

Chapter 8. Opportunities and challenges for marine spatial planning in Senegal

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- 1 In Senegal, access to and use of the ocean is a central element of the national and local economy. The fisheries sector, considered among the priority sectors of the national economy, occupies an important position due to its contribution to food security and to the creation of income and employment (ANSD, 2020). Thus, under Priority 1 of the Plan for an Emerging Senegal (PSE 2014–2035), fishing and aquaculture activities are intended to contribute to “the structural transformation of the economy in order to support a strong and sustainable growth dynamic”. Between 2009 and 2013, the fisheries sector alone represented a source of income for more than 600,000 people in the country. The contribution of fisheries to national wealth is virtually stationary, fluctuating between 1.7% and 1.8% of gross domestic product (GDP)¹, showing the dynamism of this sector. The Sectoral Policy Letter for the Development of Fisheries and Aquaculture (LPSDPA 2016–2023) is in line with this goal of the PSE and defines the government’s priorities for action in the field of fisheries and aquaculture.
- 2 While the ocean provides key services to the Senegalese economy, its condition is affected by increasing human activities on land and at sea. These include the development of port activities, maritime transport, industrial fishing and aquaculture, coastal tourism and underwater cabling. The disappearance of many natural habitats and the weakening of coastal ecosystems affect the quality and quantity of natural resources, which are both numerous and vital in this ecologically and biologically fragile area (LEFEBVRE, 2011) (see Box 1 on the importance of strengthening the collection of biological data in Senegal).
- 3 Marine spatial planning (MSP) aims to bring coherence to public policies that analyse and distribute human activities in marine areas over time and space in order to achieve ecological, economic and social objectives usually determined by political processes².

MSP is thus a priority issue for Senegal, although it also poses challenges. This chapter looks at the driving forces and obstacles to the implementation of MSP in Senegal. It first presents the strong regional incentive for the development of MSP in West Africa. It then discusses the challenges that must be taken into account and met at the national level for MSP to be both operational and in the interest of the Senegalese people.

Box 1. Scientific data: a necessary prerequisite for MSP

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The challenge of managing the marine and coastal environment in the face of climate change and anthropogenic activities calls for strategic and coordinated spatial planning. As EHLER and DOUVRE (2007) define it, this is a “public process for analysing and locating the spatial and temporal distribution of human activities taking into account ecological, economic and social objectives”. In a country’s exclusive economic zone (EEZ), this must include the political processes of the authorities in question. In international waters, planning may involve governments and UN organisations. The decision-making in management plans is based on a number of considerations; each government must have entities in charge of the maritime sector in order to be able to provide information on the main indicators that help decision-making and then to coordinate the implementation of marine and coastal management plans.

In terms of the state of knowledge, the structuring of research and the means committed to informing management policies, developing countries have a major challenge at all of these levels. In the coastal countries south of the Sahara, which are confronted with a range of problems, including food security and pollution, a good coverage of disciplinary fields is essential. In Senegal, after independence, research was oriented towards agriculture *sensu stricto*, and this field of research is well represented throughout the country.

The same cannot be said for the maritime sector. The Dakar-Thiaroye Oceanographic Research Centre (CRODT), created before independence, was long the only structure addressing ocean-related issues. The first universities were not created until 2003. However, years of drought have encouraged a renewed interest in marine activities, with the coast becoming a major economic issue. In 2021, artisanal maritime fishing, with 14,930 active pirogues, landed 83% of Senegal’s fish production, representing a commercial value of US\$156 billion (unpublished source, Ministry of Fisheries and the Maritime Economy). Added to this are other economic activities linked to the sea and its importance to human well-being.

However, research does not currently have the capacity to meet policy expectations and allow sound planning decisions. Despite ongoing efforts to improve knowledge of Senegal’s EEZ, the information is still insufficient due to:

- a significant shortage of staff
- inadequate research programmes
- a severe lack of funding.

