

**USAID/COMFISH Project
PENCOO GEJ
(Collaborative management for a sustainable fisheries future in Senegal)**

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1. EXECUTIVE SUMMARY

The primary goal of the USAID/COMFISH project is to support the Senegalese Ministry of Fisheries and Maritime Affairs, through its technical departments and particularly the Department of Marine Fisheries (DPM), to implement the Fisheries and Aquaculture Policy Letter (LPS) that guides national efforts on sustainable fisheries resources management. To achieve this, the project's activities are geared towards establishing collaborative management plans for priority fish stocks, with climate change adaptation plans that increase resilience to climate change in coastal and marine ecosystems and communities. Using the CLPA (Local Artisanal Fisheries Councils) as an entry point at the institutional level, the project attempts to bring institutional, administrative, socio-economic and environmental aspects into the process of establishing sustainable fisheries management in Senegal. And, all these activities go to ensure that coastal and marine ecosystems and communities possess adapted and efficient strategies that make them more resilient to climate change.

This third quarterly report covers activities the project carried forward from the previous quarter, particularly in the new intervention areas.

On policy dialogue and local governance, the project:

- Worked with COMNAC (National Committee on Climate Change) and the Vulnerability/Adaptation sub-group to finalize the strategy for an enhanced climate change response in fisheries policies.
- Contributed to implement the National Management Plan for sardinella by continuing to develop local sardinella management plans.
- Proposed a national strategy for implementing Senegal's maritime fisheries extension plan.
- Worked with DPSP to better institutionalize collaborative supervision (conducted by the USAID/COMFISH project) through a draft tripartite protocol with DPSP and CLPAs for improved delivery of collaborative management plans.

On institutional and stakeholder capacity development, the project organized an exchange visit to URI (in the United States) learn of the Sea Grant program and other extension programs. Six (6) key institutions for fisheries extension in Senegal took part in the visit.

On the ground, the project supported IUPA, CRODT and IFAN to refine their fisheries data collection strategy, as well as to support scientific productions through research. Students from these institutions are preparing their dissertations and doctoral theses, and the data they generate will be used in ongoing efforts to establish collaborative management plans for sardinella and bonga.

In the field of local governance, local stakeholders received support to continue outreach work on the rules of CLPA Local Agreements via radio programs and sensitization meetings. Local governance institutions and stakeholders were given capacity enhancing support to implement Local Agreements. This support took various forms, ranging from the renovation of CLPA offices in Rufisque/Bargny and Mbour; equipping the Sindia Sud CLPA; delivery of cleaning equipment to women in Mbaling; training for joint supervision units; administrative and financial management training for the CLPAs in Yene/Dialaw, Rufisque/Bargny, Sindia Nord and Sud; training on community organization and dynamics; and training for stakeholders on CLPA resource management and operationalization. A total of 113 training workshops were organized for 2,861 stakeholders. The areas covered were community organization and dynamics, climate change, Local Agreements, collaborative supervision, administrative and financial management, and the development of management plans for priority species. Beside this, extension work to improve understanding of the Local Agreements was pursued, with 21 meetings organized in the new intervention areas.

Improvement of the scientific knowledge base was sustained with three (3) new activities: IUPA led a fishing gear selectivity study, CSE did a mapping of fishing sites and infrastructure, while CRODT conducted a bioecological and socio-economic study on bonga stocks. The findings from these studies

provide key scientific support for establishing management plans on small pelagics and reinforce the project's documentary resource base. CSE prepared maps of fishing sites and infrastructure, and produced a map on stock distribution by zone. Other documents produced include a guide on collaborative surveillance, a participant's manual on community organization and dynamics, and the final report on 'ELEFAN' stock assessment software.

Development of the collaborative management plan on sardinella was pursued. DPM led a technical pre-validation of the first draft of local management plans and the consultation frameworks proposed to go with these plans. At the same time, the project began efforts to develop the collaborative management plan on bonga fisheries in Sine Saloum through information, awareness and consultation with the key players in these fisheries.

For communication and awareness, the project continued to promote radio programs for behavior change among stakeholders, and also did a mid-term review of the radio programs, alongside media coverage to enhance the project's visibility. Two (2) data sheets were produced respectively on Local Agreements and on techniques for enhanced artisanal processing of fisheries products in Cayar. Additionally, 64 radio programs were broadcast across the entire project intervention area on the network of partner radios on topics such as fishing equipment security, Local Agreements, climate change, or more topical issues, such as fisheries partnership agreements.

With regard to ***gender***, the project supported 205 women fish processors to complete and inaugurate the fish processing unit in Cayar. Overall, 1062 women came out of the third quarter with their capacities reinforced, and 517 of them received training on climate change.

On adaptation to climate change, the project's strategy is to set up collaborative management plans with climate change adaptation strategies for targeted priority species and to promote collaborative management. It is now clear that establishing collaborative management plans contributes to the production of useful goods and services for grassroots communities, and helps increase community resilience to climate change: *"according to the IPCC (2012), resilience is the ability of a community to anticipate, absorb or withstand the effects of a hazard, or recover from it, quickly and effectively, by recovering and improving its basic structures and functions". In the social context, this refers to "the ability of groups or communities to adapt to and learn to cope with stress and external disturbances caused by political, social, economic or environmental factors" (Adger, 2000).*

This means a strong and established correlation exists between community resilience to climate change and the ability of coastal and marine ecosystems to produce useful goods and services through the sustainable use of fisheries resources. It shows also that the project's whole strategy, which is based on promoting sustainable fisheries resources management, is a strategy for adaptation to climate change.

To take this process forward, the project did a lot of work in the policy arena. It concentrated first on finalizing the document from the climate change consultative meeting to be able to establish an efficient action plan for enhancing the integration of climate change adaptation into decision-making on fisheries. Still in the policy arena, and especially on the implementation of adaptation plans, the project worked with stakeholders to prepare and validate eight (8) hygiene charters on the sites in Domaine Bi, Saly, Guereo, Mballing village, Nianing, Khelcom and Tann. These charters were developed for the maintenance of hygiene at the processing sites, and have been useful for the sustainable management of cleaning equipment and infrastructure on the artisanal processing site. They also play a role in the sustainable management of fisheries resources and the improvement of product quality for distribution to a bigger market. After providing training, the project also made available cleaning equipment to the various processing sites to help them apply the rules in the various charters. Finally, to support the State in improving the community based early warning system on climate variations, the project ensured that information on weather conditions was sent via mobile phones to fishermen, in collaboration with ANACIM, to inform the fishermen about the dangers they could face at sea, and thus enable them to take appropriate measures for their safety at sea.

The project's efforts to continue implementing adaptation plans encompassed a process for developing the capacity of stakeholders on climate change. It was in this respect that 46 training/replication workshops were organized for a total number of 1,133 stakeholders.

To increase the social and economic benefits of the beneficiaries, the project rounded up activities to enhance the techniques for processing and storage of fisheries products, by inaugurating the improved processing unit in Cayar in the presence of Senegal's Minister of Fisheries and the USAID Director. At the same time, the project continued working with partners to establish an operating agreement for the unit, to refine the capacity development activities scheduled for the unit, and to monitor the revolving loan scheme. It also provided support to other sites to enable them to implement their climate change adaptation plans, as mentioned under the section on "climate change".

It is worth noting also that USAID organized a supervisory mission to some of the project's intervention areas from June 23 to 28, 2014.

2. INTRODUCTION

The Collaborative Management for a Sustainable Fisheries Future in Senegal Project (USAID/COMFISH) is a five-year initiative funded by the United States Agency for International Development (USAID). The project is implemented on the basis of a Cooperative Agreement between USAID and the University of Rhode Island (URI). The main partners implementing its activities are, among others, public departments, private sector players, non-governmental organizations that work along the coastline and in the fisheries sector, academic institutions (UCAD, IUPA), research institutes (CRODT, IRD/IFAN) and several other structures and NGOs.

The goal of the USAID/COMFISH project is to support the Government of Senegal's efforts to achieve reform of its fisheries sector, as mentioned in the Fisheries and Aquaculture Sector Policy Letter, by strengthening many of the enabling conditions necessary for enhanced governance and demonstrating effective management tools and approaches. These tools simultaneously address aspects of socio-economic, institutional and biological sustainability of priority fish stocks to strengthen resilience to climate change within communities. In doing so, they contribute to food security in Senegal. The 1998 Fishing Code makes provision for local governance organs. But, these only came into existence with the creation of Local Artisanal Fishing Councils (CLPA), which serve as the entry points for this project. While the biological sustainability of some priority fish stocks has been researched, the findings are not integrated fully into local collaborative management plans. This means the current mechanisms for collaborative management at the local level have not fully integrated the sustainability criteria set out in the Sector Policy Letter. As a result, most fisheries in Senegal are still not managed in a sustainable manner.

The USAID/COMFISH Project supports this fisheries sector reform, while also pursuing the objectives of biodiversity conservation, taking into account the crosscutting areas of enhanced governance, gender mainstreaming and adaptation to climate change.

The USAID/COMFISH project seeks to develop and replicate innovative sustainable fishing models to help Senegal achieve sustainable management of the artisanal fisheries sector. Senegal shares most of its fisheries resources with the neighboring countries belonging to the CCLME zone. In light of this, some activities contribute to harmonize governance of artisanal fisheries at the sub-regional level, but most of the project focus is on Senegal only.

The USAID/COMFISH project contributes to four main result areas, they are:

IR 1: Institutional and stakeholder capacity strengthened at all levels of governance to implement an ecosystem-based, collaborative management approach to sustainable fisheries, to prevent overfishing, and to increase climate change resilience.

RI 2: Strategies, policies and best practices identified, tested and applied to strengthen resilience to climate change and address destructive and unsustainable marine resource uses that threaten biodiversity conservation;

RI 3: Vulnerability assessed and capacity of vulnerable coastal communities strengthened to adapt to the impacts of climate variability and change;

RI 4: Increased social and economic benefits to artisanal fishing communities provide incentives to a continued sustainable fisheries agenda and increased climate change resilience.

This document describes USAID/COMFISH project activities during the third quarter of fiscal year 2014. It comprises four sections: an introduction; a first part that describes the main accomplishments of the quarter; a second part that describes the crosscutting activities carried out; and the last section that describes project management, including the appendices to the report.

3. ACCOMPLISHMENTS IN QUARTER 3

3.1. Policy dialogue/reforms

The summary of project activities in the reporting period is as follows:

- The project contributed to implement the national management plan for sardinella fisheries by continuing to develop local collaborative management plans for this species. The Technical Task Force (TTF) held a pre-validation meeting at DPM with resource persons from partner institutions to review the national plan and the consultation frameworks proposed for it.
- The final report on “the diagnostic study of existing consultation frameworks on climate change, fisheries and the marine and coastal environment” was validated by the National Committee on Climate Change (COMNAC) during the Vulnerability and Adaptation group meeting, held on 27/6/2014 at DEEC.
- The project proposed a national strategy for implementing Senegal’s extension plan for artisanal marine fisheries.
- The project strengthened collaborative supervision through a draft tripartite protocol between USAID COMFISH, the DPSP and the CLPAs concerned, designed to foster the establishment of collaborative management plans.

