

USAID/COMFISH Project
PENCOO GEJ
Collaborative Management for a Sustainable Fisheries Future in Senegal

ANNUAL REPORT

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Fédération Nationale des GIE de Pêche



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1. EXECUTIVE SUMMARY

The USAID/COMFISH project is a five-year initiative (February 14th 2011 – September 30th 2016) financed by USAID (The United States Agency for International Development). It is implemented through a Cooperative Agreement between USAID and the University of Rhode Island (URI). This first annual report presents activities implemented between February 2010 and September 2010 to achieve results expected from the USAID/COMFISH “PENCOO GEJ” project in Senegal.

The USAID/COMFISH project main beneficiary is the Senegalese Ministry of Maritime Economy (MME) and its technical offices, mainly “*Direction des Pêches Maritimes*” (Department of Marine Fisheries - DPM), which is in charge of fisheries management and planning in Senegal. Major partners that carry out the project are, among others: WWF-WAMER, FENAGIE, ENDA, CSE, IUPA, government structures, the private sector and non-governmental organizations based along the coast and in the fishery sector.

For FY2011, the USAID/COMFISH project focused on:

- a. Specifying its strategic role in assisting the Senegalese Government on fisheries sustainable management in Senegal;
- b. Establishing foundations and enabling conditions to play that role;
- c. Creating and implementing all human, administrative and physical local structures necessary for effectively manage the project.

FY2011 results:

- a. Analysis of DPM technical strategic needs and flaws in terms of human and institutional capacity that might interfere with the implementation of the Fisheries Sector Policy Letter (“*Lettre de Politique Sectorielle*” - LPS). A DPM-led partnership involving CEP, CRODT and IUPA has been submitted for human capacity building during FY2012.
- b. The identification of a unifying paradigm: the concept of Sustainable Management Units (“*Unité de Gestion Durable*” - UGD) was approved in principle by DPM. UGDs will combine local co-management structures currently implemented (“*Conseils Locaux de Pêche Artisanale*” – CLPAs; “*Comités de Pêche Locaux*” – CPLs) and stocks so that fishing capacity and effort impacting stocks are quantitatively connected and harmonized with each stock productive capacity. The COMFISH/USAID project will assist DPM in the creation of specific UDGs for FY2012.
- c. A draft study on climate change potential impacts on landings and food security was conducted. We know that fish landings in Senegal represent 72% of animal proteins and 46% of total Senegalese food proteins. This source of protein is highly

- endangered because of a drop in quantities landed. A 20% decrease has been recorded between 2006 and 2008, corresponding to a period for which reliable data existed. It seems that this drop has been going on from 2000 until today. Therefore, USAID/COMFISH has developed a strategy to identify key stocks impacted by decreasing landings. This strategy will be carried out with DPM and CRODT during project Y2.
- d. Key stocks on which the USAID/COMFISH project will be working were identified thanks to a consultative and participative process. This process involved fishers from five CLPAs from project intervention sites and was analyzed and validated during a workshop gathering all major stakeholders.
 - e. Selected stocks for first UGDs implementation in Senegal are:
 - a. *Sardinella* spp
 - b. Shad (locally called Cobo, scientific name is *Ethmalosa fimbria*)
 - c. Coastal shrimp (*Penaeus notialis*)
 - d. Octopus
 - e. Grouper (*Epinephelus aeneus*)
 - f. Key areas were selected through the same participative process. These areas gather all CLPAs from Cayar to the Sine Saloum delta, including all CLPAs from the Sine Saloum to the Casamance region.
 - g. Efforts have been initiated to seek synergies with other field projects and ongoing programs financed by other donors and acting in the fishery sector in Senegal (JICA, BM- COMOPECHE, Spanish Cooperation and others) throughout donors group meetings on fishery, meetings organized by DPM, as well as through bilateral contacts. These meetings were useful to identify synergies and prevent overlaps between the USAID/COMFISH project and other projects acting in the fishery sector within identical intervention areas.

At the same time, in FY2011, efforts were dedicated to the creation of the project coordination office, make it operational and recruit staff. Besides, meetings were organized to present the project to partners, identify synergy approaches with ongoing projects and programs and sign protocol understandings with the project execution partners.

2. INTRODUCTION

This report covers a period from February 2011 to September 2011, corresponding to the USAID/COMFISH program first year of execution. This year was marked by the organization of several meetings with DPM, program partners, donors group for fishery in Senegal and stakeholders that benefit from the program. These meetings brought to stakeholders and partners a better understanding of the USAID/COMFISH project objectives, and started collaborative procedures with key partners of the project.

From a logistic point of view, the priority was to install equipment and personnel to have functional offices.

The USAID/Senegal objective through this project is to assist the Senegalese Government in its attempt to reform the fishery sector as mentioned in the **Fisheries and Aquaculture Sector Policy Letter** (*“Lettre de Politique Sectorielle de la Pêche et de l’Aquaculture”*), so as to keep providing revenues and ensure food security to the growing population. USAID/COMFISH will not only support this reform but also will promote the USAID objectives for the conservation of biodiversity and will address main themes of improved governance, gender equity and adaptation to climate change impacts. USAID/COMFISH seek to develop and replicate new models to assist Senegal in achieving sustainable management for its artisanal fishery. Due to the fact that most fish resources are shared between Senegal and neighboring countries in the CCLME zone, activities are conducted to help harmonizing artisanal fishery governance at a sub-region level, even if most project activities will be carried out in Senegal.

FY2011 outputs:

Activities conducted during Year1 can be summarized as followed:

The analysis of DPM technical strategic needs and flaws in terms of human and institutional capacity that might interfere with the implementation of the Fisheries Sector Policy Letter (*“Lettre de Politique Sectorielle”* - LPS). A DPM-led partnership involving CEP, CRODT and IUPA has been submitted for human capacity building in FY2012.

This partnership will involve major new concepts such as the Sae Grant/Land Grant as well as the structure changes they imply. It will also involve:

- a. Formulation of new technical ideas at the IUPA level and their validation by fishers, the implementation of a unified and integrated information system of fishing-related data that gathers cross-referenced databases and all data currently handled independently by DPM and CRODT;
- b. Training programs implementation intended to reinforce IUPA and CRODT;

- c. Identification of two students in a Master's degree for a training at URI;
- d. Several other initiatives intended to strengthen and integrate the fishery sector to improve fisheries management by DPM in Senegal, as mentioned in the LPS.

The identification of a unifying paradigm for Coastal Area Sustainable Management ("*Gestion durable de la zone côtière*" – GZC) was approved in principle by DPM. The concept of Sustainable Management Units (UGDs) was presented to DPM and to a group of funding agencies at two different DPM Technical Committee meetings and was approved in principle as a new tool for GZC in Senegal. UGDs will combine local co-management structures currently implemented ("*Conseils Locaux de Pêche Artisanale*" – CLPAs; "*Comités de Pêche Locaux*" – CPLs) and stocks so that fishing capacity and effort impacting stocks are quantitatively connected and harmonized with each stock productive capacity. The COMFISH/USAID project will assist DPM in the creation of specific UGDs in FY2012.

A draft study on climate change potential impacts on landings and food security was conducted. We know that fish landings in Senegal represent 72% of animal proteins and 46% of total Senegalese food proteins. This source of protein is highly endangered because of a drop in quantities landed. A 20% decrease has been recorded between 2006 and 2008, corresponding to a period for which reliable data existed. It seems that this drop has been going on from 2000 until today. Therefore, USAID/COMFISH has developed a strategy to identify key stocks impacted by decreasing landings. This strategy will be carried out with DPM and CRODT during project Y2.

Key stocks on which the USAID/COMFISH project will be working were identified thanks to a consultative and participative process. This process involved fishers from five CLPAs from project intervention sites and was analyzed and validated during a workshop gathering all major stakeholders. Selected stocks for first UGDs implementation in Senegal are:

- a. *Sardinella* spp
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- d. Octopus
- e. Grouper (*Epinephelus aeneus*)

