
23 On governance in fisheries in Senegal: from top-down control to co-management

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1 INTRODUCTION

The concept of ‘governance’ and how it relates to effective management, conservation, and tackling illegal fishing, one of the major issues of fisheries in the twenty-first century (UNGA 2011),¹ has become increasingly fashionable in the world of fisheries management. This is particularly true as worldwide efforts have translated into adopting ‘governance’ as a standard for ‘effective’ management. Interestingly, the definition that is used to describe governance has also evolved to adapt to economic and social constraints such as the pre-existence of traditional management schemes and political priorities and agendas (Kooiman 2005). This may result in privileging one group or sector over another, which in turn may translate into the exclusion of the latter from decision-making. Governance is also impacted by donor perspectives, particularly in the case of aid-development, when donors have approaches and management priorities they would like to see implemented.

Although the word ‘governance’ dates back to thirteenth-century old French, when it was used as an equivalent for government, and appears in English in the sixteenth century, it was adopted by the World Bank in late as the 1990s, based on its current, broad definition. Among the ten areas identified by Kooiman (1999) to which this broad definition applies, only one refers to the good governance concept of the World Bank that is being commonly used for the fisheries sector. The definition of governance today includes the whole of public as well as private interactions taken to solve societal problems and create societal opportunities. It includes the formulation and application of principles guiding those interactions and care for institutions that enable them (Kooiman 2005).

The participation of professional organizations, civil society and other contributors to management, as in a ‘good governance’ system is often ill-conceived, despite major efforts towards the use of the idea as a standard in fisheries management. This is illustrated by the example of the exclusion of traditional societies and pre-existing bodies in new governance schemes, particularly when it involves international aid-development providers.

In West Africa, there are different fisheries governance approaches, depending on fishing community involvement in decision-making, the fishing sector, the fishing history and the affinity with the former colonial system. Senegal, a former French colony with a strong fishing tradition, illustrates a case of a strong shift from a top-down governance system, inherited from its colonial ruler, to a more inclusive participatory scheme, often referred to as co-management. However, questions arise related to the implementation and implications of such shift. The strong colonial ties Senegal kept with France, after almost three centuries of occupation, strongly shaped the governance system in the country, particularly in the fisheries sector. Despite the extensive scientific data that

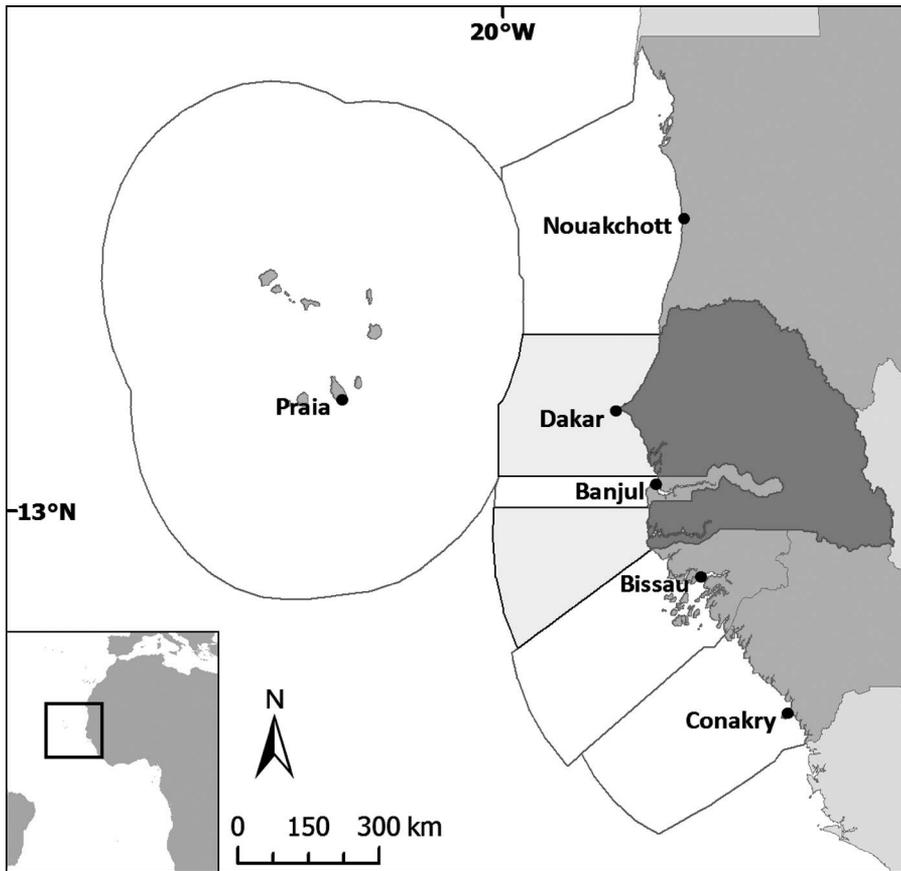


Figure 23.1 Map of Senegal showing its location within the sub-region

resulted from a high presence of scientists during the pre-and post-independence period, the maximization of resource extraction as a development strategy and the top-down centralized approach in managing fisheries resulted in the growth of excessive fishing effort, particularly after the 1970s' decline in groundnut and phosphate exports, two main sectors of the Senegalese economy, and hence the over-exploitation of fisheries resources.

Since independence from France, Senegal (Figure 23.1 provides a map of the region) became a 'semi-presidential' democratic republic, meaning that the president (head of state and head of the executive branch of government) acts along with a prime minister and a cabinet, or the government of the prime minister (who is the head of the cabinet). Legislative decisions are for the government to be made along with the parliament. However, in Senegal, it is very rare that bills emanate from the parliament. Rather, they are usually initiated by the head of state.

