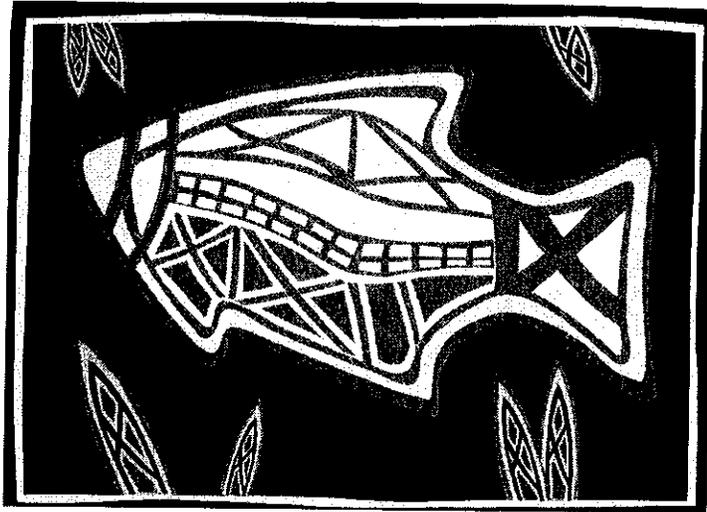


# Decentralization and Natural Resources Management



## The Case of Local Level Management of the Inshore Fishery at Kayar: Problems and Recommendations

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**Abbreviations Used**

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ARD, Inc.	Associates in Rural Development, Inc.
CFC	Cayar Fishing Committee
DGL Felo	Decentralization and Local Governance Program
KSLSC	Kayar-Saint Louis Solidarity Committee
USAID	United States Agency for International Development

## Table of Contents

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### Introduction

#### I. Context

- 1.1 Marine fisheries in Senegal
- 1.2 Inshore fishing at Kayar

#### II. Local level management of the inshore fishery at Kayar

- 2.1 Rules and regulations
- 2.2 Organizations

#### III. Conflicts and crisis

- 3.1 Conflicts over the demarcation of fishing zones
- 3.2 The crisis in 2000 and its consequences

#### IV. Options

#### V. Recommendations

### Annexes

- 1. Terms of Reference (available in French only: "*Termes de Référence*")
- 2. Calendar / Persons Interviewed
- 3. Documentation Consulted

## Introduction

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This study has been undertaken within the framework of the Decentralization and Local Governance Program (DGL Felo), funded by USAID-Senegal and implemented by ARD Inc. DGL Felo provides technical assistance, training, and capacity-building to local government units in Senegal, including the *communauté rurale* (or district) of Diender-Guedj (located in the Department of Thiès), within the territory of which is the fishing village of Kayar<sup>1</sup>.

Diender-Guedj's strategic planning workshop (which took place in June 2000 with support from DLGP) allowed the Rural Council to identify the sustainable and consensual management of inshore marine fishery resources as one of five priority areas for the local government unit. Focusing in on fisheries management reflects the economic importance of fishing in the area, which is based entirely in Kayar.

A few months after the workshop, in early October, a serious conflict broke out in Kayar between line fishermen and gill-netters. The conflict rapidly escalated into a major dispute between local villagers (who are mainly line fishermen) and migrant fishermen from Guet Ndar (near Saint Louis), many of whom are gill-netters by tradition. Security forces had to intervene but were unable to stop local villagers from burning several gill-nets and wounding some Guet Ndar migrants.

In order to help the *communauté rurale* of Diender implement its strategy of developing sustainable and consensual fisheries management, DGL Felo commissioned this study. The study is intended to provide a clearer understanding of some of the problems associated with inshore fishery management at Kayar, to examine some of the issues at stake in the recent conflict there, and to make recommendations for improving the situation.



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<sup>1</sup> Kayar is sometimes spelled as "Cayar". In this report, Kayar will be used.

## **I. Context**

### **1.1. Marine fisheries in Senegal**

The fisheries sector is one of the most dynamic components of the Senegalese economy, largely as a result of the country's relatively rich fisheries' resources endowment and the development of fishing efforts by both inshore and industrial fishing fleets. National fishing catches have grown from 50,000 tons to an all-time high of 453,000 tons in 1997. Currently, the fishing sector is the most important earner of foreign exchange in Senegal, accounting for some 30% of all exports.

Roughly 73% of total catches are made by inshore, artisanal fishermen. In 1997, it was estimated that there were about 52,000 such inshore fishermen in Senegal, equipped with almost 11,000 canoes, almost three quarters of which were motorized (mainly with outboard motors).

### **1.2. Inshore fishing at Kayar**

Kayar is located to the immediate north of Dakar region, about 50 kilometers from the city of Dakar, the capital. With a seasonally varying population of between 10,000 and 15,000 inhabitants, Kayar is the largest "village" in the *communauté rurale* of Diender. The village was founded by Lébou settlers, originally from the area around Dakar. A number of other groups have also based themselves in Kayar, attracted by the rich fishing grounds; the most important and numerous of these groups are migrant fishermen from the peninsula of Guet Ndar (located right next to Saint Louis). As a result of fishing, Kayar has become a melting pot of different ethnic groups and different trades. Today, many of the seasonal migrants from Guet Ndar have permanently settled in Kayar. In addition to fishing, local villagers also practice intensive market gardening in the Niayes, inter-dune depressions situated immediately inland from Kayar.

Kayar is particularly well located for the development of a flourishing inshore fishery. Firstly, local fish resources are not only relatively plentiful, but also varied, including both pelagic fish species (sardines, mackerel, etc.) and ground fish species (grouper, cod, etc.), of considerable commercial value for both export and local markets. The presence of ground fish species is closely linked to the many rocky areas of varying depths found just off the shoreline. Secondly, access to the fishery by local canoes is made considerably easier by the fact that Kayar stands at the head of a submarine canyon, which limits incoming waves.

The inshore fishery at Kayar has developed rapidly in the last few years. After Joal and Mbour (fishing ports situated to the south, on the Petite Côte), Kayar has become Senegal's third most important fishing center. Almost 800 canoes are based at Kayar during the main fishing season. In 2000, the total catch at Kayar was estimated to have been a little over 41,000 tons of fish, with a commercial value of a little under 7,5 billion CFA francs (roughly US\$ 11 million). Although pelagic fish catches account for the largest proportion of the total catch (brought in by purse seines), ground fish catches (mainly for export to Europe) are also significant, particularly in terms of their commercial value.