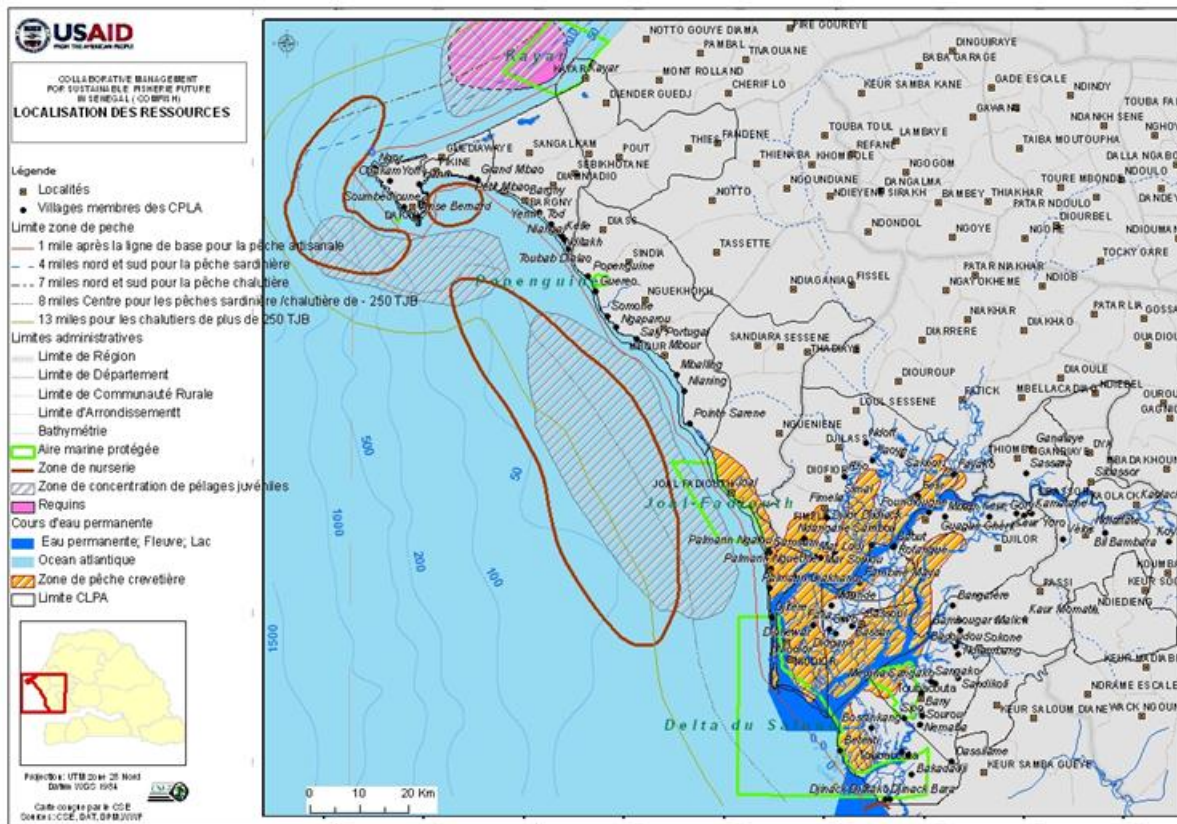


Figure 1: Map Showing Species Spatial Distribution

Key areas were selected through the same participative process. These areas gather all CLPAs from Cayar to the Sine Saloum delta, including all CLPAs from the Sine Saloum to the Casamance region.

Efforts have been initiated to seek synergies with other field projects and ongoing programs financed by other donors and acting in the fishery sector in Senegal (JICA, BM-COMOPECHE, Spanish Cooperation and others) throughout donors group meetings on fishery, meetings organized by DPM, as well as through bilateral contacts. These meetings were useful to identify synergies and prevent overlaps between the USAID/COMFISH project and other projects acting in the fishery sector within identical intervention areas.

Moreover, the project has implemented all systems necessary for the office to be operational, for meetings and protocol understandings signature with the program partners, for the organization of a national workshop on fishery planning and stock and priority areas selection and for the elaboration of the annual action plan.

At the same time, in FY2011, efforts were dedicated to the creation of the project coordination office, make it operational and recruit staff. Besides, meetings were organized

to present the project to partners, identify synergy approaches with ongoing projects and programs and sign protocol understandings with the project execution partners.

3. TARGETED RESULTS, PLANNED ACTIVITIES, ACHIEVEMENTS AND CHALLENGES IN FY2011

For this program startup period, planned activities were organized around:

- a. The analysis or baseline status of several aspects of fishing governance capacity,
- b. The identification of priority activities linked to capacity building, and
- c. The analysis and identification of local partners and their role in fisheries sustainable management.

This required an intensive consultation with local partners and program execution partners, recipient institutions (DPM and its ramifications in targeted areas), projects and other programs assisting DPM and acting in these areas as well as other local stakeholders involved in fisheries management. During this first step, the project implemented a participatory process through which its partners and all stakeholders were able to choose priority stocks and areas so as to elaborate and implement fishing participative management plans for beginning of FY2012.

From an administrative and financial point of view, all questions related to logistics, personnel recruitment, various aspects of the project startup and to the coordination office operations, were solved.

For this FY2011, planned activities are listed as follow:

- Project startup: Equip offices with the Internet, furniture, computer systems, air conditioners, water, electricity and telephone; hire a security company and set up an information management system; buy vehicles for the project and hire drivers and an office secretary;
- Organize a coordination workshop with donors and share information;
- Initiate activities linked to SIG and to mapping with CSE;
- Revise priority stock status with partners;
- Organize visits and meetings with fishers' communities to evaluate needs for implementing a functional co-management system with WWF-WAMER;
- Elaborate a vulnerability assessment and climate change adaptation guide for fishers' communities with ENDA ENERGIE;
- Organize the national planning committee meeting for the adoption of the MPAs national strategy (with WWF-WAMER);

- Support WWF participation to the trainers' training workshop from the Western Indian Ocean Marine Science Association (WIOMSA);
- Organize a national workshop on priority stock selection to create sustainable fisheries;
- Sign protocol understandings with ENDA-ENERGIE to start activities related to the creation of a manual on vulnerability assessment methodologies and to the elaboration of adaptation strategies;
- Initiate discussions with DPM on the integration of climate change adaptation in fishing policies planning;
- Sign a contract with CRODT and start data analysis on fishing, effort and overfishing in Senegal;
- Initiate discussions with IUPA to start the Seagrant program;
- Approval by the Ministry of Fisheries of the USAID/COMFISH program technical and steering committee;
- Start studies on fisheries governance (WWF-WAMER and consultant Caroline Karp mission);
- Identify activities to assist the "Alliance" action plan for a sustainable fishery in Senegal;
- Organize a national meeting to identify CLPA's needs and priorities and elaborate a capacity building program with CLPAs;
- Evaluate women's role in artisanal fisheries (Madeleine's mission);
- Elaborate terms of reference for economic value chain and energy value chain;
- Revise PMP with DPM, the World Bank entity for sustainable fish resources management (COMO-pêche) and other partners;
- Develop communication activities for a better visibility of the program activities.

3.1. Policies Reform

3.1.1. The Fisheries and Aquaculture Sector Policy Letter (*"Lettre de politique sectorielle des pêches et de l'aquaculture"*)

All USAID/COMFISH project activities target the implementation of a sustainable scientific governance system, and are based on fishers – men and women – and stakeholders using fish resources (Sustainable Management Units, UGDs). This system will be based on a concept that integrates stocks bio-economic sustainability combined with decentralized and participative congestion structures, mainly located in coastal areas. It is precisely this policy that the Ministry of Maritime Economy (MEM), (main beneficiary of the USAID/COMFISH project) identified in its Policy Letter (LPS). Thus, the USAID/COMFISH project will assist MEM in the fisheries and stocks management in Senegal by using decentralized management structures on coastal areas (*"Conseils Locaux de Pêche Artisanale"* - CLPAs, *"Comités de Pêche Locaux"* - CPLs), created by DPM over the last 12 years. These structures will at the

end be used to handle fishing capacity so that it can coincide with the actual exploitable potential. In order to do so, USAID/COMFISH will have to assist the Ministry in identifying a clear and well-defined policy for fishing capacity and efforts management on each stock, which simultaneously integrates combined effects of overfishing and climate change. This policy allows DPM to sustainably manage fisheries in Senegal and ensure protein production: (we know that fish represent 72% of total animal proteins and 42% of total Senegalese food proteins, and that fish consist in a significant source of protein for low and very low-income households). All stakeholders participating in the Workshop on priority stock selection held in July 2011, including the Ministry of Fisheries and its technical offices, approved in principle this basic philosophy. Structures that are necessary to carry out this approach involve well known “*Conventions locales*”, which can be adapted to create a link between effort, capacity and landings in neighboring CLPAs, in order to set up a new UGD approach involving communication and dialogue between fishers of several CLPAs that exploit the same stock.

Even if the LPS highlights the importance of fisheries management in Senegal using international sustainable biological and financial criteria, the scientific and technical infrastructures needed to enable the Ministry to respect these obligations have not been entirely implemented yet. In areas where these institutional structures do exist, they are not operational for not having sustainable funding mechanisms that would enable them fully play their role. USAID/COMFISH has therefore committed to supporting DPM in the creation of a new partnership that might revive fisheries management sector by reinforcing the university sector (“*Institut universitaire de Pêche et d’Aquaculture*”, IUPA) and the scientific research sector with the “*Centre de Recherches Océanographique de Dakar Thiaroye*” –CRODT, which is the competent element in terms of stock assessment and management in Senegal.

Climate change may represent a direct threat to stocks and fish landings in Senegal.

Therefore, USAID/COMFISH commits to taking into consideration in its activities major effects of excess fishing efforts and climate change on food security by strengthening DPMs capacities and by giving scientific information on governance structure, fisheries research and fisheries management so as to create:

- a. A pool of researchers, oceanographers, climatologists, economists, anthropologists in terms of stock assessment and managers in the fishery sector to achieve sustainable fisheries management in Senegal;
- b. A scientifically integrated fisheries management system.

