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EVALUATION

MID-TERM PERFORMANCE EVALUATION of the Collaborative Management of a Sustainable Fisheries Future in Senegal Project

March 2015

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MID-TERM PERFORMANCE EVALUATION of USAID/COMFISH

March 2015

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ACRONYMS

ADEPA	West African Association for the Development of Artisanal Fishing (Association Ouest Africaine pour le Développement de la Pêche Artisanale)
AFET	Association of Women in Point Sarene (Association des Femmes de Point Sarene)
Alliance	Alliance for Sustainable Fisheries (Alliance Pour une Pêche Durable)
ANACIM	National Agency for Civil Aviation and Meteorology (Agence Nationale de l'Aviation Civile et de la Météorologie)
APTE	Association for Sanitation, Fisheries Tourism and Environment (Association pour Assainissement, Pêche, Tourisme, Environnement)
CBO	Community Based Organization
CL	Local Agreement (Convention Locale)
CLP	Local Fisheries Committees (Comité Locale des Pêches)
CLPA	Local Councils of Artisanal Fishers (Conseils Locaux de Pêche Artisanale)
CNCPM	National Consultative Council for Marine Fisheries (Conseil National Consultatif pour les Pêches Maritimes)
COMFISH	Collaborative Management for a Sustainable Fisheries Future
COMNACC	National Committee on Climate Change (Comité National sur les Changements Climatiques)
CRODT	Oceanographic Research Center of Dakar-Thiaroye (Centre de Recherches Océanographiques de Dakar-Thiaroye)
CSE	Ecological Monitoring Center (Centre de Suivi Ecologique)
CSRP	Sub-Regional Fishing Commission Commission Sous-Régionale des Pêches
DAMCP	Department of Community-based Marine Protected Areas (Direction des Aires Marines Communautaires Protégées)
DEEC	Directorate of Environment and Classified Establishments (Direction de l'Environnement et des Etablissements Classés)
DPM	Department of Marine Fisheries (Département des Pêche Maritimes)
DPN	National Parks Directory (Direction des Parks Nationaux)
EGO	Economic Growth Office
EOP	End of Project
ELEFAN	Electronic Length Frequency Analysis
ENDA	Environmental Development Action in the Third World
ERA	Education and Research in Agriculture
FtF	Feed the Future
FENAGIE	National Federation of Fisheries Economic Interest Groups (La Fédération Nationale des GIE de Pêche du Sénégal)
FY	Fiscal Year
GDP	Gross Domestic Product

GIE	Economic Interest Groups (Groupement d'Intérêt Economique)
GIS	Geographic Information System
HP	Horsepower
ICC	Coordination Council (Instance de Conseil et de Coordination)
IGA	Income Generating Activities
IP	Implementing Partner
IR	Intermediate Result
IRD/IFAN	Institute for Research and Development/Fundamental Institute for Black Africa
IUPA-UCAD	University Institute of Fisheries and Agriculture/Université Cheikh nta Diop ((Institut Universitaire de Pêche et D'Aquaculture Batiment Pédagogie- Université Cheikh nta Diop)
IUU	Illegal, Unreported and Unregulated [fishing]
Kg	Kilograms
LPS	Fisheries and Aquaculture Sector Policy Letter (Lettre de Politique Sectorielle)
MOU	Memorandum of Understanding
MPA	Marine Protected Area
NGO	Non-Governmental Organization
NPD	National Parks Directorate
REFEPAS	Network of Women in Artisanal Fisheries in Senegal (Réseau des Femmes de la Pêche Artisanale du Sénégal)
REPAO	Organisation for Fisheries Policy in West Africa (Réseau sur les politiques de pêche en Afrique de l'ouest)
SCA	Accelerated Growth Strategy (Stratégie de Croissance Accélérée)
SMS	Short Message Service
SNAMP	Senegal's National MPA Strategy
TWG	Technical Working Group
UCAD	University Cheikh Anta Diop
UGS	Stock Management Units (Unités de Gestion des Stocks)
URI	University of Rhode Island
USAID	United States Agency for International Development
USG	United States Government
WAMER	West Africa Marine Ecoregion
WIO-COMPAS	Western Indian Ocean Certification of Marine Protected Area Professionals
WWF	Worldwide Fund for Nature

EXECUTIVE SUMMARY

MID-TERM PERFORMANCE EVALUATION PURPOSE AND QUESTIONS

The purpose of the mid-term performance evaluation was: (1) to evaluate the USAID Senegal Collaborative Management for a Sustainable Fisheries Future in Senegal (COMFISH) program's progress in achieving its objectives, (2) to identify opportunities for improvement to strengthen the sustainability of the program gains, and (3) to identify lessons learned and provide recommendations to guide future programming by USAID/Senegal and the Government of Senegal, Department of Maritime Fisheries (DPM) programming.

The Evaluation Team was tasked with assessing the following four cross-cutting questions:

- 1) To what extent has the project been implemented in terms of timely completion of project activities, effective use of project resources, of target groups/beneficiaries, quality of partnerships and collaboration, and contribution to overall USAID/Senegal Economic Growth Office (EGO) goals?
- 2) What outcomes has the project achieved so far to address climate change, gender, environmental compliance, and governance issues?
- 3) What is the likelihood that project approaches/practices and results will be sustained?
- 4) Have capacity-building and increased leadership/management opportunities for women led to increased participation of women in leadership roles in the community?

In addition, the Evaluation Team was asked to address four intermediate result (IR) questions:

- 1) Has the project demonstrated effective, efficient and sustainable vehicles/approaches for sustaining biodiversity, improving resource management, implementing sustainable fisheries and preventing over fishing?
- 2) What are the most binding constraints in application of strategies, policies, and best practices and how could these constraints be overcome?
- 3) What interventions best improve the ability of vulnerable coastal communities to adapt and become resilient to the impacts of climate vulnerability and change?
- 4) What are approaches that successfully address long-term biodiversity conservation objectives while effectively increasing social and economic benefits to artisanal fishing communities?

The intended users of this report include staff from USAID/Senegal, USAID/COMFISH and their implementing partners (IPs), the Government of Senegal, and other relevant stakeholders.

PROJECT BACKGROUND

COMFISH is a five year initiative (February 14, 2011 – September 30, 2016) being implemented by the University of Rhode Island (URI) in collaboration with the Government of Senegal and other local partners to help reform the country's fisheries sector to sustain productivity and enhance the participation of artisanal fisherman and women in fishery value chains. Specifically, the project aims to support the Government of Senegal DPM in implementing the Fisheries and Aquaculture Sector Policy Letter (LPS) which serves as a national framework for sustainable management of fisheries resources.

While the original focus of the project was exclusively the implementation of the Feed the Future (FtF) strategy, as program funds for climate change adaptation, resiliency and variability increased, COMFISH began to focus more on this critical issue. The geographic reach of project interventions also expanded over time. COMFISH project activities in Phase I (FY 2011-2013) initially focused on locations along the Grand Cote (Cayar) and the Petit Cote (Joal, Mbour, Sindia). During Phase II (FY 2014-2016) the geographic scope expanded into Casamance, Saint Louis and the Saloum Delta, to cover the majority of the Senegalese coast and to take into account regional economic and ecological interests.

EVALUATION METHODS AND LIMITATIONS

Data for this evaluation were collected through a combination of document review, meetings with USAID/Senegal and USAID/COMFISH, interviews with key informants, and field consultations at project sites in key coastal fishing communities in Senegal.

The Evaluation Team reviewed COMFISH annual reports, work plans and technical reports, as well as reports and documentation collected from partners during the field exercise. Meetings were held in-country with USAID/Senegal and USAID/COMFISH to determine the major successes, difficulties and the added value of the project, as well as to fill in data gaps in the analysis. The Evaluation Team conducted key informant interviews with a selection of 15 COMFISH partners to gather data, which was cross-checked during field consultations in each of the six intervention zones of the project. During these field visits, the team met with Local Councils of Artisanal Fishers (CLPAs) and Coordination Council (ICC) members, fishermen, women fish processors, Chef de Postes and representatives from Government of Senegal administrative and fisheries surveillance units. Following this data gathering process, preliminary results from the mid-term evaluation were presented to USAID/Senegal and COMFISH in a PowerPoint debriefing on 13 February 2015.

The Evaluation Team faced three limitations during the evaluation: sufficient but limited schedule, availability of baseline data, and cultural constraints in facilitating gender discussions in the field. A tight meeting schedule permitted the Evaluation Team to cross check a variety of data from numerous sources, but did not allow sufficient time to compare observations on a regular basis. Project baseline data were limited. The evaluation could have benefitted from additional scientific baseline studies, as well as studies related specifically to gender, in order to more fully assess project successes. The field team noted that the inclusion of a female evaluator to lead interviews with women could have made the women consulted feel more open and less inhibited while interviewing them about gender issues during the field portion of the evaluation.

FINDINGS AND RECOMMENDATIONS

The Evaluation Team was able to obtain sufficient information to answer each of the cross-cutting and IR questions. Based on data gathered through interviews, document review, and field visits to each of the areas included in the COMFISH program, the Evaluation Team developed the findings summarized below:

Question 1: The project is being well implemented with most of the activities completed in a timely and effective manner. Project resources are being used efficiently and are reaching the intended beneficiaries. For the most part the partnerships developed through COMFISH are contributing to the achievement of project goals, although several could be strengthened to improve outcomes. Overall the COMFISH project is contributing to USAID Economic Growth Office (EGO) goals.

Question 2: With regard to climate change, gender, environmental compliance, and governance issues, COMFISH has accomplished the following (by category).

Climate Change:

- Through outreach and capacity development there is increased awareness of climate change among stakeholders.
- Climate change adaption plans have been developed and implemented in several coastal communities based on vulnerability assessments.
- Scientific research has been undertaken to support climate change policy/decision making and preparation of action plans.
- Climate change adaptation issues have been integrated into Senegal's national fishery policy.

Gender:

- Women's incomes related to fish processing activities, which are typically performed by women, are growing as a function of improvements to local infrastructure (facilities) and protocols for fish processing (especially hygiene and sanitation).
- Participatory training programs were developed and presented to help women to improve their skills related to bookkeeping and business management.
- Women's role in the fisheries sector has increased recognition through the revitalization of the Network of Women in Artisanal Fisheries in Senegal (REFEPAS).

Environmental Compliance:

To promote the conservation of biodiversity and ecosystems and reduce practices related to overfishing COMFISH:

- Developed consensus among key stakeholders to support the national Marine Protected Area (MPA) strategy.
- Facilitated the use of buoy markers in Joal, and Cayar to help enforce MPA regulations.
- Conducted training in operations, participatory surveillance and monitoring.

Governance:

Governance structures are improving through:

- The strengthening of CLPAs and their steering committees (ICC); and
- Promulgation and adoption of Local Agreements (CL), there has been an increase in the issuance of fishing licenses; boat registrations; and wholesalers' identification cards.

Question 3: COMFISH has helped ensure the sustainability of project results and successes by building capacity at the institutional and local levels; completing outreach to various stakeholders to raise awareness about issues and interventions in the fisheries sector; providing training to stakeholders and institutions; and by using a "learning by doing" approach to strengthen partner organizations and create synergies.

Question 4: COMFISH interventions are building a foundation to increase the participation of women in leadership roles in the community. The project is establishing the foundation by raising awareness of gender issues and inequalities in the sector; strengthening economic opportunities for women by increasing their access to credit and improving the quality of their products; and by providing leadership training and supporting REFEPAS, an organization in the best position to lobby for women's rights in decision-making at the highest level.

IR1: The following represent the vehicles and approaches that COMFISH has implemented for sustaining biodiversity, improving resource management, implementing sustainable fisheries in Senegal and preventing further overfishing:

- *Initiating participatory development of rules and regulations, and participatory monitoring of fisheries* by: facilitating the promulgation and implementation of CLs using the CLPA network; establishing joint systems for collaborative fisheries surveillance amongst the CLPAs, research institutions and the DPM; and supporting the MPAs in Cayar and Joal by demarcating MPA boundaries with buoys.
- *Catalyzing relationships between governmental and fishery organizations* by: setting up a national committee on the management of fishing capacity in Senegal to enable the validation and approval of the National Strategy on MPAs by the Ministry of Environment and Sustainable Development; and leveraging the existing institutional network of CLPAs to establish collaborative management plans for priority fish stocks.
- *Fostering collaboration* by: supporting the National Management Committee on Small Pelagics; establishing the national steering committee on the integration of climate change into fishery policy; facilitating discussions with the National Committee on Climate Change (COMNACC); catalyzing

the development the implementation of the action plan on climate change for the fisheries sector; and developing a revolving fund for women's Economic Interest Groups (GIEs) in Cayar.

- *Engaging in capacity development*, by conducting training sessions on improved fish processing techniques for sanitation and hygiene in numerous coastal communities (including Pointe Sarene, Saly, Cayar, Joal-Fadiouth, Rufisque/Bargny, and Sindia North/South).

IR2: The most binding constraints in the application of strategies, policies, and best practices include the following:

- Lack of formalized frameworks with key collaborating organizations (e.g., National Agency for Civil Aviation and Meteorology [ANACIM], Association for Sanitation, Fisheries Tourism and Environment [APTE], Alliance for Sustainable Fisheries [Alliance], Ecological Monitoring Center [CSE], COMNACC, Directorate of Environment and Classified Establishments [DEEC], National Federation of Fisheries Economic Interest Groups [FENAGIE]).
- Lack of access to credit resulting in both fishers and processors becoming indebted to predatory buyers and lenders.
- Control of fish markets, especially regional ones, by wealthy merchants, which prevents women from profitably selling their fish directly to consumers.
- Lack of a participatory communication and reporting system as critical lessons learned appear in reports but are not necessarily being shared with local coastal communities.

To address these issues, the Evaluation Team recommends four actions:

1. Establish Memorandum of Understanding (MOUs) among the collaborating institutions which will provide the framework for contractual implementation.
2. Establish credit funds for men and women to support growth of the artisanal fisheries sector.
3. Investigate the possibility of establishing trade links and a market observatory¹ with the large markets of Kaolak or Diaobé (near the Guinean border) to help foster the opening of regional markets.
4. Institute a participatory communication and reporting system to share lessons learned with beneficiary stakeholders in the fisheries sector.

IR3: The results from the COMFISH project suggest that the strategies that best assist vulnerable coastal communities to improve their ability of to adapt and become resilient to the impacts of climate variability and change are the following:

- Conducting outreach and capacity building on climate change adaptation measures, weather forecast for marine safety, best fishing practices and sustainable fisheries management.
- Development of and implementation of climate change adaption plans in several coastal communities based on assessment and vulnerability analyses.
- Establishing or re-establishing collaborative surveillance groups to monitor physical changes along the coastline and the introduction of the early warning program for catastrophic storm events.
- Engaging in collaborative scientific research to analyze the effects of environmental factors (e.g., sea water temperature and upwelling) on the distribution and seasonality of the fishery stocks and gathering data for Geographic Information System (GIS) mapping of land use, infrastructure, and land cover to facilitate climate change vulnerability assessment and adaptation planning.

IR4: The approaches that best address long-term biodiversity conservation objectives and effectively help increase social and economic benefits to artisanal fishing communities include:

- Continued focus on improving the implementation of the National MPA strategy at the national, regional, and local levels.

¹ The market observatory is a platform whereby data on prices, products, market trends and supply are collected and shared with major fisheries trade associations.

- Monitoring the demarcation of MPAs and initiating corrective actions to ensure these areas are managed to preserve the resiliency and integrity of the eco-systems.
- Continuation of the collaborative practices for collecting, sharing and communicating scientific information on fisheries. These data were used to support the development of evidence-based collaborative fisheries management plans.
- Continuation of the program of co-surveillance or collaborative surveillance and monitoring of artisanal fisheries.
- Continuing to support women fish processors in increasing the value of fish products through improved processing facilities in order to increase their revenue and their resilience to climate change.

The Evaluation Team identified a number of observations/improvement opportunities regarding project implementation. For each item, the Evaluation Team provided a recommendation for improving project design or implementation. A full prioritized list of the Evaluation Team's recommendations is in Annex 4.

Overall, the COMFISH project, with fundamental support from its partners, has laid a solid foundation for ensuring the long term viability of its results and contributing to the sustainable management of fisheries resources. However, if the project were to end in the near future, this foundation would be at risk. An exit strategy should be developed that outlines how partner institutions will work together to maintain project results over the long term. Further, if the project were to be extended, the major focus should be on collecting baseline data, supporting local agreements, promoting aquaculture and providing better access to credit and markets for stakeholders.

I.0 INTRODUCTION

I.1 MID-TERM EVALUATION PURPOSE AND QUESTIONS

USAID/Senegal facilitated the conduct of the mid-term performance evaluation of the COMFISH project so as to:

- 1) Review progress made towards achieving COMFISH objectives;
- 2) Identify critical mid-course program modifications to promote sustainability of the program's accomplishments beyond September 2016; and
- 3) Identify lessons learned and recommendations to guide future USAID and DPM programming.

To achieve the objectives outlined above, the Evaluation Team was tasked with reviewing and assessing the following four cross-cutting questions within the context of USAID/Senegal FtF strategy and biodiversity conservation objectives:

- 1) To what extent has the project been implemented in terms of timely completion of project activities, effective use of project resources, reach of target groups/beneficiaries, quality of partnerships and collaboration, and contribution to overall USAID/Senegal EGO goals?
- 2) What outcomes has the project achieved so far to address climate change, gender, environmental compliance, and governance issues?
- 3) What is the likelihood that project approaches/practices and results will be sustained?
- 4) Have capacity-building and increased leadership/management opportunities for women led to increased participation of women in leadership roles in the community?

The Evaluation Team also addressed the following four IR questions:

- IR 1: Has the project demonstrated effective, efficient and sustainable vehicles/approaches for sustaining biodiversity, improving resource management, implementing sustainable fisheries and preventing over fishing?
- IR 2: What are the most binding constraints in application of strategies, policies, and best practices and how could these constraints be overcome?
- IR 3: What interventions best improve the ability of vulnerable coastal communities to adapt and become resilient to the impacts of climate vulnerability and change?
- IR4: What are approaches that successfully address long-term biodiversity conservation objectives while effectively increasing social and economic benefits to artisanal fishing communities?

Intended users of this report include USAID/Senegal staff and IPs, USAID/COMFISH staff and IPs, Government of Senegal, and other relevant stakeholders.

I.2 PROJECT BACKGROUND

Senegal's fisheries play a critical role in food security, livelihoods, and local and national economic growth. Fisheries products constitute 12.3 % of export earnings and 1.3 percent of Senegal's Gross Domestic Product (GDP) (not including post-harvest activities such as marketing, artisanal and industrial processing and inland captures). Further, about 600,000 people are directly or indirectly employed in the fisheries sector. Senegal is also one of the biggest fish consuming countries in the world, with annual per capita fish consumption of 26 kilograms (Kg). The fisheries sector has experienced declining productivity in recent years due to degradation and depletion of resources, misguided investments, overfishing, and overinvestment in onshore processing of fisheries products.²

² Purchase Order No. AID-685-O-15-00005; COMFISH Mid-Term Performance Evaluation RFQ

COMFISH is a five year initiative (February 14, 2011 – September 30, 2016) being implemented by URI in collaboration with the Government of Senegal and other local partners to reform the country’s fisheries sector to sustain productivity and enhance the participation of artisanal fisherman and women in the artisanal fishery value chains. Specifically, the project aims to support DPM in implementing the Fisheries and Aquaculture Sector Policy Letter (LPS) which serves as a national framework for sustainable management of fisheries resources. COMFISH works with a diverse groups of partners to reach its objectives, including the Government of Senegal, private entities, academic institutions, research institutions and Non-Governmental Organizations (NGOs) for women and artisanal fishing. Recently, partnerships are also beginning to form between COMFISH and other USAID/Senegal projects.

While the original focus of the project was related to the FtF strategy, COMFISH began to focus more on Climate Change as program funds for this area increased (See Figure 1).

Senegal’s marine fisheries are part of the West Africa Marine Ecoregion (WAMER), one of the world’s most biologically diverse areas which is sustained by oceanic upwelling and enhanced by additional nutrient influxes from several major river/estuary/delta complexes. Maintaining this rich biodiversity and the health and quality of this highly productive marine ecosystem is critical to maintaining a sustainable supply of goods (e.g., food) and services (e.g., employment) for Senegal’s citizens.

As noted in Figure 2, COMFISH project activities in Phase I (FY 2011-2013) originally focused on locations at Cayar and along the Petit Cote (Joal, Mbour, Sindia). During Phase II (FY 2014-2016) the focus expanded into Casamance, Saint Louis and the Saloum Delta, to cover the entire Senegalese coast and to take into account regional economic and ecological interests.

