Training Modules						X								

Lead	Team member	Activity 5 Gender Mainstreaming	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	HM, CRC	1 Training Workshops on the gender mainstreaming manual and training modules for SFMP Partners and selected organizations	Training report	20 people trained					X							
SNV	HM	Trainer of Trainees program for DAA and CEWEFIA on “honam” dialogue	Training report	10 people trained						X						
SNV	HM	Training of women leaders in policy advocacy									X					
		<i>5.2.4 Gender learning strategy</i>														
SNV	HM	Conduct baseline study on women in leadership roles within SFMP fisheries stakeholder groups	Knowledge report	Knowledge report disseminated			X									
HM	URI CRC	Prepare policy brief that highlights the results of gender mainstreaming and learning	One policy brief	gender mainstreaming applied											X	
HM	FC M&E UNIT	Processing gender data and presenting the gender story in SFMP newsletters and quarterly reports					X			X			X			X

### Activity 6.1 Partnership Development

Lead Partner	Supporting Partner	Activity 6.1 Partnership Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SSG	CoP	Conduct preliminary partner negotiations			X	X	X	X	X	X	X	X	X	X	X	X
SSG	CoP	Conducting due diligence	Up to 2 due diligence reports		X	X										
SSG	CoP	Conduct stakeholder consultations (FoN engaged in stakeholder meetings on IUU hotline)			X	X	X	X	X	X	X	X	X	X	X	X
SSG	CoP	Conduct Partnership Forums (FoN engaged in stakeholder forums on IUU hotline)	Up to 3 forums conducted, with 8-15 participants each	STTA=up to 10 for each forum or up to 30 days total	X			X			X					

Lead Partner	Supporting Partner	Activity 6.1 Partnership Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SSG	CoP	Prepare Strategic Partnership Concept Papers	Up to 2 Concept Papers				X	X								
SSG	CoP	Prepare and Negotiate Draft MOUs	1 Draft MOU	Indicator 16 = 2 partnerships created over LoP					X							
SSG	CoP	Develop overall SFMP Partnership Strategy Document	Partnership strategy submitted				X									
SSG	CoP	Oversee Partnership Management and M&E	Quarterly reporting on partnership resource contributions and activities							X	X	X	X	X	X	X
SSG	CoP	Support Communications and Outreach			X	X	X	X	X	X	X	X	X	X	X	X

### Activity 7.1 GoG Capacity Development

Lead Partner	Supporting Partner	Activity 7.1 GoG Capacity Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
URI D.Robadue CRC	Post, Castro, Swift, URI	Seminar on multidisciplinary research and extension programs training. IGERT type special study		Number of persons trained											X	X
Lazar	FC Kaine CRC	Graduate training ( 2 MS)		Number of persons trained	X	X								X	X	X
Lazar	UCC Kaine CRC	Graduate training ( 1 PHD, 2 MS)		Number of persons trained	X	X	X	X	X	X	X	X	X	X	X	X
Kaine, URI Antaru, SFMP	UCC Lazar	Procurement of US scientific equipment and shipping to Ghana	Memo on receipt of equipment			X	X	X								
SFMP Antaru, Appiah	Bowen, FC, UCC	Procurement of In-country capital equipment for FC,FEU, MP	Memo on receipt of equipment		X	X	X	X	X							
CRC Bowen	FC	Installation of IT and computer systems in FC units with local contractors	Memo on receipt of equipment					X	X	X	X					

SNV		Strategy for the post-harvest unit	Strategy document	Strategy report submitted and approved											X					
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### **Activity 7.2 CSO Capacity Development**