Inshore fishermen at Kayar generally use three kinds of equipment:

- Purse seines, originally introduced in the early 1970s, which are used to bring in small, pelagic catches. Purse seine fishermen have to make substantial capital and cash outlays because of the need for large canoes, powerful outboard motors, expensive nets, and large crews. Purse seines are used by both migrant and some local fishermen<sup>2</sup>.

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<sup>2</sup> During the main fishing season of 2000 at Kayar, there were (on average) 14 local purse seines and 45 belonging to migrants (mainly from Guet Ndar).

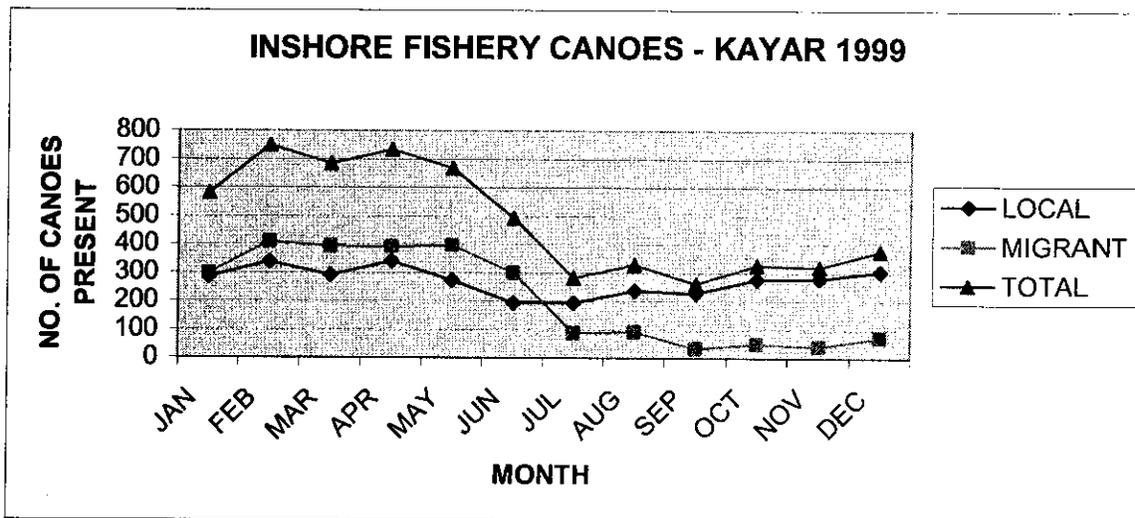
- Lines (and varying kinds of hooks), which are used to catch ground fish, mainly around the rocky areas close to the shoreline. Line fishing is highly selective and is practiced by both local and migrant fishermen.
- Gill nets<sup>3</sup>, which are relatively “passive” and which allow fishermen to catch a wide range of fish (pelagic and demersal), including sharks and sole (for catching both these types of fish, gill nets are highly effective). Gill nets are only used by migrant fishermen from Guet Ndar.

As elsewhere on the Grande Côte, fishing at Kayar is markedly seasonal:

- From November until May, cool offshore winds result in the upwelling of cold waters from the deep, rich in nutrients, thereby attracting large numbers of fish. This is the main fishing season at Kayar, during which migrant fishermen, mainly from Guet Ndar, base themselves there.
- During the hot and rainy season (from May until October), hot tropical waters flow through the ocean, reducing the availability of nutrients. This is the off-season for fishing, during which most of the migrant fishermen and some locals go elsewhere (usually to the Petite Côte).

The seasonal nature of Kayar’s fishery is graphically illustrated by figure 1, showing the number of canoes based in the village for each month of the year (1999).

Figure 1



Source: Marine Fisheries Departmental Service, Thiès

<sup>3</sup> Of which there are several variants: deeply submerged gill nets, “surface” gill nets, anchored gill nets, and free-floating gill nets.

## II. Local level management of the inshore fishery at Kayar

### 2.1 Rules and regulations

Until the recent conflict, the inshore fishery at Kayar was probably one of the most heavily regulated fishing zones in the country<sup>4</sup>. Several formal and informal rules were operational, the most important of which were:

- The demarcation of fishing zones: established in 1986, after a major conflict between local line fishermen and migrant gill net fishermen from Guet Ndar, this rule stipulated that the zone lying between two buoys (the northern one, located some 24 kilometers from Kayar, and the southern one located at the frontier between the regions of Dakar and Thiès) was out of bounds to gill nets. This central zone, earmarked for line fishing, includes most of the submerged rocky areas just off the shoreline, where ground fish are to be found. Beyond the two buoys, gill net fishing was permitted. The regulation had official backing in the form of a Prefectoral by-law issued by the *Préfet* of Thiès; the most recent version of this by-law dates to 1994. Implementation is handled by a monitoring commission, composed of the Fisheries' Service, the police, and representatives of local Kayar fishermen and migrants from Guet Ndar.
- The central zone was also off-bounds to trot lines (lines with multiple hooks, left in the water for up to a day). This rule was imposed by the Kayar Fishing Committee (CFC – see below); violators were subject to a fine of 50,000 CFA francs (roughly US\$ 70).
- Line fishermen were not allowed to fish at night, in order to avoid accidents at sea. Again, this rule was drawn up by the CFC and violators were punished through a system of fines.
- Line fishermen were not allowed to fish the submerged rocky areas during the rainy and hot season. Another CFC ruling, this was aimed at enhancing ground fish reproduction and growth through a short term moratorium on fishing. Instead of fishing in this area, line fishermen were expected to move further offshore in search of swordfish and other species.
- Line fishermen were limited to a daily ground fish catch of three ice-boxes (in which fish for the export market must be kept). Aimed at balancing supply and demand and thus at maintaining the prices paid by middle-men and –women, this rule was also drawn up by the CFC. Violators were subject to a fine of 30,000 CFA francs (roughly US\$ 40). The limitation also provided incentives to fishermen to only catch higher value, larger fish, thus reducing the off-take of immature fish.
- Purse seiners were limited to a single daily fishing trip. This regulation was initially drawn up by the Kayar/Saint Louis Solidarity Committee (KSLSC – see below), but has been continued by the Mbalmi association (see below) as well as by migrant purse seiners. As with the limitation on ground fish catches, this ruling was intended to calibrate supply of and demand for pelagic fish in order to avoid price collapses resulting from overproduction.