Senegal is an example of what could be called a democratic transition state. The country has never experienced a coup d'état and is known for higher transparency, at least relative to its neighbors. Senegal inherited a highly centralized administration from France, but followed a slow process of decentralization over the last 30 years.

In the fisheries sector, the Ministry of Fisheries is responsible for the sustainable management of fisheries resources within the country's exclusive economic zone (EEZ). The Ministry of Fisheries includes the Direction des Pêches Maritimes (DPM, Department of Marine Fisheries), the Direction de la Protection et de la Surveillance des Pêches (DPSP, Directorate of Fisheries Protection and Surveillance), The Direction des Industries de Transformations (DITP, Department of Processing Industries) and the Cellule d'Etude et de Planification (CEP, Study and Planning Unit), among other departments (Figure 23.2). The Centre de Recherche Océanographique de Dakar-Thiaroye (CRODT, Centre for Oceanographic Research of Dakar-Thiaroye) supports the Ministry of Fisheries by performing research on fisheries (ACPFish II 2013).

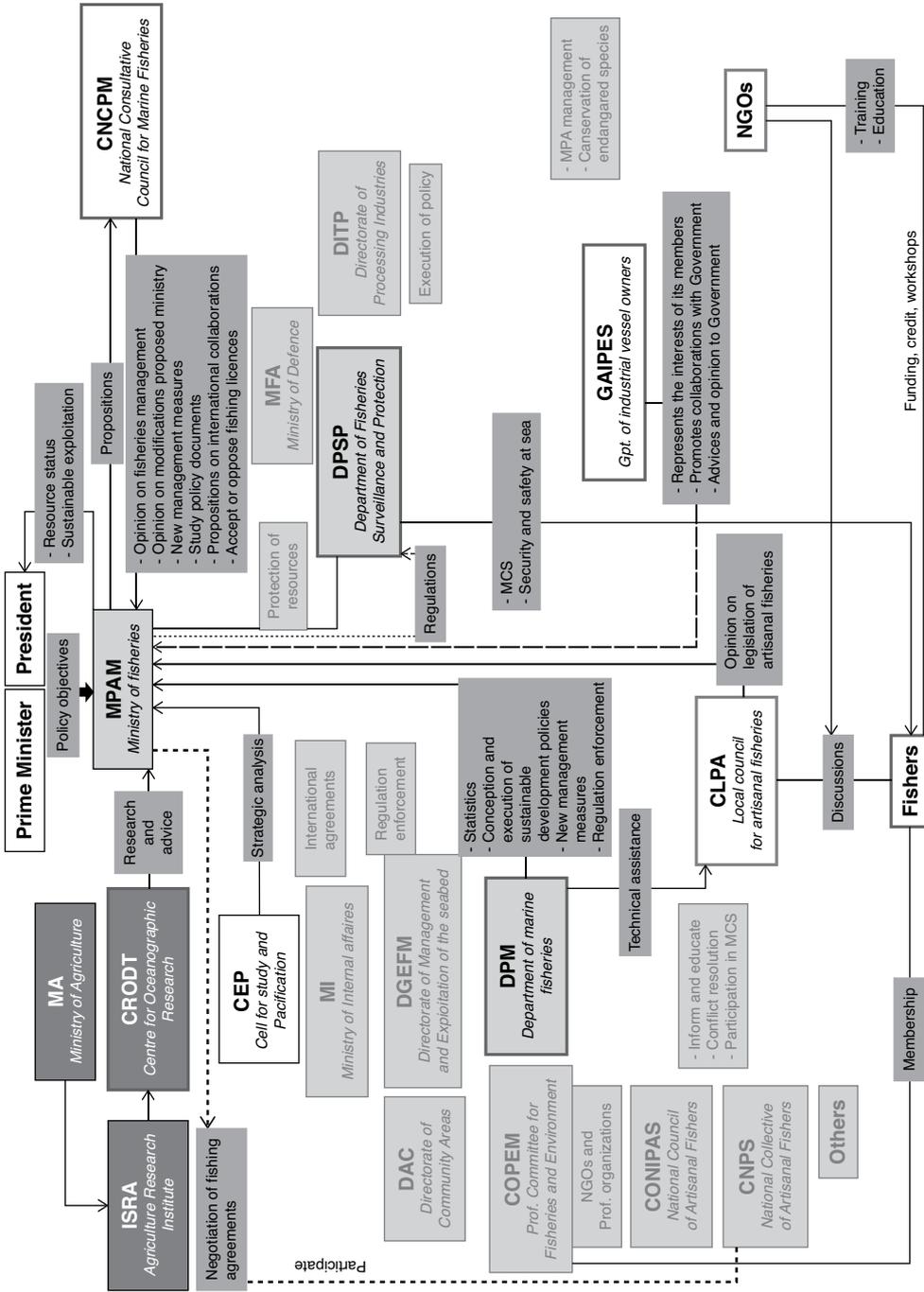
Management policy and governance of fisheries are, overall, described as weak at the national level, notably owing to a lack of control resulting in an excessive effort and illegal fishing activities. However, it would seem that the relationship between weak governance, lack of control and illegal fishing is circular, rather than causal. Lack of control and illegal fishing increase mistrust between user communities and the government. In turn, mistrust results in failures of governance. The main recommendations submitted to the Ministry of Fisheries were to tackle the issues concerned with freezing fishing effort, and thus allow fish stocks to rebuild by 2015 (Greboval and Catanzano 2005). However, these goals remain aspirational, while the fisheries in Senegal show signs of decline, and stocks are not being rebuilt. Despite the termination of a few fishing agreements, notably with the European Union (EU), the artisanal fishing effort keeps increasing every year.