The project also held several consultative meetings with stakeholders, including: nine (9) information, discussion and sensitization meetings in Sine Saloum on project activities and on the process of developing the bonga management plan; and ten (10) focus group meetings to review the fisheries in Saint Louis and Kafountine as part of efforts to develop Local Agreements after signing MoUs with the CLPAs in these communities.

3.2. Human and institutional capacity development

3.2.1. Academic institutions and research institutes

Sea Grant: A team of six (6) people was in the United States of America for training on fisheries and marine extension techniques, with a view to applications in Senegal. The group comprised representatives of strategic partners such as the Department of Fisheries, CRODT, IUPA, FENAGIE Pêche and APTE. After the training, an action plan was drafted for the team to develop a national strategy for fisheries extension in Senegal.

CRODT: A Memorandum of Understanding (MoU) was signed with CRODT to ensure that the project has the enabling substantive support for developing collaborative management plans for sardinella and bonga fisheries. This MoU makes it possible also to strengthen CRODT’s fisheries data collection system in Casamance and Sine Saloum.

IUPA and IFAN: A study was carried out on selectivity of fishing gear for small pelagics in Sine Saloum and Casamance. The project also supported IUPA and IFAN students who are in the process of preparing their doctoral theses on the biology of species targeted by the project for its collaborative management plans.

3.2.2. Local governance institutions and stakeholders

To implement Local Agreements and develop the capacity of local governance organs, the project took steps to:

Renovate the offices of the CLPAs in Rufisque/Bargny and Mbour: together with the Secretaries General of the CLPAs, the project provided financial resources to renovate the buildings of the CLPAs in Rufisque/Bargny and Mbour so that they have functional working premises.

Equip the CLPA in Sindia Sud: the project gave a donation to the new CLPA in Sindia Sud. The gift included IT equipment (computer, printer), office furniture (table), and fifty (50) chairs to enable the members to hold their meetings properly and improve the way the ICC functions.



Photos 1 & 2: Equipment provided to the CLPA in Sindia Sud

Provide cleaning equipment to women in Mbaling: the project responded to an old request from these women, who always took advantage of every major meeting to raise the problem of hygiene and sanitation at their processing site. They stated their request during the development of Local Agreements and in the climate change vulnerability assessment. They stated it also in the adaptation plans and the charters adopted for hygiene on the processing sites. The equipment provided to the women comprised spades, wheelbarrows, rakes, dustbins, masks, etc.

Develop the capacity of collaborative supervision units in the CLPAs in Cayar, Yene/Dialaw and Rufisque/Bargny in the areas of collaborative supervision and marine safety. This training was done by two resource persons from DPSP and DPM to revitalize CLPA involvement in the monitoring and implementation of Local Agreements with the fisheries services. The training lasted five (5) days: three (3) for theory and two (2) on practice. Overall, 23 stakeholders attended this session. The training defined collaborative supervision and the typology of stakeholders; types of offenses in fishing; monitoring techniques and surveillance tools; procedures for reporting offenses; maritime safety and the roles and responsibilities of surveillance volunteers.

A manual was developed after this training for members of the collaborative supervision committee in the Local Artisanal Fisheries Councils (CLPA) concerned. After the training, recommendations were made on how to maintain discussions on surveillance status, provide the CLPAs in Yenne/Dialaw and Rufisque/Bargny with equipped surveillance canoes, support collaborative surveillance operations (on land and at sea), and make badges and uniforms for the surveillance volunteers.



Photo 3: Training joint supervision units for the CLPAs in Cayar, Yenne/Dialaw and Bargny/Rufisque **Photo 4: hands-on training for supervisors**

Develop capacity in administrative and financial management for the CLPAs in Yene/Dialaw, Rufisque/Bargny, Sindia Nord and Sud: as part of efforts to continue implementing Local Agreements, the project initiated training sessions on administrative and financial management (AFM) in order to give CLPA administrative bodies a simple system for upgrading their ways of working and closing their material and financial resource gap. The training was done by experts from the project and it focused on the mandates of the CLPA, the roles and responsibilities of its administrative organs and the staff positions in those organs, the functions of the organs, the tools for administrative management, basic principles of financial management, the budget (the project development process, the operating budget, the investment budget and the savings budget), etc.

At the end of the training, the coordination committees of the four CLPAs promised to invest in internal resource mobilization so that they can address the lack of financial resources in CLPAs. They proposed action steps to take and agreed to make progress in this regard with the other members of the organs. All the Secretaries General and relay workers in the CLPAs attended the training. In all, there were about forty (40) participants from four (4) different CLPAs.

An administrative and financial management manual, designed for CLPA coordination committees, was produced and is going to be disseminated across the various CLPAs after it is validated by DPM.



Photos 5 & 6: CLPA coordination committee members, and participants in the training session

Provide training on community organization and dynamics (COD): The project provided this training to satisfy a request from women on the processing site in Tanne, Joal Fadiouth who had trouble managing funds they had accumulated in their micro-credit scheme, which was set up when their economic interest group (EIG) became functional. Twenty-seven women from the EIG, three men and four fisheries officers from various supervision posts attended the training. At the end, the EIG members understood their respective roles and responsibilities, and knew how to use tools for financial management. Some management tools were validated during the training, finalized by the program and given to the EIG president. A plan of action was developed to help the EIG officials replicate the training they had received.



Photos 7 & 8: Participants in the training and delivery of the training action plan to the EIG President

Train stakeholders in CLPA resource management and operations. To help develop collaborative management plans for small pelagics, WWF organized three workshops under the USAID/COMFISH project in the new intervention areas, which include the CLPAs in Ziguinchor and Saint Louis. Another workshop took place on the Petite Côte in Mbour. These training workshops for CLPA leaders covered management of shared resources (sardinella, bonga). They also addressed CLPA operations, communication, and roles and responsibilities. These CLPAs are the fisheries governance organs at the local level.

3.3. Natural resources/management plans/marine biodiversity and ecosystem conservation

3.3.1. Establishment of a scientific knowledge base

The project continued to reinforce its scientific knowledge base to support its work for developing Local Agreements and collaborative management plans. It initiated some actions with the beginning of the bonga fishing gear selectivity assessment, the onset of the diagnostic study on bonga fisheries, and the set-up of the bonga fisheries data collection system. At the same time, CSE began collaborative mapping of fishing areas in the project's new intervention zones (Saint Louis and Casamance).

Bonga fishing gear selectivity study: the study began in Missirah, Foundiougne, Joal, Niodior, Bassoul and Djirnda in April 2014, with meetings to inform the CLPAs in these communities on the work IUPA has been doing in this domain, and to discuss with them the problems involved in doing a selectivity study on the fishing equipment used for bonga. About 50 persons attended the meetings, including representatives of fisheries services. The discussions focused on the mesh size of bonga fishing nets. After these meetings, field surveys were conducted on fishermen and processors in the Foundiougne, Missirah and Joal sites to develop a profile of bonga fisheries in the Saloum estuary and in Casamance. These surveys were carried out using a questionnaire on a sample group of 142 persons, with the support of fisheries service officials in the zones concerned.

The preliminary findings suggest that most bonga fish catches in Sine Saloum and in Casamance are done using encircling gillnets. Indeed, a total number of about 600 fishing units using encircling gillnets have been identified in these regions, with over 70% of them operating in the maritime region in Saloum. The meshing used frequently is between 20 and 25 mm. This is lower than the authorized meshing size. The meshing size used by fishermen has been on a downward trend since 1990, dropping from 60 mm to 20-25mm. A reduction in the average size of fish captured, due mainly to the high level of fish captures, has been observed.

Mapping of fishing infrastructure and sites: During the reporting period, CSE did a characterization and localization of fishing sites and infrastructure for the CLPAs in Saint-Louis, Ziguinchor and Kafountine, as well as in the zone called Boudie Balantacounda (Goudomp/Sédhiou). The goal of this exercise was to update the geographic information system.

The table below shows the steps taken and the progress made.

Table 1. Work plan for mapping infrastructure on the new sites

Activities planned	Activities performed	Results/Remarks
Identification and localization of the fishing sites of CLPAs in Saint-Louis	<ul style="list-style-type: none"> ✓ Data collection (field trips) ✓ Data processing, integration ✓ Development of final mapping products 	<ul style="list-style-type: none"> ✓ Map on fishing sites and infrastructure, ✓ Map on stock distribution

Identification and localization of the fishing sites of CLPAs in Ziguinchor, Kafountine and CC Boudie Balantacounda	<ul style="list-style-type: none"> ✓ Data collection (field trips) ✓ Data processing, integration, ✓ Development of final mapping products (ongoing) 	<ul style="list-style-type: none"> ✓ Map on fishing sites and infrastructure, ✓ Map on stock distribution
Reporting	<ul style="list-style-type: none"> ✓ Development of final report (in progress) 	<ul style="list-style-type: none"> ✓ Final report



Photo 9: Collaborative mapping in Kafountine



Photo 10: Collaborative mapping in Goudomp



Photo 11: Localization of fishing sites in Ziguinchor

Bioecological and socio-economic study on bonga stocks to support the development of management plans for small pelagics: to help in establishing management plans on small pelagics, CRODT initiated a bioecological and socio-economic study on bonga stocks that are divided between the Sine Saloum and the Casamance regions. The first step consisted in doing a literature review that is still in progress, and identifying the sites for the collection of biological data.

3.3.2. Development of collaborative management plans

- **Sardinella management plan**

A pre-validation meeting on the first collaborative management plan on sardinella and the consultation frameworks attendant to these plans was organized at DPM in the presence of members of the technical task force (TTF) and resource persons chosen by DPM.

At the end of the meeting, the participants proposed the following:

- (1) Revise the draft management plan document, dividing it into three local plans with the following breakdown: Petite Côte (CLPAs in Joal, Mbour, Sindia Nord, Sindia Sud and Saloum); the Cape Verde zone (CLPAs in Yenn-Dialaw, Rufisque-Bargny, Cayar, Pikine and Hann); and the Northern zone around the Grande Côte (CLPAs in Cayar, Dakar Ouest, Fass Boye);

(2) Validate the document on consultation frameworks and do not install these frameworks officially until technical validation of the local plans has been obtained.

The diagram below shows the three (3) zones targeted (Petite Côte, Cap Verde and Grande Côte) by these plans and the three (3) new zones (Saint Louis, Sine Saloum and Casamance) that will be added to the next annual work plan in 2015.

