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PENCOO GEJ

(Collaborative Management for a Sustainable Fisheries Future in Senegal)

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Acronyms

ANACIM	National Agency of Civil Aviation and Meteorology
CINSERE	Climate information services for increased resilience and productivity in Senegal project, USAID/Senegal
CL	Local Agreement (<i>Convention Local</i>)
CGPP	Committee for the Management of Small Pelagics
CLPA	Local Artisanal Fisheries Councils (<i>Conseils Locaux de Pêche Artisanale</i>)
CNAAP	National Committee for Fisheries Management Support
CNGPP	National Committee for Collaborative Management of Small Pelagics
COMNACC	National Committee on Adaptation to Climate Change
CRC	Coastal Resources Center
CRODT	Oceanographic Research Center Dakar, Thiaroye
CSE	Ecological Monitoring Center
CSRP	Sub-Regional Fisheries Commission
DAMCP	Department of Community Based Marine Protected Areas
DEEC	Department of Environment and Classified Establishments
DGID	Internal Revenue Service
DITP	Department of Fisheries Processing Industries
DPC	Department of Inland Fisheries
DPM	Department of Marine Fisheries
FtF	Feed the Future
FMP	Participatory Fisheries Management Plans
GIS	Geographical Information System
ICC	CLPA Coordination and Advisory Committee
IR	Intermediate Result
IFAN/IRD	Refers to the Biological and Ecological Laboratory of Fish in West Africa
IUPA/UCAD	<i>Institut Universitaire de Pêche et d'Aquaculture - Université Cheikh A Diop</i>
IUU	Illegal, Unreported and Unregulated
LPSD/PA	Sector Policy Letter for the Development of Fisheries and Aquaculture
MEDD	Ministry of Environment and Sustainable Development
MEF	Ministry of Economy and Finance
MoU	Memorandum of Understanding
MPEM	Ministry of Fisheries and Maritime Economy
NAP	National Adaptation Plan
NDC	Nationally Determined Contributions
NOAA	National Oceanic and Atmospheric Administration
PMP	Performance Management Plan
PNP CC	National Platform for Fisheries and Climate Change
SDG	Sustainable Development Goal
UNFCCC	United Nations Framework Convention on Climate Change
URI	University of Rhode Island
URM	Local implementation unit (<i>Unité Restreinte de Mise en œuvre</i>)
USAID	United States Agency for International Development
USG	United States Government
UZM	Zonal Unit of Implementation (<i>Unité Zonale de Mise en œuvre</i>)

I. EXECUTIVE SUMMARY

The USAID/COMFISH Plus project objective is to support the Government of Senegal's efforts to reform the fisheries sector and increase the resilience of fishing communities and their livelihoods. This includes strengthening the enabling conditions for improved governance, improved access to science to support decision-making processes, and identifying and adopting measures to increase resilience to climate change.

The USAID/COMFISH Plus extension phase focuses on the priorities already identified by the USAID/COMFISH project in the framework of the 'Feed the Future' Initiative (FtF), climate change and biodiversity conservation. It also retains the integrated approach of the USAID/COMFISH project in addressing crosscutting themes such as capacity building in governance, gender and empowerment of women processors, and adaptation to climate change impacts in the fishing sector.

This report describes the progress made in implementing Quarter 1 of the fiscal year 2018 USAID/COMFISH Plus project work plan.

On policy dialogue, assistance was provided to several ministries to implement three main actions:

- Assistance to organize a meeting to update the National Platform for Fisheries and Climate Change and help implement the National Climate Change Adaptation Strategy for Fisheries developed in 2017 ;
- Continuing preparation of the U.S. study tour and exchange of experiences in Washington, D.C. for the Ministry of Fisheries on IUU fishing to draw from the US experience in setting up an interagency Task Force to Combat IUU Fishing and Seafood Fraud ;
- Assistance to the Department of Protection and Monitoring of Fisheries (DPSP) for consultations on strengthening the regulation on industrial fishing trawls in Senegal and to the Research and Planning Unit (CEP) of the Ministry of Fisheries in order to set up the various monitoring and evaluation mechanisms, and updating the results assessment framework of the Fisheries and Aquaculture Sector Policy Letter (2016-2023).

Capacity strengthening continued with institutions and stakeholders during the quarter. At the institutional level, the partnership framework with the Directorate of Literacy and National Languages (DALN) was operationalized with the opening of thirteen functional literacy classrooms for women processors at project sites. Synergy was further developed with the CINSERE project and the DPSP in the context of establishing the monitoring unit of the early warning and safety at sea system. At the strategic level, the project team also attended a sub-regional workshop hosted by the USAID/WA-BiCC project with a view to sharing with partner countries the experience of Senegal on integrating climate change adaptation into national and local fisheries sector planning documents. The national Local Artisanal Fisheries Council (CLPA) network was also provided with technical and financial assistance by the project to draft a roadmap that will help with CLPA action plan implementation.

For stakeholders, several activities have been carried out in the context of local adaptation plan implementation. They include development and validation of action plans produced by the local adaptation plan monitoring/steering committees of Ziguinchor, Kafountine and

Saint-Louis and installation of the monitoring units in Mbour and Saint Louis to improve the functionality of the SMS alert platform for safety at sea. Capacity development activities for stakeholders implementing local conventions (CLs) and participatory Fisheries Management Plans (FMPs) for the *sardinella* fishery were also implemented.

At the scientific level, for improved support to core activities (FMPs, CLs and climate change adaptation plans), the project has established a partnership with various scientific institutions (IUPA, IFAN/IRD, CRODT and CSE). USAID/COMFISH Plus contributes to the capacity development of these institutions and entrusts them with research activities to support the process of development and implementation of FMPs for targeted fisheries. The activities started with a series of technical meetings between the project and each institution, followed by a kick-off meeting during which the research methodologies proposed by the partners were presented, as well as the constraints encountered during project start-up. This quarter the CRODT has established joint units for the collection, processing and analysis of fisheries data for an improved coordination of the catch data collection systems in fishing zones supported with a strong involvement of stakeholders in the collaborative monitoring of indicators related to implementation of management plans.

Implementation of FMPs continues with the operationalization of the consultation frameworks (local implementation units). The FMP actions planned this year were developed by these units and validated by the Coordination and Advisory Committees (ICCs) of the CLPAs of Grande Côte Sud, Cap Vert and Petite Côte.

For the *ethmalosa* fishery management plan development process, the project organized a feedback workshop with Joal-Fadhiouth stakeholders focusing on the study of selectivity of fishing nets targeting *ethmalosa* in the area of Sine Saloum. The results were validated by stakeholders and helped define the most suitable mesh size for a sustainable exploitation of the resource.

Several activities have been carried out to improve local fisheries governance. These include the evaluation of additional fundraising strategies in Joal and monitoring the implementation of action plans for internal mobilization of funds in the CLPAs of Kafountine, Ziguinchor, Rufisque/Bargny, Yene/Dialaw and St. Louis. Other activities related to CL implementation continued during the quarter, such as participatory surveillance and production of radio programs. ***Seven new CLs supported by the project in the Sine Saloum area were finalized and three of them validated during the quarter.***

On **gender**, the project continued to build the capacity of women processors during the quarter and help them generate more income. The activities carried out included evaluating the action plans of the hygiene committees in processing sites, starting functional literacy classes in CLPAs, supporting women processors in Sendou and Yenne/Dialaw for income generating activities, supporting improvements at the Yénne Todd, Mballing and Pointe Saréne sites, and continuing consultations with Goxxu Mbaac women processors in support of the process of strengthening their organizational dynamics. Additional consultations were also conducted in support of strengthening processing and conservation techniques for finished fish products in five localities: Pointe Saréne, Missirah, Yénne Todd, Cayar and Guéréo.

On **communication**, partnership protocols were renewed with the project's partner radios, the Saloum Islands radio programs were evaluated, the stakeholders in Cayar were sensitized on safety at sea, videos and project capitalization documents were prepared, and a success story was published.

Regarding **Monitoring and Evaluation**, FY 17 results on key indicators were reported in FTFMS, a Data Quality Assessment (DQA) was conducted by USAID's monitoring and evaluation team and confirmed the reliability of the collection mechanism put in place by the project. During the quarter, the project team also prepared for implementation of the new collection and monitoring system called mobile-to-web platform for CLPA and project performance data. This new web-based computerized tool will allow automatic data collection, exploitation and monitoring, and help improve storage and security of recorded information.

II. INTRODUCTION

The USAID/COMFISH Plus project is a two-year initiative (October 1, 2016 - September 30, 2018) funded by the United States' Agency for International Development (USAID). It is a follow-on of the USAID/COMFISH Project (February 14, 2011 – September 30, 2016) implemented through a Cooperative Agreement between USAID and the University of Rhode Island (URI). The main partners are government entities, professional fisheries associations, universities, research institutes and non-governmental organizations (NGOs) working in the coastal and marine fisheries sectors.

The project objective is to support the Government of Senegal's efforts to reform the fisheries sector and increase the resilience of fishing communities and their livelihoods. The project does this by strengthening the enabling conditions for improved governance, including gender empowerment; improving access to science for decision making; and identifying and taking actions that increase resilience to climate change.

The USAID/COMFISH Plus project contributes to the achievement of three main results:

IR1: Institutional and stakeholder capacity strengthened at all levels to implement an ecosystem based, co-management approach towards sustainable fisheries, taking into account climate change impacts in the fisheries sectors;

IR2: Governance strategies, policies and best practices identified, tested, assessed and applied to build ecosystem resilience to threats to biodiversity conservation and climate risk;

IR3: Enhanced social and economic benefits to artisanal fishing communities provide incentives to a continued sustainable fisheries agenda.

This report describes the activities carried out by the USAID/COMFISH Plus project during the first quarter of FY 2018. It contains a description of the main achievements during the quarter, a section on crosscutting activities (climate change, governance, communication, project management etc.), and a description of activities planned for the next quarter followed by annexes.

III. ACHIEVEMENTS IN THE FIRST QUARTER FY 2018

3.1. Dialogue/Policy Reforms

3.1.1 Sub-regional exchanges on strategies to mainstream climate change in fisheries policies

USAID/COMFISH Plus participated in a sub-regional workshop in Togo (October 17th to 21st, 2017) organized by the NAP Global Network and the West Africa Biodiversity and Climate Change project (USAID/WA-BiCC). Participants came from six countries of the sub-region, Liberia, Côte d'Ivoire, Ghana, Togo, Guinea and Sierra Leone, which are vulnerable coastal countries with the common objectives of coastal preservation and responsible development of related sectors such as tourism and fisheries. Senegal was invited to discuss its' experience in adapting to climate change. Lessons and experiences regarding pilot initiatives, challenges, gaps and opportunities for integrating coastal issues into national adaptation plans (NAPs) were shared. This workshop was an opportunity for the USAID/COMFISH Plus project to share lessons learned and good practices on mainstreaming climate change in national and local fisheries planning processes and policies. Concrete adaptation strategies achieved by stakeholders at the local level with the support of USAID/COMFISH Plus were shared. Issues of gender mainstreaming and geographic information systems in adaptation planning were also on the agenda, with discussion of the different mechanisms and strategies adopted by the participating countries. Following the workshop, the [NAP Global Network blog](#) posted a summary of the USAID/COMFISH Plus contribution and the Senegal Ministry of Environment and Sustainable Development's presentation.