The issue of overcapacity, related to a drastic increase in the fishing effort, marked a major change in fisheries policy objectives in Senegal. Reforms, in turn, have changed the decision-making processes, which were until recently the sole purview of the government. In the past few years, issues such as depletion of marine resources, conflicts of interests, growing engagement by professional organization and major issues within the administration resulted in efforts to include more stakeholders in decision-making processes (Ndiaye 2000).

Despite major efforts to transfer management to local governments, fisheries policies are still elaborated based mainly on a top-down approach, with little contribution from local organizations which tend to be 'alienated from the state because of the lack of consultation regarding decisions affecting directly their livelihood' (Sarr 2011). In this chapter, the decision-making landscape and the shift in fisheries governance in Senegal is analyzed along with the main roles of the organizations involved in decision-making. Moreover, the impact of changing political systems and/or stakeholders on policy and fisheries regulations will be defined based on a literature review and opinions from expert organizations and individuals.

2 GOVERNANCE AND DECISION MAKING PROCESS

In theory, different actors contribute to the decision-making process in Senegalese fisheries (Figure 23.2). However, two types of decision-making can be distinguished, depending on how and the level at which the issue is formulated, the type of the organization and the sector.



Note: Secondary institutions and their roles are shown in light grey.

Figure 23.2 Diagram of the main institutions governing the fisheries in Senegal

2.1 National Level

Different types of decisions are finalized at the national level by the Senegalese government, whether they included or not participation from local organizations and the industry. Given proposals already formulated by the government, stakeholders do not participate in the initial steps of problem definition and objectives; rather they contribute, at most, to the revision of the latter. Decisions regarding foreign fishing agreements, quota controls for foreign fishing, and effort controls such as fishing permits, gross registered tonnage (GRT) of vessels, target species, mesh size, species size and prohibited gear are theoretically based on scientific advice (Ndiaye 2000). With the research component, the administration asks for information and the researchers work on this aspect and inform decision-makers. Decision on fishing licenses are taken based on a process involving first meeting with the industry and the Conseil National Consultatif des Pêches Maritimes (CNCMP, National Consultative Council for Marine Fisheries) for recommendations, and then the ministry. In this case, an application is presented to the Ministry of Fisheries through the Department of Fisheries, a consulting process takes place with fisheries stakeholders and the CNCMP (Camille J.P. Manel, former DPM Director, personal communication) who decides to recommend or reject the application. The final decision is taken by the Minister of Fisheries based on the recommendations of the CNCMP (theoretically). Other decisions at the national level require active consultations with local organizations, including, for example, the Plan directeur de la pêche (Director of the Fisheries Plan) and the Fisheries Act (Ndiaye 2000). However, recent surveys tend to show that fishers themselves are not aware of the implications and content of the Fisheries Act (Aliou Sall, *Mundus maris*, personal communication). The CNCMP also analyses and provides opinions and recommendations on propositions by the Ministry of Fisheries on the following aspects (Ndiaye 2000):

- fisheries management plans;
- proposed policy modifications;
- new measures for fisheries management;
- policy documents emitted by the Ministry of Fisheries prior to their final endorsement; and
- international collaborations.

As for civil society, there is no formal involvement of non-governmental organizations (NGOs) at this level (Association pour la Promotion et la Responsabilisation des Acteurs de la Pêche Artisanale à Mbour, APRAPAM, Association for the Promotion and Accountability of the Artisanal Fisheries Professionals at Mbour), and their involvement at the administrative level is not regarded as helpful (Camille J.P. Manel, former DPM Director, personal communication). Moreover, there are gaps in Senegal in including research in the decision-making process; notably that at ministry level, research institutions fail to grasp the implications of decisions and to adapt to the context within which fisheries evolve. Also, there is no communication structure (CRODT does not have a website, some of its research is confidential, even to DPM staff); there is also the absence of ‘institutional memory’ within an administration whose staff are frequently rotated (Butare and Zoundi 2005).

Ultimately, the President and the Prime Minister intervene in two different ways. First, the President proposes a solution to a given issue depending on the priorities of the sector, for example, combating illegal fishing, and requires the Minister of Fisheries to propose a bill, create policies or enforce the decision made by the President, regardless of where the original idea emanated from. Second, the President can ultimately accept or reject a decision made by the Minister, or the CNCPM, with or despite the approval of the Prime Minister. This occurred in 2012 when licenses were given to Eastern European (so-called 'Russian') boats, despite the disapproval of the Prime Minister.²

2.2 Local Level

Quota controls are the main decisions that are made at the local level by artisanal fishers (Ndiaye 2000). The Conseil local de Pêche artisanale (CLPA, Local Council for Artisanal Fisheries) is an active partner in governance, at least in theory. It is the organ for local governance, where co-management decisions are elaborated, discussed, validated and implemented at the local level (Sarr 2011). The decision-making process follows a participatory approach that has been implemented since the creation of CLPAs in the late 2000s. First, local stakeholders meet and suggest a proposal, which is validated by the CLPA, which then submits it to the CNCPM for recommendations prior to the final approval by the Minister of Fisheries (Camille J.P. Manel, former DPM Director, personal communication). This process is particularly adapted to management plan elaboration.

The CLPA has a degree of freedom and flexibility because of the heterogeneity of its members. Many CLPAs are dysfunctional (Hurley and Manel 2015), however, because of the failure of the government to fund them, and because the government and the multiple international donors who contribute to policy ignore pre-existing traditional systems of conflict resolution (Hurley and Manel 2015). Furthermore, some co-opted members of the CLPA take advantage of the per diem they receive, which is the only incentive for them to attend meetings. Given that these individuals are not representatives of fishers, there is no guarantee that a decision taken by the CLPA will be implemented in the field, besides there being the issue of mistrust between members (Sarr 2011).