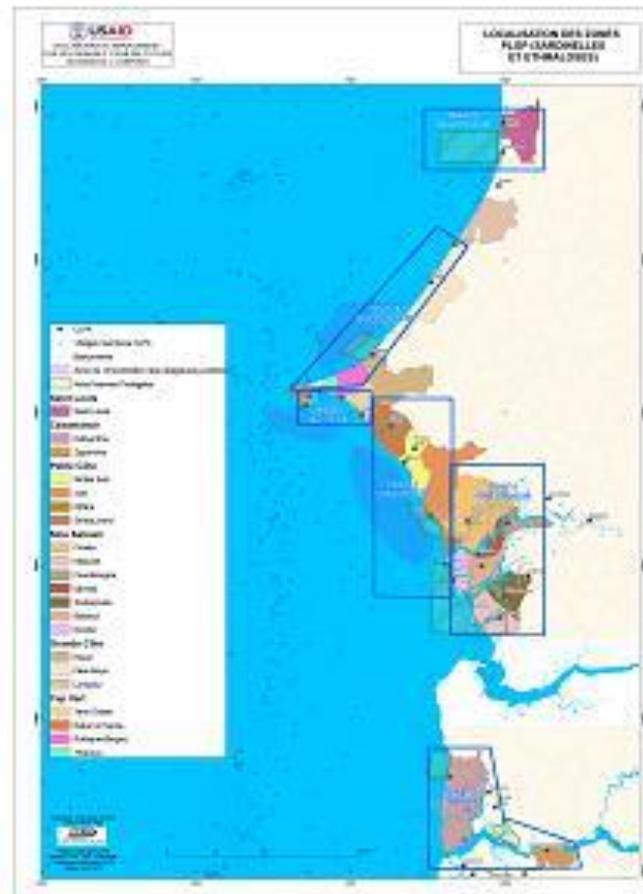


Figure 1: mapping of the zones targeted by the collaborative management plans for Sardinella

- **Collaborative management plan for bonga fisheries in Sine Saloum**

The process of developing the collaborative management plan for the bonga fisheries in Sine Saloum began with activities for information, sensitization and consultation with key stakeholders in the CLPAs in Niodior, Bassoul, Djirnda, Missirah, Toubacouta, and Fimela/Djiffere. This approach was intended to improve the level of involvement of all stakeholders. Consultative meetings were organized from May 14 to 28 May in collaboration with the technical services. The project's support made it possible to share information/database on this fishery, to identify the major problems, to put forward solutions, chart the way forward, and to develop and implement the plan. In all, 14 focus groups were organized with close to 277 stakeholders.



Photos 12 &13: Fish processors (women and Guinean community) in Niodio and Missirah

The main results of these consultative meetings are outlined in the table below

Table 2: Constraints, causes and solutions from consultations with stakeholders

Problems	Causes	Solutions
<p>Difficulty to access suitable credit</p> <p>Lack of financing</p>	<p>Unsuitability of formal loan facilities (banks or other financial institutions) for the types of fishing needs and activities (seasonal fishing)</p> <p>Difficulty in getting access to the formal financing system</p> <p>Low capacity for managing sustainable financing and loan grants (families)</p> <p>The interest rates of financial institutions are too high and the repayment conditions too restrictive</p> <p>Foreigners have a very disadvantageous financing system</p> <p>Lack of suitable sources of financing</p> <p>Low profit margin for fishing activities</p>	<p>Support stakeholders to set up mutual credit and savings schemes</p> <p>Support financing structures to set up adapted credit schemes by opening credit lines (CMS, mutual savings schemes and Crédit Immebir -MECEF)</p> <p>Discuss with mutual credit schemes for them to offer better conditions for getting and paying back loans</p> <p>Discuss with foreigners to improve the conditions/system for granting loans</p> <p>Find other alternative and sustainable sources of financing</p> <p>Put in place strategies for increasing the profit margin of bonga fisheries</p> <p>Organize training in financial management</p>
<p>Dwindling resource availability in the usual fishing zones/areas (drop in quantity and quality of catch)</p>	<p>Poor fishing practices with non-selective equipment (purse seines and gillnets)</p> <p>Capture of juveniles with unauthorized gillnets (juvenile development sector)</p> <p>Increased fishing capacity from use of heavy equipment in nurseries</p> <p>Free access to the breeding area</p> <p>Poor knowledge of the fishing code and non-compliance with the rules</p> <p>Negative impacts/effects of climate change (degradation of mangroves, drop in rainfall levels, hypersaline waters) on fisheries</p>	<p>Prohibit non selective fishing equipment, especially purse seines in certain nurseries</p> <p>Promote good bonga fishing practices (subsidize use of selective equipment)</p> <p>Support the enforcement of the ban on fishing of juveniles</p> <p>Comply with rules on the use of authorized net sizes 50-36 instead of 26-30 (Art; 28: 60 mm mesh FME) and Art. 37; individual size of 15 cm)</p> <p>Support the creation of MPA/PFZ, define biological rest period and regulate access</p> <p>Prohibit excessive cutting of mangroves and promote mangrove reforestation</p> <p>Implement CC adaptation measures</p>

<p>Uncontrolled increase in fishing effort/capacity</p>	<p>Open access to artisanal fishing Increase in the number of canoes and fishermen No system for controlling and limiting fishing effort No granting of access rights for fisheries and fishing areas Non-compliance with the fishing code and laws Increase in fishing capacity</p>	<p>Characterize the level of fishing effort (registration) Try to define access rights for fisheries and/or fishing areas (granting access rights) Support the enforcement of the code (the mesh size of fishing nets) Support the implementation of regulations for controlling the fishing effort in line with the relevant ministerial orders (Article 12, registration, seizure of permits) Professionalize/Regulate fishing trades Organize training on the code Develop and implement local management initiatives</p>
<p>Inefficient/inadequate management measures (national and local)</p>	<p>Non-compliance with the fishing code (net meshing) Stakeholders lack knowledge of fishing policies Lack of local initiatives Low capacity of the institutions involved in fisheries management (technical, financial) Low organizational capacity of local institutions involved in fisheries management (implementation of measures) Lack of surveillance on compliance with the code and initiatives Poor supervision on development and implementation of local initiatives Difficulty implementing the ongoing local initiatives Lack of mobility in island areas (movement is difficult)</p>	<p>Organize training on the fishing code and ensure it is implemented (art; 28: 60 mm meshing FME) and art. 37; individual size 15 cm) Promote active participation in the policy design and implementation process Disseminate fisheries policy documents among stakeholders Develop and implement a strategy for developing the institutions involved in fisheries management Organize training on organizational management Support the functioning of local institutions involved in fisheries management Establish a system for monitoring the actions and measures taken Improve the organization and consultations between stakeholders, on one hand, and between stakeholders and fisheries officials and other stakeholders involved, on the other Support collaborative surveillance</p>

3.3.3. Support to Marine Protected Areas

During the reporting period, WWF undertook a mission to assess the corrective measures (support functioning of MPA management committee, support surveillance of the MPA in Joal Fadiouth) implemented by the Joal Fadiouth MPA's management committee in 2013 and 2014.

As a reminder, the USAID/COMFISH project funded WWF to do a study in 2012 on the gaps and shortcomings in MPA management. The study covered the three MPAs in Joal Fadiouth, Bamboung and Cayar, and reported the major shortcomings that were undermining their management, with recommendations on the way forward for each site.

To implement corrective measures the project decided to focus on the MPA in Joal Fadiouth, which had more experience in the collaborative management of natural resources.



Photo 14: Members of the MPA management committee



Photo 15: Preparing to float a boundary marker in December

The team that conducted the participatory evaluation reported that the work of the MPA management committee was satisfactory on whole, considering the good results they had achieved both in activity delivery and in technical and financial reporting. The stakeholders also made suggestions for improvement on some of the weaknesses observed.

3.4. Crosscutting themes

3.4.1. Adaptation to climate change

Under adaptation to climate change, the project conducted three activities during the reporting period. It finalized the document from the consultative meeting on climate change, continued to develop stakeholders' capacity on climate change, and launched activities on the ground to implement the adaptation plans.

Final document from a meeting on integrating climate change in fisheries policies: This meeting report was sent to the COMNAC Vulnerability/Adaptation sub-group for validation. This was done after the reporting back session on the analysis of consultation frameworks for fisheries/climate change, and the inclusion of remarks and contributions from the experts and consultants who attended the first meeting. Thereafter, the President of the COMNAC Adaptation/Vulnerability sub-group consulted with DEEC, and later sent them a letter in May 2014 asking them formally to approve the document.

On 27/6/2014, the Vulnerability and Adaptation group had a meeting at the Department of Environment and Classified Establishments. It was after this meeting that COMNAC validated the document on ***"the diagnostic study of consultation frameworks established on climate change, fisheries and the coastal and marine environment"***, subject to the inclusion of recommendations made by the members of COMNAC.

Pursuing stakeholder capacity development on climate change: During the reporting period, the project's facilitators organized a considerable number of training exercises for stakeholders, using educational materials that had been designed for that purpose. This made it possible to replicate the training received on all the project intervention sites, and to improve understanding of climate change issues and the impact they have on the fisheries sector among the CLPA members in Saint Louis, Cayar, Rufisque/Bargny, Yenne/Dialaw, Sindia Nord, Sindia Sud, Joal/Fadiouth, Ziguinchor and Kafountine. This training led some stakeholders to start a climate change mitigation and adaptation initiative in Saint Louis. They decided to plant trees along the coastal area in the month of August, with support from the Department of Water and Forestry resources.

This training also made it possible for the project to reach out to several stakeholders across the CLPAs in Saint Louis, Rufisque/Bargny/Yenne-Dialaw/Cayar, Joal Fadiouth/Sindia, Mbour/Sindia Nord, Sine Saloum and Ziguinchor/Kafountine.

Furthermore, the project continued developing the capacities of ICC and CLPA members for the CLPAs in Missirah, Toubacouta, Djirnda, Bassoul, Niodior and Pikine.



Photos 16 &17: Developing capacity of local communities in Rufisque/Bargny and Saint Louis

Implementing climate change adaptation plans: the project continued implementing adaptation plans by: disseminating endogenous knowledge and good fishing practices through radio programs for sustainable management of fisheries resources; putting in place a sanitation system for keeping artisanal processing sites clean; providing information on weather conditions for safety at sea; disseminating the rules of Local Agreements; and providing support for marine safety and monitoring committees to be set up and run properly.

Disseminating local knowledge and good fishing practices for adaptation to climate change through radio programs: the project continued this activity by disseminating information on:

- Climate change and local knowledge; how elderly people should share their experience with the youth to improve adaptation to climate change
- Boat crew organization; roles and responsibilities of crew members in dealing with weather conditions and other threats
- Hygiene at fish processing sites; the importance of setting up hygiene committees at fish processing sites

In all, 12 radio programs were produced and broadcast. These programs were done with four community radios, namely: La Côtière in Joal/Fadiouth, Jokko FM in Rufisque, Kondaf FM in Ndayane and Cayar FM.

Sanitation system for maintaining hygiene at artisanal processing sites: Hygiene committees were set up at processing sites in Ndeppe and Domaine bi for the CLPAs in Rufisque/Bargny, Saly and Guereo for Sindia Nord; in Nianing and Mbalng for the CLPAs in Sindia Sud, and in Tann and Khelcom for the CLPA in Joal/Fadiouth. Following this, hygiene charters were developed and validated, and then cleaning equipment was given to groups of women fish processors. With the support of the fisheries services, the stakeholders developed charters containing hygiene and sanitation rules, as well as disciplinary measures. These consensual measures were validated by all the stakeholders and approved by the Presidents (male and female) of the processing sites as well as the fisheries department. In all, eight charters were developed and validated during the reporting period.