USAID/COMFISH identified 12 execution partners to carry out activities to help DPM in the implementation of the LPS for the next five years. This will enable the project to intervene on issues linked to food security due to fishing overcapacity, climate change as well as issues linked to the conservation of biodiversity.

3.2. Natural Resources

3.2.1. Biodiversity Conservation and Marine Ecosystems Management:

The objective of the USAID/COMFISH project is to create Sustainable Management Units (UGDs). To achieve this objective, the project will implement efficient strategies to face bad practices and management methods and to manage fishing capacity. The idea will be to identify key species and stocks, to evaluate the volume and the intensity of illegal fishery (INN) and the number of Senegalese fishing outside Senegalese waters.

Implement strategies in order to create UGDs for stock management in Senegal: USAID/COMFISH has identified a strategy to bring CLPAs and their component to the villagers' level (CLP and others) and to create broader structures targeting the same stock. These new structures are called Sustainable Management Units (UGDs), once implemented they will manage capacity and effort, fish equipment, opening and closing fishing periods for a given stock. Each UGD will identify and carry out a Management Plan (MP). All CLPAs and CLPs of a given UGD (that is to say all fishers – men and women – and equipment/boats they use) will be connected by “Conventions Locales” (CL – Local Conventions). This strategy was approved in principle by DPM and will be carried out under its supervision during the elaboration and the implementation of Management Plans in FY2012.

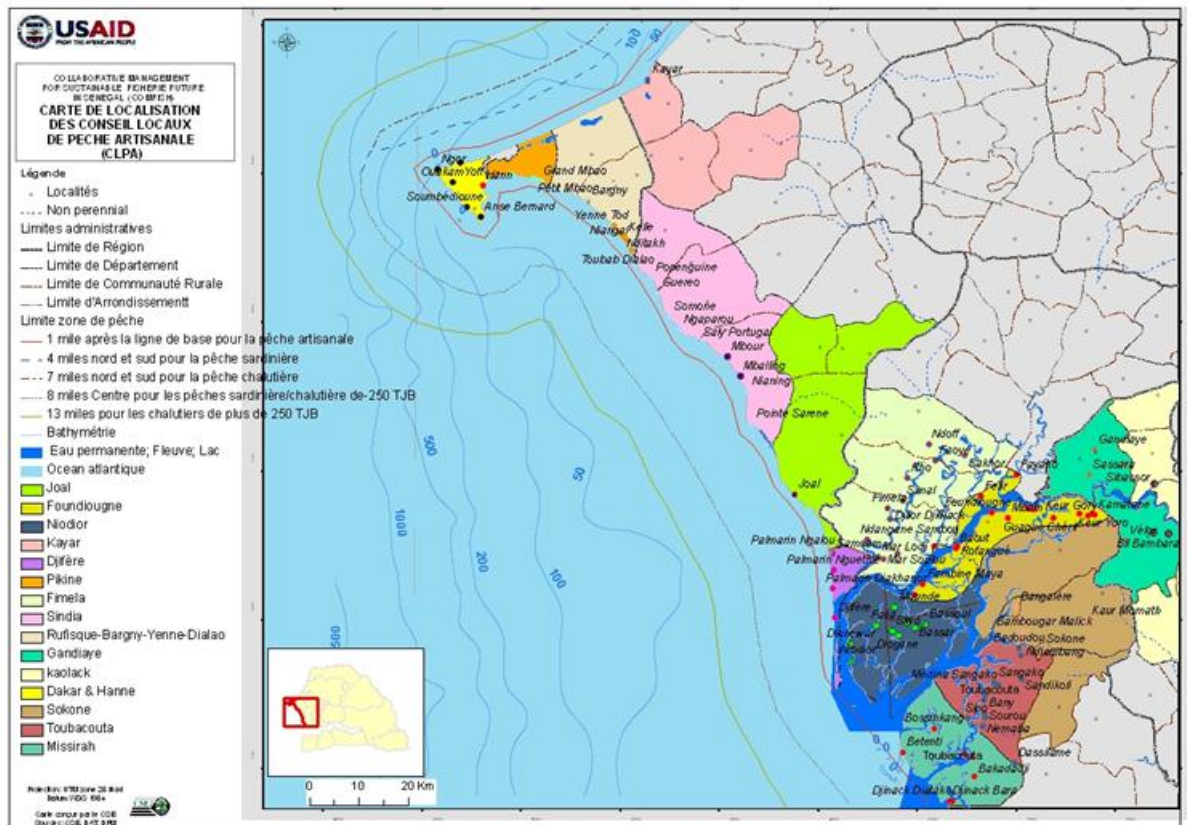


Figure 2: Map showing CLPAs Localization

Fisheries planning and synergies development:

- a. Implementation of Fisheries Management Plans (FMP): the key tools required to implement UGDs are stock-based Fisheries Management Plans. They were approved in principle by DPM in FY2011. USAID/COMFISH will identify means and ways to create and carry out UGDs through the implementation of Management Plans in FY2012.
- b. Priority stocks selection: A new consultative, participative and decentralized process, which gathered over 30 fishers groups, six CLPAs, IUPA, CRODT, DPM, main funding agencies and other key stakeholders, was identified and carried out for the selection of stocks on which USAID/COMFISH will work during the next five years.

The **Workshop Proceedings on Priority Fish Stocks** (“*Rapport de l’Atelier sur les stocks*”, July 2011) covers this process, which led to the following list of selected stocks as potential UGDs for FY2012:

- i. *Sardinella* (two species)
- ii. Coastal shrimp
- iii. *Ethmalosafimbria* (cobo)
- iv. Octopus
- v. Grouper (*Epinephelus*)
- vi. Green Lobster

In fact, to select priority stocks, evaluate empirical knowledge related to resources sustainable management and evaluate needs for the creation of a functional co-management system, the WWF-WAMER staff conducted a field mission from July 4th to 9th, 2011. Thus, several meetings were held between the WWF/USAID/COMFISH staff and CLPAs of Foundiougne, Joal, Mbour, Sindia, Kayar and Rufisque/Bargny.

About species selection, each CLPA had to indicate a selection of priority species that required a management and implementation plan, considering the economic and social importance of that species fishery for the local and national economy.

- The economic importance of targeted priority stocks;
- The difficulties linked to the co-management entities’ structure, especially in the absence of regular dialogue between these entities;
- The non-payment of royalties from fishing permits to CLPAs, therefore making these structures difficult to operate;
- The drastic reduction of the fishery service staff, making it difficult to support fishery surveillance missions by fishery agents in fishing areas and MPAs when needed;
-

- The existence of prohibited fishing practices that threatens the resources durability.

These meetings were followed by several focus groups and missions conducted by local and international consultants who respectively worked on:

- The assessment of “*Conseils Locaux de Pêches*” on fisheries governance (consultant Caroline Krap’s mission in July 2011);
- The diagnosis results summary on CLPAs and CLPs and OCB (Kande and Diouf March 2011).

Results from these meetings were taken into consideration in the workshop held on July 20th and 22nd, 2011 on fisheries installation and the selection of the priority stocks on which the USAID/COMFISH project will work over the next five years.

At that step, the above-mentioned seven (07) species were selected from the economic and biological criteria determined in the working groups.



Participants to the workshop on stocks/species selection, July 20th-22nd 2011

The validation of the workshop results was carried out by organized returns at the CLPAs’ level on each intervention site from August 17th to 19th 2011 and during the meetings organized on September 13th and 14th 2011 with project partners in Dakar.

Selected stocks status review: To better target the status of selected stocks, a set of TORs (05 in total) was submitted to CRODT, leading structure responsible for fisheries monitoring, in order to get significant basic features on these species and targeted stocks. Despite various

meetings between the structures, these actions couldn't be conducted. Following a working program exchange between CRODT and the USAID/COMFISH project through the DPM (August, 29th 2011), CRODT (September, 5th 2011) and USAID/COMFISH (September, 13th and 14th 2011) planning meetings, a protocol was submitted to CRODT for a better consideration of the project priorities. Planned activities based on this protocol will be executed during the project's second year (2011-2012).

Simultaneously, CLPAs capacities will be strengthened to carry out local conventions in order to elaborate and assist with the creation of management plans for priority species (**Sardinellas, Ethmalose, shrimp, grouper**) and to develop during FY2012, activities on resources monitoring and conservation. That is how, during the 2011-2012 fiscal year, the project will mainly focus on the elaboration and implementation of management plans on one of the priority stocks: sardinellas. To support these actions, it is considered to conduct a biological and socio-economic review on sardinellas fisheries in Senegal and in the sub-region. The objective of this activity will be to analyze the impact of the environment on the sardinellas population dynamism in the North West African area.

At the same time, to help managers better consider durability aspects in fish resources management, the project will support the creation of an eco-certification process of stocks, which will be identified according to installation priorities. In that perspective, a workshop will be hold to strengthen managers' and fishery stakeholders' capacity in MSC (Marine Stewardship Council).