Other local decisions are made within the fishing community itself at the landing site, which involve less heterogeneity and more trust. The examples of the Comité de Pêche (Fisheries Committee) and the Commission de Surveillance (Surveillance Commission) of Kayar illustrate cases where decisions are made locally, which mainly concern quota limitations, number of fishing trips, controlling safety onboard pirogues and the prohibition of night fishing. Even at the high-resolution local level, the types of decisions and controls are different. When a decision is made by a fishing group (homogeneous, for example, targeting the same species), decisions tend to be with respect to specific aspects of the fishery in contrast to community-level decisions. The former usually focus on more economic aspects, limiting access (a measure absent or less enforced nationally), while the latter involves social aspect, such as enforcing national regulation of prohibited gear (Lenselink 2004).

Despite efforts, users (for example, fishers), and other stakeholders, for example, civil society and scientific research, are far from being fully included in the decision-making process. Decisions concentrated mainly on regulations, and the non-inclusion of fishers results in mistrust.

2.3 Governance Issues

A few issues were mentioned by Camille J.P. Manel (former DPM Director, personal communication), including:

- lack of communication between the government and the stakeholders;
- weak enforcement of regular meetings at the national level (administrative meetings), in contrast to local organization meetings which are held regularly;
- lack of organization within the fishing industry;
- high number of representatives whose legitimacy is often questioned;
- weak management of issues at a local level, hence the need for capacity-building; and
- inappropriate interference by some NGOs and other organizations.

Other issues relate to the prioritization of developed-country views in donor strategy and the failure of integrating traditional and ethnic diversity in management strategies (Hurley and Manel 2015).

3 POLITICAL SHIFTS AND THEIR IMPACTS ON FISHERIES

We need to use this report quickly before a change in the Minister occurs, otherwise the report will stay in a drawer and we may no longer be able to use it. (Senior staff member, DPM, personal communication).³

One of the main issues in fisheries management in Senegal is the frequent change of leadership, resulting in high institutional instability, a lack of regulatory enforcement and change in priorities (Corten et al. 2012). According to conclusions of a meeting of the APRAPAM, frequent changes in ministries and ministers have a very negative impact on fisheries governance and the policy and strategies that emanate from it. Three main steps contributed to establishing fisheries policy during 2000–2014, a period characterized by major instability within the Ministry of Fisheries (seven nominations) and within the administration (six Directors of Fisheries).

These steps are summarized as follows:

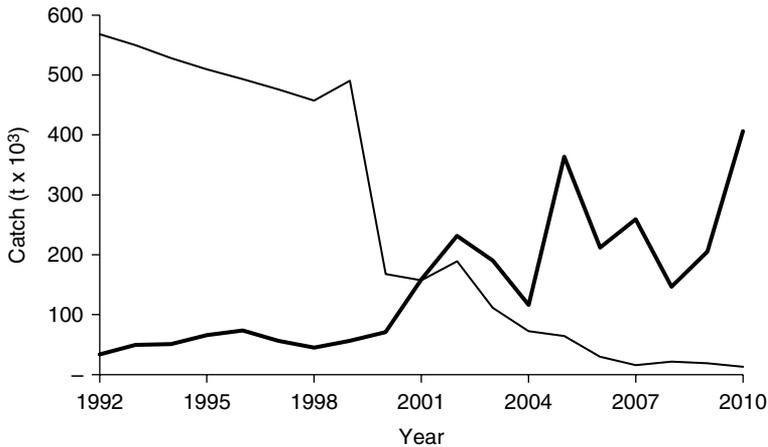
- In 2000:* A new step towards inclusive governance began by a national consultation process with fisheries stakeholders, funders and development partners. This ultimately resulted in the definition of a national sustainable development policy for the fisheries and aquaculture sectors.
- In 2004:* The results of this strategy were evaluated by fisheries and aquaculture stakeholders.
- In 2007:* The sectoral policy letter was adopted (see evolution of fisheries reforms section below for further details).

Despite these major efforts towards a more inclusive governance, frequent changes in ministries and fisheries directors translated into the objectives of the policy not being

achieved and implemented. Moreover, there is a lack of regular monitoring of activities along with the absence of a process of evaluation of results and development objectives, that is, accountability. Furthermore, despite existing drafts, management plans as defined by the sectoral strategy are yet to be implemented (Gaoussou Gaye, APRAPAM General Secretary, personal communication). At the administrative level, ministerial changes tend to extend processes at all levels. Often, steps that were already put in place during former processes are repeated or their objectives re-oriented and teams changed (Camille J.P. Manel, former DPM Director, personal communication).

Despite a few events, changes in presidency do not appear to affect significantly fisheries policy and its implementation. Elections in Senegal are held every five years, but the mandate of presidents can last for a longer period. Recent events that might illustrate the impacts of politics on fisheries policy and governance may be highlighted: under President Abdoulaye Wade (2000–2012), former Minister Koureiychi Thiam (2009–12) offered fishing licenses to Eastern European (referred to as Russian) large pelagic trawlers targeting small pelagic fisheries, in clear contradiction of the Lettre de Politique Sectorielle (Sectoral Policy Letter), which prioritized artisanal fisheries and food security. M. Koureiychi Thiam denied all accusations of corruption, asserted that these authorizations were approved by former President Wade, and that they contributed to US\$3 million in 2012 to national coffers, an economic success according to him, despite the fact that these fishing licenses were rejected by the CNCPM (Sarr 2011). This illustrates the prioritization of economic benefit over food security and sustainability, which contribute to shaping the failure of regulations driven mainly by short-term political gains. The economic contribution of these licenses is questionable since, on the one hand, the contribution of small-scale fisheries to the economy, with some US\$340 million is by far higher (Belhabib et al. 2015c), while on the other hand, their contribution through the value chain is minimal if at all existent (Figure 23.3). In terms of added value, artisanal fisheries inject into the economy an additional US\$1.2 per kilogram of fish caught (Figure 23.3), which translates into US\$68 million overall (Belhabib et al. 2015c). On the other hand, industrial pelagic trawl fisheries inject less than US\$0.1 per kilogram of fish in the economy, which encompass mainly the value of the licenses. In addition, artisanal and small scale fisheries in Senegal are a source of food and livelihood for some 440 000 people (Belhabib et al. 2015c), with employment alone reaching 60 000 jobs per year at the fishery level (Belhabib et al. 2015c), in comparison with zero for pelagic trawl fisheries.