It is important to note that these local rules have been applied with a considerable degree of flexibility, depending on circumstances. At certain times of the year, for example, gill netters have been allowed to fish for sole (which are seasonally present in the fishery) in the zone situated between the two buoys. The CFC also relaxes the allowable catch rule from time to time, particularly when demand is very high or when large schools of grouper enter the fishery (the price of sea bass rarely falls).

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<sup>4</sup> See ARD (1996) for a description of local fishery regulations at Kayar in 1996.

## **2.2 Organizations**

Local fishery regulations at Kayar have been drawn up and implemented by a number of organizations, the most important of which are:

- The KSLSC, which was created in the aftermath of the Kayarois and Guet Ndar migrant conflict in 1986. The Committee, made up of leaders from both communities, was instrumental in reconciling the two communities and in demarcating separate zones for line and gill net fishing. It was also the instigator of the ruling about single daily fishing trips for purse seiners. However, for a variety of reasons (the death of several of the older committee members, lack of re-elections, etc) the KSLSC has become increasingly moribund – to the extent that today, in reality, it no longer functions as an effective organization.
- The CFC, established in 1994 (by both local and migrant line fishermen) in order to form a collective front against middle-men and –women operating on behalf of the export factories in Dakar. The CFC, which can be conceptualized as a line fishermen’s union, defends the interests of its members, most importantly by seeking to sustain reasonable prices for ground fish. Fines levied on violators of its rules are used by the CFC to finance a range of social and community interventions (contributions to the construction of the local health center, financial assistance to the city of Saint Louis following Senegal river floods, help to fishermen who have lost equipment at sea, etc.). Up until 1997, the CFC also levied a daily “tax” on canoes; however, the “tax” was ended following complaints by line fishermen, who were not entirely convinced that funds were being well-managed.
- The Mbalmi association, the purse seiners’ “union”, established in 1997. Mbalmi operates in much the same way as the CFC.
- The Thiès Departmental Fisheries’ Service, which has strongly supported local fishery management initiatives, particularly the demarcation of fishing zones. The Service also oversees implementation of provisions of the national Fishing Code, of which the most important concern the exclusion of industrial trawlers from the inshore fishery.
- The police force, which is a member of the monitoring commission for the zonal management of the inshore fishery.

At a national level, many observers are highly supportive of Kayar’s efforts to manage the inshore fishery. The Federation of National Fisheries Associations, for instance, considers local level management of Kayar’s inshore fishery as “exemplary”.

## **III. Conflicts and crisis**

### **3.1 Conflicts over the demarcation of fishing zones**

The demarcation of the line fishery (and exclusion of gill net fishing from that zone) has clearly been the most controversial of Kayar’s regulations, certainly when seen from the point of view of the Guet Ndar gill netters.

According to line fishermen, the exclusion of gill nets from the submerged rocky areas between the two buoys is justified on a number of grounds:

- Lines and hooks almost inevitably get tangled and caught up in gill nets, particularly submerged ones. This is clearly problematic for line fishermen.

- Gill nets are thought to make a “noise” in the sea, caused by vibrations as seawater flows through them. This “noise”, so line fishermen claim, discourages larger ground fish from approaching them. Thus, if gill nets are placed in the same area as line fishermen, the latter have little chance of catching larger (and more valuable) ground fish.
- While sharks are rarely caught by line fishermen, gill nets are particularly effective for shark fishing. Some line fishermen insist that sharks are now over-fished (by gill netters) at Kayar<sup>5</sup>. They believe that predatory sharks drive ground fish into the depths (where lines can catch them more easily) and that the reduction in the number of sharks has therefore had a detrimental effect on line fishing catches.
- Gill nets, which sink or float away by accident (particularly gill nets made from nylon), continue to catch fish, which are never landed. Line fishermen consider this to be a serious waste of fishery resources.
- Finally, when gill nets (or sections of them) are lost and then get tangled up in the submerged rocks, they continue to catch fish, which then rot in the water. Rotting fish caught in tangled gill nets gradually pollute the area, driving ground fish away.

In brief, line fishermen at Kayar are convinced that the co-existence of gill net and line fishing is near impossible and that gill nets are detrimental to the condition of the fishery.

Gill net fishermen from Guet Ndar, on the other hand, feel that the line fishermen overstate their case and that gill netting is a highly effective and profitable fishing technique. Moreover, gill nets are especially effective in catching certain species of fish – sharks and sole, in particular. Guet Ndar fishermen consider that the gill net makes up a legitimate part of their “toolkit” of fishing tackle and feel that it is unfair to ban its use at Kayar. Migrant fishermen from Guet Ndar, probably the best known fishing community in Senegal, insist that “where there are fish, we will catch them in any way we can” and that the sea does not “belong” to any particular community, but to all Senegalese citizens. Finally, they believe that attempts at Kayar to limit the use of gill nets is simply the result of local “jealousy” of their fishing prowess.

Despite their exclusion from the zone between the two buoys, Guet Ndar gill netters are strongly motivated to fish in the area. Not only are fish relatively plentiful in the area (because of the submerged rocks) – the zone is also immediately next to the village beach (where canoes are landed), thereby allowing fishermen to economize on both fuel and time in accessing the fishery.

In order to enforce the ban on gill nets within the line fishing zone, then, it has always been necessary to monitor the area. In principle, the monitoring commission was established to do this: as and when violators are spotted, the commission is supposed to pull up the gill net and hand it over to the police station, along with a written deposition concerning the violation, drafted by Fisheries Service personnel. Violators are supposed to be sanctioned by the police.

While this system appears to have worked satisfactorily in the first few years following the demarcation of the fishery, for a variety of reasons, it gradually became less and less effective over time:

- The representatives of the Guet Ndar migrant fishing community eventually withdrew from the commission, almost certainly as a result of sympathy for their fellow migrant gill netters. In addition, some migrant fishermen claim that local line fishermen from Kayar, by fishing in

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<sup>5</sup> Shark fins, subject to high demand on Asian markets, are of considerable commercial value.

the area set aside exclusively for gill nets (beyond the buoys), were violating the rule but were not being punished. The migrants perceive themselves to have become increasingly marginalized by local villagers.