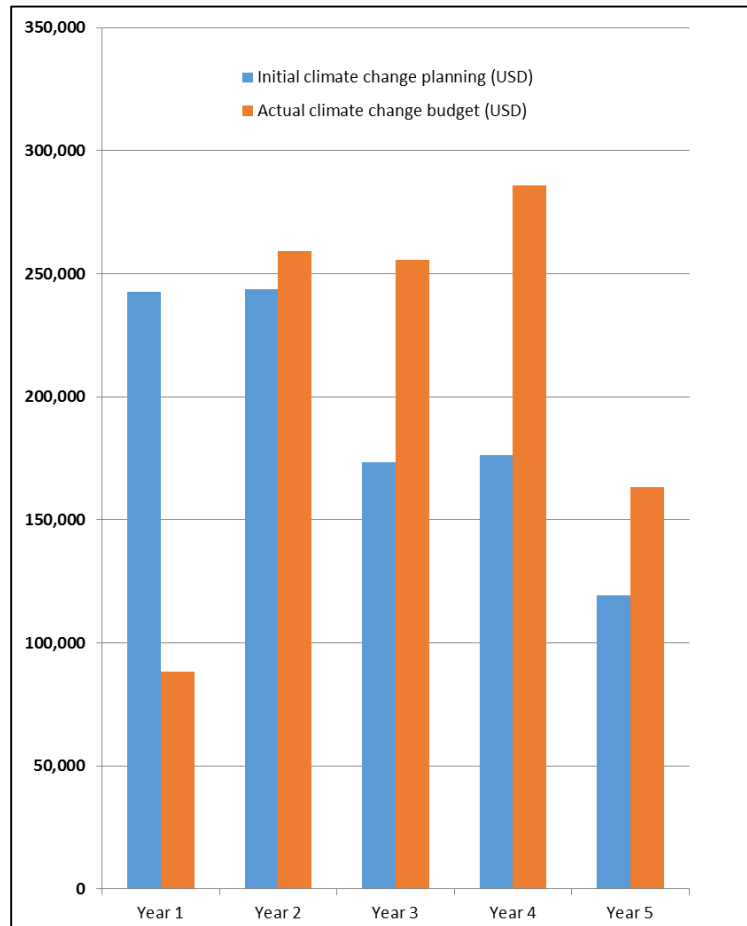


Figure I: COMFISH Climate Change Funding Patterns

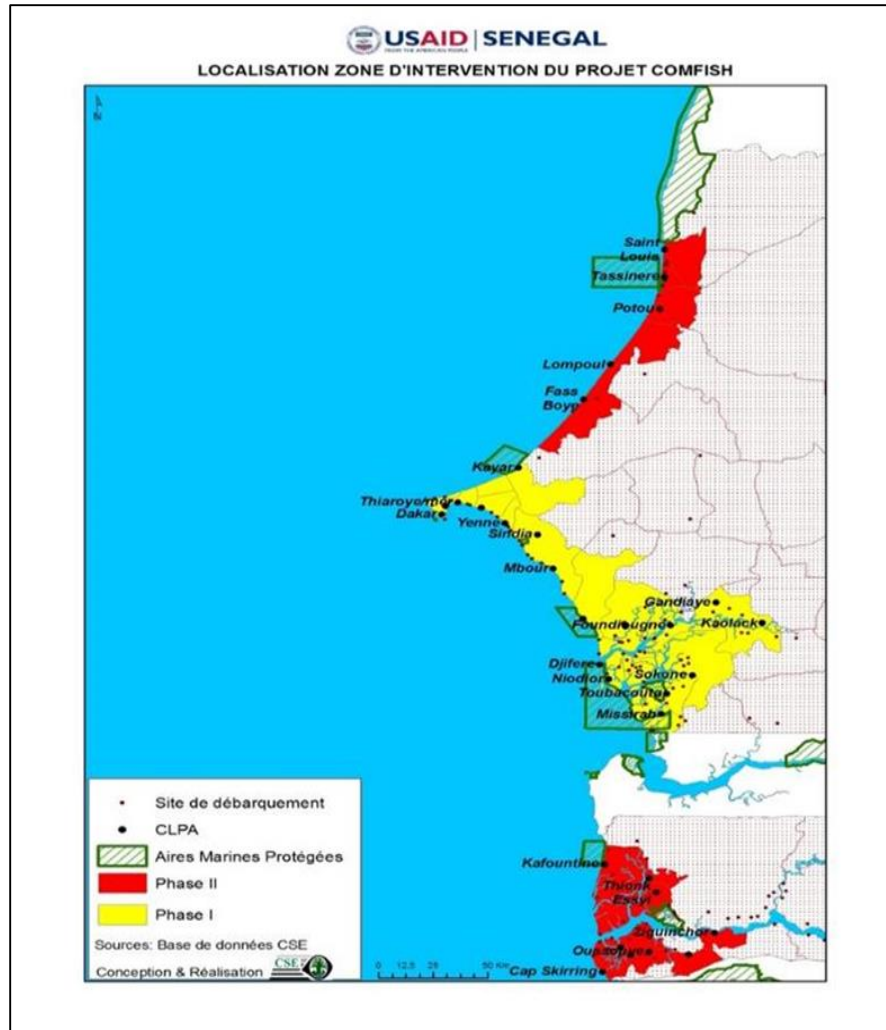


Figure 2: Geographic Coverage Phase I and Phase 2

As stated in the 2014 COMFISH Annual Report, the project’s long-term objective is “to end overfishing in Senegal and provide the nation with a sustainable source of high quality protein that contributes to the quality of life in artisanal fishing communities, and maintains the capacity of coastal and marine ecosystems to produce goods and services that are useful to, and desired by the people in Senegal.”

The important strategies and concepts that COMFISH has included in the project design and implemented in order to meet this long term objective include:

- Ecosystem based management;
- Establishment of specific critical enabling conditions for sustainable fisheries at all levels;
- Inclusive and participatory fisheries management planning; and,
- Learning by doing.

The COMFISH project’s emphasis on ecosystem based management (using sustainable management units) and participatory fisheries management is the core element in the project’s theory of change and life of project outcomes.

I.3 EVALUATION METHODS AND LIMITATIONS

Data for this evaluation was collected through a combination of document review, meetings with USAID/Senegal and USAID/COMFISH, and interviews with key informants and field consultations at project sites along the coast of Senegal.

I.3.1 EVALUATION METHODS

A. DOCUMENT REVIEW

Prior to undertaking key informant interviews and field visits, the Evaluation Team reviewed a variety of documents to better understand project activities, to inform meetings and interviews to be conducted in the field, and to assist in answering the cross-cutting questions.

The Evaluation Team also collected additional documents in the field from COMFISH partners, including contracts, informational PowerPoints and pamphlets, government communications, annual reports and action plans, among others. These documents were also reviewed to inform responses to the evaluation cross-cutting questions.

A listing of the documents reviewed can be found in Annex 1.

B. USAID/SENEGAL AND USAID/COMFISH MEETINGS

USAID/Senegal Meeting

The Evaluation Team met with USAID/Senegal on 28 January 2015 to review the Work Plan, but also to understand USAID's perspective on the COMFISH project. The Evaluation Team learned that USAID/Senegal is satisfied with the value the project has added to the fisheries sector, especially in regards to the improved functioning of CLPAs in managing fish stocks, the research completed, integration of climate change data, as well as COMFISH's overall participatory, ground-up approach to building a foundation for a sustainable fisheries future. According to USAID/Senegal, CLPAs and women in particular have benefitted from the project. USAID/Senegal also noted several difficulties that still need to be addressed in the sector, namely, that the government's legal framework is not consistently enforced, sanctions are not strict enough to prevent problems, monitoring and surveying of illegal fishing is not done on a routine basis, and lack of payment for pirogues is creating a substantial open access problem.

The approved evaluation Work Plan is in Annex 2.

USAID/COMFISH Meetings

In addition to an official meeting held on 27 January 2015, the Evaluation Team had numerous conversations with USAID/COMFISH staff throughout their time in Dakar and in the field. COMFISH provided additional documentation and detailed information regarding project interventions in the target zones. COMFISH staff were always available to clarify information or answer any questions that the Evaluation Team posed.

C. KEY INFORMANT INTERVIEWS

Key informant interviews with COMFISH partners and stakeholders were organized, with help from USAID/COMFISH, from 26-30 January 2015 and from 9-10 February 2015. These interviews were guided by the questionnaire submitted in Cadmus' USAID-approved Work Plan. Table 1 below shows a complete list of key informant interviews held.

Table 1: Key Informant Interviews³

DATE	ORGANIZATION
26 January 2015	DPM
	CRODT
27 January 2015	FENAGIE
	USAID/ Education and Research in Agriculture (ERA)
	USAID/COMFISH
28 January 2015	DEEC
	Sub-Regional Fishing Commission (CSRP)
	USAID/Senegal
29 January 2015	APTE
	University Institute of Fisheries and Aquaculture - Cheikh Anta Diop University (IUPA-UCAD)
	ANACIM
	USAID/Yaajeende
30 January 2015	Accelerated Growth Strategy (SCA)
	Institute for Research for Development/ Fundamental Institute for Black Africa (IRD/IFAN)
	West African Association for the Development of Artisanal Fishing (ADEPA)
	Ibraihima Niamadio- (past) Coordinator of Worldwide Fund for Nature (WWF)/ COMFISH activities
9 February 2015	Alliance
10 February 2015	Seynabou Camara Ndiaye- DPM Gender Bureau Coordinator and REFEPAS member

Annex 3 contains the interview guide for both the key information interviews and field discussions.

D. FIELD VISITS

During the period of 1 February to 11 February 2015, the Evaluation Team split into two groups to visit project sites in the six intervention zones along the coast of Senegal. Overall, the teams met with representatives from a total of 14⁴ CLPAs. The Evaluation Team members conducted interviews and focus groups with various individuals in the fisheries sector including fishermen, women transformers, ICC and CLPA members, Chef de Postes, and representatives from administrative and surveillance units.

Annex 1 contains information on the meetings conducted and range of interviews completed in the field.

I.3.2 PRELIMINARY POWERPOINT PRESENTATION

Upon returning from the field, both groups integrated their respective data and observations into coherent preliminary results arranged around the four cross-cutting and IR evaluation questions that were presented to USAID/Senegal and URI on 13 February 2015.

I.4 LIMITATIONS

The schedule for conducting the evaluation was sufficient but tight. While the ambitious meeting schedule allowed the Evaluation Team to cross check a variety of data from many sources, visiting a more focused

³ The Evaluation Team attempted to consult with representatives from CSE, FEFEPAS, and GO-MAMER; however, these stakeholders were not available or did not respond to requests for interviews.

⁴ Cayar, Djirnda, Fatick, Joal Fadiouth, Kafountine, Mbour, Missirah, Rufisque/Bargny, Saint Louis, Sindia North, Sindia South, Warang, Yenn Dialaw, Ziguinchor,

sample of key partners from different sectors (e.g., government, NGOs, research institutions) would have provided the evaluators more time to transcribe and compare notes on a regular basis. However, the Evaluation Team managed to compare notes and get supplemental information from project staff to complete the assessment process.

COMFISH completed the studies listed below and relied on previous research to establish a baseline and to justify its intervention areas, approaches and tools:

- 1) Baseline survey on stakeholder's perception of socio-economic well-being; conducted in 2012 with plans to repeat the survey at the end of FY 2015;
- 2) Baseline study at the Cayar processing site to see how interventions have improved site functions and the quality of products; conducted in 2012;
- 3) Baseline study on CLPA effectiveness and operationalization at project sites; conducted in 2012;
- 4) Baseline study on fishery sector stakeholders and equipment use; conducted in 2012;
- 5) Baseline data collected from 1954, 1978, 2003 and 2011 (high-resolution aerial photographs and satellite images) to assess coastal communities' vulnerability to climate change; and,
- 6) Baseline reports on women in fisheries in Senegal by Hall-Arbor in 2012,⁵ by Dia et al.⁶, and by Ndiaye et al.⁷

Although a number of studies had been used to establish the COMFISH project strategy, limited baseline data made it difficult for the team to conduct a more quantitative analysis of change. The evaluation process could have benefitted from additional scientific baseline studies, as well as studies related specifically to gender, in order to better monitor project successes.

The Evaluation Team included a gender specialist, to provide assistance with the preparation of the field questionnaire, to provide the Team Leader with advice regarding the administration of the questionnaire, and to respond remotely to gender-related questions that the Evaluation Team had during the field effort. The field team noted that cultural constraints appeared to prevent the women participating in gender discussions from feeling sufficiently comfortable to share information openly about economic and social matters related to gender during field consultations. However, the Evaluation Team was able to collect sufficient data to inform the fourth cross-cutting question related to women's leadership and capacity building by making substantive observations in the field, as well as by gathering supplemental information from partners, COMFISH staff, and the head of the DPM's gender office, Madame Seynabou Camara Ndiaye. Further, the team had the support of three COMFISH staff, Ms. Diouf, Ms. Thiaw and Ms. Kama to assist in facilitating gender discussions during field visits to the fishing communities along the coast from Joal to Cayar.

I.5 EVALUATION TEAM

For this important evaluation, Cadmus carefully selected professionals who have:

- In-depth knowledge of global and Africa specific fisheries.
- Specialized functional and technical evaluation skills and experience.
- Greater than 10 years of experience in their respective fields and have an external perspective and knowledge of best practices.

⁵ Madeleine Hall-Arber (2012), An Evaluation of the Roles of Women in Fishing Communities of Dakar, the Petite Cote, and Sine Saloum. Coastal Resources Center, University of Rhode Island, Narragansett, RI, 26 pp.

⁶ Minata Dia, Aminata Mbengue, Khady Sané Diouf, Atelier préparatoire Genre et CLPA pour la Gestion Durable des Stocks. USAID/COMFISH project, Senegal, and Coastal Resources Center, University of Rhode Island, Narragansett, RI 12 pp.

⁷ Ndiaye, D., I. Niamadio, K. S. Diouf et P. S. Diouf. Stratégie de renforcement des capacités et du pouvoir social et économique des femmes actives dans la pêche. September 2012. USAID/COMFISH project.

In addition, several of our team members are native Wolof speakers, which facilitated focus group discussions and interviews.

2.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS FOR CROSS-CUTTING QUESTIONS

The Evaluation Team's findings relative to each of the four cross-cutting question and IR questions are described below. The findings are presented in a narrative summary followed by a table of observations (improvement opportunities) and recommendations. The descriptions of the findings for the first two questions on project implementation and project outcomes are brief and concise as they provide a high level perspective on project performance. The descriptions of the findings for the second two questions on gender and sustainability are more detailed with extensive examples as they warrant a deeper analysis of project performance in these critical areas. By their nature, the evaluation findings for the cross-cutting questions somewhat overlap with one another.

In order to provide a single summary of the recommendations, we have included the prioritized list of the Evaluation Team recommendations with assignment of responsibility to appropriate individuals and groups, in Annex 4.

2.1 CROSS-CUTTING QUESTION I

To what extent has the project been implemented in terms of timely completion of project activities, effective use of project resources, reach of target groups/beneficiaries, quality of partnerships and collaboration, and contribution to overall USAID/Senegal EGO goals?

2.1.1 FINDINGS

The COMFISH project has been effectively implemented based on the set of criteria outlined in Question 1 including:

- Timely completion of project activities;
- Effective use of project resources;
- Reach of target groups/beneficiaries;
- Quality of partnerships and collaboration; and
- Contribution to overall USAID/Senegal EGO goals.

The Evaluation Team based its assessment on the information presented below.

A. OVERALL PROJECT ACTIVITIES BEING COMPLETED IN A TIMELY MANNER

In order to assess the effective completion of COMFISH activities and milestones, the Evaluation Team completed a detailed comparison of targets and actual results of the COMFISH program based on the 26 indicators outlined in Table 5-1, in Annex 5 (from the Project Monitoring and Assessment Plan Results Framework). (For ease of reference purposes Table 2 describes each of the indicators.) The team compared the end-of-project (EOP) targets (including those revised in 2013) with the cumulative values as of FY 2014. As noted in the summary, Table 5-1, in general the average percentage completion rate is 66%, which is slightly less than, but within the normal range of completion, of the completion rate of 70% that one would expect at this stage of the project, with 18 months left in the program.

As would be expected for such a large program, the more nuanced evaluation of the indicators shows that the success rate varied from one indicator to another. For example, the EOP targets have already been achieved for Indicator #9, the number of policies/regulations and administrative procedures developed and presented to the public/stakeholders for consultation, and for Indicator #23, the number of households that are benefiting directly from the assistance. The activities represented by thirteen indicators have attained a

completion rate of more than 50% (#2,4,7,10,11,13,14, 15,16,18,20,21 and #22). Only three indicators, #5, 6 and 12 have a completion rate between 44 and 50%.

The completion rate for the activities represented by two indicators, #3 and #17, are below the rates for the other 24 indicators, at this phase of the project. The completion rate of 10% for communication program as represented by Indicator #3, the number of written and audiovisual materials produced to strengthen the capacities of collaborative management institutions and fisheries actors, appears low for such a critical activity. Similarly, the completion rate of 24% for Indicator #17, the number of hectares in areas of biological significance under enhanced management, seems low in comparison to Indicator #16, which is relatively high at 85%. The low completion rates indicate either that the performance of that activity is delayed, which is not consistent with the other indicators, or that the indicators are calculated incorrectly. These indicators are essential elements of monitoring and evaluation which should be validated to ensure that they are correctly measuring program progress.

In addition, the Evaluation Team’s review of the expected outcomes over the project timeline, based on our review of work plans and annual reports, confirm that the project is being implemented in a timely and effective way. Field visits confirmed this conclusion. For example during focus group sessions in Cayar and Saint Louis, it was noted that the CLPA found the project activities were implemented in a timely manner.

Table 2: USAID/COMFISH Project Indicators

No.	Description of USAID/COMFISH Monitoring and Evaluation Indicator.
1.	The synthetic index for CLPA management effectiveness.
2.	Number of persons who received short training courses on food security and productivity with the assistance of the USG.
3.	Number of written and audiovisual materials produced to strengthen the capacities of collaborative management institutions and fisheries actors.
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.
5.	Number of action plans and/or projects developed to support the fisheries management process.
6.	Number of technical studies that contribute to enhance the management plans of sustainable management units.
7.	Number of synergy areas created in the process of establishing sustainable management units.
8.	Number of policies/regulations and administrative procedures analyzed.
9.	Number of policies/regulations and administrative procedures developed and presented to the public/stakeholders for consultation.
10.	Number of policies/ regulations and administrative procedures submitted officially for adoption (legislation/decree).
11.	Number of policies/ regulations and administrative procedures instituted with the assistance of the USG, and that have been approved.
12.	Number of policies/ regulations and administrative procedures approved, and which are implemented.
13.	Number of new technologies for fisheries resources put in place.
14.	Number of actors who have adopted new rules for collaborative fisheries resources management.
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).
16.	Number of hectares in areas of biological significance and/or containing natural resources under enhanced management with the assistance of the USG.
17.	Number of hectares in areas of biological significance under enhanced management with the assistance of the USG.
18.	Number of individuals who have received training on climate change with the assistance of the USG.
19.	Number of vulnerability assessments conducted with the assistance of the USG.
20.	Number of laws, policies, agreements, MoUs or regulations on climate change proposed, adopted or implemented with the assistance of the USG.
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.
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.
23.	Number of households that are benefitting directly from the assistance of the USG (indicator 4.5.2-13 from FTF).
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.

B. PROJECT RESOURCES ARE BEING USED EFFECTIVELY

Based on the Evaluation Team's observations collected during interviews with the stakeholders at the local level, interviews with COMFISH finance staff, and the review of the finance tables included in COMFISH annual reports, project resources are being used effectively. Our observations during interviews and focus group meetings with the CLPAs and local stakeholders indicate that the number of staff employed by the COMFISH project is appropriate for the scope of work. Similarly the resources dedicated to salaries and benefits were appropriate to the level of effort required to execute the duties of each position. In addition, resources allocated to equipment and vehicles appeared appropriate to the requirements for management and transportation for the COMFISH project.

According to the most recent financial results included in the COMFISH annual report of FY14, a total of \$7.78M of the original budget of \$11.49M has been expended (at the end of FY14), which at 67.73%, is appropriate for the total level of effort completed at this phase of the project.

Based on the Evaluation Team's interview with the COMFISH Director of Administration and Finance, the total funds expended by the project by the end of FY15 are expected to attain approximately \$10M. Given the original budget of approximately \$11.5M, it appears that there will be approximately \$1.5M to complete the activities planned in FY16. This total may not be sufficient for completion of the activities planned for that year. During the Evaluation Team debriefing, USAID/Senegal staff questioned the accuracy of these forecasts. Follow up discussions are planned to resolve the potential issue.