Figure 1: Workshop participants in the field. USAID/COMFISH Plus Chief of Party with a traditional chief at the workshop

3.1.2 Exchange meeting with the National Platform for Fisheries and Climate Change

Following establishment of the organs of the National Platform for Fisheries and Climate Change (PNPCC), a meeting was organized at the USAID/COMFISH Plus office for an update with the coordination bureau of the Platform. This meeting of exchange and sharing helped take stock of the process identify the major constraints and lay down strategic orientations in order to ensure shared and inclusive governance with regards to implementation of the Fisheries and Aquaculture National Adaptation Plan in Senegal. Recommendations were made to the coordination bureau for its operation. These include:

- Updating the list of individuals designated by institutions and professional organizations
- Identifying and targeting resource persons in institutions and structures who are knowledgeable on climate issues and who can validate requests submitted to them ;
- Organizing meetings with the National Committee for Adaptation to Climate Change (COMNACC), the Department of Environment and Classified Establishments (DEEC) and other institutions involved in order to use their skills and share their concerns on the strategic components of the PNPCC Annual Work Plan.

3.1.3 Contributing to the control of Illegal, Unreported and Unregulated (IUU) fishing

U.S. study tour arrangements in process. As announced since year one of implementation, the project plans to assist the Ministry of Fisheries and Maritime Economy (MPEM) to implement the national plan to combat IUU fishing. A study tour is planned to Washington, D.C. in quarter 3 to share experiences and draw from the U.S. experience in establishing an inter-agency Task Force to deter IUU fishing and seafood fraud. In order to rekindle the process an official invitation to MPEM was prepared by the project and sent to USAID for review.

Strengthening national regulations and improving the selectivity of industrial fishing trawls. The DPSP intends to launch a series of meetings with fishing professionals to discuss the relevance of improving the regulation and selectivity of industrial fishing trawls. The purpose of these meetings is to create a framework for exchange and consultation with industrial fishery stakeholders, in order to propose a type of trawl with a satisfactory mesh size for a sustainable and rational exploitation of fish resources.

The first meeting was held on November 2, 2017 at the DPSP office and aimed at discussing the possibility of proposing a prototype trawl that would ensure good selectivity and significantly reduce the harmful consequences of trawling on the marine and coastal environment. Participants came from fisheries administration structures and industrial fishing companies. The discussions focused on the hanging ratio of trawl nets, which, depending on the mounting of the lateral headline, determines the extent to which the net's mesh is open. Manufacturers have asked for and obtained the terms of reference from these consultations. They will study them internally with their ship equipment officers and shipmasters. A second meeting will be convened by DPSP to continue discussions that will lead to relevant recommendations for effective and efficient implementation of industrial fishing trawls.

3.1.4 Support to implement the Sector Policy Letter for the Development of Fisheries and Aquaculture (LPSD/PA)

An update of the results assessment framework of the LPSD/PA. From November 22-24, 2017, the project assisted the Research and Planning Unit (CEP) of the MPEM to organize a technical workshop for the review and update of the framework for assessing the results of LPSD/PA implementation with the participation of the Directorate General for Planning and Public Policies (DGPP) and the Organization and Methodologies Office (BOM). This workshop is part of a process to set up a monitoring and evaluation system for the LPSD/PA. The West Africa Economic and Monetary Union (WAEMU) guidelines adopted in 2009 on public financial management and the Harmonized Framework for Monitoring and Evaluation of Public Policies (CASE) set up by the State of Senegal in 2015 set out the principle of Results-Based Management (RBM) for effective management of public resources. Thus, the

LPSD/PA places particular emphasis on the need to put in place a functional system to monitor and evaluate interventions in the sector with reliable and relevant indicators. This option also promotes RBM culture and enhances project/program transparency and good governance.

The diagnostic report and operational framework for the monitoring and evaluation of the sectorial policy were submitted to the technical committee for validation. Impact and outcome indicators for the ultimate and intermediate results and indicators relevant to the sector and related to the Sustainable Development Goals (SDGs) and the Agenda 2063 of the African Union also have to be selected.

The issue of co-management was raised during the discussions and the need to endow the CLPA with much more expertise was reaffirmed, in conformity with the LPSD/PA. The professionalization of the fisheries stakeholders was also an identified need.

The initiatives to put in place the LPSD/PA monitoring and evaluation framework and related arrangements are a major innovation supported by the USAID/COMFISH Plus project. It will enable the efficient and effective implementation of projects and programs operationalizing this new policy. This process will also contribute to establishment of monitoring and evaluation mechanisms that will have to take account of results imperatives and the accountability requirements. In the same vein and in support of LPSD/PA implementation, the USAID/COMFISH Plus project also provided financial assistance to publish the Sectorial Investment Framework for Fisheries and Aquaculture document (CISPA 2017- 2023).

3.2. Capacity Building for Institutions and Stakeholders

Institutional and stakeholder capacities were strengthened during the quarter, particularly in the context of project activity planning, but also in functional literacy. Areas of synergy have been developed with the CINSERE project and the DPSP related to the EWS monitoring units. Several community-based activities were also carried out in the implementation of local adaptation plans, CLs and sardinella FMPs.

3.2.1 Project Activity Planning and Coordination Meeting

The first USAID/COMFISH Plus project planning and coordination meeting for the 2017-2018 fiscal year was held on October 26, 2017, in Saly. It was chaired by the Regional Inspector of Thiès, in charge of Fisheries and Surveillance, and the USAID/COMFISH Plus Project Chief of Party. Participants were project staff, facilitators, CLPA coordinators, relays and CLPA secretaries as well as Heads of coastal monitoring stations in the project area. A total of 54 people attended the meeting. The objective was to take stock of the activities of the past year (2016-2017) and to share with partners the new annual (2017-2018) and quarterly (October-November-December 2017) work plans. Several topics were tackled during the discussions, in particular CLPA internal fundraising, collaborative surveillance, climate change, gender-related aspects, FMPs and support for reforms and policy dialogues carried out in the framework of the project.



Figure 2: Discussion with partners at the project planning and coordination meeting.

The following recommendations were made for future meetings: relocating the planning meetings, enabling all regional fisheries inspectors in target areas to attend the project planning meetings, and facilitating the participation of the women leaders of the artisanal processing sites.

3.2.2 Support for National CLPA Network functionality: Development of the CLPA network roadmap

The project provided support to the Department of Maritime Fisheries (DPM) for CLPA networking. Following this logic, USAID/COMFISH Plus continued its technical and financial support efforts by contributing to the operationalization of the national network. It supported organization of a workshop on December 5, 2017 to develop a roadmap for the National CLPA Network. A total of 19 participants attended, including: the Director of Marine Fisheries; the USAID/COMFISH Plus project Chief of Party and staff; a representative from the PRAO and ADEPA projects; and members of the national CLPA network office. Several points were reviewed prior to development of the roadmap itself. A presentation of the workshop Terms of Reference by the National Network Coordinator was followed by a reminder of the mission and attributes of the National CLPA Network by the DPM representative.

The roadmap has been broken down into several strategic components: *Strengthening the capacities of the network (Strategic Axis 1)*; *Sustainable management of fisheries resources (Strategic Axis 2)*; *Consultation with institutions and other partners (Strategic Axis 3)*; and, *CLPA networks operation (Strategic Axis 4)*. In addition, the activities proposed for each strategic axis have been validated. A total of 16 activities constitute the annual work plan of the National CLPA Network. An ad hoc committee was set up to reflect on the costs attributable to the execution of each activity in order to complete the planning table. At the end of the meeting, the stakeholders welcomed the adoption of this roadmap that will allow the National CLPA Network to correctly fulfill its' mission, but above all to be able to evaluate its' interventions effectively at the end of each year. The roadmap will also enable the MPEM and the various technical and financial partners to have a planning document to refer to, which will enable them to effectively support the operation and activities of CLPA networks.



Figure 3: A view of CLPA network workshop participants

1.2.3 Renewal of Local Artisanal Fisheries Councils: Capacity building for new ICC members and installation of the CLPA of Cayar

The CLPAs renewal process began this quarter with Cayar. On December 12, 2017, the USAID/COMFISH Plus project started training the new councilors of the CLPA of Cayar on the role and mission of the CLPA in connection with fisheries co-management. Thus, the ICC (Coordination and Advisory Committees) members and the agents of the Cayar Fisheries Department have had their capacities strengthened on: co-management of fisheries; the CLPA mission; the CLPA structure and functioning; the roles and responsibilities of the CLPA councilors, and the working tools of the CLPA officer holders. This is part of the project's normal process to build CLPA capacity, but it is also part of the follow-up training on Organizational Capacity Assessment (OCA) for the CLPA of Cayar started by USAID in 2017. A total of 40 people attended the session, of which 32 were men and 8 women.



Figure 4: Left-A trainer in action. Right-Councilors and agents in a training session

Following the training, the project also provided support for organization of the official installation ceremony for the new ICC members of the CLPA of Cayar. This meeting was held on December 13, 2017 at the Japanese fishing dock n°2 in Cayar. One hundred and forty two (142) people, including 111 men and 31 women, were present at the ceremony that was graced by administrative authorities like the *Préfet* of the Department of Thiès (Chairman of the ICC), the *Sous-Préfet* of Keur-Moussa, the representative of the Mayor of the Commune of Cayar, a DPM Representative, a CLPA Network Representative, and Project and Program

Representatives (COMFISH Plus and ADEPA). The 40 ICC member councilors were officially installed and given their scarves.



Figure 5: The Préfet of Thiès addressing the audience and Councilors receiving their scarfs



Figure 6: Councilors already installed by the Préfet



Figure 7: View of participants at the installation ceremony of CLPA ICC councilors

3.2.4 Presentation of annual CLPA work plans: the case of Saint-Louis

Building the capacity of local governance institutions with a focus on their roles and responsibilities has enabled CLPAs to prepare annual work plans and present a technical and

financial report. During the quarter a workshop was organized to evaluate the Saint Louis CLPA's 2017 annual work plan and develop the 2018 work plan. The Departmental Inspector of Fisheries and Surveillance of Saint-Louis chaired the meeting. Workshop attendees also included the Regional Inspector of Fisheries, the Head of the Guet Ndar watch station, the Head of the Coastal Surveillance Station of Saint-Louis, a representative of CFAO motors, a representative of ANAM and members of the CLPA council and ICC. A representative of Kosmos Energy, a mining company, was also invited for their contribution in the implementation of CLPA activities.

Following presentation of the technical report, the CLPA treasurer presented the 2017 work plan financial report. In his introductory remarks, he specified that his report is the first of its kind carried out by the CLPA of Saint-Louis thanks to support from the USAID/COMFISH Plus Project Facilitator. The 2018 annual work plan was then developed, validated and adopted.

The participants were satisfied with the content of the workshop, which was the first ever organized by the CLPA of Saint-Louis. The Regional Inspector of Fisheries and Surveillance of Saint-Louis said, "*The progress report on activities carried out during a year coupled with the presentation of a financial report is an obligation for any organization. Through this initiative, the CLPA has strengthened the bond of trust between its members but also between the said structure and its financial partners*". The USAID/COMFISH Plus project facilitator said, "*As the project enters the final year of its extension phase, the CLPA of Saint-Louis has resolutely turned to capitalizing on management initiatives and mechanisms, hitherto set up by the USAID/COMFISH Plus project.*" The annual financial report presented in the appendix, enters into this dynamic and will be institutionalized by the CLPA of Saint-Louis.