- It appears that gill net violators were no longer paying fines. According to line fishermen, gill netters fishing in the proscribed area were increasingly able to “come to an understanding” with the local police, thus avoiding sanctions.
- Gill nets hauled up in the zone reserved exclusively for line fishing were simply returned to their owners, who immediately reset them in the area.
- Monitoring outside of official hours (at night) did not take place.

In short, monitoring and enforcement were insufficiently comprehensive and strict. Given this, migrant gill netters gradually became bolder, seizing as many opportunities as possible to set their nets in the exclusion zone.

Local line fishermen became more and more frustrated with the increasing evidence of persistent gill netting in the area. Local purse seiners claim that they too were becoming frustrated by the gill netters, whose nets were unmarked (in order to remain undetected); purse seines, which got tangled up with unseen gill nets, were seriously damaged. The CFC, strongly committed to defending the interests of its membership, became particularly incensed about gill net violators.

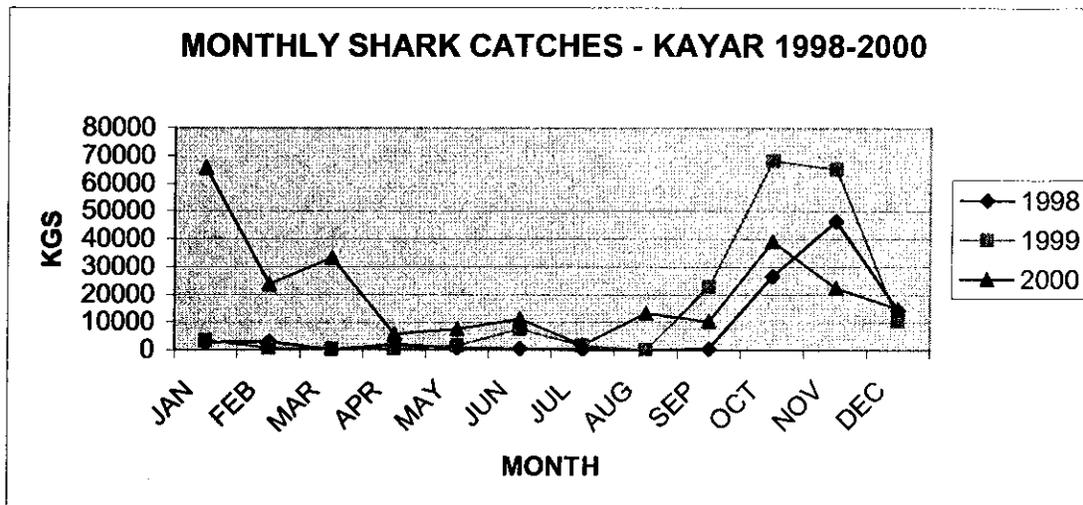
Tensions, then, were gradually increasing at Kayar. It should be noted that this was taking place at the same time as the KSLSC – initially established to resolve these kinds of conflict – had become more or less moribund.

### **3.2 The crisis in 2000 and its consequences**

On October 6<sup>th</sup>, latent tensions at Kayar deteriorated into open conflict between local fishermen and migrants from Guet Ndar. In addition to the more “structural” factors (linked to the decreasing effectiveness of monitoring), a number of more specific factors were also at play:

- Although October is normally a relatively inactive fishing month, it is a period when the number of sharks in the fishery rises (as can be seen in figure 2 below). As has been seen, gill nets are especially effective for shark fishing and migrant gill netters were therefore setting up their nets to catch sharks (as well as other fish). According to the migrants, they set their nets up in between the submerged rocky areas and the village beach, in the area where they would expect to catch sharks.

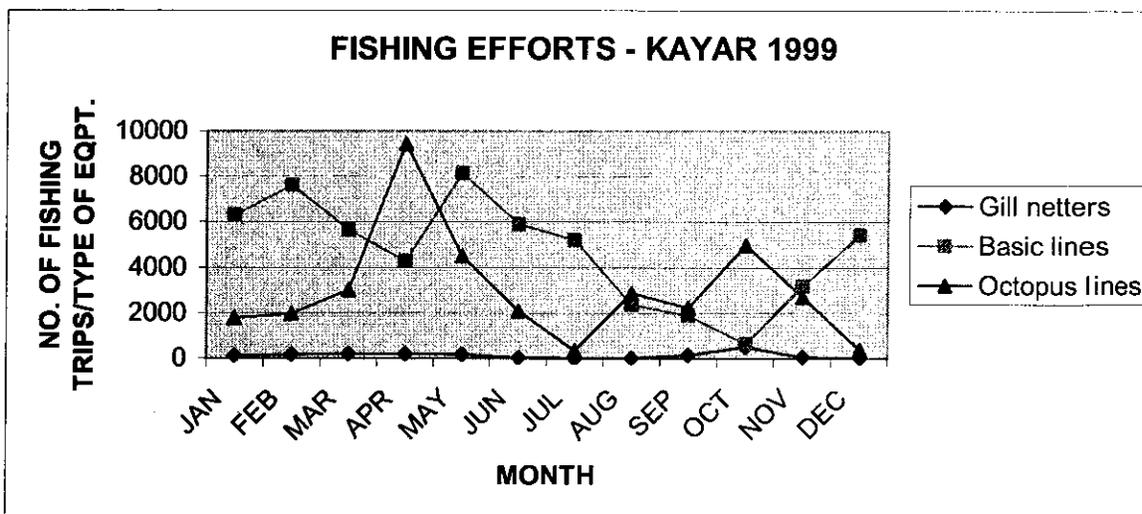
Figure 2



Source: Thiès Departmental Fisheries Service

- Generally, October is also a quiet month for line fishermen. However, in recent years, large numbers of octopus have entered the fishery starting in October. Line fishermen adapt their tackle for catching octopus, and increase their trips to the fishery, as is shown in figure 3 below.

Figure 3



Source: Thiès Departmental Fisheries Service

- As a result, the line fishermen were extremely frustrated by the presence of migrant gill nets in the area, and at a time when they were trying to catch octopus (following a seasonal period of very low catches).
- As far as the local line fishermen were concerned, the gill netter migrants from Guet Ndar were “provoking” them by setting their nets almost directly in front of the village. It is also thought that the migrants may have become bolder since the appointment of a Saint-Louisian as Minister of Fisheries, from whom they may have believed that they would receive a degree of protection in the event of conflict with local fishermen at Kayar.