C. RESOURCES ARE REACHING BENEFICIARIES

Based on our review of relevant documents, our analysis of relevant indicators, and our meetings with stakeholders, the resources provided to the COMFISH project appear to be reaching the intended beneficiaries.

According to our analysis of the relevant indicators shown in annual reports as shown in Annex 5, the resources allocated to COMFISH appear to be reaching the intended beneficiaries. For example, the number of beneficiaries receiving short training courses on food security and productivity (Indicator # 2) has attained 7,574 people, which is 63% of the EOP target of 12,050. (See the disaggregation of this indicator by gender, as described in Findings on Gender Outcomes.) In addition to fisher beneficiaries, the project has reached 108 organizations, as measured by the number of research institutes and academic institutions, government departments, consultation frameworks, and NGOs which have strengthened their capacities (Indicator #4), which is 55% of the EOP target of 196. Similar results, as measured by Indicators #18 and #21, show that the intended beneficiaries are being reached via training on climate change in general, and on adaptation to the impacts of climate variability and change, specifically.

The project has had the most success in reaching beneficiaries via the adaptation of new rules for resources management, and the application of new management practices as reflected in Indicators #14 and #15, for which COMFISH has achieved completion rates of 90% or higher. The number of individuals who have adopted new rules for collaborative fisheries resources management (Indicator #14) has reached 43,854 people, which is 94% of the EOP target of 46,646 people. Similarly, the number of producers and others who have applied new technologies or management practices (Indicator #15) has attained 40,045 people, which is 93% of the EOP project target of 42,837.

Our meetings with institutional partners and stakeholders in Dakar as well as our focus group meetings in the coastal communities confirm that the resources are reaching the beneficiaries. For example, members of the CLPAs in Sindia South and in Mbour noted during interviews and focus groups that the CLPA offices had been renovated, refurbished and equipped by the COMFISH program. In addition, members of the CLPAs in Cayar, Sindia South, and Mbour noted that COMFISH provided funds for two collaborative surveillance trips per month.

Though the data indicate that project resources are reaching beneficiaries, it is not clear that the lessons learned from project execution are being communicated to the stakeholders at all levels. For example, the lessons learned as described in COMFISH annual reports are not being communicated to the beneficiary coastal communities in accordance with a system of participatory reporting.

D. PARTNERSHIPS ARE EFFECTIVE BUT COULD BE STRENGTHENED

One of the key objectives of the COMFISH project is to enhance and strengthen the quality of the collaboration and partnerships between national, regional and local governments. The Evaluation Team's interviews with stakeholders at each level of governance indicated that collaboration had increased in the fisheries management sector. At the national level, for example, partnerships between the organizations and ministries across sectors of responsibility have been enhanced by COMFISH support of the consultation framework for the implementation of climate change adaptation policy via COMNACC. The steering committee for development of policy to integrate climate change into fishery policy includes the DPM, DEEC, COMNACC, FENAGIE, the CSE, REPAO, and Oceanographic Research Center of Dakar-Thiaroye (CRODT). In addition, the process to review and approve the proposed fisheries climate change adaptation policy developed by the steering committee has engendered consultation across levels of governance from the national to local levels within government organizations like the DPM, and across sectors with administration officials from the local prefecture and sub-prefecture offices.

Similarly institutional capacity development (as described below in the Sustainability Findings, Question 3), has strengthened these partnerships by providing venues for discussion and dialogue between representatives from each level of government in the fisheries management sector.

One of the weaknesses encountered early in the collaboration between COMFISH and the national government was the delay to approve or engage in the overall institutional steering committee for the COMFISH project. The primary roadblock appeared to be the Government of Senegal's slowness to validate the composition (including SCA, DEEC, USAID, DPM, and COMFISH) of the steering committee proposed by the DPM. To address the lack of an institutional steering committee, COMFISH worked with local institutions to develop official agreements to validate its cooperation with the government officials in the field. For example, the DPM wrote a "note de service" to document its cooperative work with COMFISH (i.e. work schedule, expected results, and validation of results). Similarly, the CLs were approved by local Prefects⁸ for the coordination and validation of the field work.

High quality collaboration based on informal arrangements in place with partner institutions have been developed during the COMFISH project. For example, COMFISH funded a Sea Grant Training Program in the United States for representatives from DPM, CRODT, IUPA, FENAGIE and APTE to empower them to apply techniques learned in Senegal's fisheries.

However, the Evaluation Team found that relationships among many of these partners are not strong nor formalized. These relationships will need to be strengthened and formalized in order for these associations to take responsibility for viability of the project. For example, APTE, FENAGIE and ADEPA have complimentary work plans and the organizations could benefit from supporting each other. Further, COMFISH support to these institutions is mainly for projects and activities that coincide with COMFISH's annual Work Plan, and do not necessarily support the specific objectives or work plans of the partner institutions. For example, FENAGIE and COMFISH have an MOU in place for specific activities and some operational support, but FENAGIE could use additional support in developing a strategic business plan to improve fundraising, and could also benefit from additional climate change training, which they can in turn disseminate to their members (in local languages), many of whom are in CLPAs.

⁸ The Prefect is the local authority representing the Minister of the Home Affairs

E. PROJECT CONTRIBUTES CONCRETELY TO USAID/EGO GOALS

As outlined in the Results Framework for the COMFISH project, the USAID EGO development objective to increase inclusive economic growth and the USAID FtF goal to sustainably reduce global poverty and hunger are supported by the four USAID/COMFISH IRs. These IRs support the USAID EGO sub goals of:

- Inclusive agriculture sector growth
- Increased private sector trade
- Improved management of natural resources
- Improved nutritional status especially for women and children

According to the performance indicators included in in Annex 5, the COMFISH project contributes to these goals. Though these indicators do not necessarily show direct evidence of concrete contributions to each goal, they do provide indirect evidence of progress towards the goals. The project completion rates for Indicators #2, (63%) #15 (93%), #16 (85%), #22 (71%) and #23 (100%) show that activities in support of the EGO will support the completion of the EOP targets by the end of the COMFISH program. Indicator #2, the number of persons who received short training courses on food security and productivity, addresses agricultural sector growth and improved nutritional status. Indicators #15 and #16 address the goal of improved management of natural resources. Indicator #22, the number of private food security companies (for profit), producer organizations, water users associations, women’s groups, associations of men and women entrepreneurs, and Community Based Organizations (CBOs) who have received assistance, addresses the goal of increased private sector trade. Finally, Indicator #23, the number of households that are benefitting directly from the assistance of the United States Government (USG), addresses the goal of improved nutritional status especially for women and children.

2.1.2 OBSERVATIONS AND RECOMMENDATIONS

Based on the Evaluation Team’s findings above, Table 3 summarizes the observations (improvement opportunities) and recommendations for Cross-cutting Question 1.

Table 3: Observations and Recommendations for Cross-Cutting Question 1

PRIORITY	OBSERVATION	RECOMMENDATION
1	<ul style="list-style-type: none"> • Need to strengthen coordination among high-level partners and project monitoring 	<ul style="list-style-type: none"> • Establish a Steering Committee including SCA, DEEC, USAID, DPM, COMFISH
2	<ul style="list-style-type: none"> • Budget may not be sufficient for final year of project implementation which could lead to destabilization of important COMFISH achievements 	<ul style="list-style-type: none"> • Review and discuss accuracy of FY 2016 budget concerns • Request budget supplement for FY 2016, if necessary
3	<ul style="list-style-type: none"> • Exit strategy lacking 	<ul style="list-style-type: none"> • Develop an exit strategy that features partner support as project activities decrease
4	<ul style="list-style-type: none"> • Lack of formalized frameworks with key collaborating institutions (e.g. FENAGIE, APTE, DEEC, ANACIM, Alliance, CSE) 	<ul style="list-style-type: none"> • Establish MOUs which provide framework for contractual implementation
5	<ul style="list-style-type: none"> • Lessons learned are included in reports but not necessarily being shared with to communities 	<ul style="list-style-type: none"> • Ensure regular presentation and review of quarterly reports to local stakeholders with focus on lessons learned

PRIORITY	OBSERVATION	RECOMMENDATION
6	<ul style="list-style-type: none"> Project monitoring indicates a few weak spots (e.g., Indicator #3, for communication and outreach materials; Indicator #17 for areas of biological significance under enhanced management) 	<ul style="list-style-type: none"> Ensure that annual work plan specifically addresses those areas that appear to be lagging; Check the quality of certain indicators to ensure that they are adequately measuring progress
7	<ul style="list-style-type: none"> Difficult to link activities in annual work plan to annual report 	<ul style="list-style-type: none"> Ensure that summary tables included in each report are easy to read and that activities are listed in a manner consistent between the reports

2.2 CROSS-CUTTING QUESTION 2

What outcomes has the project achieved so far to address climate change, gender, environmental compliance, and governance issues?

2.2.1 FINDINGS

The COMFISH program has achieved, for the most part, the outcomes expected at this stage of the project for the four themes under Question 2 related to climate change resilience, gender, environmental compliance, and governance. The findings for each of these themes are described in detail below.

A. CLIMATE CHANGE OUTCOMES

The major outcomes achieved by COMFISH to address climate change resilience include:

- Increased awareness of climate change among stakeholders through outreach and capacity development.
- Development of and implementation of climate change adaption plans in several coastal communities based on an assessment and vulnerability analysis.
- Enhancement of the scientific database to support policy/decision making and action plans.
- Integration of climate change adaptation into national fishery policy.

Analysis of Results using Logical Framework Indicators: According to our review of the COMFISH program’s success within the logical framework of representative indicators and our comparison of EOP targets and actual results, the incorporation of climate change adaptation into fisheries management has been successful so far. The relevant indicators, #18, 19, 20, 21, show completion rates of 65%, 50%, 82%, and 65% respectively.

Outreach and Capacity Development: Through outreach and capacity development, 3,017 of the targeted 4,673 beneficiaries (approximately 65%) have received training on climate change (Indicator #18). In FY14 almost 40% of the recipients of climate change training were women. Similarly, through climate change resilience training during the evaluation phase of vulnerability studies, and most recently, initiation of the first steps of implementation of the climate change adaptation plans in the three CLPAs noted above, 65% of the targeted beneficiaries (8,229 out of 12,705) have increased their capacity to adapt to climate variability and climate change (Indicator #21).

According to our discussions with stakeholders, climate change awareness is attained at all levels: national, regional, and local. The major outreach and capacity building activities on climate change have included:

- Outreach and capacity building on the basic concepts of climate change and adaptation measures for stakeholders at the local level;
- Capacity building on new environmentally friendly fish processing technologies for women;
- Strengthened capacities of stakeholders to use weather forecast information for marine safety; and
- Radio outreach programs on climate change, best fishing practices and sustainable management of fisheries.

Assessment of Vulnerability and Adaptation to Climate Change: Three climate vulnerability studies (out of the EOP target of six per Indicator #18) have been completed in the coastal communities represented by the CLPAs of Joal/Fadiouth, Sindia and Rufisque/Bargny. In FY13, the climate change adaptation plans for these communities were developed and validated. These plans include discrete actions such as the restoration and conservation of degraded ecosystems. At these locations, in the second quarter of FY14, the first steps in the implementation of climate change adaptation plans were completed. Implementation of climate adaptation plans is one of the fourteen policies on climate change (out of the 17 planned) that have been completed by COMFISH (as measured by Indicator 20 for an 82% completion rate). These initial steps included the dissemination of the rules from the CLs, support to establish or re-establish the collaborative surveillance groups, introduction of the early warning strategy for catastrophic storm events, and the provision of weather information.

Enhancing the Scientific Database to Support Policy/Decision Making and Action Plans: In order to provide a scientific basis for decision making and the development of climate change adaptation plans and strategies, studies were performed by COMFISH partners to further understand the potential impacts of climate change on fisheries and coastal communities. Examples of outcomes from four of these research studies⁹ include:

- Research completed by the CRODT on *Sardinella* stocks indicates that fish populations have moved north, away from historical fishing areas, as shown in Figure 3, and will continue to do so over the next decades, based on the analysis of the effects of environmental factors (i.e., sea water temperature and upwelling) on the distribution and seasonality of the stocks.
- GIS mapping of land use, infrastructure, and land cover have been produced to facilitate climate change vulnerability assessment and adaptation planning.
- GIS mapping studies have integrated scientific data collection and local knowledge to provide a scientific basis for fisheries management plans.

Integration of Climate Change Adaptation into Fishery Policy: In order to integrate climate change adaptation strategies into policies across governmental agencies, research institutions and other stakeholders, COMFISH worked with the DPM, DEEC, COMNACC, FENAGIE, CSE, REPAO, CRODT in FY13 to establish a steering committee on climate

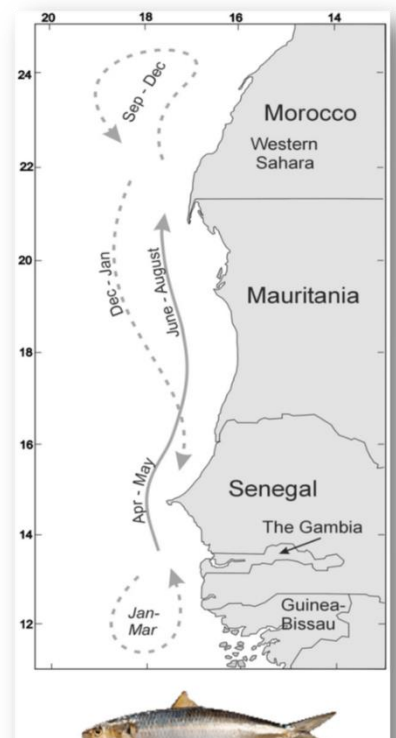


Figure 3: Historical Migration of *Sardinella*

⁹ Other completed research studies included: (1) North- West African *Sardinella* Population dynamics: environmental, biological and socio-economics constraints; (2) Bio-ecological and socio-economic study of *Ethmalosa* stocks in Senegal; (3) Contribution to the role of the artisanal fisheries socio-economic in the economy of coastal communities : Case study Cayar; (4) Diagnosis of the weaknesses and obstacles of the Governance concerning MPAs in Joal, Cayar and Bamboung; (5) Increasing the knowledge on climate change and fishing practices in the Senegalese ZEE and in other

change adaptation strategy. The steering committee developed an action plan to integrate climate change into fisheries polices and adopted a consultative framework to ensure dialogue on climate change between the fisheries sector and the other major sectors as represented by COMNACC. In FY14, a national workshop brought together representatives from 45 institutions to review and approve the action plan. In the subsequent series of workshops in three regions, Dakar, Louga and Fatick, the action plan was presented to and reviewed by 224 local representatives from the technical services for fisheries and environment, the administrative authorities as well as stakeholders.

B. GENDER OUTCOMES

The critical outcomes achieved by the program to increase the leadership and participation of women in fisheries management include:

- Improved infrastructure and protocols for fish processing (especially hygiene and sanitation).
- Training in bookkeeping and business management.
- Revitalization of REFEPAS.

Analysis of Results using Logical Framework Indicators: According to our review of the COMFISH program’s success within the framework of representative indicators and our comparison of EOP targets and actual results, the incorporation of women in fisheries management appears to be successful. For example, the disaggregation by gender of the data represented by Indicator #2, number of persons who received short training courses on food security and productivity, and Indicator #18, number of individuals who have received training on climate change, which show that the proportion of women participating in training ranged from 31 to 55% as shown in the Table 4.

Table 4: Disaggregation of Participants in Training Courses by Gender

INDICATOR	TOTAL PARTICIPANTS	TOTAL WOMEN	FISCAL YEAR
# 2: Individuals who received short training courses on food security and productivity	169 Workshops	32.4%	FY14
	2078 individuals	31.5%	FY13
	986 individuals	55% ¹⁰	FY12
	Not Available	NA	FY11
#18: Individuals who have received training on climate change	1841 individuals	39%	FY14+

Improved infrastructure and protocols for fish processing (especially hygiene and sanitation): The COMFISH program has contributed to increasing women’s incomes by improving fish processing activities which are typically performed by women. Example outcomes include:

- Construction of the pilot processing unit for the women’s association in Cayar;
- Training in functional literacy for the women’s association in Cayar;
- The provision of processors, cleaning material and equipment to women’s processing groups in Mbour;
- Capacity building on improved fish processing techniques for sanitation and hygiene in numerous coastal communities including Pointe Sarene, Saly, Cayar, Joal-Fadiouth, Rufisque/Bargny, and Sindia North/South;

ZEE of the SRFC member countries; and, (6) Monitor and Evaluate the impacts of MPAs, using biological, socio-economic indicators and governance

¹⁰ Data from the COMFISH FY 2012 Annual Report, Annex A1, reported as “Indicator 4. Ratio of women who have received short term training on food security (in relation to the total number of people trained).”

- Development of hygiene charters for eight communities in the CLPAs in Joal-Fadiouth, Rufisque/Bargny, Sindia North and South; and
- Participation by Cayar women's groups in three trade fairs to exhibit their products in Thies, Matam and Pusan, South Korea.

Training in bookkeeping and business management: Participatory training programs were developed and presented to provide women with the additional skills to manage their businesses. Example outcomes of these programs include the following:

- Capacity building for women in the 20-member GIE in Joal Fadiouth on the organizational skills to manage their new micro-credit fund association;
- Leadership training in cooperation with the DPM for 18 women; and
- Development of a revolving fund for women groups in Cayar.

Additional examples of outcomes that have been achieved to address gender issues are described below in Section 2.4.1, describing the findings for Question 4.

C. ENVIRONMENTAL COMPLIANCE OUTCOMES

Based on the results of the USAID 2005 biodiversity assessment and environmental threats and opportunity analysis, which indicated that overfishing and destructive fishing methods were direct threats to marine diversity in Senegal, COMFISH has facilitated the development of policies and strategies to reduce or eradicate bad fishing practices, and to promote the conservation of marine biodiversity and ecosystems. Environmental compliance, in the context of the COMFISH project, equates to compliance with the policies, rules and regulations to meet these objectives.

The important outcomes achieved to ensure environmental compliance include:

- Support for the national MPA strategy;
- Physical demarcation of MPAs using buoy markers in Joal, and Cayar; and
- Training (in operations, participatory surveillance and monitoring); and,
- Implementation of the Environmental Management and Monitoring Plan.

Analysis of Results using Logical Framework Indicators: According to our review of the COMFISH program's success within the framework of representative indicators and our comparison of EOP targets and actual results, environmental compliance interventions appear to have been completed successfully up to this phase of the project. The key indicators for environmental compliance, #14, #15, and #16, show that, at this phase of the project, the completion rates exceed 85%. The completion rates for indicator #14, the number of actors who have adopted new rules for collaborative fisheries resources management, and indicator #15, the number of producers and others who have applied new technologies or management practices, both exceed 90%. The completion rate for the relevant indicators for biodiversity conservation, #16, the number of hectares in areas of biological significance and/or containing natural resources under enhanced management¹¹ exceeds 85%.

Biodiversity Conservation - Support for MPA Strategy: An important objective of COMFISH is the promotion of the conservation of marine biodiversity and ecosystems by improving the national MPA management program. The COMFISH project has achieved the following outcomes in support of this objective:

¹¹ Indicator #17, the number of hectares in areas of biological significance under enhanced management has a completion rate of 24%; however, it is not clear that this metric is calculated correctly.

- Consensus development among stakeholders on the national MPA national strategy (SNAMP) by conducting workshops and obtaining approval in FY14 of the strategy by relevant experts from the Ministry of Environment and Sustainable Development.
- Capacity development for the DAMCP, DPM, National Parks Directory (DPN) and CBOs on MPA management through two workshops to consider certification programs for MPA managers and to develop associated training programs.
- Implementation of corrective measures/actions for poorly managed MPAs, through the development of action plans to address the weaknesses in the management of three MPAs in Joal Fadiouth, Bamboung and Cayar.
- Ecotourism development, by operationalizing the Joal-Fadiouth ecotourism interpretation center, to support the management of the Joal-Fadiouth MPA.

Physical demarcation of MPAs using buoy markers in Joal and Cayar: The proper maintenance of buoy markers is critical to enforcement of MPA regulations. COMFISH facilitated the following activities to demarcate MPAs:

- Monitoring, improved management of buoys in the MPA in Joal-Fadiouth and implementation of lessons learned for the installation of marker buoys for the Cayar MPA.
- Demarcation of the Cayar MPA using buoy markers based on GPS geolocation performed by the MPA management committee, in collaboration with the local Conservation Officer, the private company contracted to mark the boundary, the National Department of Lighthouses and Beacons, and WWF.