Lead Partner	Supporting Partner	Activity 7.2 CSO Capacity Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV		Capacity Assessment (scoping study) of the National Association of Fish Processors and Traders(NAFPTA)	OCA report	Report submitted and approved			X									
SNV		Capacity building support to regional branches of NAFPTA	Training report	20 people trained						X						
SNV		OCA for remaining CSOs	OCA report	Report submitted and approved			X									
SNV	URI	Development of Synthesis OCA report for Partners	OCA Synthesis report	Synthesis Report submitted and approved			X									
SNV	URI	Finalization of Organizational Development Manual	Training manual	Manual submitted and approved				X								
SNV		Validation of Organizational Development Manual with Partners	Workshop report	Workshop report submitted and approved						X						
SNV		Piloting of Organizational Development Manual	Pilot Report	Manual piloted with 1 organization						X						
SNV		Training of Partners on Organizational Development Manual.	Training report	Training Workshop report submitted and approved								X				
SNV		Development of organizational business plans for CSO partner organizations	Business plans	4 business plans developed							X	X	X	X	X	X
SNV	URI Kent, etc.	Organization of periodic coaching and mentoring for selected organizations	Coaching reports	4 organizations received coaching support												X

Lead Partner	Supporting Partner	Activity 7.2 CSO Capacity Development	Output (product/report/ etc.)	Result Target per indicator	O	N	D	J	F	M	A	M	J	J	A	S
SNV	URI (for DQF)	Capacity building interventions for CSOs. <ul style="list-style-type: none"> <li>Organizational development Team building and Human resources and staffing Financial administration Strategic planning, board development Constituent relationships</li> </ul>		Number of persons trained	X	X	X	X	X	X	X	X	X	X	X	X
Kent CRC	SNV, FC	Study tour to Senegal and The Gambia on empowering women and post-harvest improvements (Cayar, TRY, NASCOM)		Number of persons trained				X	X							
Appiah CSFMP	SNV, URI	Training and outfitting of local Implementing Partners on QuickBooks		Number of persons trained	X	X	X									
Castro URI	GITA MOFAD UCC	Study tour to USA on trawl fisheries environmentally friendly technology and co-management		Number of persons trained	X	X										

### Activity B.5 Reporting Requirements

Lead Partner	Supporting Partner	Activity B.5 Reporting Requirements	Output (product/report/ etc.)	O	N	D	J	F	M	A	M	J	J	A	S
CRC	all	Quarterly partner Progress reporting and meeting	Progress reports (3)			X		X				X			
CRC	all	Annual report	Annual report	X											
URI/CRC		Accrual reporting	Accrual reporting (4)			X		X				X			X
CRC	all	Year3 work plan	Year3 work plan											X	X
CRC	all	Senior Management Team meetings		X			X		X				X		X

**Activity B.6 Corporate Communications and support services**

Lead Partner	Supporting Partner	Activity B.6 Corporate Communications and support services	O	N	D	J	F	M	A	M	J	J	A	S
SFMP Mensah		Quarterly Communications Team meetings	X				X			X			X	
SFMP Mensah	All partners	Success Stories			X			X			X			X
SFMP - Accra	Comms Team	FtF bullets	X	X	X	X	X	X	X	X	X	X	X	X
SFMP-Accra	All partners	Development of periodic <b>press releases</b> in support of project activities national dialogues, etc.	X	X	X			X						X
All partners	CRC/URI	Regular production of project reports, progress reports, annual work plan			X			X			X			X
SFMP - Accra	CRC/URI (McCarthy)	Development of implementation plan for project document production and distribution		X			X			X			X	
SFMP - Accra		Year 2 project Flyer				X								
SFMP - Accra		2016 Calendar – Design and final production		X	X									
SFMP - Accra		Production of Roll-up Banners for all partners				X	X							
SNV		Establishment of social network WhatsApp mobile platform for SFMP	X											

**Activity B.8 Monitoring and Evaluation Plan**

Lead Partner	Activity B.8 Monitoring and Evaluation Plan	Output (product/report/ etc.)	O	N	D	J	F	M	A	M	J	J	A	S
CoP/M&E Specialist	Baseline report of Household Survey in project and non-project coastal sites report prepared	Baseline report	X	X	X									
CoP/M&E Specialist	Combined annual self-assessment and work planning meeting with implementing partners, USAID, and selected other partners and donors				X			X			X			X
CoP/M&E Specialist	Quarterly PMP reporting to USAID as part of quarterly reports and data input to the METSS and Feed the Future online reporting portals				X			X			X			X