As maritime waters are a national heritage, the development of research in an EEZ must be the responsibility of national agencies, with resources coming from the government to ensure sustainable activities. Decision-making bodies require scientific information provided by fundamental and applied research. For MSP and

marine ecosystem management policies and to anticipate potential problems that could affect the health of the ocean, it is crucial to increase financial support for research in coastal countries south of the Sahara.

For more information

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A legal framework favourable to implementing MSP

- 4 While a regional or national agreement specific to MSP has not yet emerged in West Africa, the diversity of economic activities at sea has highlighted the need to consider the value of coordinated management. This has led at the regional level to the Abidjan Convention, which provides a framework and strategic direction for the development of MSP in West Africa. The formal regional planning instruments of the African Union (AU) could provide further support for its development.

The Abidjan Convention: a framework for MSP in West Africa

- 5 The Abidjan Convention on Cooperation for the Protection and Development of the Marine Environment and Coastal Areas, signed on 23 March 1981 in Abidjan (Côte d'Ivoire), was ratified by Senegal on 23 July 1982³. It entered into force on 5 August 1984. In total, more than 22 coastal countries in West, Central and Southern Africa are covered by the Convention, 19 of which have ratified it. Four additional protocols have been signed but not yet ratified⁴.
- 6 Of these texts, the additional protocol on integrated coastal zone management aims to provide a framework for management and for strengthening regional cooperation to better protect and preserve the coasts of member states. Its objectives include the integrated planning and coordinated development of coastal zones, island zones and river basins, the maintenance of ecosystem resilience to human activities, natural hazards and climate change, including the adequate protection of sensitive areas, and the prevention and reduction of pollution from air, land and marine sources. The protocol on integrated coastal zone management is supplemented by seven thematic annexes⁵. The objectives of integrated coastal zone management (which are similar to those of MSP) aim to “ensure the sustainable use of natural resources and ecosystem services” and to “maintain ecosystem resilience to human activities”⁶.
- 7 The additional protocol on the sustainable management of mangroves makes reference to the continuity between the land and the ocean. According to Article 2.ii of the protocol, “mangrove means any animal or plant species adapted to the salinity of coastal ecosystems in intertropical regions subject to exchanges between the land and the ocean”. This definition of mangroves would make them subject to MSP insofar as it establishes a connection between the land and the ocean, and as mangroves themselves are a resource linking human activities at sea and in coastal areas. Indeed, mangrove ecosystems are the source of various income-generating activities, but above all of

shoreline protection. Article 7-2 and Article 8 of the protocol include provisions with the direct aim of protecting mangroves from human exploitation.

- 8 The principles of sustainable management of mangrove ecosystem resources listed in Article 4 of the protocol (e.g. the right to information, to participation and to access to justice, the ecosystem management approach) are also relevant to MSP processes. Additionally, the protocol contains annexes that are essential for MSP⁷. For example, Annex 2 categorises practices that may negatively impact mangroves, including the development of fishing ports, mineral ports and/or oil platforms.
- 9 The additional protocol concerning cooperation in the protection and development of the marine and coastal environment of the Western, Central and Southern African region against pollution from land-based sources and activities contains several provisions relevant to the establishment of MSP. The geographical area to which this protocol applies (hereafter referred to as the “protocol area”) corresponds to that defined in Article 1 of the Abidjan Convention and includes the marine environment, coastal areas and inland waters under the sovereignty regime of State of the countries of the Western, Central and Southern African region, from Mauritania to South Africa. The protocol states that “Contracting Parties shall adopt and enforce national laws and regulations to facilitate, to the greatest extent possible, public access to relevant data and information on pollution and degradation caused in the protocol area by land-based sources and activities, on measures taken to prevent, reduce, mitigate and combat their adverse effects, and on the effectiveness of such measures, taking into account the provisions of international instruments concerning public access to environmental information”⁸.
- 10 Article 6 also arguably highlights the need for coherent, dynamic measures between the marine and terrestrial environment: “Parties shall take all appropriate measures to prevent, reduce, combat and control pollution from offshore exploration and exploitation activities in the protocol area and shall, in particular, ensure that the best available techniques and best environmental practices, which are environmentally effective and economically appropriate, are implemented”⁹.
- 11 Article 17.2 on reporting specifies that “reports [...] shall contain: (e) information on activities resulting in changes to the coastline, habitats along the coastline and related catchment areas”. The requirements imposed by this provision thus provide the basis for a framework for joined-up action by the various stakeholders to combat pollution from land-based sources and activities.
- 12 These additional protocols of the Abidjan Convention contribute to the regional incentive to set up MSP systems. The African Union (AU) goes even further, with a continental maritime goal and strategy.