Training in operations, participatory surveillance and monitoring: One of the COMFISH objectives is to initiate a program of co-surveillance or collaborative surveillance and monitoring of artisanal fisheries in Senegal as the existing fisheries surveillance system focuses on industrial fisheries and is severely constrained by lack of resources. The goal, as articulated in the 2012 Strategy for CLPA Capacity Building, is to involve fishers, through the CLPA network, in planning and implementing participatory surveillance and monitoring. COMFISH completed the following outcomes in this area:

- Capacity development for the CLPAs, research institutions and the DPM to establish joint systems for collaborative fisheries surveillance.
- Outreach to and capacity development for CLPA collaborative supervision committees on methodologies to eliminate or control illegal, unreported and unregulated (IUU) fishing.
- Capacity development of the CLPAs from Cayar, Yene/Dialaw and Rufisque/Bargny on collaborative supervision and safety at sea by trainers from the DPM and DPSP.
- Development of a guide on participatory monitoring for CLPA supervision committees.
- Support for collaborative surveillance teams to conduct 50 surveillance trips (40 with the CLPAs in Joal Fadiouth, Sindia South, Mbour and Sindia North, and 10 with the village level teams in the Siedhiou region).
- Outreach and capacity development via radio broadcasts from 43 radio stations across intervention areas on the organization, and management of collaborative surveillance crews.
- Development of the collaborative mechanism for collecting, sharing and communicating scientific information on fisheries. These data were used to support the development of evidence-based collaborative fisheries management plans.
- Establishment of collaboration with the Western Indian Ocean Certification of Marine Protected Area Professionals (WIO-COMPAS) program.

Implementation of the Environmental Management and Monitoring Plan: The project has developed its Environmental Management and Monitoring Plan (EMMP) which is approved by the mission and the Senegal Environment Directorate (DEEC). An environmental monitoring and management plan report is produced every quarter and submitted for approval to USAID/Senegal.

D. GOVERNANCE OUTCOMES

One of the key goals of the COMFISH program is to strengthen the enabling conditions required to enhance governance in the fisheries sector in Senegal at all levels. The important outcomes achieved to address governance issues include:

- Strengthening CLPAs and their steering committees (ICC).
- Promulgation and adoption of CLs.
- Dramatic increases in the issuance of fishing licenses (see Figure 4).
- Increases in boat registration.
- Increases in the issuance of wholesaler's identification cards.

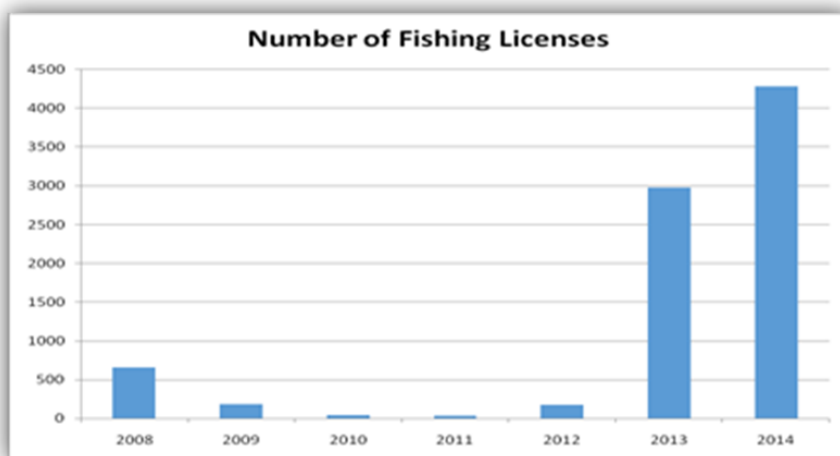


Figure 4: Increase in Fishing Licenses: Cumulative Data from Six CLPAs¹²

Strengthening of the CLPAs and their ICCs: The COMFISH project has leveraged the existing institutional network of CLPAs to establish collaborative management plans for priority fish stocks. As a result, strengthening existing CLPAs and developing new CLPAs has been critical to the success of the program. Specific examples of achieving this outcome include:

- Revitalization of CLPAs, and assistance, using a participatory and inclusive mechanism, to promulgate “local conventions” to implement the policy framework and the adopted fishery management strategy. (See promulgation of CLs below.)
- Capacity development of CLPAs and their ICCs on administrative and financial management, fund raising mechanisms, community organization and dynamics, and resource management, collaborative surveillance, and monitoring, and climate change adaptation.
- Organizing CLPAs into relevant technical committees (e.g., Rufisque/Bargny and Yene/Dialaw).
- Establishing the new CLPA in Kafountine in the Casamance.

¹² Joal, Mbour, Sindia North, Sindia Sud, Cayar, and Fass Boye.

- Facilitating the renovation and provision of equipment in CLPA offices in Rufisque/Bargny, Mbour, and Sindia South.

Additional examples of key outcomes which have strengthened CLPAs are described in Cross-Cutting Question 3 below, under Findings on institutional capacity building at the local level.

Promulgation and Adaptation of CLs: In order to provide the legal underpinning for CLPAs to negotiate fisheries management rules in each area of intervention, CLs have been promulgated by the CLPAs and approved by the local central government representative (i.e., the prefect or sub-prefect). The establishment and implementation of these CLs is also critical for stakeholders to participate actively in developing collaborative management plans. Specific examples of the outcomes achieved to support CLs include:

- Establishment of six CLs, for the CLPAs in Sindia, Mbour and Joal Fadiouth, in FY 12, and in Cayar, Rufisque/Bargny, and Yenne/Diallao in FY13.
- Development of new CLs in FY14 for the Ziguinchor, Kafountine, and Saint Louis CLPAs.
- Conducting surveys of fishery stakeholders and their equipment in Ziguinchor, Kafountine, and Saint Louis.
- Disseminating of CLs via awareness meetings (in Yenne/Dialaw, Rufisque/Bargny and Cayar), and radio programs (in Joal Fadiouth, Mbour, Ndayane, Cayar and in Rufisque).
- Development of three fisheries management plans for three zones: (1) Petite Côte (CLPA Joal, Mbour, Sindia-North, Sindia- South and Palmarin); (2) Cape Vert (CLPA Yenn-Dialaw, Rufisque-Bargny, Pikine and Hann) and (3) Grande Côte (CLPA Cayar, Dakar Yoff West and Fass Boye).

Additional examples of key outcomes which have strengthened the promulgation and implementation of CLs are described below in Cross-Cutting Question 3 Findings on institutional capacity building at the local level.

Dramatic increases in the issuance of fishing licenses, boat registrations and the issuance of fish seller cards: The management rules contained in each of the CLs require that members obtain boat registrations and fishing permits from the government. Similarly, each CL requires that fish processors obtain and display fish seller cards issued by the local CLPA. As a result of the promulgation and implementation of the CLs, significant increases in the number of fishing licenses have occurred, as indicated in Figure 4, at CLPAs where the CLs have been promulgated. Similar increases have occurred for boat registrations and fish seller cards.

2.2.2 OBSERVATIONS AND RECOMMENDATIONS

Based on the Evaluation Team’s findings above, Table 5 summarizes observations (improvement opportunities) and recommendations for Cross-cutting Question 2.

Table 5: Observations and Recommendations for Cross-Cutting Question 2

PRIORITY	OBSERVATION	RECOMMENDATION
1	<ul style="list-style-type: none"> • Numbers, roles and importance of women in the fishing sector unknown for entire coastline 	<ul style="list-style-type: none"> • Work with DPM Gender officer and REFEPAS to undertake national survey of women in Fishing
2	<ul style="list-style-type: none"> • Lack of access to credit results in both fishers and processors becoming indebted to predatory buyers 	<ul style="list-style-type: none"> • Establish revolving credit funds at the local level
3	<ul style="list-style-type: none"> • Lack of market access by <i>Ethmalosa</i> (Cobo) and <i>Sardinella</i> (Yaboy) fishers 	<ul style="list-style-type: none"> • Identify mechanism to broaden access (trade facilitation)

PRIORITY	OBSERVATION	RECOMMENDATION
	and processors enables predatory practices by buyers	<ul style="list-style-type: none"> Organize study tour for fishers and processors to central markets (e.g., Diabé)
4	<ul style="list-style-type: none"> Development of some partner institutions (e.g., FENAGIE) handicapped by lack of business and strategic plans 	<ul style="list-style-type: none"> Provide training and support for the development of business and strategic plans
5	<ul style="list-style-type: none"> Lessons learned by some communities not being accessible to others 	<ul style="list-style-type: none"> Organize exchange visits and study tours; Participate in fish product exhibitions
6	<ul style="list-style-type: none"> Mechanics of the Cobo (<i>Ethmalosa</i>) trade unclear 	<ul style="list-style-type: none"> Support a Cobo (<i>Ethmalosa</i>) value chain analysis to identify opportunities to improve sales and increase revenues of fishers, processors, and sellers

2.3 CROSS-CUTTING QUESTION 3

What is the likelihood that project approaches/practices and results will be sustained?

2.3.1 FINDINGS

USAID/COMFISH's long term objective, over a 20- to 30-year timeframe, is "to end overfishing in Senegal and provide the nation with a sustainable source of high quality protein that contributes to the quality of life in artisanal fishing communities, and maintains the capacity of coastal and marine ecosystems to produce goods and services that are useful to, and desired by the people in Senegal." Cross-cutting Question 3 addresses this objective, and asks whether or not project approaches, practice and results can be sustained when the project ends in 2016. The Evaluation Team found that the chances of sustainability are likely, based on project successes thus far: institutional capacity building, information dissemination and awareness raising, training (capacity building) and learning by doing.

A. INSTITUTIONAL CAPACITY BUILDING

The COMFISH project has strengthened institutions at both the national and local levels through capacity building activities; support for various committees, working groups and research studies; provision of resources and equipment for offices and processing sites, and technical support for management and climate change adaptation plans, among others. From FY11 through FY14 the project sites that 108 total research/academic institutions, government departments, consultation frameworks and NGOs have had their capacities strengthened with the assistance of the COMFISH project. Several important examples of capacity building at the institutional level are detailed in the narrative below.

National Level

At the national and governmental level, the DPM and COMFISH work together closely. Specifically, COMFISH enabled the validation and approval of the National Strategy on MPAs by the Ministry of Environment and Sustainable Development, and supported the MPAs in Cayar and Joal by marking MPA boundaries with buoys.

COMFISH also helped set up a national committee on the management of fishing capacity in Senegal, and supports the National Management Committee on Small Pelagics. They also supported the creation of a Technical Working Group (TWG) in charge of developing and validating fisheries management plans on targeted fisheries for *Sardinella* and *Ethmalosa*, whereas two meetings were held in year four. Members in this TWG include the Deputy Director of Fisheries, DPM technicians, fisheries inspectors in project areas, and

COMFISH experts. The Evaluation Team found that due to the lack of an appropriate management plan or CL (Saloum Delta), the *Ethmalosa* fisheries are largely unregulated and susceptible to illegal fishing activities.

COMFISH also revitalized the National Consultative Council for Marine Fisheries (CNCMP), and provided training to DPM staff on leadership, population, health and environment. In year three, the project awarded a training grant to the Technical Inspector of Fisheries to attend a five month training at URI to review and study Senegal's governance system, and to learn about fisheries management and how to adapt good practices and approaches to Senegal's system.

At the government level, COMFISH collaborated with and supported DEEC. COMFISH supported a study on climate change vulnerability and is currently supporting a national climate change adaptation plan which is an obligation under the Kyoto Protocol. Further, COMFISH helped set up COMNACC. COMFISH funded a regional training on website design and operation, which allowed COMNACC to develop a platform for disseminating climate change information (comnacc.org). COMFISH also partners with COMNACC to organize and deliver workshops on climate change.

COMFISH has also supported research institutions, such as CRODT and IUPA/IFAN. CRODT and COMFISH have an MOU in place for scientific support to develop collaborative management plans on *Sardinella* and *Ethmalosa*. COMFISH supports their research for establishing management plans for small pelagics, and also supported focus group studies at landing sites to identify the bio-ecological and socio-economic characteristics of *Ethmalosa* stocks (this report has been submitted for validation). Also of importance to note, is that COMFISH facilitated CRODT's capacity to collect fisheries data in the Casamance and Saloum Delta, areas which were not previously covered by their research.

For IUPA/IFAN, COMFISH funded the Master's degrees for three students, as well as one PhD student from IUPA and one PhD student from IFAN. COMFISH also funded a study by IUPA on fishing gear selectivity for small pelagics in Casamance and the Saloum Delta. One area where CRODT requested additional assistance, is with recruiting young researchers in areas outside biology, where the majority of CRODT staff are experts. CRODT staff believes they could benefit from research support in areas such as economics, sociology, politics, etc.

COMFISH also facilitated a training workshop in year three on the use of the Electronic Length Frequency Analysis (ELEFAN) software at the University Cheikh Anta Diop (UCAD) in Dakar. Trainers were experts from the University of British Columbia. Thirty participants attended this training from various organizations, including DPM, CRODT, WWF, IUPA, IFAN and COMFISH. While research institutions have certainly been strengthened by COMFISH efforts, there is also a duplication of efforts occurring in some research studies between CRODT, IUPA, IRD/IFAN and DPM which can lead to redundancy and wasted resources.

There are numerous other examples of institutional capacity building at the national level, including:

- Supporting SCA with their action plan for managing fishing capacities and controlling IUU fishing.
- Supporting CSE in mapping fishing sites and infrastructure to inform management plans.
- Supporting APTE in the construction/implementation of a processing plant in Cayar.
- Supporting ANACIM to collect and disseminate forecast information on weather and sea conditions to fishermen.

Further, COMFISH supports the collaboration between various institutional partners, which is an important foundation to build to allow project results to continue when the project has ended. For example, COMFISH funded a Sea Grant Training Program in the United States for representatives from DPM, CRODT, IUPA, FENAGIE and APTE to empower them to apply techniques learned in Senegal's fisheries.

Local Level

At the local level, CLPAs in COMFISH target zones have benefitted greatly from project support. As the main enforcers and implementers of the LPS at the local level and on the ground, this support is crucial for maintaining project successes and results once the project is finished. One of the main areas of support provided to CLPAs in the target zones is the development of CLs, which provide site-specific guidance and regulations to manage fisheries in support of the LPS. At the time of the evaluation, CLs have been established in all project sites besides the Saloum Delta, and COMFISH and CLPAs have signed MOUs to formalize their partnership for developing and implementing these CLs.

As a component of implementing CLs, COMFISH supports collaborative surveillance teams at CLPAs. In 2014, there were over 40 CLPA surveillance trips at sea in Cayar, Rufisque/Bargny, Joal Fadiouth, Sindia North and South and Mbour. The Evaluation Team found that further support for surveillance teams is needed, particularly in Cayar and Ngaparou, where patrol vehicles and funding for surveillance committees were insufficient to safeguard project results. For example, in Cayar, the patrol vehicle is less powerful than those used by illegal fishers (40 HP vs 60 HP).

COMFISH has also helped CLPAs plan for and adapt to climate change by helping to implement the National Strategy for Adaptation to Climate Change in the fisheries sector and coastal areas at the local level. Climate change vulnerability assessments were conducted in Rufisque/Bargny, Joal Fadiouth and Sindia, and adaptation plans have been approved by the ICCs in these areas. As a result, implementation of adaptation strategies has started in the CLPAs of Rufisque/Bargny, Sindia North and South and Joal/Fadiouth.

In addition to providing support for CLPAs, COMFISH also established the first CLPA in Kafountine (a phase II project zone) through a participatory approach. Local stakeholders such as regulatory authorities, the Ziguinchor fisheries service, and fisheries practitioners were all consulted in this process, exemplifying COMFISH's ground-up approach to implementing activities. Following the establishment of the CLPA, representatives were trained in a three-day course on the role of CLPA council members.

In some cases, CLPAs already existed in project areas, but were essentially inactive before COMFISH interventions (e.g., Rufisque/Bargny, Cayar). Other sites were active, but were in need of training in various areas. To address these needs, COMFISH provided trainings that including the following: financial and administrative management, participatory surveillance, climate change adaptation approaches, computer skills, hygiene and sanitation best practices for women transformers, and peace and conflict resolution.

Further, COMFISH supports the internal operation of CLPAs by setting up technical committees. In Rufisque/Bargny and Yene/Dialaw, committees were set up on the following: awareness, information and communications; environmental and fishery resource management; conflict prevention and settlement; finance and social action; and surveillance and safety at sea. In addition to supporting the function and improvement of CLPAs, COMFISH has also provided funds and equipment in the shape of computers, printers, office furniture, chairs, etc. CLPAs in Rufisque/ Bargny, Mbour, Sindia South and Saint Louis were renovated as a result of the project.

At project sites in the newer intervention zones (i.e., Casamance, Saloum Delta and Saint Louis) the Evaluation Team found that generally, the CLPAs had similar needs, and require additional project support in the following areas:

- Assist CLPAs in finalizing the process of official recognition and preparing action plans.
- Determine more efficient financing mechanisms to facilitate their work and enforcement of LCs.
- Improve infrastructure at main landing sites (e.g., roads, electricity, running water, and equip the fisherman's center ("maison du pecheur" in French) with computer, chairs, tables, internet, etc.).
- Provide credit schemes or revolving funds for the communities.
- Disseminate updated fishery maps.

- Improve material, equipment and techniques for proper handling and processing (hygiene).
- Extend radio programs in communities where they do not exist.

The Evaluation Team also found that CLPAs could be further strengthened if the LPS was updated to reflect the good governance aspects that COMFISH is promoting at CLPAs. For example, the LPS should include and define the roles of ICC officers, and should require a balance of genders in ICC offices. Further, conditions should be established that need to be met in order for CLPAs to open bank accounts so that the government can more easily transfer funds to CLPAs outside of Dakar. The Evaluation Team also found that surveillance officers on the ground are concerned about life insurance and their status for enforcing the law. These concerns should be addressed. Further, while ICC members do not need identity cards because they are designated via ministerial decree, it would be beneficial for each college to establish membership cards¹³ to improve management in the sector.

CLPAs were supposed to receive 60% of fishing licenses, wholesaler cards, and boat registration fees¹⁴, as well as a portion of penalty fees from surveillance efforts, but the system is not working because the CLPAs do not have bank accounts (there is no legal basis to open an account to have access to government funds). In order to rectify this, the government granted each CLPA with 3 million CFA this year. However, due to the issue of who should open accounts and sign on behalf of the CLPA, the funds have not been released. Meanwhile, the project, in conjunction with its partners, suggested the following mechanisms for mobilizing internal resources for operations:

- Making and selling membership cards.
- Collecting contributions from GIEs.
- Collecting payments from impounded boats.
- Reducing the amounts CLPAs pay for offences committed by their members.
- Helping CLPAs organize one-day public events on fisheries to create purchase points for fishery products.
- Soliciting contributions from gas stations, refrigeration facilities, banks and other fisheries sector stakeholders.
- Organizing income-generating activities.

Further, studies need to be completed to quantify the needs of each CLPA for activities and operation, in order to identify a fund-raising target.

A major obstacle to establishing a foundation for sustainability of project results is ensuring that CLPAs communicate with each other and work together when the project is completed. As fishery stocks traverse multiple CLPA zones, it is crucial that they collaborate to ensure sustainable management of these stocks. For this reason, COMFISH is working on developing collaborative management plans for *Sardinella* in the six project zones that encompass multiple CLPAs. In turn, the project developed Stock Management Units (UGS) for each of the six project zones to coordinate this effort. Each UGS is composed of the CLPAs within the zone, with the exception of the Saloum Delta, which does not have a CLPA or CL. COMFISH is also in the process of establishing a CLPA network (the terms of reference still need approval by the DPM). COMFISH also provided training on co-management, facilitation techniques, organizing farmers, the mission of CLPAs and the objectives of the COMFISH project to ICC members, the facilitators, and the liaison officers (see Figure 5 below). At the end of the project, the liaison officers will absorb the responsibilities of the facilitators as the link between the community and fisheries administration.

¹³ All fisheries stakeholders are members of the CLPA even without holding membership cards.

¹⁴ The World Bank-funded PRAO program supports the registration of artisanal fishing boats and fishing licenses.