Figure 8: Saint-Louis CLPA participants at the technical and financial report presentation workshop

3.3. Natural Resources/Management Plans/Conservation of Biodiversity and Marine Ecosystems

3.3.1. Improving the scientific base for FMP implementation

Working meeting with project scientific partners. A series of technical meetings was organized with the directors and accountants/managers of the USAID/COMFISH Plus project partner institutions on December 5-7, 2017 to monitor activities of scientific partners implementing the project. All the activities planned for the quarter effectively started and all the partners received the funds they requested despite some constraints related to the delay in replenishing the accounts. Solutions have been proposed and implemented for a smooth running of activities.

Establishing the joint data collection units. Joint data collection and analysis units have been set up by the CRODT at the CLPAs of Mbour, Joal, Cayar and Hann as part of the implementation of *sardinella* FMPs. In addition to the local DPM representative, these units include the CRODT surveyor stationed at the landing beach and a representative of the local stakeholders selected since November by the CLPAs following the criteria defined by the CRODT. In the field, data collection has started and the necessary computer equipment has been provided by the USAID/COMFISH Plus project, i.e., a laptop for data entry and a printer for each locality. Collected data is compiled at CRODT.

Immediately after the stakeholders' representative was selected, capacity strengthening followed for the unit with a focus on data collection forms: fishing effort, catch and price. At the end of the meetings, the selected attendees were informed of the important role they play in the scientific component of *sardinella* FMP implementation. This system engaging stakeholders to assist with scientific data collection was introduced for the first time to contribute to the implementation of *sardinella* FMPS (involving scientists and a CLPA stakeholders). This mechanism will continue data collection work even after the end of the USAID/COMFISH Plus project.



Figure 9: Selection of surveyors in Hann and Collection forms being explained

Coordination workshop at CRODT. A coordination workshop on scientific activities was organized at CRODT on December 8. The USAID/COMFISH Plus Chief of Party, some project staff, two URI/CRC staff members and all scientific partners participated. The workshop was opened by a representative of the CRODT Director and the USAID/COMFISH Plus Chief of Party. A series of presentations was made, followed by discussion.

The first presentation focused on the strategy for implementing FMPs. The main points focused on development and implementation of annual action plans; monitoring implementation through local and zonal implementation units; the scientific monitoring framework and capacity building for the stakeholders and institutions involved in implementation of the plan. The mode of operation of the monitoring bodies was also mentioned.

The second presentation, made by IFAN/IRD, focused on activities to be implemented in 2018, including: a comparative study of *Ethmalosa* size structure, growth and reproduction in the areas of Saint-Louis and Joal; participation in meetings of the joint collection units; processing and analysis of fishing, price and environmental data; participation in the scientific meetings organized by CRODT on the *Ethmalosa* fishery, and organization of a scientific workshop for the exchange and presentation of the scientific results obtained as part of their collaboration on project supported scientific activities.

The presentation of the CSE also focused on activities planned for 2018, namely: to support and provide the stakeholders with maps for development of CLs; map land use in the 7 CLPAs of Sine Saloum; geo-locate fishing sites and infrastructure; and, transfer the GIS produced by the CSE to the DPM for centralization of the results and better administration of data produced within the framework of the project.

The IUPA started its' presentation with the results of the study on the selectivity of gillnets targeting *ethmalosa* in the Sine-Saloum estuary before touching on the activities planned for 2018 including: a study on *ethmalosa* (*Ethmalosa fimbriata*) bio-ecology in the Sangomar and Gandoul Marine protected Areas (MPAs) in the Sine-Saloum estuary and in Casamance (Niamone kalounaye, Casa Balantacounda MPA); sharing results of the study on the selectivity of nets used in the *ethmalosa* fishery in the Sine-Saloum estuary with local stakeholders; participation in meetings on the joint collection units, processing and analyzing environmental, fishery and price data, and participation in scientific meetings organized by CRODT on the *ethmalosa* fishery to support implementation of FMPs for this species.

The fifth and final presentation made by CRODT focused on the activities planned by this institution, namely: setting up joint data collection and processing units; synthesizing available knowledge on the use of monofilament nets; and holding scientific workshops on the *ethmalosa* fishery.

The discussions provided an important opportunity for participants to make contributions and to ask questions of presenters. These elements are summarized below by theme:

The FMP implementation strategy: Some participants commended the strategy presented, especially the level of stakeholder buy-in during its development. It was acknowledged that the implementation strategy is effective thanks to a participatory process at the CLPA level.

Scientific meetings: Some participants did not understand the differences between the two types of meetings presented by CRODT and IFAN/IRD. Thus, the project team provided clarification on the different scientific meetings. First, CRODT will organize a quarterly meeting with a focus on the results of the fishery data collected, processed and analyzed by the joint units. Then, CRODT will organize scientific workshops on the *ethmalosa* fishery to support the current management plans on for this species. A final scientific workshop where the final results of the project will be presented with all the institutions and partners involved in the project will be organized by IFAN/IRD.

Mapping: Participants exchanged on mapping products through the CSE presentation. As a result of that discussion, CRODT expressed a need for mapping support through possible collaboration with the CSE. However, the type of contract that binds institutions to the USAID/COMFISH Plus project does not include resources to satisfy this need. It should be noted that CRODT has already done some work in this area, particularly on seabed identification.

The fishing net selectivity study: The participants shared their views about the study on the selectivity of gillnets for *ethmalosa* in the Sine-Saloum estuary, notably by proposing to the IUPA to take the economic aspect into account regarding the recommendations of the study. The mesh size issue was also approached, especially since the conclusion of the study

recommended that the ideal mesh size be greater or equal to 36 mm. Some of the participants wondered whether the stakeholders would accept that proposal when the fishing code proposes a much smaller mesh size. In conclusion, the IUPA drew the attention of participants to the fact that the study was conducted in a collaborative way with the stakeholders and the mesh size issue could be solved with the implementation of CLs.

Biological data: The participants exchanged on the purpose of the data produced by the scientific studies, which should be correlated with the sustainable management of fisheries resources. These include reproduction studies to support biological rest periods when no fishing is allowed. This information can be put to use in the management of MPAs, through their management plans.

Scientific Framework Meetings: The frequency of meetings of joint data collection units was also discussed and some participants felt that the time for collecting data during the quarter is too short for scientific results to be presented. Eventually, the exchanges led to maintaining these quarterly meetings.

Reporting back on the results of the study on *ethmalosa* fishing net selectivity: The results of a study conducted by IUPA on gillnet selectivity targeting *ethmalosa* in Sine Saloum were completed and presented to the stakeholders in four sites in the region (Joal, Niodor, Missirah and Jindra). Fishermen and IUPA researchers, working together, tested the selective properties of four different mesh sizes of gillnets (30 mm, 32 mm, 36 mm and 40 mm). However, determining optimum mesh sizes requires a balance between the reproductive ecology and gear selectivity of *ethmalose*. To this end, a separate study was conducted, in collaboration with fishermen, to determine the size at maturity which was found to be at 18.5 mm. The study showed that current legal mesh size of 30 mm is not appropriate as they retain a large portion of juveniles. The study recommended that the appropriate mesh size should be increased to 36 mm to allow fish to escape to grow and reproduce at least once before being caught. Stakeholders confirmed the considerable conservation benefits and effectiveness of the 36 mm mesh size. They also agreed that the current mesh size is too small. The study was designed and executed through a collaborative research between fishermen, university researchers (PhD student and professors) and the DPM within the framework of the Extension Strategy developed by the project, IUPA and DPM.

3.3.2. Implementation of Participatory Fisheries Management Plans

The implementation of FMPs has started in Grande Côte Sud, Cap Vert and Petite Côte with development of a strategy for implementing these FMPs. During the quarter, the implementation process continued through development of annual action plans (specifying activities, actions, person in charge, partner and budget) validated by the CLPA ICCs.

As a result of this process, the members of the local implementation units (URMs) have been trained in different modules such as the role and mission of members and the use of facilitation tools (How to prepare and handle meetings, and reporting). Each local unit later develops its' monthly planning.

The first planned action focused on the dissemination and socialization of extracts from the Fishing Code targeting small pelagics in Senegal. Thus, an extract (law and decree) concerning only small-scale fisheries was designed with the support of the DPM. This extract is an important awareness-raising tool on the sustainable management of resources as part of the implementation of *sardinella* FMPs.

To disseminate these extracts, training sessions were held from December 22 to 29, 2017, for the members of 7 URMs and resource persons (canoe captains). These stakeholders will in turn be responsible for duplicating training in their respective colleges for better implementation of the *sardinella* FMP. The extracts from the artisanal fisheries regulation will be translated into local language (Wolof) and distributed to local stakeholders in booklet form.

The points covered during the training relate to:

- Articles from the law No. 2015-18 of July 13, 2015 of the Code of Maritime Fishing of Senegal. Emphasis is placed on notions of fisheries resources, management plans, royalties and permits, and prohibitions;
- Articles from the extract of Decree No. 2016-1804 implementing Law No. 2015-18 of July 13, 2015 of the Code of Maritime Fishing. Emphasis is placed here on the notions of size of the species and size of the gear that targets sardinella;
- The strategy to disseminate the training among local stakeholders.

3.4. Crosscutting Themes

3.4.1. Climate Change/Gender

Support for implementation of the National Climate Change Adaptation Strategy for Fisheries at the local level was provided through the following activities conducted during the quarter.

Meeting to validate the action plans of the Monitoring/Steering committees of the local adaptation plans of Ziguinchor, Kafountine and Saint-Louis. In support of implementation of local plans for Casamance and Grande Côte, multi-stakeholder exchange, monitoring and evaluation frameworks have been set up and approved by the administrative authorities (Préfets in the areas concerned). These committees started their activities by developing annual action plans. For this purpose, meetings were organized in the CLPAs of Ziguinchor, Kafountine and Saint-Louis to review the proposals made by the monitoring committee (CLPA level), sharing, discussing and validating the annual actions of the monitoring committee with the different technical services that are members of the steering committee and to define a set of specifications for each structure involved in implementation of the selected options. This institutional mechanism (monitoring/steering committees) composed of de-concentrated technical services, representatives of CLPAs (Ziguinchor/Kafountine) and local elected officials will ensure sustained coordination, monitoring of action plan implementation and adaptive management of local plans. It will promote an inclusive and collaborative dialogue around the issue of climate change adaptation, taking into account local specificities and the grassroots needs of the various stakeholders.

Establishing EWS monitoring units in Mbour and Saint-Louis. In the framework of strengthening safety at sea for artisanal fisheries stakeholders and sustaining the early warning system (EWS), actions were undertaken with the CINSERE project, ANACIM and the DPSP following evaluation of the system put in place in 2014 as part of the USAID/COMFISH project. On November 20 and 21, 2017, the monitoring units of Mbour and Saint-Louis were set up to strengthen initiatives with vulnerable fishing communities. These units will collect the information needed to inform stakeholders about access to, and the use and impacts of, climate services. This framework will also promote discussion among stakeholders to improve the system and create the best security conditions (communication and dissemination

of accurate, reliable and adapted information) for the safety at sea of artisanal fishermen. During these meetings, the roles and responsibilities of each stakeholder were defined and the composition of the units validated. At the same time, assessment tools on access to, and the use and impacts of, climate services provided under the early warning system were shared with stakeholders and the mechanisms for monitoring and reporting local level information have been defined.