These licenses have resulted in a spike in (illegal) small-pelagic catches by the foreign industrial legal fleet, which kept its fishing operations after the dismissal of the agreement (Figure 23.4). The immediate impact of this (lack) of governance was, at first, an increase of small-pelagic catches by foreign fleets that were 'legally' caught (Belhabib et al. 2014). Illegal catches increased from 33 000 t·year⁻¹ in 2000 to 400 000 t·year⁻¹ in 2010 which marks the year when licenses were granted. Stakeholders from the artisanal sector fiercely rejected these licenses, which resulted in their revocation and hence a decline of the legal catch. However, despite being deprived of a fishing license, these vessels, based in Mauritania and other West African countries, frequently fished illegally⁴ in the waters of Senegal. In addition, trends comparison between legal and illegal catch (Figure 23.4) show that in the absence of a proper monitoring control and surveillance system, unlicensed vessels would fish in the Senegalese Exclusive Economic Zone (EEZ) even after the licenses were revoked (Belhabib et al. 2014).

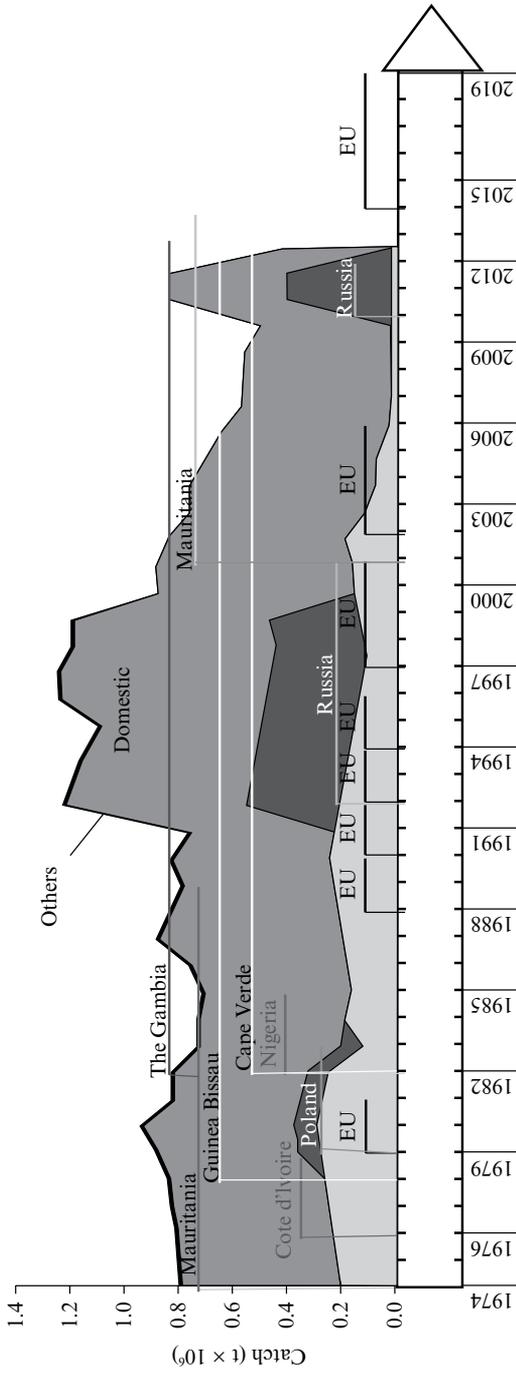


Source: Data extracted from Belhabib et al. (2014).

Figure 23.4 Trends of (reconstructed) legal (thin line) and illegal (thick line) foreign catch from the Exclusive Economic Zone of Senegal, 1980–2010

shift to new partners, such as Chinese vessels operating under the Senegalese flag. One outcome of this strategy, focusing on conservation and food security, is the agreement with Mauritania that resumed in the early 2000s (Figure 23.5), allowing Senegalese fishers to operate within Mauritania's EEZ and fish for small-pelagic species whose catches were declining in Senegal.

In terms of investment and development-aid, Senegal traditionally received its foreign direct investment (FDI) inflows from France with 90 percent of the total until 2000, the year of election of President Wade, when Senegal started diversifying its FDI sources. Senegal shifted its FDI sources to the Arab states, Malaysia, and China (FAO 2013), with the latter becoming a major partner in 2005 (Gehroid and Tietze 2011). This move illustrates how electing a new president can affect fisheries indirectly, through shifting trade/business partners, particularly in the fisheries sector. Thus, the Chinese National Fisheries Association (CNFC) suddenly became a major investor in *Sénégal Pêche* and *Sénégal Armement* (Gehroid and Tietze 2011), which translated into an increasing presence of Chinese fishing vessels –mainly reflagged – within the domestic fleet, of 10 to 14 vessels per year during the 2000s (Belhabib et al. 2014). This not only disguises beneficial ownership, but is shown to have a direct link with practices such as illegal fishing gear and GRT under-reporting. One of the many consequences of this is a shift from the EU as a main foreign fisher, whose catches in Senegal are under-reported (by the EU fleet) by two-thirds and whose agreements with Senegal serve as a source of nearly 20 percent of its fisheries revenue, to China. China under-reports by up to 90 percent (in comparison to 60 percent by the EU), while providing only 2 percent of revenues (Belhabib et al. 2015b). Another consequence of this change relates to the loss of a major funding partner by the CRODT; thus the research budget declined significantly (Belhabib et al. 2015a). With the budget allocated to fisheries research declining, fisher's trust in management outcome and how research is involved in the latter decreased, putting a strain on the governance chain.