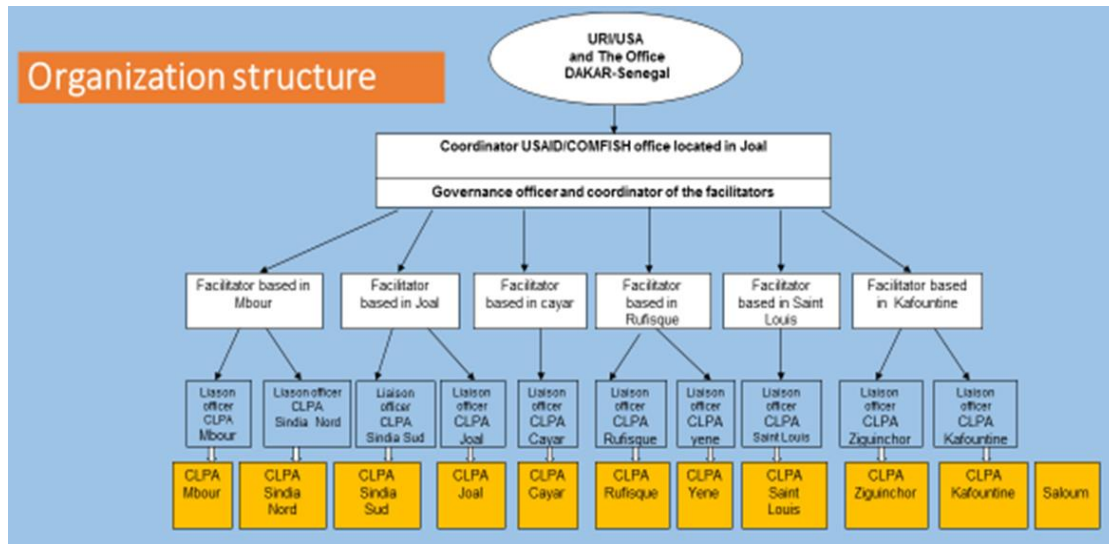


Figure 5: CLPA Links to USAID/COMFISH

In addition to supporting CLPAs, COMFISH also provides support to women's groups at the local level. As discussed further under Question 4, COMFISH has provided training to women processors and members of GIEs on subjects including functional literacy, community organization, information technology, good processing practices, hygiene and sanitation, and climate change adaptation. Following these training sessions, the women in Pointe Sarene (6,000 processors) who are organized under the Association of Women in Point Sarene (AFET) adapted and implemented a charter on good hygienic practices. Women in Joal Fadiouth who were trained were then able to apply the financial management tools they learned to manage a newly established micro-credit fund, and they developed a plan of action for EIG members to apply lessons learned. COMFISH has also supplied equipment and materials for cleaning and processing.

The Evaluation Team observed that women are generally satisfied with project interventions, but that there are also many ideas for improvement. The main requests for support from women in the field were in accessing credit and markets, and improving processing sites (where COMFISH has not already done so). For example, women in Djirnda tried taking their fish to Guinea to sell it, but the buyers found out and lobbied so that noone would buy their fish. The Evaluation Team also recognized that women are under-represented in CLPA leadership and ICCs.

A. INFORMATION DISSEMINATION AND AWARENESS RAISING

The COMFISH project uses various means to disseminate information and raise awareness about climate change, best practices, project successes, CLs and the MPA strategy, among others. Methods include using the facilitator, radio broadcasting, Short Message Service (SMS) alerts to spread weather forecast information, workshops, meetings, and various other media sources such as factsheets, billboards, and posters.

The facilitator is a COMFISH employee, but lives in the community of the respective CLPAs. The role of the facilitator is to act as an intermediary between the fisheries administration and the community, disseminating news between the two. For example, in 2014, the project trained facilitators on climate change to permit replication of this training in local communities and facilitate the development of collaborative strategies on the coast. The facilitators also help choose radio program topics for the communities (see paragraph directly below).

COMFISH works with ANACIM to disseminate meteorological safety information to fishermen along the coast. ANACIM uses a SMS alert system of colored flags to notify fishermen of high winds, swells, and dangerous weather that reaches around 1,000 people. In turn, these people communicate the message received to additional people. Certain Imams receive the message, and spread the message following prayers.

In order to help stakeholders understand the messages transmitted, ANACIM organized trainings for 224 people from various CLPAs on receiving and interpreting the information. This system was found to be effective in Saint Louis and Cayar, but the Mbour interviewees noted that the information could be more accurate for the local CLPA fishing zones. In general, actors are really pleased with this project. Fishermen have understood the trainings, and some have said the information can save their lives. ANACIM would like to expand this project by establishing electronic billboards on the coast to warn actors of dangerous weather and sea conditions.

To disseminate information about CLs, COMFISH uses awareness building meetings and radio programs. COMFISH organized nine meetings with various CLPA decision-making bodies in Yenne/Dialaw, Rufisque/Bargny and Cayar to explain the application of local conventions. COMFISH also has agreements with community radio stations which has led to the production of 160 radio programs on climate change and fishing. The main objectives of these programs are to share information about climate change (i.e., effects, maritime safety, impact on resources, stock management, indigenous knowledge sharing) and LCs (functions, roles and responsibilities of crews, good/bad fishing practices). Another important topic covered is how elderly individuals can share their experience with youth regarding adaptation to climate change. A collaborative approach was used to select these programs, and representatives from CLPAs and local fisheries services were involved in the process. The Evaluation Team found that representatives in Cayar were particularly content with the information shared, and they acknowledged that the information is communicated in a language they understand, and that the timing of the programs is convenient. COMFISH also organized a workshop in March, 2014 on preparing and presenting radio programs to improve communication between community extension workers, facilitators, representatives of community radios and the project's communication officer. Twenty participants attended this training, including community extension workers, representatives of local fisheries services and radio presenters.

The project also uses “reporting back” sessions as a means to confirm study results and to disseminate information found. For example, after validating the final report titled “Diagnostic Study of Existing Consultation Frameworks on Climate Change, Fishing and the Marine and Coastal Environment” by the Vulnerability and Adaptation group under COMNACC, COMFISH held a national reporting back session, as well as additional sessions in Dakar, Louga and Fatick. At the national session, 60 participants attended from 45 institutions to discuss the results and recommendations of this study. Around 224 people were trained at the regional level including local stakeholders, local technical services for fisheries and environment and the administrative and local authorities. In addition to serving as way to share information, these “reporting back” sessions are also useful for encouraging and improving relationships among COMFISH partners. The study itself was co-chaired by DPM, DEEC and COMNACC, but CSE, CRODT and ANACIM were also involved in related consultative meetings.

Another example of information dissemination is through COMFISH partner, Alliance, which convenes “coffee talks”, or discussions, on IUU fishing and inland fisheries, aquaculture and food security in Senegal. In turn, the alliance also disseminates the results of the project, and of the project's partners. In 2014, the Alliance held two coffee talks.

COMFISH works to improve project visibility by communicating project information and successes. They have done this using factsheets, billboards, greeting cards, video and photo reports, etc. However, the Evaluation Team found that project successes could be communicated better, even in reports submitted to USAID, which would benefit from a more direct linkage to the work plan and clearer organization.

B. TRAINING (CAPACITY BUILDING)

A major mechanism the project uses to capture and communicate lessons learned is through capacity building workshops. The project estimates that more than 10,000 actors have been trained in CLs and Climate Change Adaptation plans. The following recent examples demonstrate the diversity of COMFISH workshops, as well as the target groups and partners that have benefitted from these trainings:

- Two workshops were held (one in 2013 and one in 2014) for the DAMCP, DPM and DPN staff and other community stakeholders in MPA management.
- In 2014, 919 people at the local level from various CLPAs were trained in basic concepts of climate change and adaptation measures at the local level.
- In 2014, 40 participants from four different CLPAs in Yene/Dialaw, Rufisque/Bargny, Sindia North and South were trained on administrative and financial management.
- In 2014, three workshops were held at the new activity sites in Ziguinchor, Saint Louis and the Mbour to train CLPA leaders on the management of shared resources (*Sardinella* and *Ethmalosa*) and on CLPA functions, communication and roles and duties.
- In 2014, three workshops in Dakar, Rufisque and Mbour were held for CLPA consultation framework members to understand how collaborative management plans for *Sardinella* fisheries need to have harmonized management across CLPAs in Joal, Mbour, Sindia North, Sindia South, Yene-Dialaw, Rufisque-Bargny, Cayar Dakar Ouest, Pikine and Hann.
- In 2014, 214 stakeholders were reached in ICC trainings for CLPAs involved in *Sardinella* and *Ethmalosa* management.
- The fisheries administration office in Saint Louis received training on climate change, administrative and financial management, preparation of a local convention, participatory surveillance, and management plans for *Sardinella* and *Ethmalosa*. CLPA members at this site praised the project for valuing indigenous knowledge, and for using this traditional knowledge to form management plans.
- Another important training to acknowledge is the 2012 leadership training organized by URI's "Fisheries Leadership Institute". Participants included representatives from DPM (including the DPM Deputy Director), fisheries research institutes (including the director of CRODI), as well as local stakeholders groups and project staff. The course empowered participants to explore new partnerships, tools and principles they can apply to fisheries policies in order to achieve sustainable management of fisheries in Senegal. Trainings of this nature should be continued so that the project can ensure that national and local associations can take responsibility for short and long term viability of the project.

C. LEARNING BY DOING

COMFISH uses a "learning by doing" strategy to strengthen partner organizations, create synergy amongst stakeholder in the sector and build capacity. Rather than implementing interventions using the COMFISH project alone, the project supports its partners in implementing interventions so personnel at these organizations can apply their skills at a practical level. This allows the partner organizations to practice interventions first-hand that will need to continue once the project is finished, thus supporting sustainability of project results and practices. Several important examples are noted below.

"PENCOO GEJ"

The designation of a local project name "PENCOO GEJ", which translates to "joint management for sustainable fishing" exemplifies the collaborative consultation process COMFISH uses for effective implementation and acceptance of interventions at all levels. For example, when COMFISH designs its work plan, all of the partners provide ideas, COMFISH has a retreat to discuss these ideas, and then the partners and COMFISH staff reunite to strategize and develop the work plan. These consultations allow the project to understand how to avoid institutional and stakeholder blockages or reluctance to accept interventions.

APTE

The COMFISH project supported APTE in improving fish product processing and conservation techniques in Cayar. This included construction of the modern processing unit, setting up a technical committee to monitor fieldwork, supporting Income Generating Activities (IGA) and providing technical support and training.

ANACIM

As mentioned above, COMFISH supports ANACIM in its efforts to disseminate meteorological data to fishermen to warn them of high winds or bad sea conditions for fishing. In particular, COMFISH provides resources and supports training sessions to actors on interpreting the data received through SMS alerts from ANACIM. COMFISH helped with outreach to fishermen and to show actors and potential funders the added value of this intervention.

IUPA/IFAN

As mentioned above, COMFISH funded three Master's degrees as well as one PhD student from IUPA and one PhD student from IFAN. The IRD/IFAN students presented their research to the Evaluation Team, who found the data on size at first capture, juvenile concentration areas, and breeding trends to be extremely important in developing management plans for fishery stocks.

CLPA Collaborative Supervision Committees

COMFISH supports CLPA collaborative supervision committees in support of LCs and to fight IUU fishing. The project trained CLPAs in Cayar, Yene/Dialaw and Rufisque/Bargny on collaborative supervision and safety at sea in order to better implement and monitor LCs. Twenty-three participants attended this training, which included three days of theory and two days of practical work. COMFISH also provides field training for DPM staff using participatory surveillance trips.

CLPA Liaison Officers and CLs

Liaison Officers are elected to the CLPA in a democratic and transparent manner by ICC members. These officers are always chosen from among fisheries stakeholders in the area. Because they are local actors, they are respected more than if they were outsiders, and are accepted by the community.

CLs are established through a participative process that involves local actors. The fishermen are involved in the process of defining management rules, and are therefore more likely to comply. The Evaluation Team found that in Cayar in particular, before the CL was in place, few people complied with national fishery laws. Following CL implementation and training of CLPA members, the CL is followed by many more actors. COMFISH is the first project to establish LCs approved by the state.

2.3.2 OBSERVATIONS AND RECOMMENDATIONS

Based on the Evaluation Team's findings above, Table 6 summarizes observations (improvement opportunities) and recommendations for Cross-Cutting Question 3.

Table 6: Observations and Recommendations for Cross-Cutting Question 3

PRIORITY	OBSERVATION	RECOMMENDATION
1	<ul style="list-style-type: none">The Project has helped establish CLs in all most project sites except for the Saloum Delta	<ul style="list-style-type: none">Establish and support implementation of CLs in all sites, especially the Saloum Delta <p><i>The largest constraint to developing a CL in the delta is the widely separated islands. There are 9 CLPAs in the Saloum with populations spread out across dozens of islands. The project needs to choose the most suitable site and develop a CL with the participation of the coordinators of each CLPA</i></p>
2	<ul style="list-style-type: none">Women's voices in national politics are not regularly acknowledged or listened to	<ul style="list-style-type: none">Reinforce women's lobbying and empowerment by conducting a diagnostic study on the roles they play in the fisheries sector with REFEPAS and DPM/Gender Office

PRIORITY	OBSERVATION	RECOMMENDATION
3	<ul style="list-style-type: none"> The <i>Ethmalosa</i> Fishery is largely unregulated and susceptible to considerable illegal and unreported exploitation 	<ul style="list-style-type: none"> Work with DPM and partners to develop an <i>Ethmalosa</i> Management Plan
4	<ul style="list-style-type: none"> Women have trouble buying, storing and/or transporting product to market making them particularly vulnerable 	<ul style="list-style-type: none"> Help establish mechanism to provide short term loans (revolving credit), build storage facilities and gain market access
5	<ul style="list-style-type: none"> Markets, especially regional ones, often tightly controlled by the wealthy merchants which keeps women from selling their fish directly 	<ul style="list-style-type: none"> Help establish trade links through regional markets <p><i>Investigate the possibility of establishing trade links with Kaolak or Diaobé (the large fish market near the Guinean border). Use USAID/Yajeende to establish market connections in other areas of Senegal</i></p>
6	<ul style="list-style-type: none"> Project efforts to facilitate CLPA networking could go further to help create opportunities to exercise political pressure 	<ul style="list-style-type: none"> Strengthen National CLPA network (survey, workshops, etc.) <p><i>Organize exchange visits with successful CLPAs</i></p>
7	<ul style="list-style-type: none"> Project has had many impressive successes but could capitalize on them better 	<ul style="list-style-type: none"> Strengthen communications about successes; brochures; fact sheets, etc.

2.4 CROSS-CUTTING QUESTION 4

Have capacity-building and increased leadership/management opportunities for women led to increased participation of women in leadership roles in the community?

2.4.1 FINDINGS

While baseline data on gender is insufficient and the effects of leadership training were not closely monitored, the Evaluation Team found solid evidence that the COMFISH project has contributed to building capacity and increasing leadership opportunities for women by raising awareness of gender issues and strengthening economic opportunities. These interventions have led to positive impacts on women in the target communities.

A. AWARENESS OF GENDER ISSUES

The project has contributed to raising awareness of gender issues through outreach, and through supporting REFEPAS.

Following project consultations with women involved in the fisheries sector, the “Capacity Building Strategy for Women Active in the Fisheries Sector” was developed to better take into account their interests in the process of decision-making at the local and national level. Also developed along with this strategy was an “Action Plan for Capacity Building of Women Active in the Fisheries Sector”. COMFISH did not have sufficient funds to implement the strategy, but began by raising awareness of the need to involve women in decision-making processes. As a result, a “Declaration of Women Active in the Fisheries Sector in Senegal” was created and signed by women representing various women’s organizations in Senegal, and also by the director of DPM. The declaration calls for:

- 1) Including women in all instances of government related to the artisanal fishing sector.

- 2) Abiding by the Constitution of 2001 and the Senegalese Equality laws that call for the equity of genders in all partially or completely elected assemblies in the fishing sector.
- 3) Using political news to enforce concerns that the women find important, including family health, girls' literacy, reduction of domestic violence, family planning, and the tough working conditions for women.
- 4) Including a women's axis in all local and national management plans for fisheries to take into account their interests, concerns, and values.

This declaration was also disseminated at the local level by the liaison officers so that women at project sites could sign it. The coordinator of the Gender Bureau at the DPM took part in this process.

The project also supported awareness raising of gender issues among women themselves. COMFISH included women in the process of elaborating CLs and management plans for CLPAs through focus group sessions. This was the first time women had been included in the process, which has previously only concerned fishermen and the administration of CLPAs. As a result of this process, women are more conscious of their power and responsibilities in the sector, and they are dynamically claiming their role in this process, as demonstrated through their revitalization of the women's network, discussed below.

This enthusiasm, coupled with support from the DPM Gender Office and the COMFISH project, led to the revitalization of REFEPAS, which has existed since 2000, but was not functional. REFEPAS then used the existing women's strategy and action plan as guidance to elaborate their own action plan. The REFEPAS action plan was then validated by COMFISH and its partners. COMFISH equipped the new REFEPAS office within the premises of the Regional Department of Fisheries in Dakar in fulfillment of one of the activities listed in this action plan. While COMFISH focuses on strengthening REFEPAS as the main catalyst for lobbying at the national level for the women's capacity building strategy, the project also creates synergies with partners such as DPM, Environmental Development Action in the Third World (ENDA), and Alliance.

REFEPAS is currently conducting a national tour to raise awareness among women of the need to develop business cards to professionalize their role in the industry. While in the field, the Evaluation Team found evidence of the results of this tour, as women in both Cayar and Saint Louis have been trying to develop business cards. One area where REFEPAS could use further support, is in conducting a study on the socio-economic contribution from women to the fisheries sector. This will show the value of the women in the sector, and assist with lobbying efforts. While REFEPAS represents a network of women at a higher level, women on the ground-level at CLPAs are still organized. If women across different CLPAs were better connected and able to share lessons learned, a more powerful network would emerge.

COMFISH also uses radio programs to disseminate information about women in the artisanal fisheries sector. The Evaluation Team found that these radio programs have contributed to a better understanding of the rights and obligations of women. For example, in Cayar, the men involved in the ICC acknowledged the responsibility and roles of women in the sector. However, there is a need for women to play a more active role in these programs, including presenting the programs themselves. Programs broadcast information on hygiene and sanitation at fish processing sites, and on the Women's Declaration in the fisheries sector.

B. STRENGTHENING OF ECONOMIC OPPORTUNITIES FOR WOMEN

The project's strategy for strengthening economic opportunities for women is through providing the tools they need to succeed via capacity building, credit, and the provision of modern equipment. This combination allows the women to improve their processing practices, thus improving their product at the market, while also contributing to the sustainability of the industry by introducing best practices and raising awareness of climate change issues. Further, by supporting REFEPAS, the project is helping to strengthen women's voices in the political arena. Conducting a national survey of the socio-economic contributions from women to the sector will be extremely important in reaching this goal.

Hygiene and Sanitation Interventions

COMFISH and APTE partnered to strengthen the capacity of women processors to cope with climate change. This intervention consisted of building awareness, establishing collaborative hygiene committees, and developing codes of conduct for good hygiene. As a result of these efforts, eight hygiene charters were established at sites covering CLPAs in Joal-Fadiouth, Rufisque/Bargny and Sindia North and South. The women at these sites now value delivering finished products, and have reported successful outcomes as a result of this training. They are also better organized to improve working conditions and address the adverse effects of climate change.

Women in Saly also received training on best practices for hygiene and cleaning. Following this training, the women set up a committee in charge of organizing weekly cleaning sessions of the site, and also initiated contributions for the maintenance of materials (a charter on hygiene was elaborated and followed). However, the Evaluation Team found that women in this community would like the project's support in organizing themselves into an association. They would also benefit from training in financial and administrative management.

In Point Sarene, 6,000 women processors are organized under the AFET and in 30 GIE. These women received training on surveillance, weather forecasting and climate change, radio programs, and best practices for hygiene and sanitation at processing sites. Following this training, the women also adapted and implemented a charter on good hygienic practices.

In Joal-Fadiouth, Rufisque/Bargny, Sindia North and South and Mbour, the project donated cleaning equipment and processors, and improved hygiene and sanitation practices. However, the Evaluation Team found that the communities of Kafountine, Missirah and Fatick and do not have access to appropriate processing sites or materials.

Economic Interventions

Women processors in Joal Fadiouth requested the support of the project in managing their new micro credit fund. The nature of the request alone implies that awareness has been raised about the services the project can provide to support women. A training session was provided for 20 members of the GIE to give them a better understanding of their roles and responsibilities, as well as using financial management tools. The trainers prepared a plan of action for use by GIE members to apply lessons learned. However, the Evaluation Team found that women in the following CLPAs are still struggling due to a lack of access to credit: Ziguinchor, Kafountine, Missirah, Djirnda, Fatick, Joal Fadiouth, Sindia South, Mbour, Sindia North and Yenn Dialaw.

THE CAYAR CASE

The new processing plant at Cayar is a huge success for the project and for the beneficiaries in the community, but it needs to be considered a Pilot due to its novelty. The plant needs to be monitored over the next few years to evaluate the true impact and success of the project.

However, women processors in Cayar have benefitted greatly from training, technical support and the improved processing facilities at the plant. The first two years of the project focused on capacity building for women to ensure that they could take on the responsibilities of the plant and revolving credit fund, including functional literacy, bookkeeping, information technology, hygiene and sanitation during processing, standardization of units, labeling, and renewable energy. All of the equipment in the processing facility was approved by the women themselves. COMFISH provided technical support to ensure that the microbiological quality of products from the processing site are satisfactory. These results will be used to obtain FRA trade authorization from the Ministry of Trade.