- It may also have been significant that the “migrants” who set up their nets were the least “migratory”, having become permanent residents in Kayar and, in some cases, having married local women from the village. In October (as shown in figure 1), the vast majority of migrants from Guet Ndar were no longer in Kayar, but elsewhere. That it was “near locals” who set up the gill nets was particularly irritating to the Kayarois.

Confronted by what they considered to be outright provocation by the gill netters, Kayar’s line fishermen decided to take matters into their own hands by seizing the nets. The police quickly stepped in, but not before several nets were set alight and some migrants had been injured by young Kayarois men.

The consequences of this conflict have been several:

- There has been a serious polarization between the two communities, even though the issue is one between line fishermen and gill netters. The violent reaction of Kayar-based villagers appears to have forced migrant line fishermen from Guet Ndar to close ranks with their gill netter kin. At the time of writing, relations between the two communities remain very tense. There is an overall atmosphere of mistrust and a patent lack of serious dialogue.
- The migrants who were injured in the conflict and whose gill nets were destroyed have taken the matter to court. The case is now in the hands of Thiès’ regional courts.
- Gill netters have more or less stopped fishing at Kayar since October 2000. However, there are signs that some of them have been begun setting their nets in the northern part of the fishery.
- Line fishermen from Guet Ndar have left the CFC and no longer feel bound to respect limits on allowable catches.

#### **IV. Options**

In order to resolve the problem at Kayar, some of those involved have made a number of suggestions.

A number of line fishermen from Kayar feel that the only solution is to completely ban gill nets from the inshore fishery, particularly if they are made from non-degradable nylon<sup>6</sup>. This does not appear to be a realistic option, largely because it is clear that gill nets are highly effective for catching certain species of fish. The majority of Fisheries Service staff insist that gill nets do indeed have a place in the inshore fishery, just like other items of fishing equipment. In addition, it is highly unlikely that fishermen from Guet Ndar would accept such a ban on gill nets.

Other line fishermen remain convinced that the demarcation of fishing zones at Kayar is still the best option and that it should be strictly enforced. It is clear, as has been seen, that the heart of the problem at Kayar lies in the inability to enforce the ban on gill nets in the zone between the two buoys, mainly because of inadequate monitoring mechanisms and a lack of genuine sanctions. Nonetheless, it might also be argued that the ban is no longer acceptable (in its current form) to fishermen from Guet Ndar and is therefore seen as being illegitimate by them. If this is the case, then no monitoring system or sanctions will ensure that the ban is respected.

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<sup>6</sup> Such nylon is, in fact, proscribed by the national Fisheries Code (see provision 30 of the regulatory framework for implementation of the national law). For the moment, however, this provision has yet to be implemented by the Fisheries Service because traders are still importing such nylon nets into Senegal.

A number of migrant fishermen from Guet Ndar think that all efforts aimed at regulating the inshore fishery at Kayar should be abandoned and that fishermen should be free to fish as they wish. This is clearly not a sensible option. In the first place, an entirely unregulated fishery would almost certainly lead to increased conflict between line fishermen and gill netters. Secondly, access to the fishery needs to be regulated in order to ensure some degree of sustainable management of fish stocks.

It is reassuring to know that local fishermen do not suggest that migrants from Guet Ndar be banned from the inshore fishery – local fishermen unanimously subscribe to the view that the fishery does not belong exclusively to them. But they do insist that access to the fishery needs to be regulated. However, it remains the case that relations between the two communities remain very tense – and hence the suggestion, by some actors, that there is a need to facilitate a process of reconciliation as way of re-establishing genuine dialogue between locals and migrants.

## V. Recommendations

In the light of all of the above, a number of recommendations seem appropriate.

The first and most important, in the short term, is to facilitate a process of reconciliation between the two communities. Even though the real issue lies in the semi-permanent conflict between line fishermen and gill netters (and therefore between two different kinds of resource user), there is a strong tendency for the protagonists to polarize the conflict by appealing to community-based solidarities. Today, there is a stand-off between local fishermen from Kayar and migrant fishermen from Guet Ndar. As a result, there is little communication between them. Until the two groups can communicate, there is little chance of finding an enduring solution to the problem of the inshore fishery.

The Rural Council of Diender, given its overall responsibility for public order in the *communauté rurale*, should take the lead in catalyzing this process of reconciliation. In order to do this, the Council should appeal for support from both customary and statutory authorities, not only within Thiès (the Governor, the *Préfet*, the *Sous-Préfet*, the Regional Fisheries Service) but also from Dakar (considered to be the Lébou heartland) and Saint Louis (where many of Guet Ndar's customary authorities are based). The Council should decide exactly which people it will need support from. Together with such resource persons, the Council should then organize a meeting at Kayar with the aim of reconciling the two communities and thus reducing tensions. This sort of process worked in 1986 and there is every reason to suppose it will succeed once again.

It should be emphasized that this first step will not resolve the substantive problem (of competition and conflict between two styles of fishing) at Kayar. Until that issue is fully addressed (by all those involved – fishermen, the administration, the fisheries service, elected officials, civil society), it is recommended that current regulations be reinstated, simply to minimize the risk of further conflicts breaking out between line fishermen and gill netters.

Following this, and assuming that the two communities can be reconciled, it is recommended that all parties review the existing regulatory arrangements for fishery management. Whatever fishermen from Guet Ndar may claim, it is very much the case that the inshore fishery at Kayar needs to be properly managed in both time and space. Firstly, because certain types of fishing techniques cannot be practiced at the same time and in the same place, regulations are needed to avoid conflict. However, it should be kept in mind that most techniques are “legitimate” – the issue will be to coordinate the efforts of different kinds of fishermen. Secondly, fishery resources (particularly ground fish) are under heavy pressure, and unless something is done to ensure wise management of them, their sustainability will be put at risk.