Notes:

China is not included under the agreements since its vessels are reflagged and hence considered domestic.

Total estimates for maximum sustainable yield (MSY) range within 450 000 t and 600 000 t·year⁻¹ with no indication of how these were assessed. The current catch numbers either indicate that Senegalese fisheries are operating dangerously beyond MSY, and/or MSY is heavily underestimated.

Source: Belhabib et al. (2014).

Figure 23.5 Evolution of catches by country and corresponding agreements from Senegal, between 1974 and 2019 for demersal and small pelagic species (EU and Russia) and for large pelagic species (latest agreement with the EU)

4 FISHERIES POLICY SHIFTING TO INCLUSIVE GOVERNANCE

4.1 Evolution of Fisheries Reforms

Declining fish abundance and scarcity of resources triggered the need for reforms since the late 1990s, which drove authorities to embark on co-management endeavors. The main objective is to make stakeholders co-responsible for the management, monitoring and, even, enforcement of regulations (Sarr 2011).

In 2000, the government launched a campaign of consultations with professional organizations and NGOs, and the administration revisited fisheries development strategies. The government recognized then the failure of the top-down approach and opted for an inclusive governance strategy. Another consultation process was launched in 2004 to include fishers in reform decisions. As a result, the consultative process yielded the Sectoral Policy Letter, and the elaboration of the *Stratégie de croissance accélérée* (SCA, Strategy for Accelerated Growth), where fisheries are regarded as a key component in the strategy for poverty reduction (Sarr 2011).

While governance in Senegal shifted from a top-down approach to be inclusive of other stakeholders such as fishers, fisheries policy shifted from focusing on increasing productivity to managing fish stocks sustainably (Kébé 2008). After independence, fisheries policy concentrated on two main aspects. First, it focused on promoting the development of artisanal fisheries (REPAO 2011). The main objective of this strategy was to increase fish catches and foreign currency through licensing foreign industrial vessels and subsidizing domestic industrial and artisanal sectors, which ultimately resulted in an increase in foreign fishing effort, increasing catches (Figure 23.3), and ultimately, over-exploitation. Also, targeting higher-value species to increase exports led to lower supply in local markets (Kébé 2008). Second, efforts were made to emphasize sustainable management and co-management to correct for the effects of the first strategy (REPAO 2011). Co-management and inclusive governance in Senegal are promoted through the creation of CLPAs (Gaoussou Gaye, APRAPAM General Secretary, personal communication) which, in theory, involve the fishing industry in management, decision making, governance and monitoring, control, and surveillance (MCS) of fisheries (REPAO 2011).

The chronology of fisheries management and policy in Senegal could be summarized in two steps.

Step 1: 1960–90

Fisheries management policies within this time period aimed to encourage high production levels through the development of artisanal and industrial fleets. Fishing access was free and uncontrolled; the fund for encouraging fisheries and connected industries (CEPIA) was created in 1967; the Centre for Supporting Pirogue Motorization (CAMP) was created in 1972, along with the Centre for Assisting Senegalese Artisanal Fisheries (CAPAS) to promote commercialization and processing techniques and to enhance fishers' revenues. Also, increased subsidies for motorization were offered by the governments of Belgium, Canada and Japan. The state promoted the use of purse-seines with a project funded by the FAO in 1969 (REPAO 2011).

Major five-year plans (*plan quinquenal*) were structured during this time period:

- Plan I, 1960–64: this plan was aimed at the development of fisheries cooperatives and the economic development of artisanal fisheries. It resulted in improved processing techniques and thus exports.
- Plan II: 1965–69: this plan was aimed at developing industrial fisheries, resulting in the introduction of a national fleets and the improvement in catch amount;
- Plan III: 1969–74: this plan focused on the reorganization of fishery cooperatives and the privatization of fishing industries. The state relieved fishers' debts; the Department of Fisheries (DOPM, currently; DPM), took over the management of fishery cooperatives, which were reorganized and finally most fishing industries were privatized;
- The 1976 Code de la pêche maritimes (Fisheries Act);
- Plan d'Action de la Pêche (PAP, Fisheries Action Plan) 1982: This plan focused on better integration in the Senegalese economy and the creation of joint (private–state) ventures for fish processing;
- The 1987 Code de la pêche maritime (Fisheries Act).

These strategies led to the widespread use of purse-seines, over-exploitation, overcapacity and the destruction of fish habitats along with expansion of the fished areas (REPAO 2011). The participation of fishers, civil society and research on the establishment of these strategies was slight to non-existent.