CoP/M&E Specialist	Monthly reporting of performance data by implementing partners to M&E specialist	Monthly partner reports	X	X	X	X	X	X	X	X	X	X	X	X	X
CoP/M&E Specialist	QA and QC visits to field sites and Implementing Partners		X	X	X	X	X	X	X	X	X	X	X	X	X
CRC/DAA, CEWEFIA/DQF	Experience sharing meetings among DAA, DQF and CEWEFIA.			X			X			X				X	

**Activity B.9 Environmental Compliance and Management**

Lead Partner	Supporting Partner	Activity B.9 Environmental Compliance and Management	Output (product/report/ etc.)	O	N	D	J	F	M	A	M	J	J	A	S
ENV Officer at HM	CRC	Annual Environmental. Monitoring and Mitigation report	Report	X											
ENV Officer at HM	CRC, SNV	Submission of ER for the DAA Center and El Mina FC outpost	ER forms to CRC for submission to USAID		X	X						X	X		
ENV Officer at HM	CRC	Environmental monitoring.	Quarterly progress reports	X	X	X	X	X	X	X	X	X	X	X	X



## Appendix 1 PMP Summary list of Targets for Year 2 and changes relative to the M&E Plan

	Indicators	Target in PMP	Revised Target per work plan
<b>Goal: Rebuild targeted fish stocks via adoption of sustainable practices and exploitation levels</b>			
1	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)	N/A	N/A
	Biomass to produce MSY ( $B_{msy}$ )	N/A	N/A
	Fishing Mortality at MSY ( $F_{msy}$ )	N/A	N/A
2	Number of direct project beneficiaries (number), the percentage of which are female (percent) (IDA Core Indicator) (Goal level indicator from Ghana CDCS)	N/A	N/A
<b>IR1: POLICY: Strengthened enabling environment for marine resources governance</b>			
3	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	fish act drafting public consult	fish act drafting public consult
		small pelagic plan drafted	small pelagic plan drafted
		public consult	public consult
		child labor draft of recommended action	child labor draft of recommended action
		Demersal plan analysis	Demersal plan analysis
<b>IR2: SCIENCE &amp; RESEARCH: Increased use of science and applied research to inform decision-making, law enforcement and the implementation of management plans</b>			
4	Number of institutions with improved capacity to develop and implement managed access fisheries management plans	N/A	N/A
<b>IR3: CONSTITUENCIES: Constituencies and political will for policy reform &amp; implementation built</b>			
5	Number of days of USG funded technical assistance in NRM and/or biodiversity provided to counterparts or stakeholders (EG 4.8.1-28)	888 260(Lazar) 32(SSG STTA+SSG full time PS at 260 days) 336(URI SSTA	

	<b>Indicators</b>	<b>Target in PMP</b>	<b>Revised Target per work plan</b>
6	Number of information products disseminated in local media reports, radio shows, conference papers, and research studies (Project indicator).	55	18
<b>IR4: APPLIED MANAGEMENT: Improved management of marine resources</b>			
7	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)	N/A	N/A
8	Number of DAs supported with USG Assistance (Ghana CDCS, IR 2.3 indicator)	4-On-going	4-On-going
9	Improvement in fisheries enforcement and prosecutorial chain to counter IUU fishing (increase/decrease in prosecutions and percent that lead to conviction) (Project Indicator)	on-going	on-going
10	Number of climate vulnerability assessments conducted as a result of USG Assistance (EG 4.5.1)	1-Pra	Axim, Ankroba(carry over from year 1) &-Pra
11	Number farmers and others who have applied new technologies or management practices as a result of USG assistance (FtF 4.5.2)	100,000 (assumes national closed season for small pelagics	
12	Number of micro, small and medium enterprises (MSMEs), including farmers, receiving business development services from USG assisted sources (FtF 4.5.2)	500	3279
13	Value of new private sector investments in select value chains (FTF 4.5.2-38)	target estimated after STEP process has completed	target estimated after STEP process has completed
14	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)	Same 3 ongoing assistance	Same 3 ongoing assistance
15	Number of members of producer organizations and community based organizations receiving USG assistance (S)(FTF 4.5.2(27))		
	<b>Cross Cutting Indicators</b>		