APTE and COMFISH both contributed to the revolving credit fund for two GIEs in Cayar, which has proven extremely successful. The women were originally given 1,000,000 CFA (about USD 2,000) and have increased the fund to 3,024,300 CFA. The women do all of their own bookkeeping to manage the revolving fund.

In Cayar, APTE and COMFISH partnered to deliver training sessions in Wolof to women involved in processing using pedagogic tools. In order to transmit messages in a way the women would understand, they used storytelling, dancing, and even presented information inside a shape resembling a mosque, so women could chant lessons as if they were chanting prayers. APTE also developed photos showing best practices with labels in Wolof to improve comprehension.

The project has found success in its interventions targeting women, but less than 50% of interventions actually target women. Further, women are still hampered by traditional gender roles. Men are considered the money managers in the household. They buy some food, but mostly the women purchase food, soap, water and other household needs, as well as pay for school. Some women the Evaluation Team met said they give their husbands about half of their earnings. Since Men can have up to four wives, they can capitalize on their wives' earnings. And, after all, women process fish that the *men* catch, which gives the men a certain level of power. However, some women processors are refusing to process juvenile fish, and are therefore also using their leverage.

C. STRENGTHENING LEADERSHIP OPPORTUNITIES FOR WOMEN (NATIONALLY AND LOCALLY)

In 2013, COMFISH, in coordination with the DPM gender office, provided leadership training to 18 women working in artisanal fisheries. The courses were taught in Wolof, and covered the following subjects: how to be an effective leader, advantages and disadvantages of leadership, how to appreciate leaders for what they are worth, how to strengthen leadership, and major lessons learned from the training. Women who attended this training then trained women locally, using a “training of trainers” approach.

While the outcomes of the leadership training were not tracked over time, the COMFISH director informed the Evaluation Team that some women who received leadership training from COMFISH are now members of REFEPAS. REFEPAS is advocating for appropriate credit schemes to face the imbalanced competition from foreign buyers of raw material, as well as a more balanced representation of women at ICCs and CLPAs (see Table 7). Only two people from each CLPA college are represented in CLPA leadership, and since women are, for the most part, only involved in transformation, their leadership opportunities are limited. REFEPAS' action plan includes changing the law on CLPAs so that the transformation college is split into multiple colleges (i.e., drying, smoking, etc.) to more accurately represent the proportion of women involved in the process.

Figure 6: Photos from APTE Training Sessions in Cayar



Storytelling during Training Sessions. Photo Credit: APTE



Dancing during Training Sessions. Photo Credit: APTE

Table 7: CLPA Composition by Role and Gender

	Joal Fadiouth			Mbour			Sindia Sud			Sindia Nord			Cayar		
Acteurs	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif
Pêcheurs	7624	0	7624	6145	0	6145	645	0	645	636	0	636	4136	0	4136
Mareyage	596	324	920			283			136			90			564
Transformations artisanales	780	381	1161	65	133	198	0	317	317	0	317	317			205
Prestataires de service			1658			425			111			137			1133
ostréiculture et coque	72	65	137	0	0	0	0	0	0	0	0	0	0	0	0
	Rufisque/Bargny			Yene/Dialaw			Saint Louis			Ziguinchor			Kafountine		
Acteurs	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif	Homme	Femme	Effectif
Pêcheurs	2201	0	2201	1492	0	1492	3847	0	3847	405	0	405	538	0	538
Mareyage			120			185	161	299	460	163	108	271	185	104	289
Transformations artisanales			722	668	0	668	47	412	459	19	22	41	290	264	554
Prestataires de service			243			53	817	4	821	174	8	182	467	4	471
ostréiculture et coque															

D. SUMMARY OF IMPACTS ON WOMEN

The interventions above have led to positive impacts on women in the targeted areas. In communities targeted by trainings, women have gained capacity to improve their trades and sell a more valuable product at the market, as well as the ability to manage credit, where available. Certain women have also benefitted from the equipment and materials provided by the project.

REFEPAS is one of the main areas of project intervention that should prove to have positive impacts on women at the highest level. If the CLPA law can be changed so that women are better represented at CLPAs and ICCs, women will have the opportunity to seize more leadership roles and contribute to decision making to improve the livelihoods of women in the sector. However, at the time of the evaluation, women are still underrepresented at CLPAs and ICCs, and do not have many opportunities for leadership positions at these institutions.

Women at the Cayar processing site have seen the most positive impacts from the project. Although additional project implementation time is needed to assess the sustainability and replicability of this intervention, women are already perceiving improvements. Their revolving credit fund has multiplied due to the success of women paying back their loans, the sale price for their fish is double the market price, and further, they are experiencing fewer losses of fish. Since the opening of the processing facility, they were even invited to participate in three trade fairs to exhibit their products. APTE supported the women in attending fairs in Thies, Matam and even in South Korea.

It is important to note that women in the project sites did not say anything negative about the project (which does not necessarily mean they did not have complaints, only that they did not voice them), they only made requests for additional support. Further, in most project sites, men were positive towards women's interventions. In Foundiougne, the Evaluation Team found that some men would be troubled by having a women facilitator, but most men would not. Despite these successes, women in the artisanal fisheries sector still need support. The project has established a solid foundation for improving conditions for women, but it needs to continue and expand its efforts to continue making an impact.

2.4.2 OBSERVATIONS AND RECOMMENDATIONS

Based on the Evaluation Team's findings above, Table 8 summarizes observations (improvement opportunities) and recommendations for Cross-Cutting Question 4.

Table 8: Observations and Recommendations for Cross-Cutting Question 4

PRIORITY	OBSERVATION	RECOMMENDATION
1	<ul style="list-style-type: none"> Women are less represented in ICCs than men 	<ul style="list-style-type: none"> Expand representation in CLPAs/ICCs by electing representatives reflecting job specificities as with men (i.e., cleaners, sellers, salters, dryers, smokers, etc.)
2	<ul style="list-style-type: none"> The roles of women are understood in their communities, but their importance is not reflected in national policies 	<ul style="list-style-type: none"> Reinforce women’s lobbying and empowerment by supporting women’s network (REFEPAS) Continue (or expand in more locations) women’s knowledge of bookkeeping and access to micro credit/revolving funds
3	<ul style="list-style-type: none"> Many people want to copy the successful model of Cayar without understanding how it came to be and its specificities 	<ul style="list-style-type: none"> Ensure that efforts to improve profitability and sustainability consider the differences between species of fish, local economics, etc. Conduct a feasibility study of replicating the Cayar Site in other target zones. Conduct a feasibility study of wind/solar/biogas potential to reduce overhead and enable stakeholders at the processing plant to be more competitive in markets. Solar tents/dryers speed up drying time and allow women to process more and generate more revenue in periods of glut
4	<ul style="list-style-type: none"> Women active in the artisanal fishing sector are not sufficiently organized 	<ul style="list-style-type: none"> Improve communication between CLPAs to promote and strengthen coordination with REFEPAS
5	<ul style="list-style-type: none"> Women have received leadership training but the impact of this training is not tracked 	<ul style="list-style-type: none"> Track and assess long-term impact of leadership training

3.0 INTERMEDIATE RESULT QUESTIONS

IR 1: Has the project demonstrated effective, efficient and sustainable vehicles/approaches for sustaining biodiversity, improving resource management, implementing sustainable fisheries and preventing over fishing?

The following represent the vehicles and approaches that COMFISH has implemented for sustaining biodiversity, improving resource management, implementing sustainable fisheries in Senegal and preventing further overfishing:

- Initiating participatory development of rules and regulations, and participatory monitoring of fisheries by:*

 - Facilitating the promulgation and implementation of CLs using the CLPA network,
 - Establishing joint systems for collaborative fisheries surveillance amongst the CLPAs, research institutions and the DPM; and
 - Supporting the MPAs in Cayar and Joal in demarcating MPA boundaries with buoys.
- Catalyzing relationships between governmental and fishery organizations by:*

 - Setting up a national committee on the management of fishing capacity in Senegal, to enable the validation and approval of the National Strategy on MPAs by the Ministry of Environment and Sustainable Development; and
 - Leveraging the existing institutional network of CLPAs to establish collaborative management plans for priority fish stocks.

- *Fostering collaboration by:*
 - Supporting the National Management Committee on Small Pelagics;
 - Establishing the national steering committee on the integration of climate change into fishery policy;
 - Facilitating discussions with COMNACC, and catalyzing the development and implementation of the action plan on climate change for the fisheries sector; and
 - Developing a revolving fund for women groups in Cayar.
- *Engaging in capacity development*, by conducting training sessions on improved fish processing techniques for sanitation and hygiene in numerous coastal communities (including Pointe Sarene, Saly, Cayar, Joal-Fadiouth, Rufisque/Bargny, and Sindia North/South).

IR2: What are the most binding constraints in application of strategies, policies, and best practices and how could these constraints be overcome?

The most binding constraints in the application of strategies, policies, and best practices include the following:

- Lack of formalized frameworks with key collaborating organizations (e.g., FENAGIE, APTE, DECC, ANACIM, Alliance, CSE).
- Lack of access to credit resulting in both fishers and processors becoming indebted to predatory buyers and lenders.
- Control of fish markets, especially regional ones, by wealthy merchants, which prevents women from profitably selling their fish directly to consumers.
- Lack of a participatory communication and reporting system as critical lessons learned appear in reports but are not necessarily being shared with local coastal communities.

To address these issues, the Evaluation Team recommends four actions:

1. Establish MOUs among the collaborating institutions which will provide the framework for contractual implementation.
2. Establish credit funds for men and women to support growth of the artisanal fishery.
3. Investigate the possibility of establishing trade links and a market observatory¹⁵ with the large markets of Kaolak or Diaobé (near the Guinean border) to help foster the opening of regional markets.
4. Institute a participatory communication and reporting system to share lessons learned with beneficiary stakeholders in the fisheries sector.

IR3: What interventions best improve the ability of vulnerable coastal communities to adapt and become resilient to the impacts of climate vulnerability and change?

The results from the COMFISH project suggest that the strategies that best assist vulnerable coastal communities to improve their ability of to adapt and become resilient to the impacts of climate variability and change are the following:

- Conducting outreach and capacity building on climate change adaptation measures, weather forecast for marine safety, best fishing practices and sustainable fisheries management.
- Development of and implementation of climate change adaption plans in several coastal communities based on assessment and vulnerability analyses.
- Establishing or re-establishing collaborative surveillance groups to monitor physical changes along the coastline and the introduction of the early warning program for catastrophic storm events.

¹⁵ The market observatory is a platform whereby data on prices, products, market trends and supply are collected and shared with major fisheries trade associations.

- Engaging in collaborative scientific research to analyze the effects of environmental factors (e.g., sea water temperature and upwelling) on the distribution and seasonality of the fishery stocks and gathering data for GIS mapping of land use, infrastructure, and land cover to facilitate climate change vulnerability assessment and adaptation planning.

IR4: What are approaches that successfully address long-term biodiversity conservation objectives while effectively increasing social and economic benefits to artisanal fishing communities?

The approaches that best address long-term biodiversity conservation objectives and effectively help increase social and economic benefits to artisanal fishing communities include:

- Continued focus on improving the implementation of the National MPA strategy at the national, regional, and local levels.
- Monitoring the demarcation of MPAs and initiating corrective actions to ensure these areas are managed to preserve the resiliency and integrity of the eco-systems.
- Continuation of the collaborative practices for collecting, sharing and communicating scientific information on fisheries. These data were used to support the development of evidence-based collaborative fisheries management plans.
- Continuing program of co-surveillance or collaborative surveillance and monitoring of artisanal fisheries.
- Continued support to women fish processors in increasing the value of fish products by improved processing facilities, in order to increase their revenue and their resilience to climate change.

ANNEX I: INFORMATION SOURCES

I.1 KEY INFORMANT MEETINGS HELD

Date & Time	Name	Position	Phone number	Mobile Phone	Email
DPM					
26 January 2015, 10:00 AM	Camille Jean Pierre MANEL	Director			
CRODT					
26 January 2015, 1:00 PM	Dr. Massal FALL	Director			
	Ahmet DIADHIOU	Researcher			
	Moustapaha DEME	Fish Economist			
FENAGIE					
27 January 2015, 10:00 AM	Mr. Samba Gueye	President			
	Mr. Abdoulaye Samba	Technical Coordinator			
	Mrs. Fatou Kine Diop	Vice-President			
	Mrs. Awa Djigall				
ERA					
27 January 2015, 12:00 PM	Mr. Larry Vaughan	Monitoring and Evaluation Special Director for Dev. Program list			
USAID/COMFISH					
27 January 2015, 1:45 PM	Mrs. Khady Sané DIOUF	COP			
	Mr. Vaque NDIAYE	Fish Expert			
DEEC					
28 January 2015, 9:30 AM	Mr. Gabriel NDiaye	Representative of the Director			
	Mr. Cheikh Fofana	Technical Advisor of the Director			
	Mr. Aliou Ba	Coordinator COMNACC			
CSRП					
28 January, 2015, 1:00 PM	Marième Diagne TALLA	Acting Permanent Secretary			
USAID/SENEGAL					

Date & Time	Name	Position	Phone number	Mobile Phone	Email
28 January 2015, 2:30 PM	Mrs. Anne Williams	Economic Growth Office Director			
	Mrs. Oumou LY	Environmental Specialist / COMFISH AOR			
	Mr. Papa Nouhine Dieye	Senior Agriculture Specialist			
	Mrs. Agathe Sector	Natural Resources Officer			
	Mr. Abdoulaye Boly	Water and Sanitation Specialist			
	Mr. Alioune Mody Ndiaye	Acquisition and Assistance Specialist			
	Mrs. Fatou THIAM	Monitoring and Evaluation Specialist, USAID/COMFISH Midterm Evaluation COR			
APTE					
29 January, 2015, 10:15 AM	Dr. Aminata MBengue Diop	Chief, Fisheries and Gender Program			
IUPA-UCAD					
29 January 2015, 12:30 PM	Dr. Malick Diouf	Director of IUPA			
	Dr. Alassane Sarr	Professor			
ANACIM					
29 January 2015, 2:30 PM	Mr. Sathbou BA	Head of Department			
	Mrs. Adji Awa TOURE	Ingenieur Networks and tele-coms services			
	Mr. Mouhamadou KAMARA	Ingenieur Metéo			
	Mr. Papa Ngor NDIAYE	Service Chief			
USAID/YAAJEENDE					
29 January, 2015, 4:00 PM	Todd CROSBY				
SCA					
30 January 2015, 9:00 AM	Khalil Rakhmane NDIAYE	Grappe Coordinator			
IRD/IFAN					
30 January 2015, 11:00 AM	Dr. Didier JOUFFRE	Marine Biology, Fishery Sciences			

Date & Time	Name	Position	Phone number	Mobile Phone	Email
	Dr. Khady Diouf GOUDIABY				
	Mr. Waly NDIAYE	PHD-Student, COMFISH			
	Dr. Papa NDIAYE	Director, LABEP-AO			
	Mr. Ousseynou SAMBA	PHD-Student, COMFISH			
	Mr. Moustapaha BENGUE	Technician			
	Mrs. Khady DIOP	Researcher, IRD			
ADEPA					
30 January 2015, 3:00 PM	Moussa MBENGUE	Executive Secretary			
	Samba SECK	Administration and Finance			
	Coumba DIOP	Student in Project Management			
WWF					
30 January 2015, 4:00 PM	Ibrahima Niamadio	Past Coordinator of WWF/COMFISH Activities			
DPM Gender Office					
10 February, 2015	Seynabou Camara Ndiaye	Coordinator of DPM Gender Bureau and REFEPAS Member			

I.2 INFORMANTS FROM FIELD CONSULTATIONS¹⁶

Date & Time	Name	Position	Phone number	Mobile Phone	Email
Regional Fisheries Office Joal					
1 February, 2015	Mr. Ibragima Lo	Head of the office			
Office					
1 February, 2015	M. Saloum Cissoko	Charge of Governance locales			

¹⁶ Note that this is not a complete list, as in certain sites, the circumstances did not allow the Evaluation Team to collect contact information from all informants.

Date & Time	Name	Position	Phone number	Mobile Phone	Email
	IBOU	Coordinator, office USAID/COMFISH			
Rural Radio					
1 February, 2015	Mr. Lamine Diakhate	Head of the rural radio Côtiers FM 88.0			d
CLPA Joal					
2 February, 2015	Mr. MBaye Seck	Coordinator			
	Mr. Souleye Sabaly	Chef de Poste Joal et secrétaire CLPA			
	Mrs. NDeye Souane	Tresoriere, Women Association Yann			
	Mr; Mamadou Sathie	Adjoint secrétaire CLPA			
	Mr. Mamadou Thiam	Tresorier CLPA			
	Mr. Pape Ganna Gueye	V CLPA Joalice Coordinator			
	Mr. NDeye Demba Seck	Poste Peche			
	Mr. Amadou kande	Poste Peche			
	Mr. NDatte Diagne	Poste Peche			
Mrs. Bintou Traore	Poste Peche				
CLPA Sindia-Sud Pointe de Sarrene					
3 February, 2015	Mr. Mbaye Sow	Coordinator CLPA Sindia Sud			
	Mr. Rafael NDour	Vice coordinator Sindia Sud			
	Mrs. Fatou Sarr	Membre CLPA			
	Mr. Idrissa Diémé	Facilitateur USAID/COMFISH			
	Mr. Saloum Cissoko	USAID/COMFISH			
	Mr. Cheikh Bâ	SG CLPA pointe Sarrère			
	Mr. Ousseynou Faye	R Mareyeur			
	Mr. El hadji MBodji	Relais CLPA			
	Mr. NDiaga NDiaye	Dir Pêche pointe Serrère			
Mrs. NDeye Arame Diène	Presidente femmes AFET				
Mbour Fisheries Office, CLPAs of Mbour					
4 February, 2015	Mr. N'Diaye Cisse	Liaison Officer/CLPA MBour			

Date & Time	Name	Position	Phone number	Mobile Phone	Email
	Mr. Moustapha Senghor	CLPA MBour			
	El Hadji Daouda NDiaye	member			
	Mr. Daouda Gueye	member			
	Mrs. Khady NDoye	member			
	Mrs. Bayatte Fall	member			
	Mrs. Anta Diouf	member			
	Mr. Aliou NDiaye	member			
	Mrs. Coumba Diakhate	member			
	Mr; Aliou di Badou NDoye	member			
	Mrs. Awa Gueye	member			
	Mr. Assane San	member			
	Mr. Aliou WAde	member			
	Mr. Bacary Diop	member			
	Baba NDiaye	USAID/COMFISH, Facilitator			
	Saloum Cissoko	USAID/COMFISH Governance officer			
Monitoring Brigade of Ngaparou					
5 February, 2015	Maître Moussa Camara	Brigade de Surveillance, NGaparou			
	Mr. Ibrahima faye	Chef de Poste de contrôle			
CLPA Sindia Nord					
5 February, 2015	Mr. Adoulaye NDiaye	member			
	Mr. Moussa Faye	member			
	Mr. Daouda NDiaye	member			
	Mr. MBaye Faye	member			
	Mr. Gorgui Dieng	member			
	Mr. Ibrahima Niang	member			
	Mr. MBaye Niang Diop	member			
	Mme. Aby Diouf	tresoriere			
	Mr. Ibrahima Ciss	member			
	Mme. Halice Diom	member			
Mr. Saloum Cissoko	Governance				

Date & Time	Name	Position	Phone number	Mobile Phone	Email
	Mr. Bira yambe NDiaye	Chef Poste de contrôle Popenguine			
Fatick					
5 February, 2015	M. Ly	Inspecteur Regional			
Kafountine					
6 February, 2015	M. Abasse Badiane	Chef de Poste de Contrôle des pêches et de la Surveillance			
Saly Women Processor Ad Hoc Committee					
6 February, 2015	Mr. Babou Dioum	processor			
	Mr. Rokhaya NDiaye	processor			
	Mrs. Aby Thiandom	processor			
	Mrs. Yama Tiandom	processor			
	Mrs. NDeye Sene	processor			
	Mrs. Rokhaya Thiaw	processor			
	Mrs. Nogoye Lo	processor			
	Mrs. Khardiatta Gueye	processor			
		processor			
		processor			
		processor			
		processor			
	Mrs. Marieme Mané	processor			
	Mrs. Seynabou Faye	processor			
	Mrs. MBaye Gaye	processor			
	Mrs. Maty Sylla	processor			
	Mrs. Sally Diouf	processor			
	Mr. khary Seck	processor			
	Mrs. Fatou Seck	processor			
	Mrs. Khaliss Diom	processor			
	Dienaba NDione	processor			
Mrs. Fatou Diouf faye	processor				
Mrs. Marietou Thiandoum	processor				
Mr. Baba Diom	processor				
Fisheries Administration Unit and CLPA Rufisque/Bargny					