Step 2: 1990–present

Fisheries management policies during this period are aimed at the proper management of fisheries by limiting fishing expansion and effort. Co-management approaches are promoted and the Fisheries Act was modified. It is also during this period that the first Sectoral Policy Letter was structured (REPAO 2011):

- *Plan quinquennial* (five-year plan) 1990–95: this plan aligned four main objectives, the first being the sustainable management of fisheries resources. This plan aimed to increase seafood catches for both exports and local supply by enhancing artisanal fishing techniques and developing industrial fisheries. It also emphasized research, which resulted in the first comprehensive fishing effort survey (ISRA 1998).
- The 1998 Fisheries Act defined access rights of fisheries. The state became responsible for organizing the fisheries sector, the protection and surveillance of fisheries resources, and activities within the Senegalese EEZ. Fisheries resources within the Senegalese EEZ belong to the Senegalese people, and the state has the responsibility of managing these resources sustainably for the benefit of all Senegalese, including future generations (Sarr 2011). Since 1998, the government of Senegal put a particular emphasis on co-management and sustainable use of marine resources using different tools including institutional mechanisms for management (the structure of management plans was defined), the creation of national consultative councils for marine fisheries, the legislation of CLPs and CLPAs, the creation of the consultative commission for fisheries licenses, and the first attempts to limit fishing effort through permits were made (REPAO 2011).

This Fisheries Act faced challenges as it was not supported by the industry and its regulations were hardly enforced in reality (Kébé 2008).

- The strategy for sustainable development of fisheries and aquaculture in 2001: this policy aimed at adopting sustainable management approaches for fisheries, while meeting the national seafood demand, modernizing the artisanal fishing fleet, adding value to fish products and developing a financially sustainable credit system (REPAO 2011).
- Medium-term plan for the sustainable development of fisheries and aquaculture 2001–07: this policy aimed at the sustainable management of fisheries and aquaculture, enhancing MCS, strengthening international cooperation. It ended with the adoption of the first *Lettre sectoriel des pêche* (Sectoral Policy Letter) in 2007. This letter resulted in the publication and adoption of the *Document de Stratégie de réduction de la Pauvreté* (DSRP, Strategic Document for the Reduction of Poverty) and the SCA which allocated an important role to fisheries for poverty alleviation (REPAO 2011);
- *Plan d’Orientation Stratégique pour le Développement Economique et Social* (PODES, Strategic Orientation Plan for Economic and Social Development) 2002–07: this plan focused on fisheries management and sustainable development, while increasing artisanal fisheries production and quality and adapting industrial fisheries to international standards. This plan was the first of its kind to link national planning with local and regional objectives, a definite step towards good governance;
- *Sectoral Policy Letter 2007*: four main objectives are highlighted in this document. The sustainable management of fisheries resources was to be achieved through a proper assessment and control of fishing effort (pirogue registration, fishing permits, and so on), elaboration of management plans, the promotion of integrated coastal management and strengthening fisheries research capacity. Second, the policy aimed at increasing seafood supply to meet national demand through the promotion of aquaculture and freshwater fisheries and reducing post-harvest loss. The third objective aimed at increased the added value of seafood and ensuring the participation of fisheries stakeholders in management (Ministère de l’Economie Maritime des Transports Maritimes de la Pêche et de la Pisciculture 2007).
- *PODES 2008–13*: the government of Senegal adopted operational double planning strategies which adapted national policies to local programs. This plan supported the *Programme National pour le Développement Local* (PNDL, National Programme for Local Development).
- *Economic and social policy document 2011–15*: the main objective of this policy is to increase the contribution of fisheries and aquaculture to the national economy and food security (Anonymous 2014).

During the past ten years, a new policy has aimed to limit overcapacity and overexploitation through the implementation of marine protected areas (Thiao 2009), fishing licenses and fees for small-scale fishing units; however, this has met with limited success.

In summary, the main reforms in Senegal included the introduction of artisanal fishing permits (a measure yet to be properly enforced), pirogue registration, freezing of demersal

industrial fishing effort, the introduction of co-management approaches, notably through the creation of CLPAs, the strengthening of MCS techniques, notably through the creation of the DPSP, the introduction of conservation measures (biological rest, and marine protected areas), the establishment of a restructuration plan for industrial fisheries, the management and legislation of fisheries connected activities (processing and trade), the establishment of an aquaculture and inland fisheries development programs.

Overall, fisheries in Senegal are regarded as the focal point of reforms. Fisheries management plans, although effectively lacking, are regarded as key instruments to implementing reforms. Decentralization of fisheries management is key in involving local communities in decision-making processes, and economic and biological aspects are today at the heart of the reforms (Hurley and Manel 2015).

5 INCLUSION OF CIVIL SOCIETY IN GOVERNANCE SCHEMES

Non-governmental organizations in Senegal do not have a direct role in decision-making (Gaoussou Gaye, APRAPAM General Secretary, personal communication); rather their participation is mainly restricted to local communities and administrative support, which contributes in a way to the bottom-up decision making process.

Non-governmental organizations in Senegal play a role in support of government, rather than conception and execution of independent projects. Two main fields of intervention could be highlighted within which advocacy can play an important role (Belhabib 2014):

- The conservation and management of fish stocks; and
- The education and training of professionals within the industry.

Thus, the World Wide Fund for Nature (WWF) contributes to creating marine protected areas (MPAs) and enhancing MPA management, promoting the conservation of endangered species and sustainable management, and support the government and the Sub-Regional Fisheries Commission (SRFC) in elaborating policy. The International Union for the Conservation of Nature (IUCN) focuses on the conservation of marine habitats and biodiversity, empowering local populations and enhancing collaborations between NGOs and governments. The NGO Océanium acts mainly to preserve fish habitat through the promotion of MPAs and providing platforms for MPA controls (Thiao 2009). However, given that some of these strategies, such as MPAs, may be contrary to traditional systems and fishing access, some of them are highly contested and even destroyed, as in the case of a recent World Bank established MPA (Hurley and Manel 2015).