Figure 10: Establishing the EWS monitoring units of Mbour and Saint- Louis

Resilience support to women processors in the artisanal fisheries sector by the project this quarter included: an evaluation of the hygiene committee action plans; functional literacy training for women; launching the process of supporting hygiene committee action plan implementation for improvements at the processing areas of Mballing village, Yéne Todd and Pointe Saréne; continuation of consultations with the women processors of Goxxu Mbaac; income-generating activity support for women in Yenne/Toubab Dialaw, Sendou and Diamniadio; consultations with women from Pointe Saréne, Yenne Todd, Mballing Village, Missirah to improve processing and conservation conditions for processed products; and organizational assistance (General Assembly) to the GIE of Mantoulaye Guène in Cayar, in the context of management monitoring of the modern artisanal processing unit.

Evaluation of women processors' hygiene committee action plans. In order to consolidate and sustain achievements, meetings were organized with the women processors of the CLPAs of Rufisque/Bargny, Yenne Dialaw, Mbour/Sindia Nord and Joal/Sindia Sud on October 31st and November 2nd and 3rd, 2017. These meetings helped to evaluate the annual action plans of women processors, to discuss how to implement the literacy program in their areas and to devise a system and mechanisms for monitoring the income generating activities (IGA) at the Guéréo and Ndayane sites.

Functional literacy training of women processors' hygiene committees. As part of the women processors literacy program to strengthen the managerial capacities of women processors, sessions were held at 14 processing sites, marking the opening of all classes in national languages (22 codified languages). This will enable the processors to better manage and

benefit more from their income-generating activities and to better understand the management tools put in place by the project.



Figure 11: Literacy Classes in Mballing site and Yéenne/Dialaw

Supporting hygiene committee charters for improvements at the processing areas of Mballing village, Yéenne Todd and Pointe Saréne. To contribute to the implementation of hygiene charters and to increase the productivity and improve the working conditions of women, this quarter the project began the process of supporting implementation of hygiene committee action plans. This process contributes to add value to processed products in these areas by integrating hygiene and health aspects in accordance with the hygiene charters of these committees. Capacity building processes conducted at the committee level to date, including training sessions on financial management, have contributed to the establishment of effective mechanisms and tools for women to be able to collect, monitor and evaluate the financial income from their activities. The table below summarizes the progress of each committee this quarter.

TABLE 1. FINANCIAL STATUS OF HYGIENE COMMITTEES (IN CFA FRANCS)

Committee	Previous Position	Position in Quarter 1
Yéenne Dialaw	290 000	340 000
Sendou	130 000	150 000
Guéréo	4 482 467	5 034 980
Saly	84 500	110 000
Ndayane	319 500	527 000
Mbour	192 000	
Joal/Fadjiouth/Sindia Sud (Tann/Khelcom and Pointe Saréne)	599 750	624 750
Sine/Saloum (Diamniadio, Missirah)	168 000	230 000

Strengthening the organizational dynamics of women processors of the Saint-Louis CLPA (Goxxu Mbaac Site). With a view to improving the regulatory framework and management of the processing area of women processors at Goxxu Mbaac (set up by the MPEM), meetings were held with beneficiaries on November 15 and 16, 2017. The meetings provided an opportunity to discuss with the women the environmental, financial and administrative management measures for the new processing area, to collaboratively elect the office bearers of the Goxxu Mbaac area, and to discuss the conditions for access to the site. Given the complexity and local realities of the area, access to the site remains a problem hindering the

practice of improved artisanal processing activities. In order to engage all stakeholders of the area in coordinated and inclusive management of the site, additional meetings are planned with the local groups, the local community, and the Ministry of Fisheries to set up a regulatory framework taking into account the specificities of the area. This process to support the MPEM in alignment with the women's organizational dynamics in Saint-Louis will continue in the second quarter.



Figure 12: Consultation with women processors of Goxxu Mbaac

Income Generating Activities support to women processors of Yenne Dialaw and Sendou. In view of the success recorded with previous experiences (improving food security, environmental protection, fundraising), the project aims to consolidate the achievements of the various women processor groups by empowering them. As a result, the women processors of Sendou and Yenne/Dialaw received support to start their income-generating activities. These activities are seen as a lever to boost the socio-economic power of women in a context increasingly marked by the scarcity of fish resources, essential raw materials for artisanal processing



Figure 13: Recipient receiving a check for revolving credit

Consultation with women processors in five artisanal processing areas. Following evaluation of the hygiene committee action plans, an improvement was noted in terms of hygiene, infrastructure, processing techniques and equipment used in some processing sites. In this

context, a capacity building program was initiated on handling and processing techniques in five areas (Yénne Todd, Guéréo, Missirah, Pointe Saréne and Cayar). As part of the continuous improvement of the working and living conditions of women processors through the implementation of the hygiene charters for the areas concerned, consultations were held from December 4th to 12th, 2017. This process emphasized the mainstreaming of women's needs and know-how, their involvement in the design of site development plans and their approval, coaching and technical monitoring of labeling processes to add value to finished processed products. The meetings helped identify and characterize the processing practices and methodologies in each zone, specify the processed products of each site, establish strengths and weaknesses, needs and constraints of each site and work out a capacity-building program for each of them. As part of the effective implementation of this program, additional meetings and consultations will be conducted to empower women processors from these sites on techniques and practices that enhance their products. This capacity building will be accompanied with appropriate equipment and improvements to meet hygiene and quality standards.



Figure 14: Exchanges with women processors on value addition to finished products

Management monitoring of the modern unit of Cayar: Support to hold the General Assembly of GIE Mantoulaye Guene. The GIE Mantoulaye Guene had not renewed its decision-making bodies since 2010. This has negatively affected the implementation of GIE activities (poor financial management, slowdown of income-generating activities, etc.). To solve these recurring problems, a general assembly was held to renew the office holders elected decades ago and to revise the internal regulations of the GIE in order to align with the group's management mandate. For the smooth running of the assembly, the women thought it advisable to hold preliminary meetings in order to collect outstanding debts owed to the GIE, work on the financial balance sheet with the accountant, and enlighten women on the role of each official position up for renewal.



Figure 15: Women meeting in the run up to the General Assembly of the GIE Mantoulaye GUENE

During the general assembly held on Tuesday, November 21, 2017 the women's GIE executives were renewed. Established in Cayar, the GIE is composed of women fish processors. Participants included women processors, the accountant and the quality manager of GIE Mantoulaye Guene, the Head of the Department of Fisheries of Thiès, the Head of the Monitoring Center, the Head of Station, the COMFISH Plus Chief of Party, the Coordinator of the CLPA of Cayar, the Relay of the CLPA of Cayar, the COMFISH Plus Facilitator in Cayar, and some guests representing professional organizations in Cayar.

After a brief presentation of the activities of the GIE during the past two years, Mrs. Dior Diouf, the outgoing President, thanked her sisters for the trust placed in her, before giving the floor to Mr. Madiouf Dème, the accountant of the GIE for the presentation of the financial position of the GIE.



Figure 16: Official opening of GA in Cayar CLPA. Invitees from professional organizations

Overall, the financial situation of the GIE is positive with a total balance of **F CFA 12,568,750**, distributed as follows:

- Bank: 8,059,100 F CFA
- Receivables: 726,000 F CFA
- Sundry Debtors: 3,783,300 F CFA

Following the presentation of Mr. Dème, new office holders were voted in with the following electoral results:

- 59 registered voters;
- 1 invalid ballot;
- 58 votes cast;
- 40 votes for Maty NDAW;
- 18 votes for Dior DIOUF.



Figure 17: A women casting her ballot during the vote



Figure 18: Members of the GIE during the vote

Subsequently the assembly approved with a simple majority the election of Maty NDAW as new President of the GIE Mantoulaye Guene for a two-year term. The newly elected body is as follows:

- | | |
|--|-------------------------------|
| • President: | Maty Ndaw |
| • Vice-President: | Marème Sarr Ndiaye |
| • Secretary General: | Absa Djité |
| • Deputy Secretary General: | Khathie Faye |
| • Secretary in charge of Organization: | Fatou Sarr |
| • Deputy: | Seynabou Toure |
| • Treasurer: | Seynabou Sene |
| • Deputy Treasurer: | Bineta Kama |
| • Auditors: | Marame Ndiaye and Diaba Sambe |

The Steering Committee is composed of:

Sub-group Leaders:

- Ramata Ndiaye

- Ndeye Kheury Diop
- Noye Gaye
- Maimouna Diop

Collection Officers:

Material:

- Maty Gueye
 - Seynabou Wade
- Shop:* Maréme Diouf

The members of the executive board will be installed in the presence of agents of the Fisheries Department and the outgoing officers will take that opportunity to hand over the rental equipment.

This transparent process initiated by women processors with the support of the USAID/COMFISH and USAID/COMFISH Plus projects, demonstrates the effectiveness of the capacity building program including training on leadership and management for women who accompanied the establishment of the modern unit *Adja Ndoumbé Seck* of Cayar. Renewing the GIE organs will allow women to negotiate additional contracts with public or private partners. In fact, through funding from Kuwait, the Ministry of Fisheries just allocated a loan of F CFA 10,000,000 to the GIE.

3.4.2. Governance/Decentralization

Evaluation of Local Conventions in the CLPAs of Yene/Dialaw and Rufisque/Bargny. After several years of implementation, the project supported the evaluation and updating of CLs in the CLPAs of Rufisque/Bargny and Yene/Dialaw. Workshops were organized during the quarter with all CLPA colleges to document their concerns relating to CL implementation. At the end of the exchanges, achievements and difficulties were highlighted. In the CLPA of Yéne/Dialaw, significant progress has been noted on payment of fishing licenses and registration of artisanal canoes, reduction of conflicts related to access to fisheries resources, management of the fishing dock and revitalization of CLPA's operational capacity. In the CLPA of Rufisque/Bargny, achievements are related to the alignment with meteorological services guidance and a decrease in accidents at sea, a downward trend in artisanal processing of juvenile fish; elimination of an old practice of using recycled salt in processing, and revitalization of CLPA operational capacity.

Measures which are difficult to implement mainly concern braising of *sardinella* on the ground, prohibition of beach sand extraction and dumping waste on the beach, particularly in the CLPA of Yene/Dialaw. Added to this are low payment rates for fishing licenses and fishmonger cards, catching, processing and selling of juveniles, and persistence of underwater fishing in the CLPA of Rufisque/Bargny. For more effective CL implementation stakeholders have requested support measures. These include:

- Rehabilitation of processing sites;
- Establishing a surveillance brigade in the Rufisque/Bargny area;
- Capacity-building for ICC members on their roles and responsibilities, particularly in the CLPA of Rufisque/Bargny;
- Name badges for ICC members (Yene);

- Awareness-raising for local authorities for better adherence to the implementation of the CL in the CLPA of Rufisque/Bargny.

Following these observations, the ICCs of the CLPAs of Rufisque/Bargny and Yene/Dialaw unanimously approved the updated local agreements, which will be submitted for approval by administrative authorities.

Evaluation workshop on internal fundraising strategies in the CLPA of Joal. The Project supported the CLPA of Joal to organize an evaluation workshop on internal fundraising strategies. The meeting provided an opportunity to recall the underlying objectives of internal fundraising, to identify and evaluate the various mechanisms under way, and to produce an action plan to continue the search for additional financial resources.