To operationalize these hygiene committees and help keep the processing sites clean, the project also provided cleaning equipment to support the groups. The equipment donation ceremonies were real occasions for making these stakeholders more aware of the impacts of climate change and the correlation with good conditions of hygiene. The ceremonies took place from June 16 to 20, 2014.



Photos 18 & 19: Donating cleaning equipment to the processing sites

The marine weather information system and a functional warning system for safety at sea: to achieve this, the project held several meetings with ANACIM. At the last meeting, held on June 18 at ANACIM, both parties agreed that:

- On the sidelines of the current protocol (that can not be signed before the end of the current fiscal year), a letter of agreement between ANACIM and USAID/COMFISH shall be written to formalize the start of activities for the rest of FY 2014
- ANACIM shall also propose a plan of action to begin training the stakeholders in the CLPAs targeted
- USAID/COMFISH shall procure all the equipment to reinforce ANACIM for the transmission of weather information in real time

This strategy will enable the project to begin implementing the activities planned with ANACIM, pending the signing of a Memorandum of Understanding in FY 2015. The arrangement will make it possible also to test the system for disseminating weather information in the fisheries sector.

3.4.2. Governance/Decentralization

Pursuing extension of the management rules in CLPA Local Agreements: The extension of Local Agreements is an activity that continues throughout the process of demonstrating tools for effective local governance of fisheries resources. In the reporting period, two (2) methods were used to reach the highest possible number of stakeholders. These were:

- ***Awareness raising meetings:*** these meetings on the rules in the Local Agreements started at the beginning of the year and continued across the CLPAs in Yenne/Dialaw, Rufisque/Bargny and Cayar. A total number of nine (9) meetings were organized in the various local governing bodies to ensure wide dissemination of the Local Agreements.
- ***Radio programs***

The project produced 43 radio programs across its intervention area using its network of partner radios (La Côticière in Joal Fadiouth, Dunya FM in Mbour, Kondaf FM in Ndayane, Cayar FM and Jokko FM in Rufisque). These programs were presented and anchored by the radio station managers and CLPA community extension workers. They covered two main areas: implementation of Local Agreements and climate change. The topics addressed during the reporting period were:

- The roles and responsibilities of stakeholders in implementing Local Agreements
- Hygiene and quality in the sector's pre-production stages
- Collaborative surveillance (Organizing crews; roles and responsibilities of crew members)
- The roles and responsibilities of the CLPA; the importance of periodically alternating the members in the decision-making bodies
- Hygiene at the processing sites; the importance of setting up hygiene committees at the sites
- Underwater diving and its impacts on resources
- Safety at sea and weather markers (equipment and its use, orientation marks and markers for weather forecasts)
- The roles and responsibilities assigned to delegates in the various decision-making organs of a functional CLPA

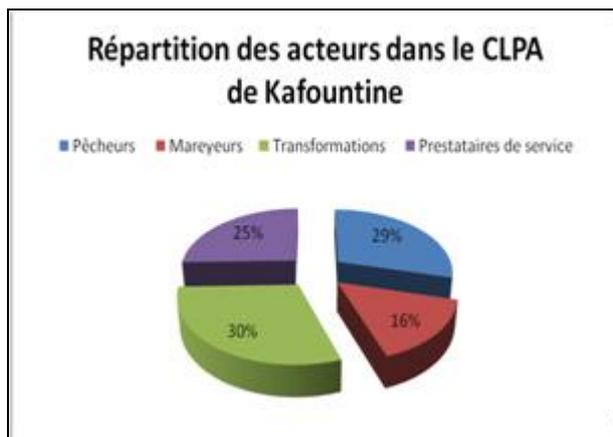
Supporting collaborative supervision and safety at sea in the Mbour, Joal/Fadiouth and Sindia Nord et Sud CLPAs: One area where the project considerably assists CLPAs in their surveillance duties is to support co-surveillance units by providing fuel. Apart from surveillance operations, these patrols also sensitize fishermen to the regulations in force and to the need for them to comply with the provisions of the Local Agreement, thereby contributing to the fight against IUU fishing. The patrols are led by the heads of coastal guard posts. Members of CLPA Surveillance Committees have been taking part in them. In the reporting period, the four CLPAs recorded 16 patrols.



Photos 20 & 21: Patrols in the fishing zone of the CLPA in Sindia Sud

In the region of Sedhiou, the consultation framework carried out two (2) patrols (inspecting 285 canoes) in the coastal villages around the area to monitor compliance with the Local Agreement in the Boudie Balantacounda fishing area. The patrol team noted that some of the fishermen were using monofilament and unauthorized meshing counter to the established rules.

Identifying stakeholders and reviewing fishing equipment to develop Local Agreements: Surveys for the baseline study on the CLPAs in Saint Louis, Ziguinchor and Kafountine were concluded recently after a period of investigation that began in the previous quarter. The surveys were carried out by CLPA community extension workers, with the support of facilitators from the project. The data collected will make it possible to do a proper analysis on the state of fisheries resources and the management initiatives already developed. The information received for the time being is on the number of different stakeholders and the fishing equipment utilized. The results from an analysis of the data generated are as follows:



(A)



(B)

Figure 2: Distribution of the different stakeholders in the CLPAs in Saint-Louis and Kafountine

The results of this analysis show that fishermen make up 69% of the stakeholders in Saint-Louis and 29% in the CLPA in Kafountine. This is why there is a high level of fishing activity in Saint-Louis. These fishermen are generally from the community called Guet-Ndar, where fishing is the main occupation.

Wholesalers make up 18% of the stakeholders in Kafountine and 8% in Saint Louis. Kafountine has a high number of wholesalers due to the zone's nearness to countries in the sub-region. These wholesalers basically sell the fish landings to countries in the sub-region such as Guinea Bissau. Artisanal processing is also well represented in Kafountine, and accounts for 30% of the stakeholders. In this local community, both the men and the women engage in the processing of fisheries resources. The stakeholders are generally from countries in the sub-region. Service providers, on their part, make up 25% in Kafountine and 15% in Saint-Louis.

Regarding fishing equipment, the survey identified 12 types, including: surface shrimp driftnets, fixed shrimp nets, surface driftnets, underground driftnets, encircling gillnets, driftnets, purse seines, beach seines, single lines, longlines, trammel nets and hoop nets. The fishermen using purse seines number 166 in Saint Louis and 24 in Kafountine respectively. This is because most of the fishermen in Saint-Louis have purse seines operating in Mauritania where most of the fish landings are sardines. These artisanal fishermen in Saint-Louis also have large fishing vessels and move outside the Senegal EEZ.

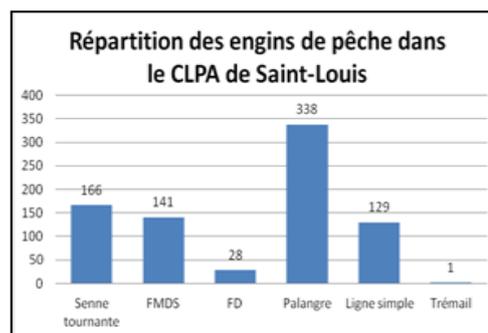
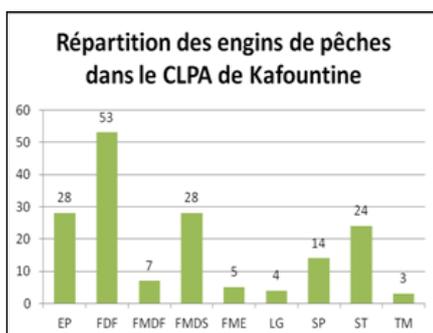


Figure 3: Breakdown of fishing gear in the CLPAs in Saint-Louis and Kafountine

Launching focus group meetings to develop the management rules in new Local Agreements: As a reminder, the objective of these focus groups was to identify the constraints faced by various stakeholders in fisheries, and to tease out the solutions they propose for sustainable management of fisheries resources. This stage is crucial in the negotiation process and in establishing the management rules

in Local Agreements. There were 10 focus groups organized for the CLPA in Saint Louis, 5 in Ziguinchor, and 2 in Kafountine.

3.4.3. Gender

The highlight in the third quarter of fiscal year 2013–2014 was the inauguration of the improved processing facility, the project’s flagship activity for “**Improving the processing and storage techniques for fisheries products in Cayar**”. With this inauguration, the unit began to operate in full, and this gave the women in Cayar an opportunity to apply all that they had learned so far.

A formal process commenced with DITP (Department of Fisheries Processing Industries / Direction des Industries de Transformation de la Pêche) to obtain approval for the unit from FRA, and the business license from the Department of Trade in Thies. With the onset of activities, the women took steps also to introduce the unit to some administrative services such as ASEPEX (Senegalese Agency for Promoting Exports / Agence Sénégalaise de Promotion des Exportations) and ADEPME (Agency for Development and Training of Small and Medium Enterprises / Agence de Développement et d’Encadrement des Petites et Moyennes Entreprises).

The project’s capacity development efforts focused on the management of the unit (quality, hygiene and maintenance). In the reporting period, the women received training in HACCP. The training identified the specifications of work and the measures needed to support them to ensure rigorous management of the unit. The revolving credit fund, initiated in February 2014, is still functioning well.

Establishing the unit

Installation of production equipment: Before the inauguration ceremony, the equipment identified for each area of work was received. The fisheries technologist and the women themselves had identified all the equipment required to begin test runs in production at the unit.



Photos 22 &23: Containers for fermenting and washing products. Courtesy of APTE, 2014



Photos 24 & 25: Carts and storage cabinets for the reception area



Photos 26 & 27: Electronic scale installed in the reception hall trimming table with taps

Test runs in production: The test runs in the production unit took place on April 16 and 17, 2014. The women used this occasion to test the “step sequencing” equipment and system. On the whole, the fisheries technologist trained fifteen (15) women. The fisheries service in Cayar also attended this training. The test runs focused mainly on roasting fish to produce “keccax” and on fermentation to produce “gej”. At the inauguration of the processing unit, all products the women had tested were presented.



Photo 28. Women in the reception room preparing fish for dressing under the supervision of the fisheries technologist



Photos 29 & 30: Products after roasting and skinning



Photos 31 &32: Fish ready for baking in an oven. Fish placed carefully on oven grills after being cleaned and weighed. Courtesy of APTE, 2014

Inaugurating the unit: the inauguration ceremony for the improved processing unit in Cayar took place on April 23, 2014. Before this event, which is so important for the project, several preparatory meetings were held by the local organizing committee that was set up for that purpose. The committee included all economic players in Cayar (fishermen, wholesalers, city dignitaries, the mayor, etc.) and the project sponsors (USAID/COMFISH and APTE). The ceremony gave the project and its partner APTE the opportunity to showcase all the activities they had been conducting since the beginning of the project.

The ceremony was chaired by the Minister of Fisheries and Maritime Affairs in Senegal. Also present were the Director of the USAID mission in Senegal, the Director of USAID/COMFISH, the WWF Regional Representative in Senegal, the Mayor of Cayar as well as several religious and traditional leaders in Cayar. The sponsor of the ceremony was the First Lady of Senegal, who sent a powerful delegation of MPs to the occasion.