Implement activities related to Unregulated and Undeclared Illegal Fishery (INN): The importance of unregulated and undeclared illegal fishery in Senegal was reviewed and a partnership is created between USAID/COMFISH and the Senegalese and American Navy initiated by the USAID/COMFISH AOTR. This new activity will enable USAID/COMFISH to objectively evaluate catch volumes by major industrial vessels, which violate the Senegalese law and/or do not land their catch in Senegal. Available information indicate that quantities of landed fish may vary from 100,000t to 370,000t/year. The latest estimation exceeds current landings volumes officially declared. This new activity will start in February 2012 and will be a significant element to the UGDs sustainable management and to food security (any policies aiming at reducing artisanal fishery effort and capacity and ignoring important illegal landings in the sea, cannot be effective).

Fishery by Senegalese vessels outside Senegalese waters: USAID/COMFISH and CRODT agreed to work together to identify landings volume (estimated at least at 70,000t/year starting from the mid-90's) and the level of fishing effort deployed outside Senegalese waters. This activity will start at the beginning of FY2012. It is a significant element of sustainable management since reliable assessment cannot be conducted on any stock as long

as data related to effort and landings are flawed by ignorance on the quantity of fish captured in foreign seas.

Management of marine ecosystems: Planned fisheries management has to identify limitation or exclusion areas for human action in order to protect critical or fragile ecosystems such as the ones intended to Marine Protected Areas (MPAs). Due to fish resources vulnerability and management problems, Senegal has committed in 2004, with the WWF WAMER and OCEANIUM assistance, to creating five new Marine Protected Areas (MPAs) in Saint Louis, Cayar, Joal-Fadiouth, Abene and Bamboung, as fisheries management tool. This MPAs network has enable the protection of sites presenting an ecological, social and economic value and has fostered local stakeholders awareness towards conservation and sustainable management of marine and coastal resources. However it presents several weaknesses and constraints (judicial, institutional, governance etc.) that might compromise the achievement of assigned objectives as well as their durability.

Given the plurality of constraints and considering the degradation of marine and coastal resources, fishers mobility, impacts of exogenous activities, profits made by MPAs and the necessity to keep the structure and functions of marine and coastal ecosystems, the Senegalese government, in collaboration with its partners, elaborated a National Strategy for MPAs to foster and support the creation of a marine protected areas network coherent and functional. During this first year of execution, the USAID/COMFISH project has supported the technical validation and the official approval of this initiative by the Ministry of Maritime Economy (MEM) and the Ministry of Environment (ME).

The National Strategy for Marine Protected Areas in Senegal identified three strategic approaches of intervention, which are: (i) institutional reinforcement, (ii) creation and management of MPAs, (iii) contribution of MPAs to a sustainable management of fish resources, the conservation of marine and coastal biodiversity and to the improvement of local communities conditions and livelihood and the promotion of scientific research for MPAs. In FY2012, the USAID/COMFISH project will intend to support this Strategy's implementation, which is the result of a series of dialogues from all stakeholders.

Initiate activities on the Geographic Information Systems (GIS) database and mapping with CSE ("Centre de Suivi Ecologique"): The project's objective is to implement a Geographic Information Systems (GIS) integrating the spatial mapping of major stocks in the country and interventions of different fishery donors, a localization of existing CLPAs and their jurisdiction and local governance administrations on the project's intervention areas. Aspects related to space-time variations and to climate change will also be included in this exercise. Therefore, several meetings have been set with CSE in order to initiate mapping activities. That is how some activities were conducted during this period and allowed to:

- Finalize and sign the URI-CSE contract;
- Collect available data from institutions operating within the project's areas (WWF, UICN, DPM, Wetlands International, PRCM, ENDA);
- Process and harmonize data to be integrated in the future GIS;
- Create thematic maps;
- Produce a technical execution report including:
 - i. The elaboration of an administrative map and a ground occupation map for the intervention area (Kayar, petite côte, the Saloum delta and possibly Casamance);
 - ii. A visual review of CLPAs ("*Conseils locaux de Pêche Artisanale*") and CLPs ("*Comités Locaux de Pêche*") distribution; a mapping of these consultation frameworks was created by considering their creation date, their composition, their structure;
 - iii. A mapping of donors' intervention within the area by considering targeted species, as far as possible;
 - iv. A mapping of the resource: it will be about localizing critical areas, laying areas (with WWF), fishing areas, key habitats, migration itineraries, distribution areas of non-migrant species, landing sites, reef localization (see with DPM), MPAs localization (specify their functionality level: management plan, etc.);
 - v. An inventory of number of fishing pirogues within the intervention area;
 - vi. Elaborate a summarized methodological report presenting used data and methodology, information that cannot be mapped, etc.



Figure 3: Administrative Map of the Project Area

This work enabled to:

- Identify priority sites and species on which the USAID/COMFISH project will work: (Sites: Cayar, petite côte, Foundiougne, Casamance); (prioritized potential species: Sardinella, ethmalose, grouper, octopus, coastal shrimp, Cymbium, green lobster);
- Implement a Geographic Information Systems that will be progressively supplied;
- Finalize and officially approve the MPAs National Strategy by the Ministry of Maritime Economy (MEM) and the Ministry of Environment (ME).

3.3. Increase of Socio-Economic Benefits For Fishers Communities and Food Security

To better trade products in order to increase stakeholders' social benefits, three aspects will be considered in this component: the value chain analysis, the improvement of treatment and conservation techniques for fish products within the project's intervention areas and the assessment of coastal communities' perception on the state of their social wellbeing.

In addition to the economic value chain, the review will integrate an environmental part which purpose will be to better understand the impact of the different fisheries type and transformation on the environment. This will enable the implementation of a greenhouse

gases mitigation plan. This initiative will contribute to the implementation of measures for climate change adaptation.

Exchanges occurred with the different institutions involved in these reviews, which have enabled a better finalization of this year's Terms of Reference.

3.4. Adaptation to Climate Change

Climate change is a reality and will intensify. In Senegal, these phenomena may have important impacts on the fishery sector, on coastal and marine biodiversity, on habitats and coastal infrastructures as well as on coastal communities. These impacts may affect the co-management success and the objectives to establish a sustainable and flourishing artisanal fishery. Most of the project activities on climate change will be postponed to FY2012.

Management of climate change impacts on stocks and landings: Apparently climate changes have already impacted fish landings in Senegal, as it is in other countries in the sub-region. USAID/COMFISH will work in coordination with the DPM and CRODT to identify main stocks that have been impacted. This information will be used to identify a specific strategy per stock, which will allow DPM to manage catch per unit effort (CPUE), by adjusting fishing capacity to threats from climate changes and excess fishing effort.

Therefore, USAID/COMFISH will focus on:

- a- Identifying a management plan for fishing capacities in Senegal;
- b- Identifying key stocks impacted by climate changes;
- c- Combining information to produce models and results necessary for the management of each stock that has been impacted, so that the sustainable reproduction capacity of this stock will be related to its total capacity. This will enable DPM to sustainably manage the stock.

CRODT and DPM will be the USAID/COMFISH partners in these research activities.

Management of climate change effects on human communities: climate changes concern both fish resources and human beings. USAID/COMFISH chose ENDA ENERGIE as partner to execute activities on climate change in coastal communities.

Therefore, ENDA ENERGIE elaborated a manual on the methodology for assessing vulnerability and elaborating adaptation strategies that will be used as a work basis for FY2012, in specific sites selected by the project. ENDA ENERGIE produced three drafts on activities conducted between June and September 2011. These documents respectively focus on:

- a- A questionnaire to assess vulnerability to climate change at a community level;
- b- A methodological manual to assess climate change vulnerability at a community level (coastal areas);
- c- Integrated strategies for climate change adaptation at a community level (coastal areas).

The documents preliminary analysis indicates that the questionnaire, the manual and the document on strategies are properly presented but remain too general when it comes to the fishery sector. In fact, key elements mentioned in TORs do not seem to be included in these reports.

Moreover, as we move on FY2012 planning, we notice that activities, as well as initially expected results for the USAID/COMFISH project on the “climate change” component, are not sufficiently developed to significantly contribute to different strategies developed by USAID/Senegal to support the Senegalese government facing climate change effects. That is how a set of initiatives is being developed by the project to better considerate the “climate change” component in order to develop a process and proper vulnerability assessment tools both at the coastal communities’ level living in the intervention sites and the stocks’ level on which the project will be working. This approach will allow, from the second year of execution, to implement a participative action plan to adapt and/or mitigate the effects of climate change on the project intervention sites.