Four strategies are in progress. These are the regular membership fees from ICC members, the financial contribution of the inter-professional GIE managing the dock, a share of the fines resulting from infractions noted by the CLPAs, and the invitation for financial support from partners. In addition to these strategies, the CLPA of Joal plans to broaden its' efforts to include other activities in the new action plan in order to mobilize additional internal resources. These include the sale of college membership cards, contributions by local businesses (gas stations, factories, ice factories, banks and other stakeholders involved in the fishery sector), and organization of for-profit events (regatta). Commitments were also made for institutionalization of some of the strategies currently being implemented (contribution of the inter-professional GIE and share of fines resulting from infractions identified by the CLPA). It was also noted that the treasurer will closely monitor implementation of the fundraising action plan starting next quarter.

Follow up on fundraising action plans in CLPAs. CLPA action plans on internal fundraising were also executed during the quarter with several strategies implemented across multiple CLPAs. The total amounts collected by CLPA and by strategy are shown in the table below.

TABLE 2: FUNDS RAISED BY CLPAs (FRANCS CFA)

Strategies	CLPA of Kafountine	CLPA of Ziguinchor	CLPA of Saint-Louis	CLPA of Yéne/Dialaw	CLPA of Mbour	CLPA of Joal
Sale of college membership card or college membership fees	182 000	105 000	-	200 000	151 500	55 000
Contribution of inter professional GIEs	745 880	100 000	-	-	-	700 000
Contribution of local enterprises (Ice factories, gas station)	-	25 liter/month	-	530 000	-	-
Renting of equipment, meeting rooms	-	-	130 000	-	-	-
Renting of Sound system	-	-	430 000	-	-	-
Grand total mobilized	927 880	205 000	560 000	730 000	151 500	755 000

In the CLPA of Kafountine, the sale of membership cards and the contribution of factories, gas stations and inter-professional GIEs were significant. Similar strategies were noted in the CLPA of Ziguinchor where there is a significant gas station contribution in the form of fuel to ensure monthly surveillance trips. In the CLPA of Mbour, only the strategy regarding the sale of membership cards has given satisfactory results. In the CLPA of Yene/Dialaw, implementation of the action plan on fundraising enabled stakeholders to collect funds from

corporate donations as well as from the sale of membership cards. In Saint-Louis, three new strategies have been implemented, namely renting the meeting room and sound equipment, as well as the contribution of the inter-professional GIE managing the fishing dock in Goxu Mbacc. The last strategy has not yet produced funds for the CLPA. However, discussions are underway for the implementation of this action as soon as possible.

Collaborative monitoring. The USAID/COMFISH Plus project continued to support collaborative monitoring during the quarter in contribution to the application of CL rules. Co-surveillance brigades have carried out periodic trips at sea and at fishing docks and artisanal processing areas. A total of 35 sea trips and 12 shore trips were supported in the CLPAs of Mbour, Joal Fadiouth, Sindia Sud, Sindia Nord, Rufisque/Bargny, Yene/Dialaw, Kafountine, Ziguinchor and Saint Louis. During these trips, 404 canoes were inspected, with 50 boardings. The main offenses noted are: not wearing lifejackets, absence of fishing license, non-registration of boats, use of prohibited nets (monofilament and non-regulatory mesh size), underwater fishing in the Petite Côte, non-alignment with hygiene rules in the fishing dock, and artisanal processing of fish on the ground. The sizeable numbers demonstrate the CLPAs' determination to fight these forms of illegal fishing practices. Given the nature of the infringements, it is important to continue to build the capacity of stakeholders by focusing on popularizing the fishing code to enable them to better understand the regulations in effect regarding harnessing fishery resources.

Development of new Local Conventions in the CLPAs of Sine Saloum. The results of the participatory diagnoses of the fishery sector in Sine Saloum made it possible to have a baseline of fishery resources in each of the CLPAs in this zone, to define the legal framework which governs the sustainable management of fishery resources, and to analyze the results of the participatory identification of management rules before compiling them into 7 CL documents.

The validation process started during the quarter, after the 7 CLs were finalized. Validation workshops were organized for these documents on December 26th through 29th, 2017 by the CLPAs of Toubacouta, Missirah and Sokone. Another technical validation meeting was held with the technical services before the documents were submitted to the members of the CLPA Coordination and Advisory Committees who made some amendments before unanimously validating these 3 CLs. The process will continue next quarter in the remaining 4 CLPAs (Niodior, Djirnda, Bassoul and Foundiougne), which will have to submit their CLs to their respective ICCs for validation.



Figure 19: Development and validation of Local Conventions in Sine Saloum

Evaluation of Fishing Insurance in the Test CLPAs. Implementation of fishing insurance fits within the framework of the sustainability of collaborative monitoring activities necessary for compliance with the regulatory texts in effect in the various CLPAs (CLs, FMPs and fishing code etc.). Implementation started in September 2015 in 4 test CLPAs: Joal Fadiouth, Sindia Sud, Sindia Nord and Mbour. Two years after implementing this insurance, an assessment was conducted to identify bottlenecks. From November 27th to 30th, the project collaboratively evaluated the fishing insurance policies. Included among the major bottlenecks is the concern of stakeholders with damage repair procedures due to the absence of monitoring from the insurance company (CNASS) and MANOBI its technical collaborator. Despite bottlenecks, the stakeholders proposed to continue the fishing insurance by extending its coverage to include terrestrial activities, but also taking into account the numerous recommendations the stakeholders made during the evaluation.

3.4.3. Communication/Sensitization

Continuation of radio programs to socialize the local conventions. Protocols were renewed with the 11 project partner radios in November 2017 to allow continuation of the radio programs in partner CLPAs and in the other project intervention areas. With the renewal of these protocols, the participatory planning of program themes and program production/broadcast continued normally. Ninety programs were produced during the quarter.



Figure 20: A radio program on air in Foundiougne and Betenty (Niokock FM)

These programs have focused on topics such as safety at sea, hygiene and safety in processing areas, socialization of the Sectorial Policy Letter for the Development of Fisheries and Aquaculture/Fisheries Code, conflict prevention and management, MPAs, local adaptation plans, collaborative monitoring, payment of fishing licenses/fishmonger cards, *sardinella* FMPs, internal fundraising, good and bad practices of artisanal fisheries, management and exploitation of oysters in the Saloum delta etc.

Evaluation of radio programs in the Saloum Islands. A mid-term evaluation of radio programs was conducted from December 11th to 16th, 2017 in the CLPAs of Foundiougne, Toubacouta, and Missirah/Betenty in the Saloum Islands.

The evaluation targeted the community radios of Foundiougne (Foundiougne FM) and Betenty (Betenty Niokock FM) and focused on the impact of radio broadcasts on local stakeholders' behavior, but also on alignment of the broadcasts by the radios concerned with the specifications provided to them by the project. Through focus groups and individual meetings, the evaluation involved grassroots stakeholders (fishermen, women

processors/shellfish farmers and fishmongers), the managing board of the CLPAs concerned, the local fisheries administration and the religious/customary and municipal authorities.



Figure 21: Evaluating radio programs with stakeholders in Missirah

Regarding radio program impact on stakeholders' behavior, the evaluation confirmed that stakeholders generally follow these radio programs and unanimously recognize that they contribute to their behavior change in favor of sustainable fishing. They also recognized the importance of radio broadcasts for the socialization of CLs and praised the relevance of the program themes developed, as well as the competence/expertise of the guest resource persons.

Regarding observance of specifications, the evaluation noted that specifications were for the most part well respected by the partner radios (regularity of the programs, broadcasts of the trailer before the program, production of decentralized programs/remote broadcasts, media coverage of CLPA activities, etc.). However, recommendations have been made by the stakeholders to maximize the impact of these programs and other awareness-raising activities on stakeholders' behavior. Below is a summary of the recommendations:

- Increase women's participation in programs with the exception of Betenty, where they are already fairly well involved in programs;
- Reinforce the capacities of the radio presenters on certain themes (Fisheries Code, LPS/PA...);
- Integrate the management committee of MPAs in the planning of the program themes, notably in the CLPA of Foundiougne;
- Propose long-term contracts to sustain the partnership between the radio, the CLPA and the project;
- Provide material/equipment support to radios (e.g. Dictaphones for Foundiougne FM and increase the power of the transmitter of Betenty FM);
- Increase the transport allowance of resource persons coming from remote islands to the program venue (e.g. Bossingkan Sokone...);
- Integrate Niodor and Sokone in the network of radios working with the project in order to reach more stakeholders;
- Encourage the CLPAs to contribute to the financing of the protocols with the radio stations for sustainable programs (for example, through the fund that the Minister of Fisheries has made available to them but also through the CLPAs Operations Support Fund (FAF) when it is functional);
- Explore the possibility of working with traditional communicators to strengthen communication with stakeholders;
- Support awareness-raising on hygiene charters using posters;
- Diversify the resource persons invited to the programs (Missirah and Foundiougne).



Figure 22: A laureate receiving a bundle of tee shirts in Foundiougne FM

Preparation of best practice videos and capitalization documents. In anticipation of the end of the second year of the USAID/COMFISH Plus project, the project team organized a meeting in November 2017 to determine the successes and themes that will be the focus of project best practice documents and capitalization videos. Priority themes were determined during this meeting, but also the following timeline for production of various communication aids:

TABLE 3: TIMELINE FOR PRODUCTION OF USAID/COMFISH PLUS PROJECT BEST PRACTICE AND CAPITALIZATION DOCUMENTS

Document Title	Officer in charge	Deadline Methodology and drafting Plan	Deadline for last draft submission	Observations
Project Approach for artisanal fisheries co-management	Vaque/Saloum and Niane/Diallo	20 and 21 December 2017	March 2018	The document will talk about the CL and FMPs. It will also focus on the collaboration/synergy developed.
Emergence of CLPAs in the governance of artisanal fisheries in Senegal	Saloum/Niane and Vaque	20 and 21 December 2017	March 2018	Focus on capacity building for CLPAs, the momentum of CLPAs with the arrival of the project, etc.
Women empowerment and value addition to processed products	Khady/Fatou	20 and 21 December 2017	March 2018	
Climate Change and Fisheries: The experiences of the USAID/COMFISH Plus project	Fatou/Khady/Diallo	20 and 21 December 2017	March 2018	Also refer to collaboration/synergy developed

TABLE 4: TIMELINE FOR THE PRODUCTION OF USAID/COMFISH PLUS PROJECT BEST PRACTICE AND CAPITALIZATION VIDEOS

Videos Titles	Officer in charge	Deadline - methodology and shooting schedule	Delivery date for the video	Observations
Implementing the CL for a sustainable management of fishery resources	Saloum/Vaque /Niane/Fred/ Khady	November 2017	January 2018	Recall the approach and show the impact/outcome of the CL on fisheries management after 5 years of implementation. Establish the link between CL development and its implementation. End the video with the management plan. Highlight the changes noted as a result of CL implementation.
Women’s empowerment and value addition to processed products	Khady/Fatou/ Fred	December 2017	February 2018	
Meteorological warnings and safety of artisanal fishery stakeholders	Fatou/Fred	December 2017	March 2018	

IV. PROJECT MANAGEMENT

4.1 Data Quality Assessment

A Data Quality Assessment (DQA) was conducted by USAID’s monitoring and evaluation team in the quarter. It confirmed the reliability of the collection mechanism put in place by the project. During the quarter, the project team also prepared for implementation of the new collection and monitoring system called mobile-to-web platform for CLPA and project performance data. This new web-based computerized tool will allow automatic data collection, exploitation and monitoring, and help improve storage and security of recorded information.