The Minister of Fisheries gave an address in which he highlighted the Cayar model as an example for other fisheries, and promised to promote the sustainable management of fisheries across the entire country. To support the women at the unit and their production efforts, the Minister ordered 5 tons of dried and smoked fish, which he promised to send to communities in the most remote areas of Senegal.

On the other hand, women from the region of Tambacounda, where the women fish processors had been for a marketing visit, also attended the inauguration ceremony. These women used the occasion to place a first order of 2.5 tons. The inauguration ceremony therefore marked the beginning of production activities at the improved processing unit.



Photo 33: The Minister of Fisheries next to the Director of the USAID mission



Photo 34: The inauguration ribbon to be cut by the Minister



Photo 35. Women performing at the opening ceremony



Photo 36. The visiting delegation in the trimming room



Photo 37. Women processors come out in numbers



Photo 38. The Minister of Fisheries gives women equipment offered by the project

Continuing functional literacy classes (ongoing activity): APTE has been working with the supervisor to develop a literacy manual. They already had one working session together. They plan to visit the Department of Literacy Education and *la Maison du Livre* to see how these entities can be of help in this project, which seeks to produce textbooks on artisanal processing of fish.

Starting the revolving credit scheme: the revolving credit scheme was introduced in February 2014 and is running effectively. At the end of each month, women collect funds and a report is sent to APTE, the supervising body on the credit scheme. The money collected is redistributed immediately to the next group of beneficiaries. At the beginning of April 2014, APTE increased the credit provision by granting an additional sum of 500,000 CFA Francs to two EIGs. In the four months it has been in existence, the profits are close to 400,000 CFA Francs. This shows the effectiveness of this form of internal financing arrangement.

The money collected from the distribution of overalls for workers will also go into the credit fund. It was agreed with the women that during the distribution of the overalls, the women would each pay 1,000 CFA Francs in return. The bigger portion of this amount has been recovered and will be added to the credit base next month.

Conducting a feasibility study on biogas (in progress): this is in contribution to the climate change adaptation strategy. The study on biogas has been initiated. But with the small amount of funds available, the consultant was forced to go to ISRA partners that already did some studies on processing residue in Cayar with assistance from the National Biogas Program (PNB). The results of this study are going to be available to the project and to PNB. On the basis of these results, a domestic bio-digester is going to be installed in Cayar for tests with fish residue.

Supporting the hygiene committee: APTE has been monitoring the work of the hygiene committee at the processing site. New equipment has been bought and given to the women. The equipment includes an animal-driven cart and a donkey for garbage collection. The women have already established how the garbage collection system works. The money needed to care for the donkey and pay the cart driver will come from the women themselves through the money they contribute every month.



Photo 39. The cart bought for garbage collection on the site and provided to the hygiene committee.

Participating in the Thies regional trade fair: On May 28 - 30, 2014, a regional trade fair was organized in Thies under the auspices of the chamber of commerce in Thies. In the fisheries sector, the women fish processors from Cayar were the major players invited to the event. This gave them the opportunity to exhibit their products from the modern processing unit. They also used this platform to share information on the modern facility, which has the potential to improve product quality, as indicated on the leaflets and banners provided by APTE. The presence of these women at the trade fair made it possible for them to establish contact with several prospective clients that wish to sell their products. The Trade Minister was at the fair and visited the women’s stand. The Minister praised this initiative supported by the USAID/COMFISH project.



3.4.4. Communication/sensitization

In the field of communication, the activities carried out during the third quarter of FY 2014 included radio programs, mid-term review of radio programs, and media coverage of the project.

Radio programs for behavior change: As in the previous quarter, the project, in the third quarter, pursued radio programs aimed at disseminating Local Agreements. It also supported efforts to

establish collaborative management plans for sardinella fisheries, and promoted behavior change among the stakeholders.

A total number of 65 programs, making an average of 13 radio programs per radio station, were produced and broadcast by the project's partner community radios (La Côtère, Kondafe, Dunya, Jokko FM and Cayar FM) on a range of different topics, including: safety at sea and weather indicators, deep-sea diving and its effects on the resource, fight against sand extraction, and the declaration of women in the fisheries sector.

Apart from the radio programs produced, the partner radios also covered the project's major activities in the field during the reporting period (e.g. ceremonies for the donation of cleaning equipment in several project intervention areas (Rufisque/Bargny, Nianing, Joal, and Nadayanne)).

Mid-term review of radio programs: In consistency with the project's annual work plan and the provisions of the partnership agreement signed with the partner radios, a mid-term review of programs and the implementation of the terms of reference of said agreement was done from May 19 to 23, 2014 in the local communities of Joal, Mbour, Sindia Nord, Rufisque /Bargny. The goal of this review exercise was to assess the impact of the radio programs on stakeholders, on one hand, and, on the other, to verify the level of implementation of the partnership agreements signed with the partner radios mentioned above.

The findings of this review exercise were that stakeholders in grassroots communities are more and more interested in these programs, and that the programs are progressively having an impact on the behavior patterns of these stakeholders at the grassroots across the respective project intervention areas. This is evidenced by the number of listeners' phone calls recorded during the programs and the level of compliance with certain management measures contained in the Local Agreements, regarding the extraction of sand, for example.

The review showed also that the airtime, topics addressed and guests on the radio programs respond properly to the expectations of the listeners. However, suggestions for improvement were made as well, in terms of rebroadcasting the programs to reach fishermen who are out at sea when the programs are aired, as well as increasing the transport allowance given to the resource persons that take part in the radio programs, sometimes from local communities that are located far away.

The review also underlined the need to increase the number of programs with Radio Dunya or to create others with Rando FM, which covers 2 CLPAs (Mbour and Sindia Nord), and to organize special programs and/or decentralized programs as provided in the partnership agreements, so as to ensure better involvement of the project facilitators on the respective issues addressed during the radio programs.

The review also brought to light the active role women play during some programs (issues dealing with hygiene, sanitation at the fish processing sites, and the declaration of women in the fisheries sector) and the need to provide certain small awards that can enhance the participation of stakeholders in the various programs through contests.

Media coverage and visibility of the project

Inauguration of the modern unit in Cayar: The project received wide media coverage when the Minister of Fisheries and Maritime Affairs and the Director of USAID inaugurated the modern fish processing unit in Cayar on April 23, 2014. The goal of establishing this unit is to contribute to the empowerment of women, to food security and to the sustainable management of fisheries resources in Senegal. To raise the profile of the event, an information and/or press pack, including a press release and data sheets on the project's activities in Cayar, were prepared and shared with the press and the partners present at the ceremony. The event was covered by 3 television stations (RTS, Sen TV, Walf

and TFM), 5 radio stations (Cayar FM, Sud FM, RFM, RTS Radio, Zik FM), 4 daily newspapers (L'Observateur, Le Soleil, Le Quotidien, Walf) and online media outlets.

Below are the hypertext links (video and text) of online press outlets

- Video link

<http://www.youtube.com/watch?v=zdNnWEw6Y0Y#t=564>

- Hypertext link

1. <http://www.aps.sn/newsedit/spip.php?article127486>
2. http://www.aps.sn/articles.php?id_article=127613
3. http://www.lesoleil.sn/index.php?option=com_content&view=article&id=38862:haidar-el-aly-invite-les-pecheurs-au-respect-du-code-de-la-peche&catid=51:economy&Itemid=63
4. <http://www.enqueteplus.com/content/securite-alimentaire-kayar-%C3%A9trenne-son-unit%C3%A9-de-transformation-de-produits-halieutiques>
5. http://www.senenews.com/2014/04/24/code-de-la-peche-es-maritimes-haidar-el-aly-prone-le-respect-des-regles_79988.html
6. <http://www.actu24.net/societe/article/gestion-durable-des-produits>
7. <http://www.lindependant.sn/index.php/economie/item/399-inauguration-d-une-unite-de-transformation-des-produits-halieutiques-a-cayar-mercredi/399-inauguration-d-une-unite-de-transformation-des-produits-halieutiques-a-cayar-mercredi.html>
8. <http://afryka.fr/senegal-inauguration-dune-unite-de-transformation-des-produits-halieutiques-a-cayar-mercredi/>
9. <http://fr.africetime.com/senegal/articles/code-de-la-peche-haidar-el-aly-prone-le-respect-des-regles>

USAID field visit: USAID conducted a field visit of project activities from June 23 to 28, 2014, which was covered by 2 journalists respectively from L'Observateur and APS – Senegalese Press Agency. The press articles on the visit are available at the following links:

- C:\Users\khady\Downloads\
http://www.aps.sn/articles.php?id_article=130141
1. http://www.aps.sn/articles.php?id_article=130141
 2. http://www.aps.sn/articles.php?id_article=130139
 3. http://www.aps.sn/articles.php?id_article=130204
 4. http://www.aps.sn/articles.php?id_article=130203
 5. http://www.aps.sn/articles.php?id_article=130298
 6. http://www.aps.sn/articles.php?id_article=130321
 7. http://www.aps.sn/articles.php?id_article=130305

Audio-visual and written reports in progress in the project intervention zones: In order to further raise the profile of the flagship activities in the major components of the project, efforts were made during the reporting period to launch 2 video film productions, one photo report and one written report in the project's intervention zones.

- **Video feature:** this focuses on the development and implementation of Local Agreements in at least 4 project intervention sites (Joal, Mbour, Cayar, Rufisque/Bargny) and on the production of a video feature story on the impacts of climate change and the adaptation strategies of fishing communities in 3 project intervention sites (Rufisque/Bargny, Joal and Sindia). The objective of doing this is to visually document the project's ongoing accomplishments in these areas. The shooting and collection of other feed required to produce this video is being done in the various sites mentioned above, and will be completed by the end of August 2014. The final product is going to be shared with project partners and other target groups.

- **Photo report:** The photo report was done in the areas of Joal, Mbour, Cayar, Sindia and Rufisque/Bargny to document fisheries infrastructure, resources (species targeted by the project), fishing gear, stakeholders in action, including women fish processors, and certain aspects of climate change (coastal erosion and adaptation techniques). The project's major accomplishments on the ground (octopus pots, modern processing unit in Cayar) are also going to be part of the report. The report activities have been completed and the photos are soon going to be made available to partners and used in various communication materials, as well as in decorating the meeting rooms of CLPAs.
- **Written report:** the written report, prepared for publication in Senegal's national daily, *Le Soleil*, and on other online information outlets, was also produced during the reporting period. The report was on the process of developing and implementing Local Agreements in fisheries, climate change impacts on fisheries, and climate change adaptation strategies in the fishing communities at the project intervention sites (Sindia, Joal, Rufisque/Bargny, Mbour and Cayar). With the material gathered, the national daily newspaper, *Le Soleil*, is going to publish 3 press articles each month on the topics mentioned above. The articles will be in French and are scheduled to appear for a period of three months. From the press articles that are going to be released, press clippings will be cut, covered with binding, documented by theme area and kept on record.