Date & Time	Name	Position	Phone number	Mobile Phone	Email
7 February, 2015	Mrs. Maguette Diabong	Service Chief a.i./SDPS/RF			
	Mr.Cheikh Balla NDiaye	Chef Post of Bargny			
	Mr. Ibrahima Mar				
	Mr. Alassane Wade	Coordinator			
	Mrs. Fatou Kiné Diop	tresoriere			
	Mrs. Assaitou Faye	Member			
	Mr. Laty Seck	Member			
	Mr. Medoune Fall	Member			
	Mr.Daouda MBodji	Member			
	Mr. Abdoulaye Diouf	Member			
	Mr. Modou NDoye	Vice coordinator			
	Mr. Saliou Bâ	Liaison officer			
	Mr. Latyr Seck	Member			
	Mr. Abiboulaye Diouf	Sage/Wise			
Mme. Assaitou Faye	tresorieire				
Missirah					
7 February, 2015	Djene Diouf				
Fisheries Administration Unit/Women Processors GIE/CLPA Cayar/Radio Cayar					
9 February, 2015	Mr. Khalle Niang	Service Peche			
	Mr. Ibrahima Sall	SPSP			
	Mr. Mor MBengue				
	Mr. NDongo Niang	CLPA Cayar			
	Mr. Aly Seck	CLPA Cayar			
	Mr. Pathé Niang	CLPA Cayar			
	El Hadji Moussa Kane	CLPA Cayar			
	Mr. Pape Jean NDiaye	USAID/COMFISH			
	Mrs.Aminata MBengue	APTE			
	Mrs. Sayi MBaye Niang	GIE processors			
	Mrs. Maty NDaw	GIE Processors, REFEPAS secretary/representative			
	Mr. Babacar Baldé	Radio Cayar			
	Mr. Diassé Kâ	Cayar City Hall			
	Mrs. Mariama Diallo	GIE Processor			

Date & Time	Name	Position	Phone number	Mobile Phone	Email
	Mrs. Binta NDoye	GIE Processor			
	Mrs. Binta Camara.	GIE Processor			
	Mrs. Madiouf Dème	GIE Processor			
	Mrs. Binta Diop	GIE Processor			
	Mrs. Codou Diop	GIE Processor			
	Mrs. NDeye Khady Diop	GIE Processor			
	Mrs. Absatou Djité	GIE Processor			
	Mrs. NDeye Coumba NDiaye	GIE Processor			
Fisheries Administration Unit/CLPA Saint Louis					
11 February, 2015	Mr. Ibrahima Lo	Reg. Inspector, Fisheries Administration			
	Mr. Moussa Cissoko	Facilitator/COMFISH			
	Mr. Amadou Hady Diallo	Liaison officer			
	Mr. Cheikh Sidaty Dieye	College MAREYEUR/ CONIPAS			
	Mrs. NDeye Penda Dieye	Presidente Diambar Sine			
	Mr. Abdoulaye M. Diaw	Coordinator College pêche à la ligne			
	Mr. Moulaye MBaye	Coordinator College filet dormant			
	Mrs. Anta Sall	President, GIE Tak L Processors			
	Mr. Abdoulaye B. Sene	Coordinator Senne tournante			

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ANNEX 2: USAID-APPROVED WORK PLAN

ANNEX 3: INTERVIEW GUIDE

ANNEX 4: COMPLETE LIST OF PRIORITIZED RECOMMENDATIONS

PRIORITY (1 to 25)	CONCLUSION/OBSERVATION	RECOMMENDATION	RESPONSIBLE PARTY
1	Need to strengthen coordination among high-level partners and project monitoring	Critical to establish a Steering Committee (SCA, DEEC, USAID, DPM, COMFISH)	DPM/ Project Manager
2	Budget may not be sufficient for final year of project implementation which could lead to destabilization of important COMFISH achievements	Review and discuss accuracy of FY 2016 budget concerns; Request budget supplement for FY 2016, if necessary	USAID/Senegal
3	Exit strategy lacking	Develop an exit strategy to gradually tail off project inputs while supporting partners	Project Manager/ URI/ USAID/Senegal
4	Lack of formalized frameworks with key collaborating institutions (e.g. FENAGIE, APTE, DEEC, ANACIM, Alliance, CSE)	Establish MOUs which provide framework for contractual implementation	Project/ Partners
5	The project has helped establish Conventions Locales most sites except in the Saloum Delta	Establish Convention Locales especially in the Saloum Delta; Support implementation	Project Field Office/Prefect/ Fisheries Regional Offices/ Liaison Officers/ CLPAs/ DPM
6	Numbers, roles and importance of women in the fishing sector unknown for entire coastline	Work with DPM Gender officer and REFEPAS to undertake national survey of Women in Fishing	Project Manager
7	Women's voices in national politics are not regularly acknowledged or listened to	Reinforce women's lobbying and empowerment by conducting a diagnostic study on the roles they play in the fisheries sector with REFEPAS and DPM/Gender office	Project/ DPM Gender Office/ REFEPAS
8	Lessons learned are included in reports but not necessarily being fed back to communities	Ensure regular restitution of quarterly reports with focus on lessons learned	Project Communication Department

PRIORITY (1 to 25)	CONCLUSION/OBSERVATION	RECOMMENDATION	RESPONSIBLE PARTY
9	Project monitoring indicates a few weak spots (e.g. Communications, areas effectively managed)	Ensure that annual work plan specifically addresses those areas that appear to be lagging; Check quality of indicator	Project M&E Officer
10	Cobo fishery is largely unregulated and susceptible to considerable illegal and unreported exploitation	Work with DPM and partners to develop a Cobo management plan	Project/ DPM/ CRODT
11	Lack of access to credit results in both fishers and processors becoming indebted to predatory buyers	Establish revolving credit funds	Project/ REFEPAS/ DPM
12	Lack of market access by Ethmalosa (Cobo) and Sardinella (Yaboy) fishers and processors enables predatory practices by buyers	Identify mechanism to broaden access (Trade facilitation); Organize study tour for fishers and processors to central markets (e.g. Diobé)	Project/ CRODT
13	Women have trouble buying fish and/or transporting product to market making them particularly vulnerable	Help establish mechanism to provide short term loans (Revolving credit) and gain market access	Project/ DPM/ Existing Microcredit Agencies
14	Markets, especially regional ones, often tightly controlled by the wealthy merchants keeping women from selling their fish directly	Help establish trade links through regional markets	Project/ Department of Commerce/ DPM/ REFEPAS
15	Development of some partner institutions (e.g. FENAGIE) handicapped by lack of business and strategic plans	Provide training and support for the development of business and strategic plans	Project/ Partners
16	Women are less well represented in ICC than men	Expand representation in CLPA/ ICC by electing representatives reflecting job specificities as with men (i.e., cleaners, sellers, salters, dryers, smokers, etc.)	Project/DPM/ Prefect/ SCA
17	The roles of women are understood in communities, but their importance is not reflected in national policies	Reinforce women's lobbying and empowerment by supporting women's network (REFEPAS); Continue (or expand in more locations) women's	Project/ DPM Gender Office/ REFEPAS

PRIORITY (1 to 25)	CONCLUSION/OBSERVATION	RECOMMENDATION	RESPONSIBLE PARTY
		knowledge of bookkeeping and access to micro credit/revolving funds	
18	Many people want to copy the successful model of Cayar without understanding how it came to be and its specificities	Ensure that efforts to improve profitability and sustainability consider the differences between species of fish, local economics, etc.; Conduct a feasibility study of replicating the Cayar Site in other target zones. Conduct a feasibility study of wind/solar/biogas potential to reduce overhead and enable stakeholders at the processing plant to be more competitive in markets. Solar tents/dryers speed up drying time and allow women to process more and generate more revenue in periods of glut	Project/ DPM
19	Lessons learned by some communities not being accessible to others	Organize exchange visits and study tours; Participate in fish product exhibitions	Project Communications Department
20	Women active in the artisanal fishing sector are not sufficiently organized	Improve communication between CLPAs to promote strengthen coordination (REFEPAS)	Project/ DPM Gender Office/ REFEPAS
21	Mechanics of the Cobo (Ethmalosa) trade unclear	Support a Cobo (Ethmalosa) value chain analysis to identify opportunities to improve sales and increase revenues of fishers, processors, and sellers	Project/ CRODT/ DPM
22	Project efforts to facilitate CLPA networking could go further and help create opportunities to exercise political pressure	Strengthen national CLPA network (survey, workshops, etc.)	Project/ DPM/ Prefect/ SCA
23	Women have received leadership training but the impact of this training is not tracked	Track and assess long term impact of leadership training	Project/ DPM Gender Office/ REFEPAS
24	The project has had many impressive successes but could capitalize on them better	Strengthen communications about successes; brochures, fact sheets, etc.	Project Communications Department

PRIORITY (1 to 25)	CONCLUSION/OBSERVATION	RECOMMENDATION	RESPONSIBLE PARTY
25	Difficult to link activities in annual work plan to annual report	Ensure coherent tables with numbered activities in annual report annex	Project/ USAID/Senegal/ URI

ANNEX 5: RESULTS FRAMEWORK – FY 2011 THROUGH FY 2014

Indicator	End-of-project targets	Revised End-of-Project Targets	FY11	FY12	FY13	FY14	End of FY14 Results	FY15 Target	Completion rate (%)
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% in 2016	Index score increases by 75% (0.07)		Index score increases by 40% (0.056)	0.04	0.048	0.057	0.04	0.068	Na
2. Number of persons who received short training courses on food security and productivity with the assistance of the USG	4 790	12050	45	986	2078	4465	7574	3581	63
3. Number of written and audiovisual materials produced to strengthen the capacities of collaborative management institutions and fisheries actors.	23	261	0	2	9	14	25	136	10
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	196	0	15	22	71	108	58	55
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	27		2	6	4	12	12	44
6. Number of technical studies that contribute to enhance the management plans of sustainable management units	16	45		2	11	9	22	18	49
7. Number of synergy areas created in the process of establishing sustainable management units	9	21	0	1	4	6	11	6	52

8. Number of policies/regulations and administrative procedures analyzed	44	68	13	10	21	16	60	6	88
9. Number of policies/regulations and administrative procedures developed and presented to the public/stakeholders for consultation	21	12	0	3	7	2	12	0	100
10. Number of policies/ regulations and administrative procedures submitted officially for adoption (legislation/decree)	20	16	1	3	8	0	12	3	75
11. Number of policies/ regulations and administrative procedures instituted with the assistance of the USG, and that have been approved	18	24	0	2	9	7	18	4	75
12. Number of policies/ regulations and administrative procedures approved, and which are implemented	12	32	0	0	3	11	14	12	44
13. Number of new technologies for fisheries resources put in place	12	17	0	4	3	4	11	5	65
14. Number of actors who have adopted new rules for collaborative fisheries resources management	47,940	46646	0	20940	10056	12858	43854	2792	94
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	42837	0	0	7685	32360	40045	2792	93
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	1109661	0	0	334104	603714	937818	171843	85
17. Number of hectares in areas of biological significance under enhanced management with the assistance of the USG	413,655	450656	0	0	41500	66496	107996	342660	24
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	4673	0	394	782	1841	3017	1325	65

19. Number of vulnerability assessments conducted with the assistance of the USG	6	6	0	0	3	0	3	3	50
20. Number of laws, policies, agreements, MOUs or regulations on climate change proposed, adopted or implemented with the assistance of the USG	6	17	0	0	3	11	14	3	82
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	12705	700	986	2078	4465	8229	3581	65
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	166	0	20	41	56	117	39	71
23. Number of households that are benefitting directly from the assistance of the USG (indicator 4.5.2-13 from FTF)	10,331	16533	0		9131	7402	16533	0	100
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

**ANNEX 6: RESPONSE TO COMMENTS FROM COASTAL
RESOURCES CENTER/UNIVERSITY OF RHODE ISLAND ON
EVALUATION REPORT**

USAID/COMFISH Mid-Term Evaluation

Response to Comments from the Coastal Resources Center/University of Rhode Island on Evaluation Report

Prepared by The Cadmus Group, Inc.

March 26, 2015

Introduction

This memorandum responds briefly to comments submitted by the Coastal Resources Center/University of Rhode Island (CRC/URI) team on March 20 regarding the draft Evaluation Report for the Mid-Term Evaluation of the USAID/COMFISH project.

This memo includes a brief summary of the CRC/URI comment, or an excerpt in *italics*, followed by a brief response or clarification, in **bold**, provided by Cadmus. Please note that these are the 13 comments, which, in the opinion of the Evaluation Team leader, warranted a specific response. Other comments were noted but did not warrant a specific response. The complete set of comments from CRC/URI are provided in Annex 7.

Response to Key Comments

1) *B.1., page 1, "The report highlights the concept of "learning-by-doing," but other important strategies embedded in project design (Project Description) and implementation are:*

- *Ecosystem based management (critical to the 'Sustainable Management Unit' idea, and the inclusive and participatory approach)*
- *Establishment of specific critical enabling conditions for sustainable fisheries at all levels*
- *Inclusive and participatory fisheries management planning"*

The Evaluation Team agrees that these are important and has included them in the "Project Background" description on page 3 of the Final Evaluation Report.

2) *B.1., page 2, "Due to tight schedule, we also note that due to time constraints some of the project's strategic partners such as CSE, FEFEPAS, and the Coordinator of the project GO-MAMER were not consulted."*

Given the limited time available, the Evaluation Team notes that an appropriate level of consultation was performed with strategic partners during the interviews with stakeholders in Dakar. According to our notes, the representatives of these organizations either did not respond

or were not available for the scheduled meetings. We have included an explanatory footnote to “Table 1: Key Informant Interviews,” on page 5 of the Final Report to address this issue.

- 3) *B.2., page 2, “The evaluation report finds that a constraint to the evaluation was a lack of adequate baseline data (p. 9 and p. 17). While this is highlighted as a limitation, a specific recommendation is not offered.”*

The Evaluation Team acknowledges that (1) a quantitative, quasi-experimental evaluation strategy was not part of the approved Project Description and Evaluation Monitoring and Management Plan for COMFISH, and (2) creating a comprehensive baseline with extensive information was not viewed as cost effective by the COMFISH team. The Evaluation Team noted that the success of many of the COMFISH projects was not necessarily represented by the standard M&E indicators. For example, the positive engagement of the project beneficiaries in the process of participatory fisheries management, though obvious during discussions with focus groups, could not be tracked with the selected M&E indicators. In addition, the Evaluation Team found that the metrics in the baseline studies developed by COMFISH were not readily accessible. As a result, the Evaluation Team observed that additional baseline data using appropriate M&E indicators, compiled in a summary document, would improve the ability of project staff and stakeholders to monitor project success.

- 4) *B.2., page 2, “[A] key baseline study not mentioned in the list on p. 17 of the evaluation report concerns women in fisheries. This was the basis for the preparation of a ‘Gender Strategy for Women in fisheries in Senegal’ with a 3 year action plan. All project activities implemented on gender followed the Strategy.”*

The Evaluation Team notes that this baseline study was reviewed by the team and was inadvertently left off the list. It has been added to the list in the “Limitations” description on pages 5 and 6 of the Final Evaluation Report.

- 5) *B.3., page 3, “The evaluation team noted cultural constraints in facilitating gender discussion in the field (p. 9).”*

Based on the experience of our gender specialist, women are often not comfortable discussing gender issues in groups with men. As a result, the Evaluation Team noted that women may have been more open to discussing gender if the Evaluation Team had included a woman evaluator. The text has been clarified in the executive summary.

- 6) *C., page 3, “With respect to climate change, gender, environmental, and governance outcomes, we note some items that were not highlighted, but worth noting:”*
 - a. *“Training of women in new fish processing technologies that are environmentally friendly, which strengthened their adaptive capacity to climate change.”*

A bulleted phrase has been added under the description of “Outreach and Capacity Development for Climate Change Adaptation” on page 14 of the Final Evaluation Report.

- b. *“Climate change plans with concrete actions such as restoration and conservation of degraded ecosystems.”*

This item has been addressed by adding a sentence in the paragraph entitled “Assessment of Vulnerability and Adaptation to Climate Change” on page 14 of the Final Evaluation Report.

- c. *“In terms of climate change integration in national fishery policy, it is important to recognize that USAID/COMFISH put in place a national level multi-disciplinary group for consultations on climate change and fisheries. An outcome of the process is to put in place a National Adaptation Plan for fisheries. Such a plan will allow the fisheries sector to integrate climate change in fisheries policies.”*

This important outcome has previously been described in the paragraph entitled “Integration of Climate Change Adaptation into Fishery Policy,” on page 14 of the Final Report.

- d. *“The USAID/COMFISH Environmental Management and Monitoring Plan (EMMP) approved by the mission and the Senegal Environment Directorate (DEEC) -- this plan covers the suite of project activities including implementing partner activities. An environmental monitoring and management plan report is produced every quarter and submitted for approval to the mission.”*

This item has been included as a paragraph describing the EMMP at the end of Section C Environmental Compliance Outcomes on page 18 of the Final Evaluation Report.

- e. *“The preparation and implementation of a ‘Strategy for CLPA Capacity Building’ dating from 2012. Items mentioned in the evaluation report fall under the umbrella of the implementation of the Strategy.”*

This item is duly noted and has been Inserted as a phrase referring to the 2012 Strategy in the first paragraph under “Training in operations, participatory surveillance and monitoring,” on page 17 of the Final Evaluation Report.

- 7) C., IR2, page 4, *“COMFISH has formal contracts with each of the listed organizations (being put in place with respect to ANACIM). The contracts are legal documents, signed, and with specific contractual implementation obligations. Establishment of MOUs is recommended in the evaluation report, but MOUs represent a more general partnering vehicle and do not carry the weight of a signed contract. The signed contracts with implementing partners allow for monitoring of successful completion of contract obligations.”*

Both MOUs and contracts are necessary to provide a framework for partner relationships. The MOU provides the vehicle for cooperation between partners at the conceptual and strategic level. The contract, as noted, provides the framework for a more detailed task by task partnership.

8) *C., IR2, page 4, "The most binding constraints include 'lack of participatory communication and reporting systems to share lessons learned with local coastal communities,' and "USAID/COMFISH does not predominately rely on project documents to communicate with communities and stakeholders. Instead, a comprehensive intervention area-wide system of coordination meetings with all partners and stakeholders is used."*

The Evaluation Team observed, based on interviews with COMFISH staff, that the lessons learned at certain focus areas and reported in the quarterly and annual reports, were not shared with all the beneficiaries across all the focus areas. This is considered a binding constraint because stakeholders are not benefiting from these lessons to make improvements at their own locations.

9) *Other comments/clarifications, page 5, "The report makes reference (p. 33) to the fact that COMFISH has suggested the selling of membership cards as a mechanism for mobilizing internal CLPA resources for operations. It is important to note that the sale of membership cards is planned, but at the level of specific "CLPA colleges" concerned. It should also be noted that all fisheries stakeholders are members of the CLPA (even without holding membership cards)."*

On page 23, the Evaluation Report notes that membership cards are sold at the CLPA college level. The phrase includes "... it would be beneficial for each college to establish membership cards to improve management in the sector." An explanatory note has been added as a footnote on this page to explain that stakeholders are members of the CLPA without holding membership cards.

10) *Other comments/clarifications, page 5, "It is true that the USAID/COMFISH project has made many efforts through the mechanism of Local Conventions to make the system of registration and license payments effective. However, the registration and licensing efforts fall under the World Bank supported PRAO program."*

An explanatory note has been added as a footnote on this page to explain that the PRAO program to support the registration of artisanal fishing boats and fishing licenses is funded by the World Bank.

11) *C, page 5, "The evaluation report recommends cobo management planning in the Sine Saloum. We note that cobo was from the project start identified as a 'key' species for management planning and is a project activity. The process of cobo management planning is described in the FY15 Work Plan and has been implemented by COMFISH and its implementing partners in Sine Saloum and Casamance."*

Based on the observations of the Evaluation Team, some actions, as described in the Work Plan, and inspired by the Wola Nafaa project, have been successfully implemented; however, a coherent and comprehensive cobo management plan has not yet been developed.

12) D., Exit Strategy, page 5, "An exit strategy and sustainability strategy are inter-related. In this context, all along, to the present point, the project has developed strategies that permit improved governance and management of the fisheries at all levels."

The Evaluation Team agrees with this point, however, recommends that a formal, systematic exit strategy be articulated.

13) E., Steering Committee, page 6, "The project has indeed tried to establish a Steering Committee and a list of institutions was developed. Unfortunately, the process never took off despite numerous efforts by USAID/COMFISH leadership with DPM."

The Evaluation Team recommends that the Steering Committee be created as conditions have evolved since initial attempts at its development. The Director at DPM is new, the administration has changed, and the COMFISH project now has a demonstrable track record and credibility with the government. These new conditions will aid in the creation of such a committee.