	<b>Indicators</b>	<b>Target in PMP</b>	<b>Revised Target per work plan</b>
16	Number of public-private partnerships formed as a result of Feed the Future assistance (S) (FTF 4.5.2(12)_	1	
17	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)	1100	826
18	Number of person hours of training in natural resources management and/or biodiversity conservation supported by USG assistance (FtF 4.8.1-29)	11000	16080

## Appendix 2 Summary of SFMP contributions in Year 2 to the NMFP

### Key management issues identified in the National Fisheries Management Plan and SFMP contributions to the NFM Plan Implementation

Key challenges identified	SFMP contribution in year 2	Comments
<b>Excessive fishing effort exerted in the fisheries.</b>	<ul style="list-style-type: none"> <li>- Fisheries profile report and photo album</li> <li>- Fishing capacity assessment training workshop</li> <li>- Fishing capacity reduction scheme at Fmsy</li> <li>- Bio-economic assessment of artisanal fisheries (income and subsidies)</li> <li>- US study tour and development of cooperative research with UCC/GITA.</li> <li>-Media campaign and outreach on overcapacity.</li> </ul>	<i>Industrial and Tuna fleet not included in scope of SFMP design.</i>
<b>Inadequate information on Fisheries Biology and stocks.</b>	<ul style="list-style-type: none"> <li>- Advanced stock assessment workshop (FSSD, UCC)</li> <li>- Training of field data enumerators (phase 1 and 2)</li> <li>- Fisheries data improvement project (pilot ICT project)</li> <li>- Graduate degree training (2 MS to URI)</li> <li>- Short term training in MS Access for FSSD</li> <li>- Mid-term training (6 months) for one FSSD staff in IT</li> <li>- Install computer network at FSSD headquarter</li> <li>- Equip FSSD with computers and tablets for ICT project</li> <li>- Initiate a cooperative research program with fishermen on several research topics (environ.).</li> <li>- Collaboration with UCC on age and growth (equip a lab at UCC and train staff from both FSSD and UCC)</li> <li>-Review fisheries landings data in collaboration with key stakeholders.</li> <li>-Material support.</li> </ul>	<i>Industrial and Tuna fleet not included.</i>
<b>Inadequate regulations and weak enforcement of existing regulations</b>	<ul style="list-style-type: none"> <li>-Material support for FEU (construct outpost in Elmina)</li> <li>-Provision for regional offices</li> <li>-Provisions for furnishing marine police academy</li> <li>-Develop a code of conduct of enforcement for FEU</li> <li>-Enforcement competency assessment and design tools</li> <li>-Education and outreach program on best fisheries practices in 15 selected communities.</li> <li>-National competition of best management practices</li> <li>-Pilot a citizen's watch program modeled after Philippines experience (SSG experts).</li> <li>-Co-management framework development (national conference)</li> <li>-Co-management policy development (national conference)</li> </ul>	<i>Industrial and Tuna fleet not included.</i>
<b>Low level of protection of marine biodiversity</b>	<ul style="list-style-type: none"> <li>-Environmental data hubs (SFMP/UCC/FSSD)</li> <li>-Capacity building center for western and central regions</li> <li>-Ecosystem-based fisheries management and community resilience plan in Pra and Ankobra.</li> <li>-Baseline study of selected demersal species in the Western region.</li> </ul>	<i>Industrial and Tuna fleet not included.</i>
<b>Inappropriate procedures in certifying fish for export.</b>	-	<i>Not key focus area</i>

**Contribution of the Sustainable Fisheries Management Project (USAID/SFMP)  
To the Operational Plan of the Fisheries Management Plan of Ghana 2015-2019**