Erecting billboards in the project intervention areas: to enhance the visibility of CLPA and USAID/COMFISH project activities, which are geared towards developing sardinella management plans, billboards were prepared and set up in the project intervention areas that are under the CLPAs in Joal, Mbour, Sindia Nord, Sindia Sud, Rufisque/Bargny, Cayar, Yen/Dialaw and Saint Louis.

Additionally, 2 nameplates with information on the USAID/COMFISH project were made and placed at the CLPA offices in Rufisque Bargny and Mbour, the two sites where renovation work was done recently with the support of the American people.

3.4.5. Science/Technology

The ELEFAN program, a software package for assessing fish stocks on the basis of size frequency, was finalized as part of a contract between USAID/COMFISH and the University of British Columbia. The final product was tested and delivered in several copies at the University of Rhode Island, then distributed to our partners (DPM, CRODT, IUPA, IFAN and WWF). The objective of this project was to provide a simple tool for assessing fish stocks and training fisheries scientists, managers and other partners on these assessment and management methods, based on the collection of fish sizes in a collaborative framework with fisheries stakeholders. This has made it possible to assess the state and the productivity of the priority fish stocks in the USAID/COMFISH project and to help train students in Cheikh Anta Diop University in the field of fish stock assessment and fisheries management. A workshop was organized at IUPA to train partners on the use of the software. The initiative made it possible to produce reports and scientific publications in collaboration with project partners. These works contain the information needed to assess the state of sardinella, bonga, octopus, thiof and shrimp resources. The USAID/COMFISH project continues to work with partners, in particular IUPA and CRODT, to update the data and results on bonga, and to help reinforce the capacities for scientific research.

Fishing gear selectivity: A study on the selectivity of nets used to harvest bonga fish was initiated in the Sine Saloum region to study. The work is part of a participatory research initiative being led with fisheries stakeholders. This approach to participatory research and bonga fisheries management will allow the fishermen to validate the research methods used. It will also develop their professional experience in the management of fisheries, and create an opportunity to build on their proposals.

3.5. Project management

3.5.1. Strategies/mechanisms/partnership

Coordination meeting in Joal: to ensure good planning and coordination of activities on the ground, a coordination meeting was organized with the secretaries of the CLPAs in the project intervention areas, the contract partners and the team from USAID/COMFISH (facilitators, the team in Joal Fadiouth and the team from Dakar). This meeting reviewed activities in the months of April and May and planned activities from June to September.

Launch of activities in synergy with JICA: After contributing to octopus pot immersion activities, the project is going to support the octopus and thiof management methods that have been developed by COGEPAS. The participatory training activities are already being carried out to develop the next work plan.

3.5.2. Lessons learned

The opportunities noted were as follows:

- The involvement of the fisheries services and political authorities in the adoption of an internal resource mobilization system for CLPAs is a necessary condition for the viability of such systems
- Local stakeholders have gained ownership of the radio programs initiated by the project. The airtime is used often by CLPA Secretaries General and stakeholders to disseminate the activities that concern them directly
- Supporting women fish processors in the intervention zones (training) is a necessity. Once the stakeholders are well informed on their roles, they can take charge of the rational management of fisheries resources that they rely on for their production activities

4. ACTIVITIES PLANNED FOR THE NEXT QUARTER

Type	Activities planed
<i>Capacity development for CLPAs</i>	Support CLPA representatives to report back and replicate training on CLPA organization and the roles of councils
	Support CLPAs and other management structures to set up sustainable internal financing mechanisms to fulfill their mandates properly
	Reinforce the role of local governments in CLPA financing
	Support inter-CLPA consultation frameworks in each Division in the assessment and preparation of activities for fisheries resources management
	Support inter-CLPA consultation frameworks in each Division in setting price levels
	Develop the capacity of stakeholders to implement a joint system for collaborative monitoring of fisheries (CLPA, research institutes and DPM) to assess the impact of Local Agreements/management plans
	Support local fisheries councils to acquire or have access to office and meeting space so that they can discharge their duties properly
	Support CLPA functions in the new project intervention areas (Ziguinchor, Kafountine and Saint Louis)
	Provide limited office equipment and supplies (e.g. ink cartridges) to CLPA secretariats
<i>Developing the capacities of organizations and supporting implementation of the women's strategy</i>	Develop the leadership capacity of professional organizations
	Organize training on women's rights, leadership values, and principles in the 7 CLPAs
<i>Developing the capacity of national fisheries management structures, research institutes, training institutions, NGOs and stakeholders to improve the</i>	Conduct an assessment of the means and resources used in extension work and training in the fisheries sector in order to establish a partnership between fisheries research and management structures
	Support collaborative collection of biological data on small pelagics to fill gaps and analyze using ELEFAN
	Report back the results of studies and participatory collection of data from fishermen to contribute to enhancing awareness among stakeholders

fisheries information, learning and communication system	Develop the capacity of fisheries technicians and IUPA students by awarding scholarships
	Hold meetings to revitalize the CNCPM
	Monitor the workshop on the requirements for good fisheries governance with SCA (monitoring workshop on compliance with commitments)
	Support the technical committee for capacity management (under the prevention of artisanal IUU fishing)
	Support the creation and operationalization of the CLPA network and that of initiatives tied to Local Agreements/UGD
Establishing collaboration strategies and building synergy with programs and partners	Capitalize on and monitor other activities in synergy with the other partners (Yaajeende, ERA, WWF/PNUD, etc.)
	Support the implementation of the action plan of the Alliance for sustainable management
	Establish mechanisms for collaboration with sub-regional fisheries management committees and the CCLME project under the sardinella management plan
	Offer scholarships to four students for their doctorate degrees (3 from IUPA and 1 from UGB in Saint-Louis)
GFP (Good Fishing Practices)	Support the institution of a national prize for innovative initiatives in environmental protection and income generating activities (co-funding with WWF)
	Establish a system for monitoring the integration of good practices in the process of establishing management plans
Improving the scientific data base to launch the development of collaborative management plans for target stocks	Conduct studies on catch and fishing effort in the new intervention areas (the 10 main species in the last 10 years)
	Conduct biological and socio-economic studies on bonga fish stocks to support the development of the management plan on this species
	Conduct a study on the sardinella value chain
Supporting the development of Local Agreements in the new intervention areas	Support CLPAs to develop Local Agreements (sponsor CLPA extension workers and secretaries)
	Support data processing and analysis and development of management rules for the Local Agreement
	Organize meetings to monitor the process of developing Local Agreements in collaboration with CRODT and DPM
	Deliberate on and approve Local Agreements
	Support CLPAs to pursue the implementation of Local Agreements
	Pursue extension work on fisheries rules

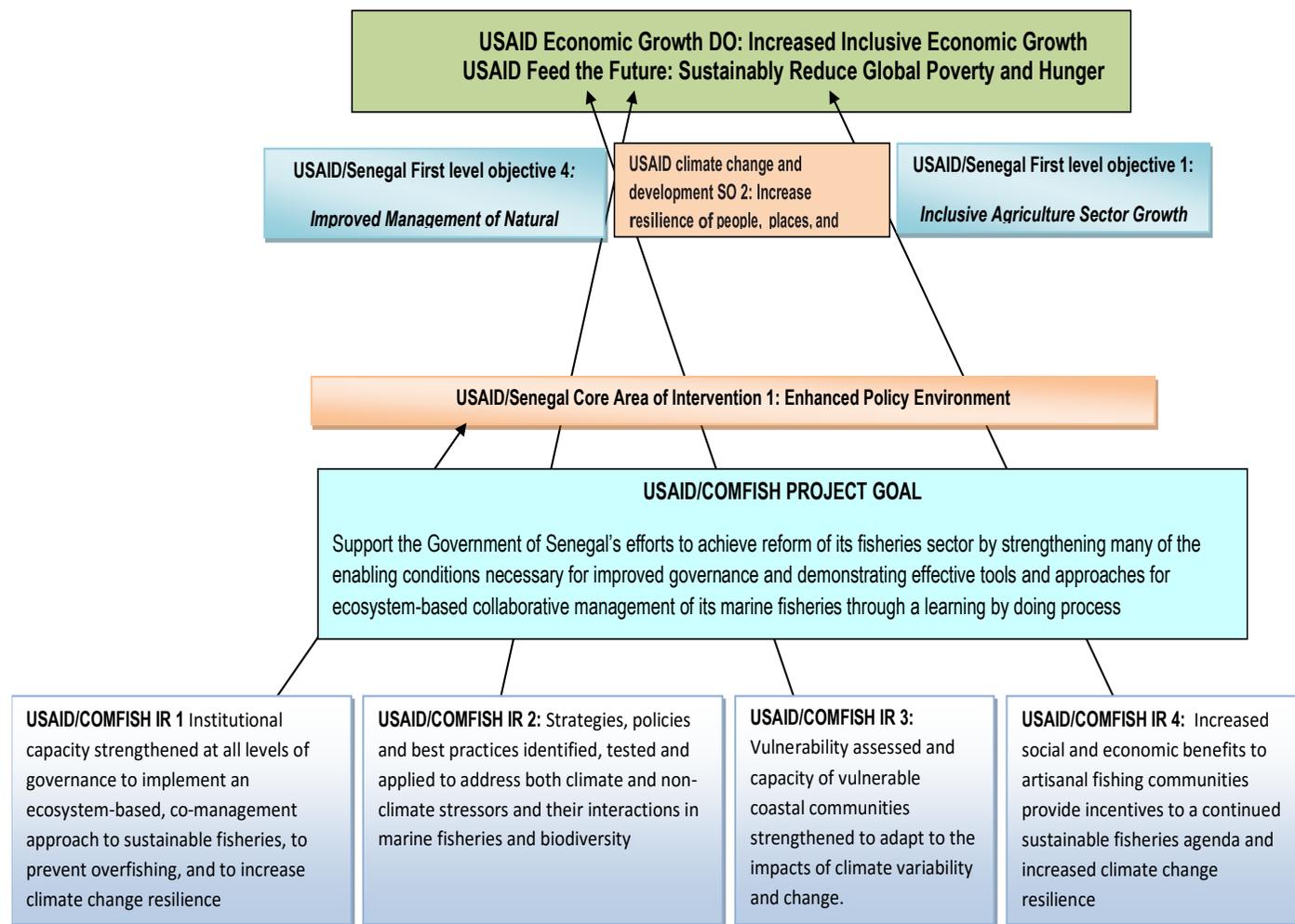
<i>Pursuing the implementation of CLPA Local Agreements in Joal, Mbour, Sindia Sud and Sindia Nord</i>	Support collaborative surveillance
	Organize meetings to monitor the implementation of Local Agreements in collaboration with technical services
	Coordination meeting with facilitators
	Support women fish processors to comply with the management rules and measures in Local Agreements
	Support CLPAs to begin implementing Local Agreements (sponsor extension workers)
	Conduct extension work on the rules
	Support collaborative management
	Conduct training on collaborative supervision and patrols
<i>Developing the management plan</i>	Support the organization of assessments of Local Agreements
	Approve the management plan on sardinella fisheries on the Petite Côte, Cape Verde and Cayar (by the Minister)
	Begin developing new collaborative management plans for sardinella in the North and South zones
	Support the participation of the technical task force to develop the collaborative management plan for sardinella in the North and South zones
	Organize a meeting for stakeholders to validate the diagnostic studies and bibliographical summary for developing the collaborative management plan for sardinella in the North and South zones
	Start writing the draft collaborative management plan for sardinella in the North and South zones
<i>Supporting the implementation of the national strategy for MPA management</i>	Conduct consultations with the other stakeholders in Fatick and Casamance on the constraints and solutions of bonga fisheries in the frame of efforts to develop the collaborative management on bonga
	Strengthen the system for collaborative supervision in the CLPA/MPA
	Implement corrective measures in the MPA and fishing areas targeted by the project
	Nurture advocacy for the validation of the national strategy on MPAs
	Support the implementation of protected fishing areas in the project intervention area (Rufisque and Mbour)
	Develop the capacities of MPA/PFA as a part of efforts for professional certification
Monitor and evaluate the impacts of MPAs on the basis of biological, socio-economic and governance indicators	