4.2 Year Two Workplan Implementation Monitoring

URI/CRC conducted a regular project implementation monitoring visit in December 2017. URI/CRC Co-PI, Karen Kent and the Chief of Party had a series of meetings with representatives of key government partners and project sub-awardees for their feedback on achievements to date and, in particular on their perspectives regarding expectations for the exit strategies being implemented in earnest in FY18 with the aim of sustainable governance processes and outcomes institutionalized at their level and at the level of local stakeholders and stakeholder institutions.

4.3 Feed the Future Phase II

USAID/COMFISH Plus participated in two meetings with other USAID Feed the Future funded implementing partners at USAID/Senegal this quarter to provide input on USAID's Feed the Future Phase II draft planning documents, including the Draft FtF Country Plan (2018-2022) and Zone of Influence mapping and prioritization. The economic and food security contributions of the marine fisheries sector in Senegal are significant. The coverage of the USAID/COMFISH Plus project (from St. Louis in the north to Zinguinchor in the south) recognizes the importance of managing marine resources in an inclusive, participatory and sustainable manner at scale to maintain this important contribution.

V. ACTIVITIES PLANNED FOR THE SECOND QUARTER OF FY 2018

For the next quarter, the main activities planned are presented under the three intermediate results.

RI1: Institutional and stakeholder capacity strengthened at all levels to implement an ecosystem based, co-management approach towards sustainable fisheries, taking into account climate change impacts in the fisheries sector.

Component 1: Institutional capacity strengthening

- Hold quarterly coordination and planning meetings with technical services and CLPAs;
- Support the revitalization of CLPA management bodies for improved operations;
- Material Support (Stationary) in 18 CLPAs;
- Monitor the implementation of the action plans on internal fundraising in the CLPAs;
- Continue the evaluation of CLPA organizational capacities;
- Support the implementation of the action plan of the national CLPA network;
- Strengthen the capacities of the new CLPAs in Casamance;
- Dissemination and socialization of the Fisheries Code;
- Study on CLPA governance capacity improvement and its' impact on fisheries management.

Component 2: Formulation of Local Conventions as an FMP implementing tool

- Continue with feedback and validation of conventions in Sine Saloum;
- Monitor approval of local conventions in Sine Saloum;
- Supply the 7 CLPAs of Sine Saloum with IT equipment and stationary;
- Strengthening CLPA capacities to implement the local convention (Training on collaborative surveillance, on administrative and financial management, setting up action plans);
- Support the renewal of the 2 CLPAs (Foundiougne and Sokone).

Component 3: Enhanced capacity to address IUU fishing

- Support participatory surveillance in 11 CLPAs;
- Start implementing the fishing insurance in 8 CLPAs;
- Support the DPSP to strengthen the capacities of CLPAs to address IUU fishing;

- Support the organization of national level meetings to set up an IUU fishing working group;
- Continue arranging for study tour to Washington, D.C. for an exchange of experience with American bodies involved in IUU fishing planned for quarter 3;
- Support collaboration of sub regional bodies to address IUU fishing in West Africa (CRSP); implementation of the local ethmalosa FMP;

Component 4: Fisheries National Adaptation Plan

- Popularization of and support to implement the Fisheries NAP and the strategy to operationalize it: (Process capitalization document; production of guidance notes/factsheet) etc.;
- Support for the PNPCC operational capacity (drafting a roadmap; internal regulations, capacity-building for members, etc....);
- Setting up local fishery-climate change platforms in partnership with DEEC, COMNACC, MPEM, DPM and the CLPA;
- Support for implementation of annual work plans of the monitoring/steering committees of local adaptation plans of Ziguinchor, Kafountine and Saint-Louis;
- Support for setting up and implementing EWS surveillance units for seafarers' safety at sea: Pilot phase with the CLPAs of Mbour and Saint-Louis in partnership with DPSP, ANACIM and the CINSERE project.

RI2: Governance strategies, policies and best practices identified, tested, assessed and applied to build ecosystem resilience to threats to biodiversity conservation and climate risk.

- Capacity strengthening for the stakeholders to implement the three sardinella FMPs: Grande Côte Sud, Cap Vert and Petite Côte;
- Monthly meeting to monitor implementation of the annual action plans in three areas: Grande Côte Sud, Cap Vert and Petite Côte (Fishery Department and Unit);
- Meeting of the scientific body;
- Support to organize quarterly meetings of the Zonal Implementation Unit (UZM) to assess sardinella FMP implementation progress in 3 zones: Grande Côte Sud, Cap Vert and Petite Côte;
- Meeting with the technical working team to re-launch the development process of the ethmalosa FMP;
- Setting up the ethmalosa FMP implementing units in Sine Saloum;
- Organize ethmalosa FMP validation workshops in Sine Saloum and in Casamance.

RI 3: Enhanced social and economic benefits to artisanal fishing communities provide incentives to a continued sustainable fisheries agenda.

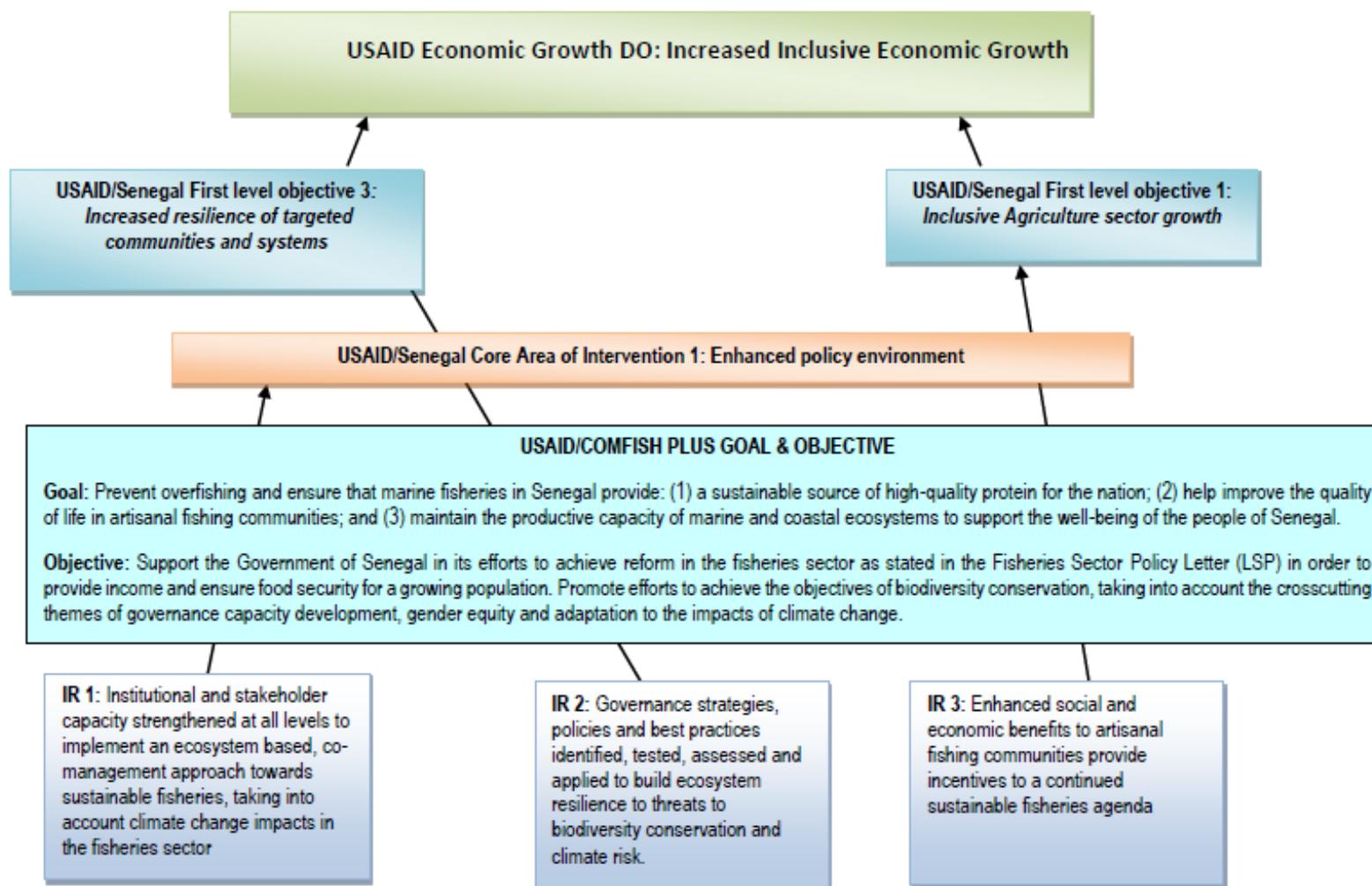
- Extend project support to women processors of Ziguinchor/Kafountine/Bassoul;
- Continue support for implementation of action plans for improving artisanal processing in Yénne Todd, Mballing Village and Pointe Saréne;
- Support the standardization, value-addition and labeling processes of the four pilot sites with Yacinthe from ITA (Guéréo, Yénne Todd, Missirah and Domaine bi);
- Monitor implementation of the IGA and women's action plans in Guéréo, Ndayane and Missirah;

- Socio-economic study on project support to women processors with a focus on three pilot sites (socio-economic wellbeing) with a case study on the Cayar unit;
- Monitor the revolving credit system in five CLPA sites Rufisque/Bargny, Khelcom, Domaine Bi, Ndéppé and Yénne Dialaw;
- Monitor literacy training in partnership with DALN (15 sites involved: CLPA of Rufisque/Bargny, Yénne/Dialaw, Sindia Nord/Sindia Sud, Sine Saloum, Mbour);
- Continue support for monitoring management of the Cayar artisanal processing unit;

Communication and M&E activities planned for the next quarter

- Produce communication aids to increase project visibility;
- Produce two project capitalization videos;
- Continue with the GIS material and data transfer from CSE to DPM;
- Continue with radio programs;
- Monitor electronic archiving of CLPA data and improve their contribution to enliven the CLPA website;
- Process to start training and setting up a Mobile-To-Web Platform for the monitoring and evaluation of CLPA data in Senegal.