In order to formulate a new regulatory framework for Kayar's fishery, it is recommended that all parties be fully involved – line fishermen, gill netters, purse seiners, the Fisheries Service, the national Oceanographic Research Center, local associations (such as the CFC and Mbalmi), middle-men and – women, food processors, locally elected officials, and customary authorities. Fortunately, Senegal's new Fisheries Code provides for the establishment of Local Fisheries Councils (see provision 12 of Law no. 98 – 32 and provision 7 of the implementation decree for the law), composed of a wide range of stakeholders and intended to play an important role in the management of inshore fisheries and of conflict between fishermen. The advantage of having a new regulatory framework formulated by a Local Fisheries Council is that the Council would have officially recognized status and must (by law) include a broad-based membership. It is therefore recommended that the Minister of Fisheries establish a Local Fisheries Council at Kayar as soon as possible. DGL Felo could usefully help the newly-formed Kayar Fisheries Council by providing facilitation skills for its first few meetings, during which a new regulatory framework for the inshore fishery would be under discussion.

As it works on drafting new rules for the fishery, the Kayar Fisheries Council will need to keep in mind a number of basic principles. These principles derive from what is known about best practice in common property management and include:

- The need to ensure that there are adequate mechanisms in place for monitoring compliance with regulations and the concomitant need to define graded sanctions for violators. As has been seen at Kayar, one of the main problems with the old zoning system was linked to poor monitoring and inadequate sanctions.
- The need to ensure flexibility in the regulatory framework, such that it is periodically reviewed and adjusted. Fishery resources are highly unpredictable and rules about access to them must be responsive to rapidly changing circumstances.
- The need to ensure that the formulation of a regulatory framework for the fishery is undertaken through a process of broad-based consultation, in order to maximize the likelihood of local "ownership".
- The need to set up appropriate conflict management mechanisms. Conflict is inevitable; what is necessary, then, is a set of procedures by which they are to be resolved and managed.
- The need to build in ways of financing local fishery management. Without adequate financial resources, the Fisheries Council will be unable to ensure adequate monitoring.

## Annex 1

### Terms of Reference

#### **Analyse politique de la Gestion Décentralisée des Ressources Naturelles et Halieutiques à Kayar (Communauté Rurale de Diender-Guedj)**

##### *Contexte*

La pêche constitue au Sénégal l'un des secteurs économiques les plus porteurs de ces dernières années. La dévaluation du franc CFA survenue en 1994, l'amélioration de la technologie utilisée et l'augmentation du nombre d'intervenants dans le secteur ont contribué à doper l'industrie. Cette situation crée évidemment des enjeux que les localités concernées apprennent à gérer au bénéfice de la communauté, du fait de la pression sur les ressources halieutiques causées par la présence des nombreux acteurs vivant de la pêche. Kayar, dans la communauté rurale de Diender-Guedj, l'une des 13 collectivités partenaires du programme, symbolise cet état de fait. Situé à une cinquantaine de kilomètres de Dakar dans une zone d'accès facile par mer comme par la route, Kayar est considéré comme l'un des centres de pêche les plus dynamiques du pays. A titre d'exemple, durant la seule année 1999, Kayar a généré plus de 8 milliards de francs de recettes tirées des produits halieutiques.

A Kayar coexistent depuis des années, les pêcheurs lébous originaires de la zone et les pêcheurs Guet-ndariens venus de Saint Louis. Les deux communautés exploitent les produits halieutiques pendant la saison de pêche. Dans la localité coexistent également des techniques de pêche dont principalement trois: la pêche à la ligne, la pêche à la phalange et la pêche au filet dormant. La première est autorisée car jugée plus respectueuse de l'environnement et de la préservation des ressources halieutiques. La deuxième, qui est une variante de la pêche à la ligne, est autorisée sous condition (la nuit et à certains endroits). La dernière jugée polluante et agressive sur les espèces est interdite.

Sans que cela épouse le contour des deux communautés, la pêche à la ligne est surtout utilisée par les pêcheurs autochtones alors que le filet dormant est surtout l'apanage des Guet-ndariens. De même, le volume de produits halieutiques réalisés par jour par pêcheur et son impact sur les coûts (quand l'offre est supérieure à la demande) et sur les réserves quand la pression augmente, posaient de réels problèmes.

Ces difficultés, qui engendrent des conflits au niveau de la localité, ont favorisé l'émergence, dans le domaine de la pêche, d'organisations locales telles que le Comité de Solidarité Kayar-St. Louis ou le Comité de Pêche de Kayar (CPC).

##### *Justification*

Le CPC, qui comprend des professionnels du secteur issus des différentes communautés établies dans la localité, est chargé de régler l'activité de pêche à Kayar en organisant les conditions d'exercice des activités et en sanctionnant le non respect des mesures édictées. Jouissant de l'appui de l'administration et tirant sa légitimité du soutien des populations, ce cadre informel joue le rôle de régulateur des prix, de gendarme pour le respect des techniques et des horaires de pêche, actions jugées positivement par la plupart des acteurs impliqués dans l'exploitation des ressources halieutiques. Ce rôle cependant est contesté par quelques exploitants, notamment lorsqu'ils sont soumis à des amendes ou à la confiscation de leur matériel de pêche pour violation des mesures arrêtées par les acteurs locaux.

Durant le dernier trimestre de l'année 2000, des heurts ont opposé ces groupes de pêcheurs nécessitant l'intervention des forces de l'ordre et l'implication de la justice. Depuis lors, une certaine tension est perceptible dans la zone.

ARD, qui appuie la communauté rurale de Diender dans le cadre des collectivités locales de la 1<sup>ère</sup> année, a voulu apporter son appui dans la résolution de ce conflit potentiel et dans l'identification de solutions pratiques, pertinentes, paisibles et durables à la gestion des ressources halieutiques dans la zone. Ceci d'autant plus que la gestion durable et paisible des ressources halieutiques est une préoccupation majeure des acteurs locaux qui l'avaient identifiée comme une des 5 stratégies prioritaires retenues par Diender lors de l'atelier de planification de stratégie organisé en juin dans la CR pour marquer le démarrage de l'intervention de ARD, Inc. Pour cela le programme se base sur une étude réalisée sur le sujet en 1996 par le CILSS et l'ARD sur la gestion décentralisée des ressources naturelles au Sénégal. Il se propose de réactualiser l'étude en impliquant tous les acteurs nationaux et locaux concernés.