This new approach will certainly need an update or a name adaptation of the “USAID/COMFISH project expected result 3” related to the “Climate Change” component. At the same time, the project is discussing with other competent institutions on this issue (ISE, ACCC, CRODT etc.) to reinforce the response team. These different interventions allowed us to achieve following results:

- a. USAID/COMFISH agreed this year on a protocol understanding with CRODT to reinforce activities linked to the identification of major stocks vulnerability to environmental and climate factors that, such as fishing overcapacity, impact food security in Senegal. This activity will also help implementing a strategy in order to adapt each one of the vulnerable stocks to climate change impacts so that they may be sustainably managed.
- b. USAID/COMFISH identified IUPA as a partner to introduce and improve a new technology from the university sector to be transferred to fishers – men and women- in UGDs/CLPA/CLPs thanks to the Land Grant/Sea Grant model. This activity will definitely have to lead to new stock assessment methods and reinforce fisheries management in Senegal.

3.5. Human Capacity Building

The unregulated exploitation of marine and coastal resources led to a drop in catch and landings, to resources degradation and to an impoverishment of coastal communities. This was illustrated by a decrease of the fishing contribution to the national GDP, which went from 2% to 1.8% between 2006 and 2009 as well as by a loss of marine biodiversity.

Today, all stakeholders agree on the fact that the State cannot handle by itself all issues that threaten fishery sustainability. Aware of the role they can play in the search for solutions to problems faced by the fishery sector, management institutions, fishery Professional Organizations (POs), research and training organizations, Non-governmental organizations (NGOs) and partners to development, take an increasing number of initiatives. Therefore numerous opportunities were taken through different meetings with the fishery authorities, donors from the fishery sector and other partners to give more visibility to the program's objectives in order to better specify expected results from the USAID/COMFISH intervention, especially the creation of fishery Sustainable Management Units ("*Unités de Gestion Durable*" – UGDs). These meetings are also an opportunity for the program to create possible synergies with other institutions working in sustainable management of fish resources.

At the same time, a series of meetings were held on the field with CLPAs and stakeholders. These exchanges led to several consultations with CLPAs coordination committees, women processors, professional organizations and several other stakeholders operating on fishing sites and targeted by the program. The exchanges enabled the launch of an important capacity building program at all levels of governance, whether on capacities of fisheries management national structures or on research or training institutions, in order to improve fisheries information system.

These opportunities cannot be sustainably developed without a favorable fishery policy environment. In fact, fishery national policies are responsible for the development of this favorable framework. USAID/COMFISH will also assist in the development of this political framework both at a national and local level. Therefore, most of capacity building activities will be conducted on FY2012.

3.6. Cross-Cutting Themes

3.6.1. Gender/ Gender Equity

On gender issues, the USAID/COMFISH project strategy will consist in building all fishers and associations capacity, including women, to enable the creation of a lobby to promote good practices in fisheries. Effective fisheries management should place fishers at the heart of the reforms and trigger a sense of ownership on new management approaches. For that, it seems necessary that different stakeholders recognize and share on experiences and needs, assume responsibilities in the management process and achieved results. Due to the fact that co-management and access regulation are relatively new in Senegal, it is essential to document the process and progress made, to emphasize communication and transparency in order to create confidence. A particular attention will be paid to women capacity building in the fishery sector. Even though women are, in most communities, underrepresented at decision levels, they constitute the first element in fish processing. Nowadays they also assume a great responsibility in children's education, health and the family social welfare. Therefore, two studies were conducted this first year to identify the role of women, their constraints, challenges they face in the fishery sector and their level of involvement in the decision making process. These studies are:

- a. A study on the “assessment of women’s power in the fishery sector” (conducted by Madeleine HALL ARBER, international expert consulting on these matters);
- b. A study on the “diagnosis of CLPAs institutional and legal framework” (conducted by Caroline Karp, lawyer and international consultant).

One of the highlights of these finalizing studies was the lack of women’s power in the fishery sector and the difficult conditions in which they work. On USAID/COMFISH project’s second year of execution, a strategy to reinforce women’s power will be elaborated. This strategy will be based on recommendations from above-mentioned studies conducted on the “evaluation of women’s role in fishers’ communities and CLPAs” and the identification of ways to reinforce their involvement in the decision making process and increase their profit from the fishery sub-sector.

Assistance will be progressively given to carry out this strategy all over the project’s term. Moreover, the improvement of women’s working conditions will be emphasized in processing sites, by the promotion of treatment and conservation techniques of fish products, which are consistent with a sustainable exploitation of fish resources and the respect of international norms and standards.

3.6.2. Science, Technology and Innovation

Climate changes impact both fish resources and fishers' communities living in coastal areas. In Senegal, as in other countries around the world, it is clear that **climate impacts on fish landings are apparent**. Therefore, the USAID/COMFISH project will be working in collaboration with DPM and CRODT to identify major impacted stocks. This information will be used to identify strategies and mechanisms necessary for DPM to better manage catch per unit effort (CPUE) on threatened stocks by best adjusting fishing capacity and excess fishing effort to climate change threats.

Even if impacts on coastal communities were already discussed during FY2011 with some partners (studies will continue in FY2012), impacts on fish stocks have not been properly assessed in Senegal yet. Therefore USAID/COMFISH will propose a set of scientific reviews and thoughts that will describe some examples of biological and economic impacts on stocks. Scientific reports from these thoughts will enable the project to propose required tools to better identify these impacts and inform DPM and the USAID/COMFISH program on the required adaptation strategies.

DPM and CRODT do have a series of historical data on stocks and species landed in Senegal. These data analysis combined with environment data will enable to demonstrate possible climate impacts on Senegalese fishery landings. These elements could be used to identify:

- Climate change positive impacts on Senegalese fishery landings;
- Current and future climate change impacts on food security for Senegalese populations;
- The possible break-even point between operated landings and populations' food security for a fisheries sustainable management.

3.6.3. Communication

Prepare and produce communication tools: At the project startup, main communication activities were conducted to elaborate a branding and visibility strategy for the project according to USAID requirements, and to create basic communication tools in order to inform on the project's presence in Senegal.

Exchanges between the project management team, USAID and URI enabled the creation and the approval of a branding and marking strategy for the project, prior to any communication activity.

Within the context of that branding strategy approved by USAID, the USAID/COMFISH project developed panels and signs to identify the project's premises and make it visible.

Other communication tools also created on FY2011 are English and French PowerPoint presentations to present the project to major partners, the French translation of the project key documents (project description, work plan, etc.) in order to ease communication between the project key partners such as DPM. Flyers, kakemono, document files etc. were also developed to increase the project visibility towards partners and the general public.



A sign indicating the access to the project premises

Project local name competition: According to one of the project objectives, which is to promote the results approval by fishers' communities, a competition was organized from May 23rd to June 23rd, 2011 in 8 fishers' communities/sites (Cayar, Joal, Mbour, Rufisque, Missirah, Dakar, Nianing, Niodor) to find a local name to the project. This process was led on a consultative and participatory way by the project team in partnership with COPEM (NGOs Committee and fishery Professional Organizations gathering over 30 NGOs from different marine and coastal regions in Senegal).

Based on selected criteria related to the name's originality, its meaning and its consonance, a jury of 4 women and 4 men agreed on the word ***Pencoo Gej*** as the project local name, which means in Wolof "Collaborative Management of Fish Resources" and summarizes the project approach on marine and coastal management. After consultation between the project team and the USAID/Senegal agents, it was decided to give to the project the official name of **USAID/COMFISH** followed by the local name ***Pencoo Gej***.



The winner of the project local name competition (right)

Project launch: After a consultation between the USAID/COMFISH project staff, USAID/Senegal from one side, and DPM from the other side, a date for the official project launch was set on October 19th, 2011. The initial date set on September 13th 2011 could not be maintained due to conflicts with the project partners' agendas and other upcoming festivities (workshop on priority stock). The date October 19th was approved unanimously as it took into account activities and events already planned by the different project partners. Therefore, preparations were undertaken, including a project launch plan shared with COPEM, DMP and USAID/Senegal to settle an agreement on the launch agenda.

Production of briefs (bi-weeklies) every two weeks: Four (04) bi-weeklies were prepared and sent to USAID during the period covered by the report. These bi-weeklies were respectively about the project local name designation process (PENCOO GEJ), the proposition of a fisheries sustainable management model approved by DPM, the workshop on priority species/stock selection and the project assistance to the validation of the MPAs National Strategy.

3.7. Project Management

3.7.1. Equip Premises and Recruit Complementary Staff

The USAID/COMFISH Coordination Unit premises were equipped with desks, furniture for computer equipment, air conditioners, water, electricity and telephone. The Internet connection is effective and the security service is implemented. Buying procedures for

vehicles are completed and two cars were bought and are in service. The computer system is operational and the complimentary staff has been hired (fishery expert, fishery assistant, driver, administrative and financial assistant). By the end of September, the office was fully functional (see diagram below). As the effective field implementation of the project will be done on FY2012, and due to the important number of activities to carry out, a local office has opened in Joal on the Petite Côte under the supervision of the fishery assistant, in order to better monitor and coordinate field activities. The Joal site was picked for two strategic reasons:

- Its central location compared to the project intervention sites (Cayar, petite côte, Foundiougne and Casamance);
- Joal hosts the Regional Fisheries Inspection, which will enable the project to better collaborate with fisheries technical services.