Towards regional MSP: the AU's goal

- 13 A significant 70% of the GDP of the African continent comes from the maritime economy, or “blue economy”. This includes all water bodies and shorelines and involves a range of economic activities such as fishing, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting and deep-sea mining sectors. In recognition of the importance of the blue economy in Africa, in 2012 the AU adopted the 2050 Africa Integrated Maritime Strategy (AIM 2050) (AU, 2012). This aims to foster the creation of

wealth from Africa's oceans and seas by developing a thriving, sustainable, safe and environmentally sound blue economy.

A Combined Exclusive Maritime Zone for Africa

- 14 Intra-African trade is at the heart of the AU's concerns as a means of reducing the continent's dependence on international trade¹⁰. Over a decade ago, the AU stated that the implementation of a common maritime zone would offer Africa significant "geostrategic, economic, political, social and security benefits, as it would generate collective efforts and reduce the risks of transnational threats, environmental damage, smuggling and arms trafficking" (AU, 2012). This goal is embodied in the proposed creation of a Combined Exclusive Maritime Zone for Africa (CEMZA).
- 15 The concept emerged from the AIM 2050 strategy and seeks to create "an African maritime space without barriers" whose objective is to "stimulate intra-African trade". The CEMZA would not create a new zone like the exclusive economic zone, but aims to eliminate or simplify administrative procedures in maritime transport within the AU, facilitating the internal market for intra-AU maritime trade and services. The AIM 2050 strategy is rather vague about the operationalisation of the CEMZA, simply calling for it to be "timely" (AU, 2012, p. 17). Similarly, its geographical boundaries are not clearly spelled out (VRANCKEN, 2020). However, it does provide for the establishment of a "strategic working group to prepare the technical proposal", which should include the geographical boundaries of the CEMZA.
- 16 To date, the AIM 2050 strategy is more a "solemn declaration" of intent to create a shared maritime space than a real action plan. The applicable legal framework, the operating rules, and the process for establishing this space have yet to be resolved.

CEMZA, a goal in line with MSP objectives?

- 17 The objective of MSP is to organise the spatial and temporal distribution of human activities taking place at sea, in order to promote the sustainable growth of maritime economies, the sustainable development of maritime spaces and the sustainable use of marine resources. A future CEMZA could constitute a common framework for the shared management of maritime space, and in several respects could be linked to a form of regional MSP.
- 18 The initiative to create a CEMZA coincides with many of the objectives of MSP. In addition to promoting economic and commercial interests, the CEMZA would include environmental protection aims and defend sectors that represent substantial sources of income for coastal populations, such as fishing and aquaculture (AIM 2050, AU, 2012). While the AIM 2050 strategy does not define the respective weight given to each cornerstone (i.e. economic, social and environmental) in the development and implementation of the CEMZA, there are similarities with MSP projects in other regions.
- 19 Establishing a CEMZA will require the joint initiative of African countries to regulate and manage the maritime space, and the distribution of authority. This is an issue that can be found at the national level in MSP, which also requires, albeit on a smaller scale, the coordination of various ministries and agencies relating to the marine environment and the activities that take place there. For a CEMZA to come into being, there will need

to be strong political will from African leaders, enhanced cooperation and effective coordination of all policies related to the marine domain. Since all AU member states will be involved in the establishment and operation of the CEMZA, the actors are not limited to coastal states. Other non- (or para-) governmental stakeholders will also be involved, such as local communities, specialist regional institutions and associations, the African maritime private sector, strategic development partners and the international community at large, including African organisations, the private sector and international development agencies.