Les résultats de l'étude réactualisée feront l'objet, dans un premier temps, d'une restitution aux principaux acteurs concernés au niveau national. Ensuite, une restitution à la base impliquant au niveau de la CR, les acteurs locaux, les responsables techniques, administratifs et politiques devrait permettre de valider les résultats obtenus et d'identifier une stratégie afin de dégager des recommandations pratiques à soumettre aux autorités en vue de l'adoption de mesures concrètes. Il s'agit, à la lumière des textes en vigueur, de voir les possibilités qui s'offrent pour une solution paisible du problème de Kayar.

L'analyse du cas de Kayar et l'organisation de rencontres pour examiner et débattre les implications, correspondent à un des quatre principaux objectifs du programme qui consiste à promouvoir une mise en œuvre plus efficace des politiques et règlements liés à la décentralisation au Sénégal.

### **Objectifs**

- Identifier les différents acteurs concernés et cerner les difficultés pratiques rencontrées par les institutions locales intervenant dans la régulation des activités de pêche et dans la mise en œuvre des mesures de gestion et de préservation des ressources halieutiques
- Analyser les recommandations les plus pratiques avancées par les acteurs locaux pour trouver une solution acceptable et durable pour une gestion paisible des ressources halieutiques.
- Identifier les mécanismes et actions prioritaires à établir ou à renforcer en rapport notamment avec la CR, le gouvernement, les autres acteurs concernés pour une gestion efficace de la pêche et une meilleure maîtrise de la gestion des ressources halieutiques

### **Contenu**

Sous la supervision du chef de programme et en collaboration avec les spécialistes en politique de décentralisation et en gestion communautaire des ressources naturelles, le consultant conduira l'étude en se référant aux objectifs susvisés et aux centres d'intérêt suivants:

- Quel est l'état des lieux de la gestion des ressources halieutiques à Kayar depuis l'étude de 1996?
- Quels sont les acteurs présentement impliqués et leur rôle dans la gestion des ressources halieutiques dans la zone?
- Quels sont les enjeux politiques et sociaux à prendre en compte dans l'analyse de la gestion des ressources halieutiques de Kayar?

- Quelles sont les opportunités offertes par les textes pour renforcer les pouvoirs de la CR et des organisations locales dans la mise en œuvre des mesures relatives à l'exploitation des ressources halieutiques? Quelles sont les limites?
- Quelles sont les recommandations les plus durables avancées par les acteurs eux-mêmes pour une gestion paisible, harmonieuse et durable des ressources halieutiques dans la zone?
- Comment les solutions préconisées peuvent-elles être appliquées dans d'autres situations similaires?

Le consultant international sera appuyé en cas de besoin par un consultant national choisi pour son expérience dans le secteur de la pêche, sa connaissance des acteurs concernés et sa compréhension des enjeux de la gestion des ressources halieutiques dans la zone.

### ***Résultats attendus***

- L'état des lieux de la pêche à Kayar est établi
- Les différents acteurs impliqués dans l'activité de pêche et le rôle qu'ils y jouent sont déterminés
- Les difficultés pratiques rencontrées par les institutions locales intervenant dans les activités de pêche sont cernées
- Les recommandations avancées par les acteurs sont analysées
- Des mécanismes pratiques et durables pour une gestion efficace et paisible des ressources halieutiques et le suivi de la mise en œuvre sont identifiés

### ***Méthodologie***

Se servant essentiellement des interviews semi-structurées ainsi que d'autres méthodes et outils d'enquête jugés appropriés, le consultant national effectuera les missions de terrain jugées pertinentes en rapport avec le consultant pour rencontrer tous les acteurs concernés. Il s'agit notamment des conseillers ruraux, des autorités administratives impliquées, des autres services de l'administration, des leaders traditionnels et religieux, des membres du Groupe de travail technique de Diender, des OCB, ONG, des projets intervenant dans la localité, des exportateurs de produits de pêche, etc.

La mission du consultant international est fixée à 21 jours et sera conduite dans la période du 03 au 25 avril 2001 ainsi qu'il suit:

- Voyage international (aller/retour).....3 jours
- Préparation du programme de rencontre et revue documentaire.....1 jour
- Rencontre avec les autorités à Dakar et Thiès.....3 jours
- Mission et rencontre avec les autorités à Saint Louis .....3 jours
- Mission de terrain à Kayar, Thiès et Dakar .....3 jours
- Rédaction du rapport (premier draft) .....3 jours
- Séance de débriefing à Kayar .....1 jour
- Finalisation du rapport (en français) .....2 jours
- Le consultant préparera une version anglaise du rapport analytique, à soumettre dans un délai d'un mois après sa mission au Sénégal.....2 jours

***Profil et qualifications du consultant***

Le consultant international devra avoir:

- Une bonne compréhension de l'environnement de la gestion des ressources naturelles et halieutiques;
- Une expérience en gestion de conflits; et
- Une connaissance des textes de la décentralisation et ceux régissant la gestion des ressources naturelles et halieutiques au Sénégal.

***Produit final attendu***

Le consultant fournira:

- Un rapport analytique de 10 à 12 pages, retraçant l'état des lieux et mettant l'accent notamment sur des recommandations pratiques à mettre en œuvre; et
- Un rapport récapitulatif de la mission, en français, comportant les éléments suivants: calendrier, liste des personnes et structures rencontrées avec leurs adresses et contacts, résumé des entretiens, liste des documents consultés et copies des documents importants obtenus au cours de la mission.
- Les rapports analytique et récapitulatif (ci-dessus) seront rédigés en français, et soumis en trois exemplaires (hard copy), et sur diskette (Word).
- Une version anglaise du rapport analytique, en Word, à expédier par e-mail.