<i>Assessing vulnerability and developing capacities for coastal communities to adapt to the impacts of climate change</i>	Support the establishment and operationalization of the fisheries/climate change consultation platform and its inclusion in the National Committee on Climate Change (COMNACC)
	Support the organization of 4 workshops for developing capacities, sharing information and building awareness of the vulnerability of fishing and coastal communities to climate change with public institutions, particularly the national assembly, Economic, Social and Environmental Council, Ministry of Fisheries and Maritime Affairs and the Association of Elected Local Officials in Senegal
	Build synergies on climate change adaptation initiatives with DEEC, DPM, development partners and the other institutions working in the same area
<i>Assessing coastal community vulnerability and designing sustainable adaptation strategies.</i>	Implement 3 adaptation plans in collaboration with local governments in the CLPAs in Rufisque, Sindia Nord, Sindia Sud and Joal
	Establish a monitoring and evaluation system for implementing 3 adaptation plans through indicators
	Build synergies for mainstreaming gender in order to establish efficient adaptation strategies
	Develop the capacities of stakeholders in the CLPAs concerned by the sustainable management plan for sardinella and that have not received training on climate change (400 stakeholders)
	Assess vulnerability and develop the capacities of stakeholders on the Foundiougne, Mbour, Djirnda, Cayar, Yenne/Dialaw sites
	Develop and validate adaptation plans for the Foundiougne, Mbour, Djirnda, Cayar, Yenne/Dialaw sites
	Capitalize on the results of the USAID/COMFISH project and its executing partners to design strategies for adaptation to climate change in the fisheries sector and for the marine and coastal environment
<i>Improving the scientific database to support policy and decision-making and action plans.</i>	Conduct analysis in space and in time on upwelling indices on Senegalese coasts, in correlation with migration and spatial distribution of round and flat sardinella stocks
	Support technical monitoring of the modern processing unit
	Organize literacy training sessions
	Support the operationalization of the hygiene committee
	Support the operationalization of the revolving credit fund
	Support participation in an agricultural show
	Support the implementation of a biogas system
	Support the establishment of a wind power system

<i>Communications</i>	Produce and disseminate written and audio-visual reports on the Project's activities and achievements on climate change and Local Agreements
	Organize a TV debate on fisheries participatory surveillance
	Organize a press trip to some of the project's key sites to showcase some success stories
	Organize a communication training for project staff and partners

ANNEXES

A1: USAID/COMFISH Results Framework



Indicators	End-of-project targets	Year 2014 target	Quarter 1 results	Quarter 2 results	Quarter 3 results	Total	Completion rate	Remarks
IR 1: Institutional and stakeholder capacity strengthened at all levels of governance to implement an ecosystem-based, collaborative management approach to sustainable fisheries, to prevent overfishing, and to increase climate change resilience								
1. The synthetic index for CLPA management effectiveness on USAID/COMFISH project sites increases by 75% by 2016	Index score increases by 75% (0.07)	Index score increases by 40% (0.056)	Na	Na	Na	Na	Na	The TORs for the 2 nd study have been prepared and the consultant has been identified. The study will be undertaken during quarter 4.
2. Number of persons who received short training courses on food security and productivity with the assistance of the USG	4,790	1,900	M= 119 F= 27 Tot= 146	M=305 F=45 Tot=350	M= 1799 F= 1062 Tot= 2861	M=2223 F=1134 Tot= 3357	177%	113 workshops were held in the 3 rd quarter, which allowed to make up for the low numbers in quarter 2 and to even exceed the project's annual target
3. Number of written and audiovisual materials produced to strengthen the capacities of collaborative management institutions and fisheries actors	23	10	0	11	2	13	130%	2 fact sheets regarding Local Agreements and the enhancement of better management techniques in Cayar have been produced this quarter. Meanwhile, 64 radio shows have been aired in the intervention areas through the project's radio station partners ((la Côtère in Joal Fadiouth, Dunya FM in Mbour, Kondafé FM in Ndayane, Cayar FM and Jokko FM in Rufisque) on subjects related to fishing, such as the best practices or climate change.

4. Number of research institutes and academic institutions, government departments, consultation frameworks and NGOs which have strengthened their capacities with the assistance of the USAID/COMFISH project	20	18	1	24	12	37	205%	USAID COMFISH conducted capacity building activities for 12 organizations ((PPCPN, SDPS, CONIPAS, SDPST, ULFT, COPLEC, MJP, APAC, FENAMS, GPF, PCJF, Dynamique FEMME), governmental bodies and NGO, including 8 in climate change and in the protection of endangered species, and 4 in participatory monitoring or maritime safety.
IR 2: Strategies, policies and best practices identified, tested and applied to strengthen resilience to climate change and address destructive and unsustainable marine resource uses that threaten biodiversity conservation in the West Africa ecoregion								
5. Number of action plans and/or projects developed to support the fisheries management process	13	3	0	1	2	3	100%	An action plan was developed as a result of the training in organization and community dynamics aiming to support the implementation of the skills acquired during the training Strategies proposed for climate change adaptation
6. Number of technical studies that contribute to enhance the management plans of sustainable management units	16	5	0	1	8	9	180%	Report on the assessment of radio shows Report on climate change in the Sine Saloum area Guide on participatory monitoring A participant's handbook on organization and community dynamics ELEFAN in R : a stock assessment software Report on hygiene and sanitation in processing sites A mapping of fisheries sites and infrastructures A mapping of stock distribution

7. Number of synergy areas created in the process of establishing sustainable management units	9	3	1	0	3	4	133%	3 synergy areas have been created this quarter, namely with APTE, the Alliance and also through scientific support from CRODT.
8. Number of policies/regulations and administrative procedures analyzed	44	18	0	0	0	0	0%	The same policies/regulations and administrative procedures have been analyzed.
9. Number of policies/regulations and administrative procedures developed and presented to the public/stakeholders for consultation	21	5	0	0	6	0	0%	8 salubrity agreements in order to support hygiene and quality have been presented for consultation for the following sites: Khelcom, Tann, Domaine Bi, Ndeppé, Guéréo, Saly, Mballing, Nianing. We note that the Local Agreements for the new zones (Ziguinchor, Kafountine, Saint-Louis) as well as the 3 sardinella management plans (Cap-Vert, Petite Côte et Grande Côte) should be completed during quarter 4.
10. Number of policies/regulations and administrative procedures submitted officially for adoption (legislation/decree)	20	9	0	0	0	0	0%	8 health and sanitation agreements in order to support hygiene and quality at site level have been submitted.
11. Number of policies/regulations and administrative procedures instituted with the assistance of the USG, and that have been approved	18	8	2	2	0	4	50%	The 8 health and sanitation agreements have been approved during this quarter.

12. Number of policies/ regulations and administrative procedures approved, and which are implemented	12	3	0	3	8	11	366%	The implementation of the Local Agreements continues to take place in the primary zones. While waiting for the validation of the Local Agreements for the new zones, the approved hygiene agreements are being implemented.
13. Number of new technologies for fisheries resources put in place	12	4	0	0	2	2	50%	The Cayar transformation unit has been completed and inaugurated. The ELEFAN in R software: stock assessment
14. Number of actors who have adopted new rules for collaborative fisheries resources management	47,940	10,000	0	0	1,438	1,438	14%	This number represents the number of women involved with the hygiene agreements and who are implementing them.
15. Number of producers and others who have applied new technologies or management practices with the assistance of the USG (indicator 4.5.2-5 of the FTF)	40,000	32,608	-	20,940	205	21,145	65%	205 women benefit from the Cayar processing facility
16. Number of hectares in areas of biological significance and/or containing natural resources under enhanced management with the assistance of the USG	1,070,156	395,952	0	0	Na	0	0%	Awaiting the signature of Local Agreements
17. Number of hectares in areas of biological significance under enhanced management with the assistance of the USG	413,655	62,055	0	0	0	0	0%	Awaiting the signature of Local Agreements

IR 3: Vulnerability assessed and capacity of vulnerable coastal communities strengthened to adapt to the impacts of climate variability and change

18. Number of individuals who have received training on climate change with the assistance of the USG	2,400	660	0	H=48 F=8 Tot=56	H=660 F=517 T= 1177	1,233	187%	47 trainings in climate change took place during the course of this semester. This year's annual target has been exceeded, mostly due to the trainings organized for trainers which allowed for an efficient and rapid dissemination of the climate change material.
19. Number of vulnerability assessments conducted with the assistance of the USG	6	Na	Na	Na	Na	Na	Na	There were no vulnerability assessments planned for this year.
20. Number of laws, policies, agreements, MoUs or regulations on climate change proposed, adopted or implemented with the assistance of the USG	6	3	0	3	8	11	183%	8 hygiene and sanitation agreements are being implemented in the related sites.
21. Number of persons who have strengthened their capacity to adapt to the impacts of climate variability and change with the assistance of the USG	17,990	6,700	146	350	543	1,039	15.5%	This indicator takes into account all the stakeholders affected by the implementation of adaptation plans.

IR 4: Increased social and economic benefits to artisanal fishing communities provide incentives to a continued sustainable fisheries agenda and increased climate change resilience

22. Number of private food security companies (for profit), producer organizations, water users associations, women's groups, associations of men and women entrepreneurs, and CBOs who have received assistance from the USG	52	44	10	6	37	53	120%	During this quarter, the Mbour and Rufisque/ Bargny CLPAs headquarters have been renovated while the CLPAs of Mbour, Joal/Fadiouth, Sindia Nord and Sindia Sud as well as Sédhiou have benefitted from material support (for instance cleaning equipment) and from capacity building in participatory surveillance.
23. Number of households that are benefitting directly from the assistance of the USG (indicator 4.5.2-13 de FTF)	10,331	10,100	Na	Na	4,295	4295	43%	4,295 households have been identified in total in the Dakar- Ouest, Hann, Pikine and Saint- Louis CLPAs.
24. The number of fisheries stakeholders on the project sites who have perceived an improvement in their well-being from the assistance of the USG	Na	Na	Na	Na	Na	Na	Na	The TORs for the 2 nd study are under preparation and the study should be undertaken during quarter 4.