National challenges to implementing MSP

- 20 While the supranational incentive for marine space planning is strong, implementing a continental-scale CEMZA is expected to take several decades. In the meantime, African states can implement MSP on a national scale. This will require overcoming a multitude of national challenges – for example, in Senegal, these include changes in environmental law and the sectoralisation of public policies. The Senegalese institutional framework would also need to be consolidated. In this respect, the emergence of land-use planning could be a basis for MSP.

Land-use planning, a reference for future MSP?

A recent law on land-use planning and sustainable development

- 21 The legal basis for spatial planning on land – and potentially maritime space – was recently passed in Senegal with the Framework Law for the Planning and Sustainable Development of Territories (LOADT)¹¹, which “has as its general objective the harmonious development of the national territory” (Art. 4, Law No. 2021-04 of 12 January 2021). Indeed, the maritime domain is considered an integral part of the national territory as a component of the domain of the state¹², whether it is qualified as natural¹³ or artificial¹⁴.
- 22 This law could thus be used as the basic text of a national system of marine and coastal planning. Its explanatory memorandum has several major innovations: in particular, it mentions “the creation of national and territorial planning and development bodies” and “the introduction of special provisions (...) for the planning of specific and priority areas due to their economic potential or ecological sensitivity”. The determination of these aspects is a key element of MSP, which aims to reconcile economic objectives with the conservation of marine biodiversity.
- 23 Despite the absence of an explicit reference to MSP in the text of the law, several related concepts are defined in Article 2, such as land-use planning¹⁵, sustainable development¹⁶, regional development, and the economic zone¹⁷. The fact that this law not only identifies the different areas concerned, but also determines the authorities responsible for managing them, demonstrates the legislation’s aim to create standards that balance conflicting economic interests and ecological imperatives. In terms of planning, the law provides for various instruments aimed at promoting the sustainable management of the environment and natural resources. One of these is a development plan (*schéma de cohérence territoriale*, SCOT) that sets the fundamental guidelines for the

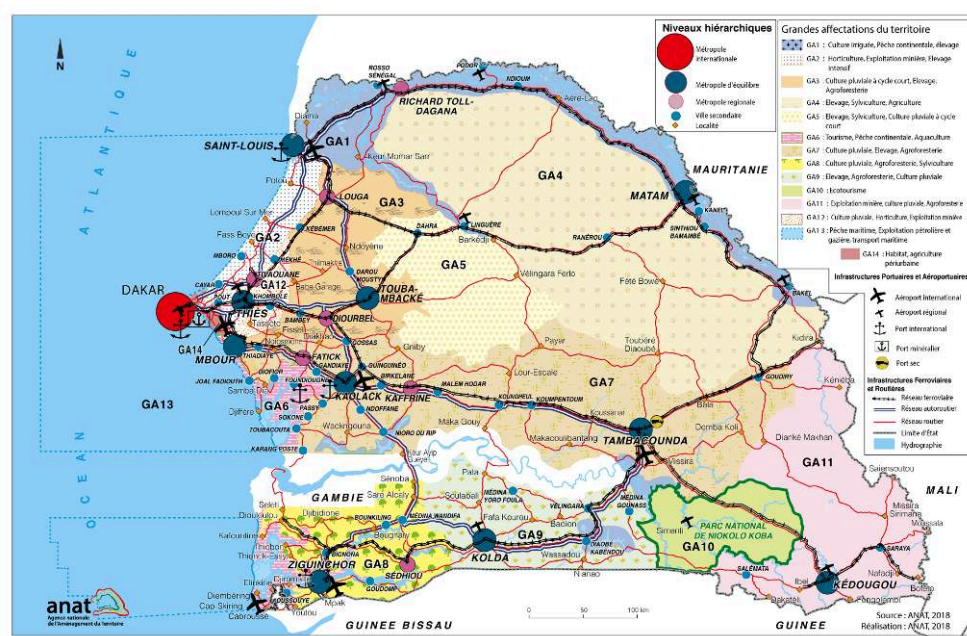
development, protection and enhancement of a given area (for example, a coastline), which could be a fundamental tool for the implementation of MSP.