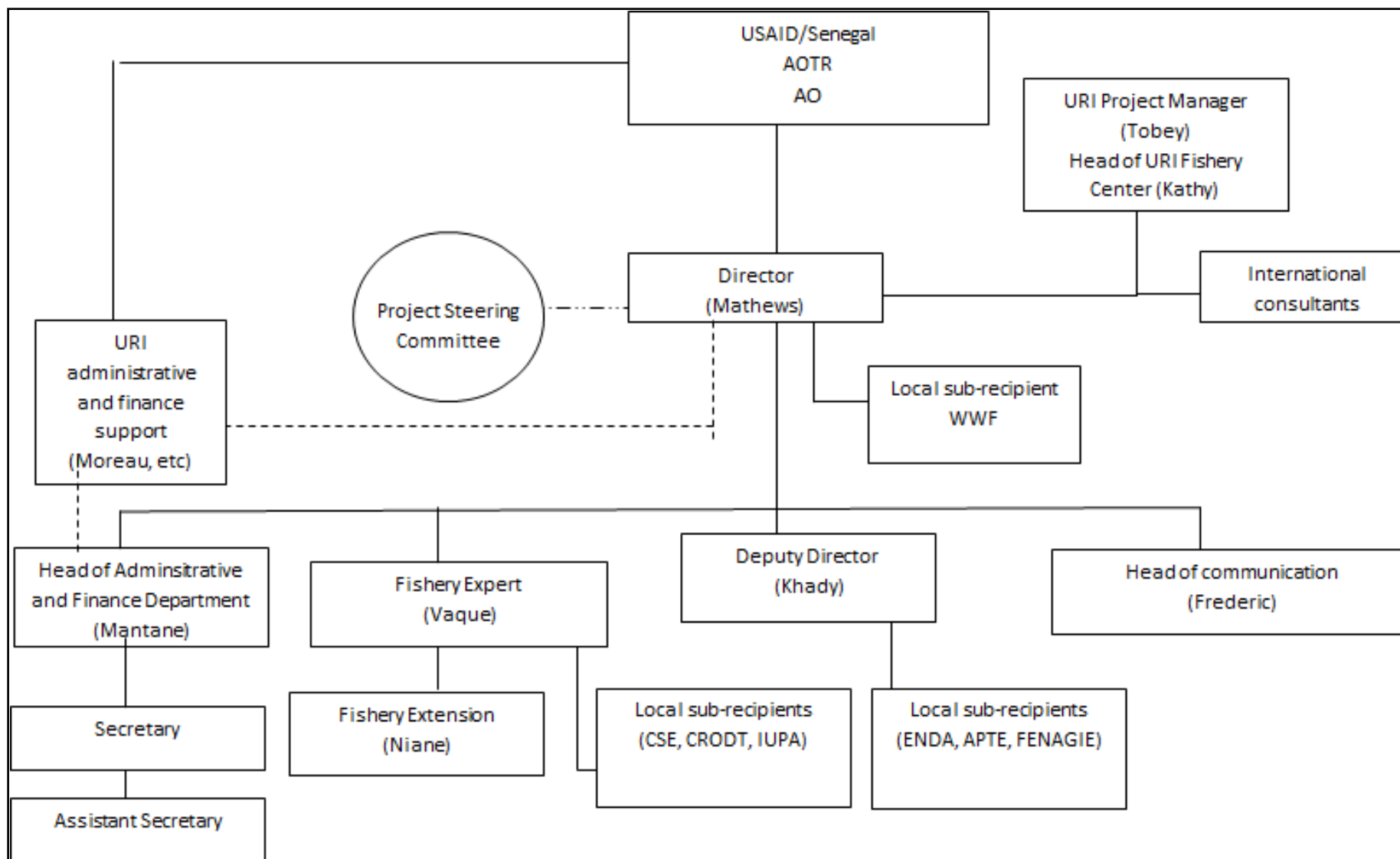


Diagram 1. UCNP administrative chart

3.7.2.Strategies/Mechanisms

Meetings with DPM, partners and donors: During this first year, several meetings were held in order to share information on the program objectives. Three major work meetings were held with DPM (5/25, 5/27 and 6/09, 2011) including two with the presence of Senegalese fishery donors. These meetings brought solutions to the following points:

- a. Register the USAID/COMFISH program on the matrix for World Bank initiated interventions and diversify fields of intervention;
- b. Implement mechanisms favorable to synergies with partners working within the program intervention area;
- c. Seek partnerships and synergies in the process for **local conventions and management plans** implementation, which should lead to the creation of Sustainable Management Units (UGDs) over the long term;
- d. Implement a steering committee with the program strategic partners (DPM, USAID/COMFISH, WWF, IUPA, ENDA, ENERGIE, CSE, COPEM, APTE etc.);
- e. Reactivate the technical committee created by CEP in which most of donors would be represented;
- f. Officially designate a focal point at the DPM level, to better integrate the program in DPM activities and for a better synergy with other donors.



Meeting with DPM and donors operating in the fishery sector

3.7.3.Partnership

The project execution partners: Even though the University of Rhode Island (URI) is the major organ for implementing and managing the USAID/COMFISH project and is responsible for the financial report to USAID/Senegal, the project major clients are the State

governing bodies and institutions for research and education. The only way to ensure a long term success and durability to fishery reforms in Senegal is to make sure that these national institutions and their ramifications at a local level will acquire the capacities to perpetuate at the end of the project, the commitment and the assistance (political, technical and financial) to carry out the reforms and new approaches brought all along the project. Therefore, the USAID/COMFISH project will help strengthen these institutions through a learning-by-doing approach. Moreover, the project will work with the civil society and the private sector, which are also key elements for durability. Other regional, national and local organizations will also play a determinant role in the search for partnerships to carry out the project activities. Major partners for the project implementation as well as their role are described in the FY2012 work plan submitted to USAID/Senegal. Most of these institutions are also recipients of the project and therefore will receive funds to execute a certain number of activities listed in the activities description in the mentioned work plan.

Partnership program: The partnership program vision is to establish a program similar to the Sea Grant/Land Grant College program involving cooperation between the government, fishery industries, universities and other organizations in terms of fish resources and scientific cooperation. The model works on a simple principal: use the available workforce composed of teachers, researchers and students, often cost effective, to ease intellectual transfer from University to fishery based on available scientific data. This program will connect all institutions involved in fishery scientific research, training, administration and industry. The objective is to start an ongoing cooperation to improve marine fishery management in Senegal. USAID/COMFISH will step in at a consultative level and will provide administrative assistance to carry out research themes identified by the Coordination Committee. During FY2011, several meetings between the University of Rhode Island and involved partner institutions enabled the project to better target this approach and prepare required protocol understandings in order to start this activity at beginnings of FY2012.

Ongoing or signed protocols: During this period, several protocols were signed with strategic partners, which are WWF-WAMER, ENDA-ENERGIE and CSE. With these partners' assistance, first actions were conducted in the field of biodiversity, climate change and mapping. Simultaneously, discussions started with scientific support institutions such as CRODT, IUPA, IRD/IFAN, SIK to carry out activities related to the products' value chain, to create a scientific database assisting management plans, to improve the fishery information system etc.

3.8. Lessons Learned

This quarter was marked by many challenges and constraints, which fortunately, have all been overcome in the execution of the project's main activities.

Nomination of a new DPM Director: During this quarter, the Fishery Director who worked in close collaboration with the USAID/COMFISH project was let go. His successor assumed his

duties by the end of the project's second semester. The USAID/COMFISH focal point continued to work with the project, therefore the noted interruption in the close working relationships between USAID/COMFISH and DPM was only temporary.

Difficulties to collaborate with CRODT: In Senegal, CRODT is the structure in charge for stock assessment, therefore a key partner to the project. However, its staff decreased drastically, from 40 researchers in 2002 to only 7 today. In that way, it cannot conduct the entire work delegated by the project. Therefore, the support of DPM and local partners has been important in this specific area.

4. SUCCESS STORIES

Two drafted success stories about the validation of MPAs and UGDs (Sustainable Management Units) National Strategy – a concept developed by the project as a response to a bad governance crisis in the fishery sector – were created and sent to USAID/Senegal in FY2011. However, they have not been published as these two processes have not achieved any concrete results yet, therefore they could not be considered as success stories. It is then expected that the above-mentioned processes will lead to success stories in FY2012.