The contribution of NGOs to policy advocacy in Senegal is very limited, and their participation is often viewed as inappropriate by the authorities. A few NGOs are involved at minimal levels of decision-making and policy advocacy through funding of major projects relating to the improvement of fisher livelihoods, workshops that lead to recommendations to the Ministry of Fisheries and strong press campaigns that may impact the ‘reputation’ of a political figure thus putting pressure on helping change ‘harmful’ decisions.

The objective set by the Senegalese government in the economic and social policy document (2011–15) is to increase the contribution of fisheries and aquaculture to the national economy and food security and rebuild fish stocks by 2015. Although these objectives have not been met – Senegalese fisheries are still facing over-exploitation and overcapacity, particularly because catches are declining despite (or rather because of) increasing fishing effort – clear and concise targets were not established. Also, costs of fishing are increasing, reducing the livelihood levels of fishers, and fish stocks such as sardinella (*Sardinella* spp.), sparids (*Pagellus* spp.), groupers (*Epinephelus* spp.) and shrimp (*Penaeus notialis*) are increasingly being over-exploited. Thus, it is likely that in the few next years, there will be further policy reconsiderations, notably at the enforcement levels. This will increasingly involve contributions from the different stakeholders within the fisheries sector. Moreover, despite the unpredictable nature of ministerial and administrative changes, the next presidential elections will be held in 2017. Mr Sall, the current President of Senegal, focuses on sustainability and increasing socio-economic contribution of fisheries, which align well with local stakeholder objectives. Thus, advocacy efforts could emanate from a bottom-up approach (while diversifying partners and increasing media attention) and adapt to the reality where small steps can take longer, given high institutional instability.

Institutional instability, increasing yet weak fishers contribution to the decision-making process, lack of adequate research input into policy, lack of transparency and weak contribution of the public (through NGOs) to policy and decision-making processes in Senegal jeopardize otherwise good governance efforts, reasonable regulations and sustainable objectives for fisheries.

Past experiences show that efforts have shifted towards a more sustainable policy approach to fisheries, thus taking into account the users of the industry (for example, fishers and fish traders) in the decision-making process. Far from being conflictual, the objectives of, for example small-scale fishers, align well with the current legislation. Indeed, if these objectives are not enforced in part with the contribution of the small-scale sector, they are enforced through press and media pressure, as Senegal is a country that is known for its relatively good democratic system. Thus, tools can be used and adapted to the actual situation where small efforts necessitate more time (and thus higher costs) to be implemented at the policy level.

6 CONCLUDING REMARKS

Although there are still efforts to be made in Senegal to enhance and strengthen the rapidly developing co-management initiatives for a better governance model, Senegal is not unique in the region and other examples illustrate how to effectively shift away from the traditional centralized approach to a scheme that is more adapted to the needs of Senegal and, by extension, other countries within the region. Governance has changed overall, partly to be more inclusive and partly to respond to development-aid organization priorities. Small-scale fisheries in Senegal and a few other countries in the region are – at least in part – governed by pre-existing traditional systems, which although in decline, still play a major role in fisheries management and advocacy against illegal fishing (Belhabib and Pauly 2015). Fishers are now increasingly part – at least in theory – of the decision-making scheme, as contributors and/or observers. In Mauritania, for example, the sectoral

strategy for fisheries established in 2005 is said to have been drafted in consultation with different stakeholders. The very existence of the Conseil national consultatif (National Advisory Committee) suggests that efforts towards good governance are increasing (Anonymous 2006). In Gambia, the Fishery Advisory Committee and Community Fisheries Centers are used as the institutional structure for inclusive oversight of the sector and decentralized fisheries co-management. However, traditional management systems exist which allow communities to be directly involved in management and regulations (Tobey et al. 2009). In Ghana, a step towards good governance consists in a recent call by the government for a dialogue that would trigger co-management initiatives, and community-based management, which is far from the traditional top-down approach. 'Nested' management was adopted as an effective way to create a community-based management network that is well connected to higher levels of decision-making, in an attempt to effectively manage constantly moving fish and fishers in Ghana (Mutimukuru-Maravanyika et al. 2013). These approaches could be used to complement the current scheme in Senegal, given that Senegalese fishers are increasingly moving to follow migrating fish, to offset declining local catches.

Despite signs of improvement, small-scale fishing communities in Senegal still describe governance as 'bad' because of the formal non-inclusion of small-scale artisanal communities, which have retained their status of mere 'observers' (CAOPA 2015). Despite encouraging signs of a shift from a top-down centralized approach to co-management, more work needs to be done in terms of implementation, inclusion of traditional knowledge and traditional management institutions.

While Mutimukuru-Maravanyika et al. (2013) indicate other reasons for failing efforts, it remains crucial to build accountability frameworks to analyze the success and failures of governance efforts across countries and regions in order to learn from these past experiences. Educating fishers about existing regulations and management strategies is key to their participation and to the establishment of new management measures. The lack of insight in the complex and diverse qualities of governance might be one of the major reasons for its ineffectiveness (Kooiman 1993). On the other hand, building a greater knowledge of current industry practices, existing traditional management systems and empowering the voices of small-scale communities and domestic industrial sectors may be a key in tailoring of appropriate sustainable management strategies and building long-term trust, hence encouraging good governance.

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NOTES

1. The UN General Assembly viewed IUU fishing to be one of the biggest threats to sustaining fish stocks globally (UNGA 2011).
2. Accessed 3 September 2014 at http://www.dakaractu.com/Affaires-des-licences-de-peche-Khoureychi-Thiam-s-explique-3-heures-durant-devant-l-Ige_a37858.html.
3. A senior staff from the DPM explained this to the first author during a meeting about catch reconstruction for Senegal and illegal fishing estimates.
4. We define illegal fishing as fishing by foreign fleets in the waters of Senegal, without a license, an authorization and/or an agreement of any kind.

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