Strategy actions	Means of Implementation	Mode of Implementation	Contribution of USAID/SFMP	Comments
<b>TRAWL FISHERIES</b>				
<p>T 1.1 Reduce the level of fishing effort by 50% with each vessel fishing 150 days per year.</p> <p>T 1.2 Reducing the number of vessels in the fishery.</p> <p>T 1.3 Remove IUU fishing to reduce fishing effort and capacity.</p>	<p>Revise conditions of license through implementation of S76 of the Fisheries Act (625)</p> <p>Increase cost of licenses by 50% from current level.</p> <p>Facilitate voluntary exit</p> <p>Suspension of fishing offences</p> <p>Cancellation of registration and licenses of repeat IUU offenders.</p> <p>Moratorium on new licenses No new vessels entry</p>	<p>-VMS monitoring</p> <p>- Logbooks</p> <p>- At sea enforcement</p> <p>- Port state measures</p>	<p>-Fishing capacity assessment training workshop.</p> <p>-Standardize fishing effort by fishery and relate fishing capacity to fishing effort. Establish reference points for sustainability by fishing sector.</p> <p>-Fishing capacity reduction scheme.</p> <p>-US study tour and development of cooperative research with GITA and UCC.</p> <p>-Media campaign and outreach on IUU.</p>	<p><i>Due to source of funding by Feed the /Future Initiative of USAID.</i></p> <p><i>Focus areas of the project is on the artisanal fisheries and small pelagics.</i></p>
<b>CANOE FISHERY</b>				
<p>C 1.1 Survey and registration of active vessels.</p> <p>C 1.2 Increase the traditional one day per week fishing holiday (could be increased to 2 days per week).</p> <p>C 1.5 Moratorium on new</p>	<p>Through engagement with stakeholders, chief fishermen and District assemblies</p>	<p>- Logbooks</p> <p>- At sea enforcement</p> <p>- Port state measures</p>	<p>-Linking insurance package to canoe registration.</p> <p>-Linking Vodafone farmers' club to the fishery sector.</p> <p>-Draft a recommendation and justification of actions for small pelagics management as an integral part of the NFMP (closed season and others).</p> <p>-Develop a monitoring plan with</p>	<p><i>Focus area is artisanal fisheries for small pelagic fisheries due to their importance for food security.</i></p>

entrants to the fishery.			<p>biological impact assessment, short and medium plan to the FC (Board).</p> <ul style="list-style-type: none"> <li>-Co-management framework development (national conference) and follow-up recommendations.</li> <li>-Policy analysis on potential alternative benefits to fuel subsidy scheme. Bio-economic impact on fuel subsidy in the fishery.</li> <li>-Regional fisheries management coordination with FCWC.</li> </ul> <p>Strategic communications in small pelagic fisheries/Early actions for reversing decline.</p> <p>Development of gender mainstreaming behavior change communications messages.</p>	
<b>BIOLOGY AND STOCK ASSESSMENT</b>				
2.1 Develop a Data Collection Regulations aimed at gathering fisheries data, namely catches, discards, landings and specific fish biological data which will form the basis for stock assessment information for the National Harvest Strategy (NHS) by 2020	License conditions to provide catch data	- Logbook regulation	<ul style="list-style-type: none"> <li>-Evaluation and improvement of fisheries information system (involve stakeholders).</li> <li>-Training of field data enumerators (phase 1 and 2)</li> <li>-Fisheries data improvement project (pilot ICT project)</li> <li>-Graduate degree training (2 MS to URI)</li> <li>Short term training in MS Access for FSSD</li> <li>-Mid-term training (6 months) for one FSSD staff in IT</li> <li>-Install computer network at FSSD headquarter</li> <li>-Equip FSSD with computers and tablets for ICT project</li> <li>-Collaboration with UCC on age and</li> </ul>	