5. ANNEXES

Annex A: Project Performance Management/ Indicator Table

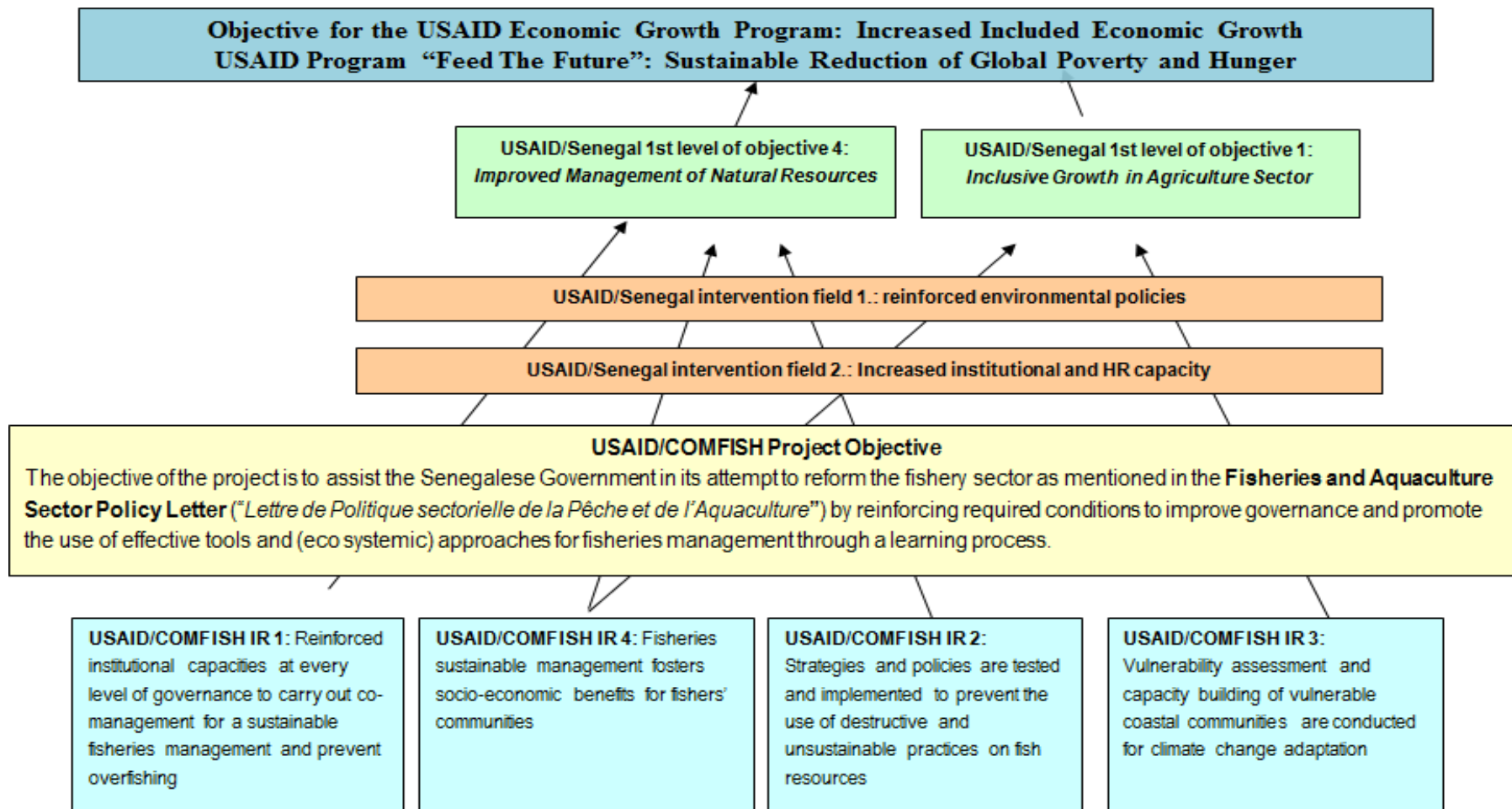
According to the USAID ADS 203 manual, the project Results Framework and Performance Monitoring Plan (PMP) were elaborated and approved by USAID in FY2011. The objective of the Performance Monitoring Plan is to assess and measure activities' effectiveness and probability to contribute to the achievement of expected results. The PMP sets the basis for the continuous assessment of the project performance and adaptation management and its implementation for a generalized apprenticeship on ecosystems management and results reporting to USAID. To monitor achievement rates of some project indicators, such as the effectiveness of CLPAs capacity building tools and the increase in socio-economic benefits for communities that benefit from the project support, some baseline status will be carried out at the beginning of FY2012.

PMP objectives all over the project timeline were reviewed and revised and additional indicators on climate change were added (indicator 10 and 11).

A meeting on the execution assessment of FY2011 activities was held with partners to achieve improved activities coordination. The project also held an annual workshop on activities planning. During these meetings, partners discussed over major achievements, challenges and acquired experiences and they planned FY2012 activities. A collecting system of indicators' data was implemented. Files/records proving the results achievement to satisfy planned performance indicators (files etc. see Results Framework in annex 1) are available. For this year, only two indicators were planned: a diagnosis on CLPAs functionality and the document on the MPAs National Strategy elaboration. All these indicators were achieved and documents are available. The two overarching Ministries (MEM and ME) officially approved the MPAs National Strategy. At beginnings of FY2012, a revision of all project indicators is planned with DPM to better adjust them to the Senegalese government Policy Letter (LPS) strategic results.

USAID/COMFISH Project Monitoring and Assessment Plan

The following Results Framework reveals general interactions between USAID/COMFISH Intermediary Results (IR) and the “Project Objectives for USAID/Senegal Economic Growth”. Each IR has one or several indicators and targets for the entire project timeline, which are indicated in the following chart. Targets are annually reviewed and adjusted.



Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
Result 1: Institutional and stakeholders capacity strengthened at all levels of governance to implement co-management for a sustainable fishery management and prevent overfishing								
1. Management effectiveness of CLPAs at USAID/COMFISH project sites	A 30% annual improvement in terms of management tool effectiveness rate	Q 1 0	Q 2 0	Q 3 0	Q 4 0	No expected result for FY2011		N/A
2. Number of individuals who have received USG supported short-term agricultural environment enabling training (FTF 4.5.2-7 indicator)	Over 2,000 people trained	0	0	0	64	64 people	This number only considers participants to the National Workshop on stock selection. It may be greater if we consider different focus groups implemented in sites during the process. Ref : Section 2.2. point b 2	N/A
Result 2: Strategies and policies tested and applied to overcome unsustainable and destructive marine resource use practices that threaten biodiversity conservation, tested and applied								
3. Number of policies/regulations and	7 Policies/	0	0	0	2	2 study reports: two CLPAs diagnosis	An analytical document was expected this year:	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
<p>administrative procedures analyzed (FTF 4.5.1-9 indicators)</p> <p>(Step 1 of 5), each one measuring a subsequent step in the process from analysis to execution</p>	regulations and strategies analyzed					<p>Ref: Section 2.2. (point b 2)</p>	<p>- “The assessment of Local Fisheries Committees (CLPs) on fisheries governance” (Consultant Caroline Karp’s mission in July 2011). Moreover, we produced two other documents: - “Executive summary of CLPAs, CLPs and OCBs diagnosis results” (Kande and Diouf, March 2011). - WWF summary report on field missions organized in project sites during the stock selection process Ref : Section 2.2. point b 2</p>	
4. Number of policies / regulations and administrative procedures drafted and presented for public/stakeholder	7 Local conventions and/or management plans	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
consultation (FTF 4.5.1-10 indicator) (Step 2 of 5), each one measuring a subsequent step in the process from analysis to execution								
5. Number of policies / regulations and administrative procedures presented for legislation / decree (FTF 4.5.1-13 indicator) (Step 3 of 5), each one measuring a subsequent step in the process from analysis to execution	6 Local conventions and/or management plans	0	0	0	1	1 MPAs National Strategy finalized and submitted to MEM and ME for approval (Section 2.2)	Annual target achieved (Section 2.2)	N/A
6. Number of policies / regulations and administrative	2 fisheries co-management plans (Location to be	0	0	0	1	MPAs National Strategy finalized and submitted to MEM	Annual target achieved (Section 2.2)	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
<p>procedures prepared with USG assistance passed/approved (FTF 4.5.1-12 indicator)</p> <p>(Step of 5), each one measuring a subsequent step in the process from analysis to execution</p>	<p>determined) officially approved</p>					<p>and ME for approval Ref : Section 2.2.</p>		
<p>7. Number of policies / regulations and administrative procedures approved and which implementation has begun (FTF 4.5.1-11 indicator)</p> <p>(Step 5 of 5), each one measuring a subsequent step in the process from analysis to execution</p>	<p>Administrative procedures implemented to finance CLPAs through some permits royalties</p>	0	0	0	0	<p>No expected result for FY2011</p>	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
8. Number of farmers and others who have implemented new technologies or management practices with the support of the U.S. government (FTF 4.5.2-5 indicator)	38 275 fishermen (estimated number of fishermen in departments of the Dakar, Rufisque, Mbour, Fatick and Foundiougne regions: CRODT, 2005 and WWF, 2006. This represents 64% of total fishermen in Senegal). The actual number of fishermen will be determined by the units/stocks management selected for the management and the number of fishermen involved in these	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
	fisheries.							
9. Numbers of additional hectares acquired thanks to technologies or improved management practices with USG assistance (FTF 4.5.2-2 indicator)	This indicator will be specified by the end of FY2012 after a complementary study on CSE and CRODT according to selected stocks for co-management and MPAs marked areas					No expected result for FY2011	N/A	N/A
Result 3: Vulnerability assessment and capacity of vulnerable coastal communities strengthened to adapt to climate change adaptation conducted								
10. Quantity of greenhouse gases emission, expressed in tons of CO2 reduced or captured with USG assistance.	To be determined depending on the energy value chain	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
11. Number of tools, technologies and methodologies on climate change developed, tested and/or adopted with USG assistance	15 Adaptation plans developed, tested and/or applied; adaptation measures, mitigation technologies	0	0	0	0	No expected result for FY2011	N/A	N/A
12. Number of individuals receiving training in global climate change as a result of USG assistance	700	0	0	0	0	No expected result for FY2011	N/A	N/A
13. Number of climate vulnerability assessments conducted as a result of USG assistance	8 6 CLPAs vulnerability assessments 2 fish stock-based vulnerability assessment	0	0	0	0	No expected result for FY2011	N/A	N/A
14. Number of laws, policies, agreements or	9 6 adaptation plans	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
regulations addressing climate change proposed, adopted, or implemented as a result of USG assistance	developed and approved 3 fisheries management plans							
15. Number of stakeholders with increased capacity to adapt to climate variability effects as a result of USG assistance	Over 120,000 community members benefit from adaptation plans and measures (the 6 communities with an average of 2,000 per community) Note: this target will be revised upwards on FY2012. The project will demonstrate that climate change increases fishers'	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
	vulnerability and that capacity building and management plans implementation on some stocks increases these fishers' and stakeholders' capacity to adapt.							
Result 4: The sustainable fisheries management foster increase in socio-economic benefits for fishers communities								
16. Number or rural households that benefit directly from USG interventions (FTF 4.5.2-13 indicator)	20,000 beneficiary fishermen households (the actual number of households will be determined by the units/stocks of management/actions selected for the management and number of fishers	0	0	0	0	No expected result for FY2011	N/A	N/A