## Annex 2

### Calendar / Persons Interviewed

- 3-4/4/01 *Travel Canada-Sénégal (MW)*
- 5/4/01 *Dakar*
- DGL Felo (ARD/Sénégal):
    - M. Stephen Reid, Chief of Party
    - Mme. Awa Ndiaye Diouf, Local Governance and Democracy Specialist
- 6/4/01 *Kayar*
- Technical Working Group (TWG) Diender-Guedj:
    - M. Masseck Gueye (PCR)
    - M. Abdou Thioune (TWG)
    - M. Lamine Drame (TWG)
- 7/4/01 *Kayar*
- Village chief and elders
  - Kayar Fishing Committee:
    - M. Aly Ndiaye Seck (President)
    - M. Mar Mbaye (General Secretary)
    - M. Pape Bassirou Mbaye (Treasurer)
  - Kayar Police Brigade:
    - Moustapha Diop (Adjutant-Major)
- 8/4/01 *Kayar*
- Imam and elders of Guet Ndarian community
  - Young Guet Ndarian fishermen
- 9/4/01 *Dakar*
- FENAGIE- Pêche
    - M. Mouhamoudou Takha Samb (Coordinator and Financial/Administrative Director)
- 10/4/01 *Travel Dakar-Saint Louis*  
*Saint-Louis*
- Regional Governor's Office:
    - M. Mamadou Dia (Associate responsible for development)
  - Guet Ndarian community:
    - M. Mamadou Moustapha Sarr, *a.k.a.* « Soua » (President of Fishermen's Collective of Guet Ndar)
- 11/4/01 *Saint-Louis*
- Departmental Maritime Fisheries Service:
    - M. Malick Guèye (Sector Chief)
  - Imam, elders and youth of Guet Ndar community
- 12/4/01 *Travel Saint-Louis-Mboro-Kayar*  
*Mboro*
- Departmental Maritime Fisheries Service:
    - M. Abdoulaye Diouf (Associate Sector Chief)
- Mboro-sur-mer*
- Fishing community of Guet Ndar

- 13/4/01*      *Travel Kayar-Mbour-Dakar*  
*Mbour*
- National Collective of Senegalese Fishermen:
    - M. Arona Diagne (President)
  - Thiès Regional Maritime Fishing Service
    - Dr. Ibrahima Seck (Regional Inspector)
    - M. Babacar Mbaye (Sector Chief)
- 14/4/01*      *Dakar*
- 15/4/01*      *Kayar*
- Economic Interest Groupe - Mbalmi:
    - M. Ibra Mbissim Niang (President)
  - Line fishermen of Guet Ndar:
    - M. Mayero Sow
    - M. Doudou Fall
- 16/4/01*      *Kayar*
- Kayar Fishing Committee:
    - M. Mar Mbaye (General Secretary)
    - M. Pape Bassirou Mbaye (Treasurer)
- 17/4/01*      *Thiès*
- Governor's Office, Thiès Region:
    - M. Cheick Ahmed Tidiane Senghor (Administrative Associate)
- 18/4/01*      *Dakar*
- Dakar Regional Maritime Fisheries Service:
    - M. Matar Diouf (Regional Inspector)
- 19/4/01*      *Dakar: Report writing*
- 20/4/01*      *Kayar: Local debriefing on findings*
- 21/4/01*      *Dakar: Report writing*
- 22/4/01*      *Dakar: Rest*
- 23/4/01*      *Dakar: Report writing*
- 24/4/01*      *Dakar*
- Office of Fisheries Protection and Monitoring (DPSP)
    - Commandant Ndome Faye (Director)
  - Office of Oceanography and Maritime Fisheries (DOPM)
    - Dr. Ndiaga Gueye (Director)
    - Dr. Elhadj Cissé (Chief, Credit Division)
  - Center of Oceanographic Research Dakar-Thiaroye (CRODT)
    - Dr. Alassane Samba (Director)
- 25/4/01*      *Dakar:*
- USAID
    - M. Abdoul Wahab Ba, CTO, and other SO2 team members
  - Departure for Canada
- 26/4/01*      *Arrival in Canada*

### Annex 3

#### Documents Consulted

- ARD, Inc., 1996: *La gestion décentralisée des ressources naturelles au Sénégal: quatre études de cas*, Burlington.
- ARD, Inc., 2000: *Atelier de Planification Stratégique de la Communauté Rurale de Diender-Guedj*, Dakar.
- Comité de Pêche de Kayar, 1994: *Procès verbal de l'assemblée constitutive du Comité de Pêche de Kayar*, Kayar.
- Comité de Pêche de Kayar, 1994: *Procès verbal de la réunion du Conseil d'Administration du Comité de Pêche de Kayar*, Kayar.
- CRODT, 1995: *Comité Régional de Planification Stratégique de la Recherche Agricole Zone Maritime*, ISRA, Dakar.
- JICA/Fisheries Engineering Co. Ltd., 2000: *Étude de concept de base pour le projet de construction d'un complexe de pêche à Kayar en République du Sénégal*, Dakar.
- Ministère de la Pêche, 2000: *Plan d'Actions*, Dakar.
- Ministère de la Pêche, 2000: *La Pêche Maritime: concertations nationales sur la pêche et l'aquaculture*, Dakar.
- Ministère de la Pêche, 2000: *Arbre des objectifs du système pêche et aquaculture*, Dakar.
- OEPS, 1998-2001: *Notes de Conjoncture N° 1 à 9*, Ministère de la Pêche et du Transport Maritime, Dakar.
- OEPS, S.D.: *Site Internet*, adresse: [http://www.refer.sn/sngal\\_ct/eco/oeeps/notes/thiof](http://www.refer.sn/sngal_ct/eco/oeeps/notes/thiof)
- Poste de Contrôle de Kayar, 2000: *Rapport Statistique Annuel 1999*, Service Départemental des Pêches Maritimes, Kayar.
- Poste de Contrôle de Kayar, 2001: *Rapport Statistique Annuel 2000*, Service Départemental des Pêches Maritimes, Kayar.
- République du Sénégal, 1994: *Arrêté N° 26 portant délimitation de zones de pêche à Kayar et instituant une commission de surveillance des dites zones*, Département de Thiès, Thiès.
- République du Sénégal, 1998: *Loi N° 98 – 32 du 14 avril 1998 portant Code de la Pêche Maritime*, Dakar.
- République du Sénégal, 1998: *Décret fixant les modalités d'application de la loi portant Code de la Pêche Maritime*, Dakar.
- République du Sénégal, 1999: *Arrêté fixant les sanctions complémentaires relatives aux filets fabriqués à partir d'éléments monofilaments et multimonofilaments en nylon*, Ministère de la Pêche et des Transports Maritimes, Dakar.
- Samb, A. & Dramé, C., 1996: *Rapport d'une étude sur la réglementation de la pêche artisanale au Sénégal*, FAO/Communauté Européenne, Dakar.
- System Science Consultants, Inc., 1997: *L'étude sur le programme de développement dans la zone de pêche Nord en République du Sénégal*, JICA/Ministère de la Pêche et des Transports Maritimes, Dakar.