Annex.1. USAID/COMFISH Plus Results Framework



Annex.2. FY 18 First Quarter Performance

Indicator Statement	Baseline year	Baseline value	LOP Target	Year 1 FY17 Actual	Year 2 FY18 Target	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual	YR2 FY18 Actual	Observations
1. Number of individuals who have received USG supported short term agricultural sector productivity or food security training (EG.3.2-1)	2016	3557	6650	M=2534 F=1486 T=4020	3150	M=704 F=329 T=1033					This quarter, 38 workshops trained 1033 people including 329 women. The workshops provided training to members of URM and <i>sardinella</i> FMPs, evaluated insurance for surveillance fishers, and trained stakeholders in Sine Saloum on the development and validation of CLs.
2. Number of people trained in sustainable natural resources management and/or biodiversity conservation as a result of USG assistance (EG.10.2-4)	2016	3557	6650	M=2534 F=1486 IUUF=4020 T=4020	3150	M=704 F=329 IUUF=1033 T=1033					56 outings at sea and at landing and processing sites have trained 81 surveillance fishers from 10 CLPAs where the CLs are applied
3. Number of people supported by the USG to adapt to the effects of climate change (EG.11-5)	2015	109,329	109,329	109,329	109,329	109,329					109,329 fishers continue to benefit from climate services provided by ANACIM due to the SMS platform put in place by the project.
4. Number of laws, policies, regulations, or standards addressing climate change adaptation formally proposed, adopted, or implemented as supported by USG assistance (EG.11-3)	2016	13	9	8	4	5					2 Orders creating implementation monitoring committees for Ziguinchor and Kafountine PLAs 2 Orders creating Steering Committees for the Ziguinchor and Kafountine PLA

Indicator Statement	Baseline year	Baseline value	LOP Target	Year 1 FY17 Actual	Year 2 FY18 Target	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual	YR2 FY18 Actual	Observations
											1 Regulation for revolving funds for the women of Yène Dialaw
5. Number of people trained in climate change adaptation supported by USG assistance (EG.11-1)	2016	1116	2090	M=488 F=932 T=1420	990	M=182 F=251 T=433					15 training workshops permitted resilience training on themes from fish product processing to functional literacy to organizational development and revenue generating activities
6. Number of fishery users to whom tailored Climate Information Services (CIS) are made available (custom)	2015	109,329	109,329	109,329	109,329	109,329					ANACIM platform supported by the project continues to distribute early warning weather alerts to 109,329 fishers across Senegal
7. Number of fishery beneficiaries with effective access to and understanding of CIS (custom)	2016	961	1100	961 continuing 156 new T=1117	100	0					During this quarter, ANACIM suspended training sessions on the interpretation of early warning systems. They could resume next quarter in Casamance and Sine Saloum
8. Number of people using climate information or implementing risk-reducing actions to improve resilience to climate change as supported by USG assistance (EG.11-6)	2015	109,329	109,329	109,329	109,329	109,329					The 109,329 fishers continue to use climate services distributed by ANACIM through the platform and other channels
9. Number of farmers and others who have applied improved technologies or management practices with USG assistance (EG.3.2-17)	2016	42,837	23,323	20,952	9,330	20,952 Continuing in 10 CLP)					Households in the new zones of Casamance and Sine Saloum are not yet integrated as the CLs have not been applied

Indicator Statement	Baseline year	Baseline value	LOP Target	Year 1 FY17 Actual	Year 2 FY18 Target	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual	YR2 FY18 Actual	Observations
10. Number of local fishery organizations able to disseminate CIS (custom)	2016	0	32 (CLPAs)	35	32	35 Continuing					ANACIM has not trained a new CLPA in this quarter
11. Number of hectares of biologically significant areas under improved natural resource management as a result of USG assistance (EG.10.2-2)	2016	1,404,565	1,484,206	1,404,565	1,484,206	1,404,565					The CLs are not yet applied in the estuary zones (case of Saloum)
12. Number of institutions with improved capacity to assess or address climate change risks supported by USG assistance (EG.11-2)	2016	0	250	58	100	32					In the course of the quarter, 32 institutions (CLPA, OCB, state services) were trained
13. Number of fishery organizations that are represented in the Steering Committee and governance structure of CINSERE (custom)	2016	0	1	0	1	0					ASPRODEB represents CLPAs No Steering Committee held this quarter
14. Number of for-profit private enterprises, producers organizations, water users associations, women's groups, trade and business associations, and community based organizations (CBOs) receiving USG food security related organizational development assistance (EG.3.2-4)	2016	0	100	63	100	30					30 CLPAs, women's groups and associations have benefited from capacity building in organizational development FY18 and LOP target revised this quarter as per FY17 FTFMS comments and clarifications.
15. Number of households benefiting directly from	2016	16,533	17,000	16,533	17,000	16,533 Continuing					16,533 households from 10 CLPAs continue to benefit

Indicator Statement	Baseline year	Baseline value	LOP Target	Year 1 FY17 Actual	Year 2 FY18 Target	Q1 Actual	Q2 Actual	Q3 Actual	Q4 Actual	YR2 FY18 Actual	Observations
USG interventions (EG.3-1)											from interventions
16. Number of hectares of biologically significant areas showing improved biophysical conditions as a result of USG assistance (EG.10.2-1)	2016	0	1,404,565		1,404,565						To be reported at the end of FY 2018 with the CRODT stock status study
17. Number of people with improved economic benefits derived from sustainable natural resource management and/or biodiversity conservation as a result of USG assistance (EG.10.2-3)	2016	0	2,151	140	1,151						To be reported at the end of FY 2018 with the impact study underway
18. Number of laws, policies, or regulations that address biodiversity conservation and/or other environmental themes officially proposed, adopted, or implemented as a result of USG assistance (EG.10.2-5)	2016	28	8	11	5	11					<p>3 <i>sardinella</i> FMPs from Grande Côte Sud, Cap Vert, Petite Côte put in place</p> <p>3 CLs proposed for the CLPAs of Sokone, Missirah and Toubacouta</p> <p>2 Orders creating implementation monitoring committees for the PLAs of Ziguinchor and Kafountine</p> <p>2 Orders created Steering Committees for the PLAs of Ziguinchor and Kafountine</p> <p>1 Regulation for revolving funds for women from Yène Dialaw</p>

Annex 3. Financial Report Q1-FY18

Expense Reporting for the period: October 1, 2017 to December 31, 2017

		Approved Y2 Budget	Y2Q1	Cumulative Expense	Balance
URI Personnel		\$ 257,175	\$ 57,665	\$ 57,665	\$ 199,510
URI Fringe		\$ 143,951	\$ 31,832	\$ 31,832	\$ 112,119
Consultants and In country stuff		\$ 841,721	\$ 148,175	\$ 148,175	\$ 693,547
Local Staff	\$ 387,449				
Local Staff fringe benefits	\$ 190,787				
Local consultants and service providers	\$ 263,485				
Subcontracts		107,269	\$ 47,629	\$ 47,629	\$ 59,640
Other direct costs		438,454	\$ 27,795	\$ 27,795	\$ 410,659
Travel		335,587	\$ 106,474	\$ 106,474	\$ 229,113
Capital Equipment		\$ -	\$ -	\$ -	\$ -
Total Direct		\$ 2,124,158	\$ 419,569	\$ 419,569	\$ 1,704,589
Indirect		\$ 541,805	\$ 105,398	\$ 105,398	\$ 436,407
Total Direct and Indirect		\$ 2,665,963	\$ 524,967	\$ 524,967	\$ 2,104,996

Annex 4. Environmental Mitigation and Monitoring Plan (EMMP) Q1-FY18

Category of Activity from Section 3.5, 3.7 and 3.10, of the Senegal EG Food Security and Natural Resource Management PIEE (April 2016)	Environmental Threats	Mitigation Measures	Who is Responsible for Monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
<p>Engaging the government, supporting local communities, planning and outreach</p> <p>Education, technical assistance, and training of stakeholders</p> <p>Technical studies, research and analyses</p> <p>Awareness, outreach and behavior change communications</p> <p>Study tours and peer to peer exchanges</p> <p>Training of government employees</p> <p>Supporting CLPAs and fisherman groups to enforce laws and regulations around fishing practices</p> <p>Realizing behavior change and achieving co-management</p>	<p>Activities that aim to increase public participation in policy making including engaging the government in dialogue at the local and central level to better manage marine fisheries and combat IUU fishing; mobilization of communities for development and enforcement of laws and regulations protecting natural resources; community planning and strategy development present no foreseeable adverse environmental impacts. Per section 3.10 of the Senegal EG Food Security and Natural Resource Management PIEE, these activities are determined to be Categorical Exclusions.</p>	<p>No mitigation measures</p>	<p>CoP</p>	<p>Workplans, Quarterly Reports, and materials prepared for capacity building, training, and studies</p>	<p>Review of materials</p>	<p>Quarterly</p>
<p>Influencing government policies</p> <p>Building the capacity of stakeholders at all levels of governance (fisheries administration and CLPA institutions, research and education)</p> <p>Improving the sustainability of fishery resources and coastal and marine ecosystems by promoting best practices</p>	<p>All activities that may directly affect fish production and marine resources must evaluate how activities to be implemented will interact with the environment.</p> <p>Environmental impacts of capture marine fisheries include overharvesting; catch of unwanted or undersized (juvenile) fish stocks; destructive fishing practices (destructive gear, bottom structure damage, use of toxic substances, and dynamite fishing); lost gear and nets (“ghost” fishing leading to additional depletion of resources and</p>	<p>Inclusion of fishers in sustainable fisheries management, monitoring and enforcement of management measures</p> <p>Training, demonstration, and enforcement of fisheries rules that reduce over-exploitation, destructive fishing</p>	<p>CoP and Senior Fisheries Officer</p>	<p>Local Conventions and FMPs</p> <p>CLPA meeting minutes and reporting</p>	<p>Review of implementation of Local Conventions and FMPs</p> <p>CLPA reports and consultations</p>	<p>Quarterly</p>

Category of Activity from Section 3.5, 3.7 and 3.10, of the Senegal EG Food Security and Natural Resource Management PIEE (April 2016)	Environmental Threats	Mitigation Measures	Who is Responsible for Monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
	<p>damage to non-target species such as turtles, marine mammals, and birds); ecosystem stress; and changes in fish population structures.</p> <p>Additional information for impact and mitigation planning related to fisheries can be found at the USAID's Sector Environmental Guidelines: http://www.usaidgems.org/Sectors/fisheries.htm</p> <p>And at https://www.usaid.gov/sites/default/files/documents/1865/FishAquaGuide14Jun13Final.pdf</p>	<p>practices, and catch of non-target fish and juveniles.</p> <p>Insurance program which supports participatory enforcement thereby reducing bad fishing practices.</p> <p>Co-management capacity development with CLPAs and coordination and collaboration at the central and local level</p> <p>Ecosystem-based fisheries management strategies</p> <p>Use of local and scientific knowledge in fisheries planning and management</p>				
<p>Post-harvest fisheries activities including:</p> <ul style="list-style-type: none"> - Improved processing methods, equipment, storage, packaging, transport and sales - Small scale construction to improve landing sites, and processing facilities - Small scale construction and rehabilitation for water and sanitation structures - Development of Best Practice 	<p>Improved facilities could result in disturbance to existing landscape/ habitat and sensitive ecosystems, or degrade water resources, cause sedimentation to surface waters or contamination of groundwater and surface water.</p> <p>Increasing the demand and value of fish products, packaging, and marketing could in theory give incentive to increase fishing effort and contribute to overfishing.</p> <p>Fish processing effluents and solid waste may</p>	<p>A technical monitoring construction committee monitors construction and evaluates its compliance with validated plans and ensures that building permits and licenses are obtained as appropriate and necessary.</p> <p>No activities at sites within 30 meters of a permanent or seasonal stream or water</p>	CoP	<p>Construction plans/ designs and photos of all facilities constructed</p> <p>Official government approvals of construction</p> <p>FMPs and Local</p>	<p>Review of approved plans and documents, site inspection, photos, and periodic review of performance related to Codes of Good Practice</p> <p>Consultations</p>	Quarterly