Indicators	Targets for the close of current project	Indicator per Quarter				Achievements FY2011	Comments and reference section in report	Challenges and reference section in report – i.e. IRs 0% different for target
	households involved in these fisheries). For an average of 10 per household representing 200,000 people.							
<p>17. Fishery sector stakeholders in project sites perceive that their social welfare is better off due USG assistance</p> <p>A study on the reference state of fishery stakeholders will be conducted, at mid-term and at the close of the current project; the same study will be reconducted.</p>	Stakeholders from the fishery sector in the project sites feel an improvement of their social welfare due to USG assistance compared to other sites or projects where the project does not operate and do not benefit from other donors intervention.	0	0	0	0	No expected result for FY2011	N/A	N/A

Annex B: Environmental and Compliance Monitoring

An environmental monitoring plan was submitted to USAID this year and has not been approved yet. An environmental monitoring process for activities to be executed within the project scope was implemented. No activity requiring an environmental impact assessment or mitigation measures was conducted during FY2011.

Annex C: List of Produced Documents

- Synthesis Report on exchange meetings with CLPAs
- Workshop proceedings on fisheries installation and priority stocks selection
- Activity report for Q2 and Q3 2011
- Workshop proceedings on self-assessment and work plan 2 validation
- Assessment of legal and institutional capacity of *Conseils Locaux de Pêche Artisanale* (CLPAs): CAROLINE A. KARP - CONSULTANT TO URI-CRC
- Senegal stock assessment and fisheries management capacity needs assessment: report by ENRIQUE C. LÓPEZ-VEIGA, Ph.D
- Methodological manual to assess climate change vulnerability at a community level: ENDA ENERGIE
- Integration strategies for climate change adaptation at a community level (coastal areas)
- Execution report from CSE (“*Centre de Suivi Ecologique*”)
- Synthesis notes on CLPAs, CLPs and others OCBs diagnosis results: SIDYA DIOUF and SEYDOU KANDE
- Madeleine’s report on the role of women in artisanal fishery
- Methodology of the bio socio-economic study on shrimp in the Sine Saloum
- Methodological manual on the elaboration of fishery local conventions.

Annex D: Acronyms

ACCC	<i>Adaptation au Changement Climatique et Côtier en Afrique occidentale</i>
AOTR	Agreement Officer's Technical Representative
BRPs	Biological Reference Points
CCLME	Canary Current Large Marine Ecosystem
CLP	Local Fisheries Committees <i>Comité Local des Pêcheurs</i>
CLPA	Local Councils of Artisanal Fishers <i>Conseil Local de Pêche Artisanale</i>
CONIPAS	<i>Conseil Interprofessionnel de la Pêche Artisanale au Sénégal</i>
CRODT	Oceanographic Research Center- Thiaroye, Dakar <i>Centre de Recherches Oceanographique de Dakar Thiaroye</i>
CSE	<i>Centre de Suivi Ecologique</i>
DEEC	<i>Direction de l'Environnement et des Établissements Classés</i>
DFPS	Department of Fisheries Protection and Surveillance
DPSP	<i>Direction de la Protection et Surveillance des Pêches</i>
DITP	<i>Direction des Industries de Transformation du Poisson</i>
DPM	Department of Marine Fisheries <i>Département des Pêches Maritimes</i>
DPN	<i>Direction des Parcs Nationaux</i>
ENDA	<i>Énergie, Environnement et Développement en Afrique</i>
FC	URI Fisheries Center
CP	<i>Centre des Pêches URI</i>
FO	USAID/COMFISH Senior Fisheries Officer
DP	<i>Directeur des Pêches Senior USAID/COMFISH</i>
FTF	Feed the Future
IAA	<i>Initiative alimentaire pour l'avenir</i>
GIS	Geographic Information Systems
SIG	<i>Systèmes d'Information Géographique</i>
IEC	Information, Education and Communication <i>Information, Education et Communication</i>
IEE	Initial Environmental Examination
EEI	<i>Examen Environnemental Initial</i>
IFA	Institute of Fishing and Aquaculture
IUPA	<i>Institut Universitaire de Pêche et d'Aquaculture</i>
IR	Intermediate Results
RI	<i>Résultats Intermédiaires</i>
ISRA	<i>Institut de Recherche Agricole du Sénégal</i>
IUU	
LEK	Local Ecological Knowledge

<i>CEL</i>	<i>Connaissance Ecologique Locale</i>
<i>LPS</i>	Fisheries Sector Policy Letter elaborated in 2008 <i>Lettre de Politique Sectorielle élaborée en 2008</i>
MEPN <i>MEPN</i>	Ministry of Environment and Protection of Nature <i>Ministère de l'Environnement et de la Protection de la Nature</i>
MMEFMT <i>MEM</i>	Ministry of Maritime Economy, Fisheries, and Maritime Transport <i>Ministère de l'Economie Maritime</i>
MPAs <i>AMP</i>	Marine Protected Areas <i>Aires Marines Protégées</i>
MSC	Marine Stewardship Council <i>Conseil pour la bonne gestion des mers</i>
NAPA <i>PAAN</i>	National Adaptation Plan of Action <i>Plan d'Action d'Adaptation Nationale</i>
NCCC CoNCC	National Committee on Climate Change <i>Comité National de Changement Climatique</i>
NCCMF <i>CNCPM</i>	National Consultative Council for Marine Fisheries <i>Conseil Consultatif National pour Pêche Marine</i>
NFF GIE <i>FENA GIE</i>	National Federation of the GIE of Fishing <i>Fédération Nationale des GIE de Pêche</i>
NFSC <i>CPPN</i>	National Fisheries Stakeholder Council <i>Conseil des Partie prenante de Pêche Nationale</i>
NGO <i>ONG</i>	Non-governmental Organization <i>Organisation Non gouvernementale</i>
PMP <i>PGP</i>	Performance Management Plan <i>Plan de Gestion de Performance</i>
PMU <i>UGP</i>	Project Management Unit <i>Unité de Gestion de Projets</i>
RF <i>SR</i>	Results Framework <i>Structure des Résultats</i>
SOP <i>PSO</i>	Standard Operating Procedures <i>Procédures Standards Opérationnelles</i>
SSMFRP <i>GDR</i>	Senegal Sustainable Management of Fish Resources Project <i>Projet de Gestion durable des Pêches au Sénégal</i>
TOR <i>TDR</i>	Terms Of References <i>Termes de Référence</i>
UCAD	Université Cheikh AntaDiop
URI	University of Rhode Island
USAID	U.S. Agency for International Development
USAID/COMFISH	Collaborative Management for a Sustainable Fisheries Future in Senegal
V&A	Vulnerability Assessment and Adaptation Planning

WAMER	West Africa Marine Eco-region
WB-WARFP PROA	World Bank-funded West Africa Regional Fisheries Program
WIOCOMPAS	Western Indian Ocean Certification of Marine Protected Staff
WWF	World Wide Funds for Nature

Annex E: Financial Status

The USAID/COMFISH project did not face any significant issues on financial implementation. In general, the budgetary execution rate did not follow the rhythm expected in planning. However, the budgetary execution rate was higher than specified in financial reports as sub-contractors did not regularly handled elements on work executed.