A2: 2014 Third Quarter Financial Report

Budget Line Items	Total approved budget	2014 Approved Annual Budget	FY14 Third Quarter Spending				Total spent to date in FY14	Total spent since the beginning of the project	FY14 Balance	Total balance since the beginning of the project	% of annual budget spent
			Apr-14	May-14	Jun-14	Total Quarter 3					
(a)		(b)	(c)	(d)	(e)	(f) = (c)+(d)+(e)	(g)	(h)	(i)=(b)-(g)		(j)=(g)/(b) * 100
a Personnel	\$1,144,880	\$291,805	\$21,681	\$23,038	\$26,224	\$70,943	\$208,927	\$935,333	\$82,878	\$209,547	72%
b. Students	\$245,697	\$4,000	\$174	\$288		\$461	\$989	\$4,489	\$3,011	\$241,208	25%
c. Consultants	\$2,150,476	\$656,164	\$84,946	\$86,977	\$72,631	\$244,554	\$625,327	\$2,782,509	\$30,837	-\$632,033	95%
d. Other direct costs	\$1,466,199	\$175,904	\$6,688	\$7,841	\$4,285	\$18,814	\$73,342	\$634,900	\$102,562	\$831,299	42%
e. Subcontracts	\$2,853,939	\$275,000	\$0		\$25,196	\$25,196	\$160,574	\$947,205	\$114,426	\$1,906,734	58%
f. Travel	\$1,179,753	\$502,336	\$29,763	\$13,953	\$21,943	\$65,659	\$80,672	\$487,595	\$421,664	\$692,158	16%
g. Equipment	\$110,071	\$0	\$0	\$0	\$0	\$0	\$0	\$103,463	\$0	\$6,608	0%
h. Tuition	\$49,848	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49,848	0%
i. Total direct charges (sum of 6a-6h)	\$9,200,863	\$1,905,209	\$143,251	\$132,097	\$150,279	\$425,627	\$1,149,832	\$5,895,496	\$755,377	\$3,305,367	60%
j. Indirect costs	\$2,298,847	\$423,854	\$6,197	\$31,175	\$84,661	\$122,033	\$302,938	\$1,329,881	\$120,916	\$968,966	71%
k. Totals (sum of 6i-6j)	\$11,499,710	\$2,329,063	\$149,448	\$163,272	\$234,940	\$547,660	\$1,452,770	\$7,225,377	\$876,293	\$4,274,333	62%

1 Subcontracts does not assume encumbered contracts for quarterly reporting

2 Indirect on outstanding foreign advances is not shown as expensed until cleared at URI

A3: Third Quarter EMMR Table

Activity	Environmental threats	Mitigation Measures Taken	Who is responsible for monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
1. Education, technical assistance, training, etc.	No environmental impacts anticipated as a result of these activities.	No mitigation measures taken for this quarter	Project Manager	Education, technical assistance, training and other materials and reports	Review of materials	Quarterly
2. Reduce post-harvest losses and improve product quality	<p>Improved facilities could result in disturbance to critical resources and sensitive ecosystems, changing access to water by animals, people and vegetation, or degrading water resources, sedimentation of surface waters soil erosion, or contamination of groundwater and surface water</p> <p>Increased harvests and threat to overfishing due to increased demand from improved quality</p> <p>Potential impacts of water supply & sanitation activities include damages to natural or sensitive ecosystems, depletion of freshwater resources, creation of stagnant water that could create breeding opportunities for water-borne disease vectors, contamination of water sources causing increased human health risks</p> <p>Land use change, degradation of water quality, increased human health risks from contamination of water, soil, and food by human pathogens, degradation of estuarine and marine and surface shallow groundwater water quality adversely affecting both human and ecosystem health</p>	<p>The technical monitoring construction committee is functional. The purpose of this committee is to monitor the evolution of construction and to evaluate its compliance with validated plans. It organizes a tour of the site every 15 days. During these visits questions are raised and improvement measures proposed.</p>	Project Manager	<p>Construction plans/ designs and photos of all facilities constructed</p> <p>Mgt. plan, MSC cert. or other evidence of measures to prevent overfishing</p> <p>Construction plans/ designs and photos of all facilities constructed</p>	<p>Review of materials and site inspection</p> <p>Review of materials</p> <p>Review of materials and site inspection</p>	Quarterly
3. Enhance fisheries value chains	Increasing the value of fish and product eco-labeling can give incentive to increase fishing effort and contribute to overfishing.	No value chain activities this Quarter	Project Manager	Management plan, MSC certification or other evidence that measures are being taken to prevent overfishing	Review of materials	Quarterly

Activity	Environmental threats	Mitigation Measures Taken	Who is responsible for monitoring?	Sources of Verification	Monitoring Method	Frequency of Monitoring
4. Improve fishing community resilience to climate change	<p>Alteration of nearshore sediment patterns resulting in displaced or accelerated erosion of beachfronts from inappropriate construction</p> <p>Natural habitat destruction or degradation, degradation of marginal lands land water; marine pollution from soil erosion or use of agricultural chemicals; reduced water availability from water storage or diversion for irrigation; bio-diversity loss from land fragmentation, conversion to agricultural use, or introduction of exotic species</p> <p>To be determined through environmental screening processes</p>	TBD	Project Manager	TBD via env. screening	TBD via env. screening	Quarterly

A4: EMMP Monitoring Log

Category of activity	N°	Activity	Monitoring/ mitigation measure	Responsible party	Monitoring Plan			Cost estimate (USD)	Monitoring Log		
					Indicator	Data source/ method	Reporting frequency		Date	Result	Follow-up
1.Education, technical assistance, training, etc.	3.1	Supporting policy dialogue and/or reform initiatives	No mitigation measure. The stakeholders were trained and sensitized in regards to sustainable management of fisheries resources, fishing code and fisheries legislation, hence contributing to a positive impact on the environment.	Project Manager	-Number of people trained during the ceremony -Number of policy dialogues	PMP	Quarterly	No cost	Feb 2014 May-June 2014	-250 stakeholders trained - A functional and dynamic CLPA -5 policy dialogues and/or reform initiatives have been supported by the project and contributed towards the validation of the National MPA Strategy in Senegal -28 institutions including DEEC and DPM present at the reporting back session of the study in regards to the existing consultation frameworks for climate change, fisheries and the marine and coastal environment	-Field visits to make sure the CLPA is functional and active -Follow up on policy dialogue and reforms implementation - Follow up on exchange visit organization to URI, USA in order to give the institutions that took part in the process exposure American experience in extension. (DPM, CRODT, FENAGIE, APTE, IUPA)
1.Education, technical assistance, training	3.3.1	Establishing a scientific knowledge base	No mitigation measures	Project Manager	-Number of scientific studies underway -Number of sites identified through geolocalisation	PMP	Quarterly	No cost	March 24-28 And continuously	-Better understanding of the volume of landings of target stocks -27 fishing sites geolocalized -Studies on sardinella and bonga species / stocks	- Make sure that all our ongoing FMPs and LC rules will not have harmful impacts - Follow up Phd students responsible for the studies with URI and UCAD on

1.Education, technical assistance, training	3.4.2	Promoting oversight and surveillance in the process of implementing Local Agreements	No mitigation measure	Project Manager		PMP	Quarterly	No cost		23 people trained in collaborative surveillance seminar	Follow up on collaborative surveillance operations Drafting of a collaboration agreement with the DPSP pending to make sure our action comply with the DPSP rules and regulations
1.Education, technical assistance, training	3.4.4	Communication / sensitization / media coverage	No mitigation measure	Project Manager	Number of radios	PMP	Quarterly	No cost	February 14 th , March 7 th	60 radios prepared, anchored and broadcast to support Local Agreements and/or sardinella management plans	Follow up on communication strategy implementation
2.Reduce post-harvest losses and improve product quality	3.4.3	Gender: Improving the techniques for processing and storing products in Cayar	No mitigation measure	Project Manager	-The processing unit -Equipment: number of fish-drying racks -Number of ovens -Number of loans	PMP	Quarterly	No cost		-Construction work of the processing site completed -Unit equipped: 20 racks, 4 ovens -Channels to market products -Launching the revolving credit facility -70 loans granted to women	Follow up on maintenance of processing site and of its equipment
3. Enhance fisheries value chains	3.1	No value chain activities this Quarter	No value chain activities this Quarter	Project Manager	No value chain activities this Quarter	Management plan, MSC certification or other evidence that measures are being taken to prevent overfishing	Quarterly	No cost	No dates	NA	NA
4.Improving fishing community resilience to climate change	3.3.2	Organizing a workshop to train and report back the findings of the diagnostic	No mitigation measure as it does not impact the environment.	Project Manager	-Number of trained stakeholders	PMP	Quarterly	No cost	Continuously	-48 trained stakeholders - A teaching book was prepared and given to each facilitator to pass on the information at grassroots level	Make sure the handbook is being used by facilitators in retraining the others at grassroots level

		study of consultation frameworks for fisheries, marine and coastal areas, and climate change									
4..Improving fishing community resilience to climate change	3.4.1	<p>Implementing climate change adaptation plans:</p> <p>Capacity building</p> <p>Resource management and preservation</p> <p>Sea encroachment fight and protection of infrastructures and ecosystems</p> <p>Support populations in adapting to climate change</p>	No mitigation measures. The themes discussed (climate change causes and impacts on fisheries, how to enhance adaptation of community fisheries, bad fishing practices...) have a positive impact on the environment	Project Manager	<p>-Number of participants</p> <p>-Number of radio programs</p> <p>-Number of people whose adaptation capabilities have been enhanced</p> <p>-Number of weather alerts</p> <p>-Number of hectares replanted</p> <p>-Number of hygiene committees set up</p>	PMP Reports	Quarterly	No cost	<p>Every Tues (Ndayane)</p> <p>Every Thurs (Joal)</p> <p>Every Thurs and Tues (Mbour)</p> <p>Every Wedn (Cayar)</p> <p>Every Thurs (Rufisque)</p> <p>March 19th (Rufisque-Bargny)</p> <p>March 26th (Joal)</p> <p>March 27th (SindiaSud)</p> <p>March 31st (Sindianord)</p> <p>Every time bad weather is forecasted</p>	<p>-33 participants</p> <p>-9 radio programs on themes such as bad fishing practices, safety at sea, etc, broadcasted in 4 local radio stations</p> <p>-300 people trained</p> <p>- 4 marine weather alerts</p> <p>- TBD</p> <p>-8 hygiene committees set up in 8 processing sites</p>	<p>- Follow up the drawing up and validation of hygiene rosters</p> <p>- Listen to the radio programs and make sure the themes developed don't integrate any recommendations with potential negative environmental impact</p> <p>- Two assessments per year of the Radio programs are done to see if the actors are keen and interested in the content, if this content still meets the general objective of COMFISH and if it is leading the actors to implement good practices</p> <p>-In coordination with the national weather forecasting, we disseminate the information to the stakeholders through CLPAs and checkpoints, etc.</p> <p>-Elaboration of hygiene code (March to May, 15) for each</p>

												site -Validation of the hygiene codes: May, 15 (Sindiasud), May, 21 (Joal), May, 22 (Sindianord) Last week of May (Rufisque-Bargny) -Site visits
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