**ANNEX 7: MID-TERM PROJECT EVALUATION COMMENTS:
USAID/COMFISH; COASTAL RESOURCES CENTER, UNIVERSITY
OF RHODE ISLAND**

**Mid-term Project Evaluation Comments: USAID/COMFISH
Coastal Resources Center, University of Rhode Island**

Date: March 16, 2015

A. Introduction

The preparation, field work, and reporting of The Cadmus Group evaluation team are appreciated by the CRC/URI team. The report overall is well written, clear, and concise. The findings are very positive. It validates the USAID/COMFISH project effectiveness and impacts. It is also useful in focusing attention on end of project exit strategies, and in considering priorities for possible phase II follow-on interventions by USAID.

B. General comments related to evaluation constraints noted by the evaluation team

2. The evaluation team indicated the constraint of a tight schedule. Given the large amount of project technical reports, progress reports, work plans, other project documents, as well as large number of project implementing and strategic partners, this no doubt made it challenging for the team to review and digest it all. With the large amount of information to digest, the COMFISH team feels that the evaluation report misses some of the big picture items in terms of project strategy and concepts, and the different phases of the project over time. The report highlights the concept of “learning-by-doing,” but other important strategies embedded in project design (Project Description) and implementation are:
 - Ecosystem based management (critical to the ‘Sustainable Management Unit’ idea, and the inclusive and participatory approach)
 - Establishment of specific critical enabling conditions for sustainable fisheries at all levels
 - Inclusive and participatory fisheries management planning

The project’s emphasis on Participatory Management Plans and the importance of these for working towards demonstrated impact on improved biodiversity (core to the project’s theory of change and Life of Project outcomes) do not seem to be central in the evaluation team’s findings. In reading the report, surveillance and enforcement seems to take more of a center stage than the voluntary compliance aspect of the theory of change.

The USAID/COMFISH project introduced a new concept of co-management based on Local Conventions where stakeholders and government came together and signed a contract to work together toward long-term sustainability of fish stocks. This process was implemented through government established CLPAs. It was very successful in the first phase of implementation in the “Petite Cote” and then was expanded to other CLPAs in the country. In total, 11 CLPAs were strengthened and made functional through a rigorous process of support and education. In addition, continuous education and stakeholder empowerment were supported by a network of extension agents (facilitators and relays) who played a pivotal role in maintaining good communication with the Department of Fisheries, local authorities, and the CLPA. The extension agents coordinated management activities between other CLPAs that shared resources and had common livelihood interests.

The diagram on Figure 5 of the evaluation report outlines the structure of the CLPAs under the Local Conventions (CL) and links to DPM and the project. This structure is founded on empowerment of stakeholders to take decisions and self-enforce fisheries management rules. Since the Fisheries Sectoral Policy Letter was adopted in 2007, no action has been successful in implementing the 2007 vision until 2012 when USAID/COMFISH first established the Local Conventions in Mbour and Joal.

It is also important to point out that in the participatory management strategy, the first two years were dedicated to the strategic definition of priority species, institutional capacity building, and collecting/analyzing scientific information for management. The 3rd and 4th years of the project produced formal management policies and plans.

Due to tight schedule, we also note that due to time constraints some of the project's strategic partners such as CSE, FEFEPAS, and the Coordinator of the project GO-MAMER were not consulted.

3. The evaluation report finds that a constraint to the evaluation was a lack of adequate baseline data (p. 9 and p. 17). While this is highlighted as a limitation, a specific recommendation is not offered. A quantitative, quasi-experimental evaluation strategy was not part of the approved Project Description and Evaluation Monitoring and Management Plan. However, significant efforts were placed in baseline studies and in baseline/mid-term/end of project quantitative surveys. Some of these are listed on p. 17 of the evaluation report. They all serve as a basis for comparing and evaluating the effectiveness of project interventions. The Project Description clearly states that in the timeframe of the project (5 years), targets and expectations of impacts on fish stocks and ecosystem health cannot be made and attributed to the project. Enabling conditions first need to be put in place or strengthened.

COMFISH put in place baselines using synthetic quantitative indexes. These include institutional capacity of selected CLPAs (complementary to the PRAO indicators on CLPA capacity) and the well-being of fisheries stakeholders. These baselines were followed by mid-term evaluations. Reports on the methodology and findings were part of the documentation provided to the evaluation team. It was on the basis of these two baseline studies that the project's strategy for reinforcement of institutional capacity of CLPAs was developed and implemented by COMFISH.

Another key baseline study not mentioned in the list on p. 17 of the evaluation report concerns women in fisheries. This was the basis for the preparation of a 'Gender Strategy for Women in fisheries in Senegal' with a 3 year action plan. All project activities implemented on gender followed the Strategy.

In addition, a large amount of studies and research on fisheries and fish stocks already exist and were used to direct COMFISH actions. Creating a comprehensive baseline with extensive (but not always easily accessible) information was not viewed as cost effective. Instead, strategic (issue-based) and selective application of science for management in fisheries was, and continues to be supported by the project. The effective application of science for management in fisheries is (in our opinion) one of the defining strengths of the COMFISH project. Significant effort and value added for defining information gaps and understanding of key fisheries in Senegal was part of the COMFISH focus, particularly in the first years. This includes bio-physical, socio-economic, and IUU studies over extended periods of time and fishing sites in partnership with CRODT, IUPA, CSE and other local research institutions.

4. The evaluation team noted cultural constraints in facilitating gender discussion in the field (p. 9). Specific examples would have been helpful to better understand this comment. However, in this context it is important to recognize that COMFISH interventions have tested and demonstrated effective practices to increase women in fisheries empowerment and sense of cultural ease and effectiveness in group meetings. This is another defining characteristic and success story of the COMFISH project. The evaluation report does recognize that the COMFISH project has effectively applied the “Gender Strategy for Women in Fisheries,” and integrated empowerment of women in fisheries in the Local Conventions. The COMFISH team members present at Cadmus field evaluation meetings felt that women responded to interview questions with ease, self-control, and objectivity (often more coherent than the men). Women understand the problems they face and have proposed solutions to remedy them.
5. The COMFISH team members present at field evaluation meetings had specific feed-back concerning a perception of inappropriate and damaging evaluation and questioning approaches. The concern was so significant that the COMFISH Chief of Party informed the evaluation Team Leader that the COMFISH team was not comfortable accompanying the team to Cayar and Saint-Louis (where fishing issues are sensitive). The COMFISH team’s concerns were consequently addressed by the evaluation Team Leader.

C. Comments and clarifications:

With respect to **climate change, gender, environmental, and governance outcomes**, we note some items that were not highlighted, but worth noting:

- Training of women in new fish processing technologies that are environmentally friendly, which strengthened their adaptive capacity to climate change.
- Climate change plans with concrete actions such as restoration and conservation of degraded ecosystems.
- In terms of climate change integration in national fishery policy, it is important to recognize that USAID/COMFISH put in place a national level multi-disciplinary group for consultations on climate change and fisheries. An outcome of the process is to put in place a National Adaptation Plan for fisheries. Such a plan will allow the fisheries sector to integrate climate change in fisheries policies.
- The USAID/COMFISH Environmental Management and Monitoring Plan (EMMP) approved by the mission and the Senegal Environment Directorate (DEEC) -- this plan covers the suite of project activities including implementing partner activities. An environmental monitoring and management plan report is produced every quarter and submitted for approval to the mission.
- The preparation and implementation of a ‘Strategy for CLPA Capacity Building’ dating from 2012. Items mentioned in the evaluation report fall under the umbrella of the implementation of the Strategy.

In terms of questions about **IR1**, a couple of clarifications:

- Activities with COMNACC have the purpose of creating a dialogue and sharing on issues relevant to climate change among officers of DEEC, DPM, local stakeholders, and other relevant agencies. A COMNACC sub-committee (Regional Climate Change Committee) was created to specifically address fisheries and climate change in national policy.

- The National Committee on the Management of Small Pelagics was supported by COMFISH specifically with respect to the introduction and validation of local participatory management plans for sardinella.

In terms of the evaluation team's question concerning **IR2**, we would like to comment on two observations:

- The most binding constraints include 'the lack of formalized frameworks with key collaborating organizations (e.g., FENAGIE, APTE, DECC, ANACIM, Alliance, CSE).'

COMFISH has formal contracts with each of the listed organizations (being put in place with respect to ANACIM). The contracts are legal documents, signed, and with specific contractual implementation obligations. Establishment of MOUs is recommended in the evaluation report, but MOUs represent a more general partnering vehicle and do not carry the weight of a signed contract. The signed contracts with implementing partners allow for monitoring of successful completion of contract obligations.

By contrast, the formulation of MOUs with state institutions (for example, with DEEC, DSPS, COMNACC, and DAMPC) is a good recommendation.

Perhaps the evaluation team is making another point here: that the COMFISH project articulates agreements with partners as implementers of activities or service providers for COMFISH rather than COMFISH supporting the partners as institutions to achieve their own institutional objectives in the sector. The relationship of institutional capacity building could, perhaps, be better articulated in some of the contract agreements.

Also, the way this is presented in COMFISH reports and other documents could be more carefully articulated to make the reader understand that COMFISH is in fact aiming to strengthen the capacity of organizations (like APTE) to carry on the activities and outcomes of COMFISH after COMFISH ends because that is part of APTE's strategic involvement in the sector. Strong Senegalese stakeholders of all types and at all levels that have appropriated and will carry on the initiatives supported by COMFISH is the goal.

As the project goes into the final stage, we should take more care to articulate along these lines in our documents and communications. Whatever a permanent Senegalese institution does or has that is initiated and owned and managed by them with the support of or as a result of COMFISH is more important to highlight at this stage than what COMFISH has done, initiated, owned or managed.

- The most binding constraints include 'lack of participatory communication and reporting systems to share lessons learned with local coastal communities.'

This observation may be based on an incomplete understanding of the real needs at the local level and the USAID/COMFISH inclusive and participatory approach. USAID/COMFISH does not predominately rely on project documents to communicate with communities and stakeholders. Instead, a comprehensive intervention area-wide system of coordination meetings with all partners and stakeholders is used. It is at local coordination meetings that project results are presented and plans are made in a participatory way.

In terms of the evaluation team's question concerning **IR3** (What interventions best improve the ability of vulnerable coastal communities to adapt and become resilient to the impacts of climate vulnerability and change?), we would like to comment that in addition to the strategies listed, the following items should be noted: 1) Support to the creation of fish spawning protected areas (e.g. in Ngaparou) with the restoration of degraded ecosystems and augmentation of coastal community resilience to climate change, and 2)

Support to the process of formulation and implementation of the National Climate Change Adaptation Plan in the fisheries sector.

Other comments/clarifications:

The report makes reference (p. 33) to the fact that COMFISH has suggested the selling of membership cards as a mechanism for mobilizing internal CLPA resources for operations. It is important to note that the sale of membership cards is planned, but at the level of specific “CLPA colleges” concerned. It should also be noted that all fisheries stakeholders are members of the CLPA (even without holding membership cards).

Another clarification concerns registration of artisanal fishing boats (pirogues) and payment for fishing licenses. It is true that the USAID/COMFISH project has made many efforts through the mechanism of Local Conventions to make the system of registration and license payments effective. However, the registration and licensing efforts fall under the World Bank supported PRAO program. USAID/COMFISH’s role is to support outreach on the system and integration into Local Conventions. USAID/COMFISH provides synergy to the registration/licensing strategy of the PRAO program (that has faced serious challenges in implementation) with the intent of improving effective and sustainable management of marine resources.

The evaluation report recommends cobo management planning in the Sine Saloum. We note that cobo was from the project start identified as a ‘key’ species for management planning and is a project activity. The process of cobo management planning is described in the FY15 Work Plan and has been implemented by COMFISH and its implementing partners in Sine Saloum and Casamance. Actions in the Work Plan include:

- Organize validation meetings in Sine Saloum on the status of sardinella and cobo fisheries and collect recommended management actions from stakeholder groups
- Organize a technical workshop and validation on cobo and sardinella management actions
- Initiate the review of participatory management plans of cobo and sardinella in the zondes of Saint Louis, Casamance and Sine Saloum.

D. Exit strategy

The evaluation report states (p. 12) that “An exit strategy should be developed that outlines how partner institutions will work together to maintain project results over the long term. Exit strategy development is also the number 3 prioritized recommendation (p. 60).

A successful exit strategy is always a critical element of CRC/URI international field projects. This reflects the CRC core mission of building outcomes that are sustained beyond the life of the project (a measure of success historically not often achieved in development projects around the world). Thus, we take this comment by the evaluation team very seriously.

An exit strategy and sustainability strategy are inter-related. In this context, all along, to the present point, the project has developed strategies that permit improved governance and management of the fisheries at all levels. The formulation and implementation of strategies and policies gives value added to the USAID/COMFISH effort. Strategies and policies adopted and implemented through USAID/COMFISH have involved collaboration and partnership with institutional partners and stakeholders. A strong and supportive constituency is one of the key enabling conditions for sustainable fisheries management. Also, throughout the process, the project has strengthened capacity at all levels (in terms of strategic planning,

management, applied research, and stakeholder empowerment in decision making) in order to improve sustainable fisheries practice and behavior in the sector.

The project is characterized by extensive and inclusive consultation processes and outreach and validation of plans and findings. Another characteristic has been to actively create synergies with institutions that promote more effective and efficient actions with sustainable impacts to the benefit of the communities and stakeholders that depend on fisheries for their livelihood and survival. All of these strategies have the intention of putting in place the enabling conditions for sustainable management of marine resources in Senegal. Despite an extension in the geographic coverage of the project, it has been possible to achieve the outcomes that nourish a successful exit strategy in little time. Some of these key outcomes include the successful model of small-scale, modern fish processing in Cayar, the Local Conventions, and participatory management plans of priority stocks (5 for sardinella and 1 for cobo). Two management plans were targeted in the USAID/COMFISH Project Description.

E. Priority recommendations and project follow-up: Annex 4

The #1 priority recommendation is the ‘need to strengthen coordination among high-level partners and project monitoring’ with a recommendation of creating a Steering Committee composed of SCA, DEEC, USAID, DPM and USAID/COMFISH.’

The project has indeed tried to establish a Steering Committee and a list of institutions was developed. Unfortunately, the process never took off despite numerous efforts by USAID/COMFISH leadership with DPM. No official reason was given, but the main reasons can be induced. DPM would have liked the project to be located in DPM such that the Department can have greater control over the project and budget. This is the World Bank project model. This was not an option, and USAID/COMFISH could not have accomplished what it has if it was located directly within the DPM management structure. A key reason is the slowness of action within government. In addition, it would not have been possible to involve the local authorities and CLPA stakeholders in the comprehensive manner that USAID/COMFISH was able to. When DPM understood that control of the budget would not be possible they made the judgment that it was not necessary to put in place a project Steering Committee.

The failed effort to install a Steering Committee did not have a negative impact on the results of the project. Rather than a Steering Committee, USAID/COMFISH succeeded throughout the project to put in place mechanisms that allowed the review and validation of all strategies at the highest level across a wide institutional landscape. In addition, DPM officers and other government officers actively participate in the array of inclusive project processes.

Overall, the Annex 4 project recommendations are extremely important but most of the recommendations require additional time and funds given that the project is now in its last 18 months (and the last 12 months will be significantly down-sized). To consolidate project outcomes there is a need for continued support to mentor local stakeholders in the implementation of management strategies and the consultative mechanisms put in place by the project. This includes:

1. Continuing support to the formulation and implementation of all fisheries management plans (sardinella and cobo). The bottom-up participatory process of fisheries management planning is necessary, but time-consuming and costly. Additional funding and time are required to ensure that the management plans, implementation, surveillance, and enforcement are functional and sustainable.
2. Follow up on the implementation, monitoring and evaluation of adopted Local Conventions. This includes all the elements relative to their effective functioning, organization of CLPA committees

and consultative mechanisms, gender empowerment, participatory surveillance, and sustainable finance.

3. The implementation of the Local Convention in the Saloum that support the cobo fisheries management plan. Without the Local Conventions, implementation of the fisheries management plan for cobo will not be effective at the local level.
4. Follow up on the implementation of the Women in Fisheries Gender Strategy that combines capacity building of REFEPAS at the national policy level and reinforcement of activities at the local level.
5. Follow up support on improved fisheries value added practices. Value added of artisanal fish processing has become a priority of the government (thanks to USAID/COMFISH) and follow-up support in other strategic sites is important for follow-up. The value-added impact has also had a significant conservation benefit. Women processors in Cayar engaged with USAID/COMFISH were able to stop fishing for juvenile fish by refusing to buy from fishermen who target juveniles. This decision by women was instrumental in the protection of incoming year classes of small pelagics. The protection of juveniles is a fundamental practice to increase yield and assure long-term sustainability of fish stocks. The practice in Cayar, spread quickly to neighboring communities and had a huge effect on the conservation of juveniles and improvement of yield. It seems that landings have increased as the result of the protection of new recruits. This model must be highlighted and spread throughout the country through an extension program.
6. Support to the process (that has begun) of the review, modification, and implementation of an updated Fisheries Sectoral Policy Letter. A follow-on effort of USAID could positively influence the process in a strategic and productive way, and support successful testing and implementation.
7. COMFISH is today a national leader in Climate Change adaptation in fisheries as a result of local level outreach and work with COMNACC at the national strategic level. These actions have continued great potential for national impact as a USAID follow-up intervention.
8. Follow up support is recommended on concrete IUU actions at the level of CLPAs and local authorities to strengthen local surveillance and to sign an MOU with DPSP supporting their improved role and capacity to effectively carry out their institutional mandate. This support would integrate with and complement U.S. efforts on IUU (President Obama's memorandum of June 14, 2014 to combat IUU).
9. CLPA operational finance. The CLPAs were supposed to receive 60% of fishing license fees, boat registration fees, and a portion of surveillance penalties and wholesale taxes but unfortunately the system has not worked despite efforts by the CLPAs. The USAID/COMFISH project through its established Local Conventions was able to introduce and test mechanisms for self-finance in several CLPAs. This model is ultimately the solution to long-term sustainability of fisheries co-management in Senegal. This process takes time and needs to be scaled up to all CLPAs.

If a second phase of the USAID/COMFISH effort is contemplated, it needs to involve an approach to maintain the bottom up structure established by USAID/COMFISH, or support graduation of the bottom up structure from CLPAs to the Ministry (i.e., phase out of facilitators and relying only on liaisons). The Local Conventions are currently supported by a network of field coordinators (facilitators and relays). Each CLPA or group of CLPAs is assigned a coordinator who manages their administrative and technical affairs. They carry messages between CLPAs and DPM and maintain through an organization of committees, the functions of an organization to take charge and hold responsibility to manage fisheries, including surveillance and enforcement, for themselves and for generations to come. This process is well established through an operational manual for CLPAs involving all aspects of management.

This network of coordinators was established through a series of training, education, and learning by doing. The investment was significant but their returns are notable even in the world of small-scale fisheries management globally. This network is the foundation of the contract between stakeholders and

the DPM through the Local Conventions. If it goes, so does the entire co-management structure made functional by USAID/COMFISH. Means and avenues for supporting this network of coordinators of the CLPAs and a gradual phasing out program need to be identified. Options include a formula of shared costs among DPM and CLPAs (with transitional donor support), and a scenario under which local partners get direct awards for innovative and successful self-financing and operational procedures.

In a follow-on effort, the process of competitive bidding will take at least a year if not more and the cost of letting the current agreement end before a new one would potentially be awarded is high (office shut down, loss of key staff, vehicles and other assets disposed of, etc.) If there is a way to engage the process in the immediate term on the USAID side, the potential to not have a gap would be a huge opportunity to capitalize on and to ensure the best use of USG resources as well as to maintain the momentum of progress being made.

We also note that using a Cooperative Agreement mechanism rather than a contracting mechanism has proven effective for this type of work to date. It enables USAID implementing partners of the caliber of URI/CRC with the guiding principles, technical approaches and appropriate ways of working with both the donor and local stakeholder communities to engage fully and with the fewest barriers in delivering cost effective, sustainable, high quality and transformative results.

Choosing the sole fishery as an additional Phase II fishery to focus on (in addition to carrying through with Sardinalla and Cobo) would reinforce the principle of ecosystem-based management of the shared stock with The Gambia and could demonstrate some significant lessons for doing that. Not to mention that it could protect Senegal from losing out in the sole value chain if The Gambia does end up getting MSC certification.

The evaluation report states (p. 12) that “if the project were to be extended, the major focus should be on collecting baseline data, supporting local agreements, promoting aquaculture and providing better access to credit and markets for stakeholders.” Continued strengthening of the shared and collaborative system of fisheries science, reporting, and validation for measuring status and progress for management is an excellent recommendation. Providing better access to credit and markets for stakeholders is also a good recommendation. The USAID/COMFISH project did not include microfinance in the Project Description because at the time it was not considered by the mission a priority for COMFISH.