			<p>growth (equip a lab at UCC and train staff from both FSSD and UCC).          -Exchange visit to the U.S. to the ACCSP program in Washington DC</p>	
<b>ENFORCEMENT LEGISLATION</b>				
<p>3.1 Active public awareness program through various media to sensitize fishermen to the regulations, including traditional communication mechanisms.</p>	<p>Publicity of the Management Plan changes through fishing sector operator meetings, community announcements</p>	<p>- Community to encourage self-management and watching others for compliance.</p>	<p>-Assist MOFAD and FC on the communication programs to implement the NFMP.          -Develop a toll free hotline to report IUU.          -Material support for FEU (construct outpost in Elmina).          -Provision for regional offices (4 vehicles)          -Provisions for furnishing marine police academy.          -Develop a code of conduct of enforcement for FEU.          -Enforcement competency assessment and design tools.          -Education and outreach program on best fisheries practices in 15 selected communities.          -National competition of best management practices.          -Pilot a citizen's watch program modeled after Philippines experience (legal review and design - SSG consultants).          Communication campaign on IUU fishing.</p>	
<b>PROTECTING MARINE HABITAT AND BIODIVERSITY</b>				

<p>4.1 Creation of marine habitat protection areas, actively protect nursery areas and spawning grounds, mainly in estuaries and mangrove areas.</p>	<p>Draft designation of different types of marine habitat considered essential for protection.</p> <p>Create and designate Marine Protected Security Areas (MPSA).</p> <p>Liaise with relevant agencies to ensure enforcement of buffer/breeding grounds around oil installations.</p>	<p>-Number and size of habitat protection areas established.</p> <p>-Number of protected areas created and monitored.</p>	<p>Complete characterization and vulnerability assessment reports.</p> <p>Information sharing and engagement for vulnerability assessment and estuary characterization.</p> <p>Initiate the ecosystem management planning for Ankobra.</p> <p>Adaptation action options for vulnerable fish landings sites in Sawoma and Axim.</p> <p>Capacity building workshop on PRA resilience planning.</p> <p>Profiling and spatial mapping of PRA.</p>	<p><i>Previous USAID/ICFG project identified potential MPA sites in the Western region.</i></p>
<p>4.2 Implement closed seasons according to oceanographic data (mainly from May and June between two upwelling period when fish adults come close to shore to spawn.</p>	<p>One (1) month closure each June (all fisheries all species)</p> <p>Two (2) months closure for demersal species.</p> <p>Revision in 2017</p>	<p>-Degree of compliance with closure.</p> <p>-Number of warnings or prosecutions for non-compliance with closed season.</p>	<p>-Sensitize communities on the rationale behind closed seasons and closed areas.</p> <p>-Support MOFAD/FC on communication rollout of closed seasons.</p> <p>-Develop a Vodafone helpline for information sharing.</p>	
<p><b>PRODUCT CERTIFICATION MANAGEMENT</b></p>				
<p>4.1 Creation of marine habitat protection areas, actively protect nursery areas and spawning grounds, mainly in estuaries and mangrove areas.</p>	<p>Draft designation of different types of marine habitat considered essential for protection.</p> <p>Create and designate Marine Protected Security Areas (MPSA).</p>	<p>-Number and size of habitat protection areas established.</p> <p>-Number of protected areas created and monitored.</p>	<p>Complete characterization and vulnerability assessment reports.</p> <p>Information sharing and engagement for vulnerability assessment and estuary characterization.</p> <p>Initiate the ecosystem management planning for Ankobra.</p> <p>Adaptation action options for vulnerable fish landings sites in</p>	<p><i>Previous USAID/ICFG project identified potential MPA sites in the Western region.</i></p>



	Liaise with relevant agencies to ensure enforcement of buffer/breeding grounds around oil installations.		Sawoma and Axim. Capacity building workshop on PRA resilience planning. Profiling and spatial mapping of PRA.	
4.2 Implement closed seasons according to oceanographic data (mainly from May and June between two upwelling period when fish adults come close to shore to spawn.	One (1) month closure each June (all fisheries all species)  Two (2) months closure for demersal species.  Revision in 2017	-Degree of compliance with closure.  -Number of warnings or prosecutions for non-compliance with closed season.	-Sensitize communities on the rationale behind closed seasons and closed areas. -Support MOFAD/FC on communication rollout of closed seasons. -Develop a Vodafone helpline for information sharing.	