Category of Activity from Section 3.5, 3.7 and 3.10, of the Senegal EG Food Security and Natural Resource Management PIEE (April 2016)	Environmental Threats	Mitigation Measures	Who is Responsible for Monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
<p>Processing Compacts (including handling and food safety) with groups of women processors</p> <p>- Strengthening the role of women in the fisheries value chain through management training and support for women fish processing associations</p> <p>Fish processing is addressed by section 3.7 of the PIEE (Post-harvest and food processing activities).</p>	<p>produce adverse effects on the receiving coastal and marine environment.</p> <p>Land use change related to small-scale construction may disturb habitat and local hydrology. Runoff from cleared ground or materials stockpiles during construction can result in sedimentation/fouling of surface waters. Construction may result in standing water on-site, which readily becomes breeding habitat for mosquitoes and other disease vectors; this is of particular concern as malaria is endemic in most of Senegal.</p> <p>Increased and air and noise pollution can result during construction or rehabilitation from the actions of construction equipment and workers.</p> <p>Local procurement of construction materials (timber, fill, sand and gravel, etc.) may have adverse local impact</p> <p>Smoke drying fish may have safety and health risks for fish processors and fish processing may generate odor pollution.</p> <p>Discharge of waste water to may degrade coastal and aquatic habitat</p> <p>Inefficient smoke drying with wood contributes to deforestation</p> <p>Impacts related to small-scale construction are found in Section 3.5 of the PIEE (Building productive infrastructure)</p>	<p>body.</p> <p>During periodic site visits questions are raised and improvement measures proposed.</p> <p>Codes of good practice are developed and adopted by all members of fish processing groups, including safeguards to protect workers from occupational safety and health hazards.</p> <p>Codes of Good Practice include agreement to not purchase or process juvenile fish</p> <p>Fisheries management plans (FMP) and Local Conventions developed and implemented to prevent overfishing and illegal fishing.</p> <p>Support for medium to large scale fish processing activities will require Positive determination and an EA.</p> <p>Review USAID Food Processing sector guide:</p>		<p>Conventions to prevent overfishing</p> <p>Technical reports</p> <p>Codes of Good Practice (hygiene and agreement to not process juvenile fish)</p>	<p>with CLPA Committees</p>	

Category of Activity from Section 3.5, 3.7 and 3.10, of the Senegal EG Food Security and Natural Resource Management PIEE (April 2016)	Environmental Threats	Mitigation Measures	Who is Responsible for Monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
		<p>http://www.usaidgems.org/Documents/MSEs/USAID_MSE_Sector_Guideline_Food_Processing_2013.pdf</p> <p>And small scale construction guidelines: http://www.usaidgems.org/sectorGuidelines.htm) http://www.usaidgems.org/Documents/VisualFieldGuides/ENCAP_VisFldGuide--Construction_22Dec2011.pdf</p>				
<p>Adaptation to global climate change activities including:</p> <ul style="list-style-type: none"> - Planting vegetation or trees for coastal protection - Improved fish processing to increase resilience of fisheries sector households - Support to protect life and property at sea, including weather alerts and safety at sea programs - Coastal development setbacks - Inclusion of climate change considerations in fisheries management plans and CLPA Local Conventions 	<p>Implementation of adaptation measures may involve alteration of nearshore sediment patterns resulting in displaced or accelerated erosion of beachfronts.</p> <p>Adaptation measures may disturb natural habitat and sensitive ecosystems, result in marine pollution from soil erosion, alter local hydrology, and cause biodiversity loss from land fragmentation.</p>	<p>Vulnerability assessments</p> <p>Formally approved Adaptation Plans and implementation of adaptation actions with no foreseeable adverse environmental impacts.</p> <p>Avoidance of hard structures and beach nourishment in favor of soft solutions, e.g. restoration of natural vegetation for erosion and flood control.</p>	COMFISH Plus Climate Change Officer	Reports, adaptation plans, Local Conventions and FMPs	Review of reports and monitoring implementation of adaptation measures	Quarterly

Annex 5. Environmental Mitigation and Monitoring Report (EMMR) Q1-FY18

Category of Activity from Section 3.5, 3.7 and 3.10, of the Senegal EG Food Security and Natural Resource Management PIIIE (April 2016)	Monitoring/mitigation measure	Responsible party	Monitoring Plan			Monitoring method	Cost estimate (USD)	Monitoring Log		
			Indicator	Source of verification	Reporting frequency of monitoring			Date	Result	Follow-up
<p>Engaging the government, supporting local communities, planning and outreach</p> <p>Education, technical assistance, and training of stakeholders</p> <p>Technical studies, research and analyses</p> <p>Awareness, outreach and behavior change communications</p> <p>Study tours and peer to peer exchanges</p> <p>Training of government employees</p> <p>Supporting CLPAs and fisherman groups to enforce laws and regulations around fishing practices</p> <p>Realizing behavior change and achieving co-management.</p>	<p>No mitigation measure. The stakeholders were trained on sustainable management of fisheries resources, fishing code and fisheries legislation, hence contributing to a positive impact on the environment.</p>	<p>Project Manager (CoP)</p>	<p>-Number of people trained</p> <p>-Number of institutions strengthened</p>	<p>AMELP Workplans, Quarterly Reports, and materials prepared for capacity building, training, and studies</p> <p>Technical reports</p>	<p>Quarterly</p>	<p>- Collection of data by the field staff</p> <p>- Review of materials by the M&E and CoP</p>	<p>No cost</p>	<p>All year</p>	<p>- 1033 stakeholders trained</p> <p>- 30 CLPA and fisherman groups</p>	<p>- Field visits</p> <p>- Training summary reports</p> <p>- Interviews with Technical staff</p>
<p>Influencing government policies</p> <p>Building the capacity of stakeholders at all levels of governance (fisheries administration and CLPA</p>	<p>Inclusion of fishers in sustainable fisheries management, monitoring and enforcement of</p>	<p>CoP and Senior Fisheries Officer</p>	<p>-Types of participants in the processes of elaboration and implementation of the various</p>	<p>AMEPL Workplans, Quarterly Reports, and materials prepared for</p>	<p>Quarterly</p>	<p>Collection of data by the field staff</p> <p>Review of materials by the M&E</p>	<p>Cost 6,618 \$US</p>	<p>All year</p>	<p>56 participatory monitoring trips</p> <p>3 Sadinella FMPs</p>	<p>- Field visits</p> <p>- Training summary reports</p> <p>- Interviews</p>

<p>institutions, research and education) Improving the sustainability of fishery resources and coastal and marine ecosystems by promoting best practices</p>	<p>management measures Training, demonstration, and enforcement of fisheries rules that reduce over-exploitation, destructive fishing practices, and catch of non-target fish and juveniles. Insurance program which supports participatory enforcement thereby reducing bad fishing practices. Co-management capacity development with CLPAs and coordination and collaboration at the central and local level Support to the CLPA Network setting up Ecosystem-based fisheries management strategies Use of local and scientific knowledge in fisheries planning and management</p>		<p>strategies and policies developed -Number of people and institutions trained in sustainable and participatory resource management -Number of participatory monitoring trips -Number of activities to monitor and evaluate implementation of strategies developed Implementation of joint research units at local level Implementation of the consultation framework for sardinella FMPs</p>	<p>capacity building, training, and studies</p>		<p>and CoP Review of implementation of Local Agreements and FMPs CLPA reports and consultations</p>			<p>implemented in Grande Côte Sud Petite Côte and Cap Vert 3 CLs proposed in Sokone, Missirah and Toubacouta</p>	<p>with Technical staff</p>
<p>Post-harvest fisheries activities</p>	<p>A technical monitoring</p>	<p>CoP and</p>	<p>-The modern</p>	<p>AMEPL</p>	<p>Quarterly</p>	<p>Field visits</p>	<p>No cost</p>	<p>All</p>	<p>Cayar: General</p>	<p>Follow up on</p>

<p>including:</p> <ul style="list-style-type: none"> - Improved processing methods, equipment, storage, packaging, transport and sales - Small scale construction to improve landing sites, and processing facilities - Small scale construction and rehabilitation for water and sanitation structures - Development of Best Practice Processing Compacts (including handling and food safety) with groups of women processors - Strengthening the role of women in the fisheries value chain through management training and support for women fish processing associations <p>Fish processing is addressed by section 3.7 of the PIEE (Post-harvest and food processing activities)</p>	<p>construction committee monitors construction and evaluates its compliance with validated plans and ensures that building permits and licenses are obtained as appropriate and necessary.</p> <p>No activities at sites within 30 meters of a permanent or seasonal stream or water body.</p> <p>During periodic site visits questions are raised and improvement measures proposed.</p> <p>Codes of good practice are developed and adopted by all members of fish processing groups, including safeguards to protect workers from occupational safety and health hazards.</p> <p>Codes of Good Practice include agreement to not purchase or process juvenile fish</p> <p>Fisheries management plans (FMP) and Local Agreements developed</p>	<p>Climate change officer</p>	<p>processing unit</p> <ul style="list-style-type: none"> -Equipment: number of fish-drying racks -Number of ovens -Number of potable water sources -Number of loans <p>Code of conduct</p> <p>Local convention</p> <p>Number of assessment and monitoring of code of conduct implementation</p> <p>Fisheries plans</p>	<p>Workplans Quarterly Reports, and materials prepared for capacity building, training, and studies,</p> <p>Code of conduct</p> <p>Monitoring and assessment reports</p>		<p>Evaluation and monitoring Meetings,</p> <p>Data collected by the field staff or partners</p>		<p>year</p>	<p>Assembly and training in women's leadership of the MTG GIE</p> <p>4 sites visited (hygiene committees)</p> <p>3 Action Plans developed for the steering committees of local adaptation plans of Saint Louis, Ziguinchor and Kafountine</p> <p>Establishment and training of the Monitoring Committees of Mbour and Saint Louis</p> <p>Functional literacy training and in gardening for the women's groups of Saloum (Foudiougne, Diamniadio and Bassoul)</p>	<p>maintenance of processing site and of its equipment M&E visit</p> <p>Follow up on the implementation of action plans</p> <p>Follow-up on using the administrative and financial management tools</p>
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	<p>and implemented to prevent overfishing and illegal fishing.</p> <p>Support for medium to large scale fish processing activities will require Positive determination and an EA.</p> <p>Review USAID Food Processing sector guide:</p> <p>http://www.usaidgems.org/Documents/MSEs/USAID_MSE_Sector_Guideline_Food_Processing_2013.pdf</p> <p>And small scale construction guidelines: http://www.usaidgems.org/sectorGuidelines.htm http://www.usaidgems.org/Documents/VisualFieldGuides/ENCAP_VisualFieldGuide--Construction_22Dec2011.pdf</p>								
<p>Adaptation to global climate change activities including:</p> <ul style="list-style-type: none"> - Planting vegetation or trees for coastal protection - Improved fish processing to 	<p>Vulnerability assessments</p> <p>Formally approved Adaptation Plans and implementation of</p>	<p>COMFISH Plus Climate Change Officer</p>	<p>Number of Plans, policies, strategies, adaptation rules/regulations -Number of</p>	<p>AMEPL Strategic documents Activities Reports etc.</p>		<p>Field visits Evaluation and monitoring Meetings,</p>	<p>cost 165000 cfa</p>	<p>2 Monitoring committees set up (Ziguinchor and Kafountine) 2 steering committees set</p>	<p>Field visit Training Assessments</p>

<p>increase resilience of fisheries sector households</p> <ul style="list-style-type: none"> - Support to protect life and property at sea, including weather alerts and safety at sea programs - Coastal development setbacks - Inclusion of climate change considerations in fisheries management plans and CLPA Local Agreements 	<p>adaptation actions with no foreseeable adverse environmental impacts.</p> <p>Avoidance of hard structures and beach nourishment in favor of soft solutions, e.g. restoration of natural vegetation for erosion and flood control.</p>		<p>hygiene charters</p> <p>Number of monitoring committees</p>			<p>Data collected by the field staff or partners</p>			<p>up (Ziguinchor and Kafountine)</p>	
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