- 24 Public participation is also recognised as a fundamental principle in Article 3¹⁸, as it is in the framework of MSP projects. The uses and users of the land or sea impacted by these plans are multiple and sometimes in conflict. In terms of fishing alone, traditional fishing accounts for nearly 80% of landings (ANSD, 2016). However, the fact that 95% of these jobs are recognised as informal (GOVERNMENT OF THE REPUBLIC OF SENEGAL, 2013) may complicate the participation of all stakeholders. If MSP is to provide balanced economic, environmental and social data in the process of allocating space, it is crucial to guarantee a place and a voice for each stakeholder. Currently, small-scale producers and informal workers are poorly represented in political processes. The challenge here is to avoid or minimise the phenomena of land or resource grabbing that can occur in certain African countries (NIASSE, 2011) and in the implementation of MSP throughout the world. True and broad public participation can help to counter this.
- 25 Article 28 of the LOADT also provides for reinforced and territorially differentiated development policies in priority development areas and sensitive urban areas. There is nothing to prevent policymakers from applying the principle of these priority areas to part of the maritime territory and using MSP to define their uses. The same applies to the special economic zones that can be created in certain areas by the government in conjunction with the local authorities to promote the creation of jobs and wealth (Art. 29).
- 26 With regard to sectoralisation, the LOADT establishes an innovation with the creation of a National Territorial Observatory that “contributes to the monitoring and evaluation of planning and development policy and constitutes a decision-making tool for all territorial actors” (Art. 30, paragraph 3).

The National Spatial Planning and Development Plan and the marine space

- 27 The new National Spatial Planning and Development Plan (PNADT)¹⁹ is an important document for MSP. In contrast to the previous National Spatial Development Plan (PNAT)²⁰, the PNADT has been adapted to the requirements of sustainable development and is of particular value for MSP. This plan aims to raise spatial planning to the level of a strategic instrument of public policy.
- 28 The PNADT lays the foundations for a division of uses of the marine and coastal environment. Figure 1 maps the activities that may overlap between potential stakeholders. The main objective of the PNADT is to take all stakeholders into account.

Figure 1. PNADT Map



SOURCE: ANAT (2020)

- 29 This map could be the basis for MSP on a national scale. Any framework for MSP is based on the use of the sea. In addition to the various legal texts that apply, the maritime space can reflect rival interests of stakeholders. The aim of MSP is to take into account the various uses and users of the sea to ensure best practices in fishing, oil and gas exploitation, navigation, etc.
- 30 The Environmental Code²¹ states that development plans and programmes must be subject to an environmental assessment. This of course includes urban planning strategies^{22,23}. Poorly controlled urbanisation affects both land and sea and forces decision-makers to address the thorny issue of sustainability. The evaluation of public policy²⁴, a new responsibility devolved to the National Assembly following the constitutional reform of 2016, can facilitate the implementation of planning in Senegal. This will necessarily involve a review of public policies relating to the marine space.
- 31 The process of MSP involves not just advising on the legal zoning of various marine areas, but recommends specific specialist institutions responsible for their management. In Senegal, these institutions exist, but are caught between sectoralisation and the need for cooperation.

An institutional framework between sectoralisation and cooperation

- 32 Despite recent developments taking a more integrated approach to the protection of the marine environment, the institutions in charge of the exploitation of the sea remain highly sectoralised in Senegal.

The need to adapt institutions to implement MSP

- 33 In Senegal as elsewhere, many institutions (ministries for urban planning, the environment, local authorities, fisheries, etc.) are involved in marine spatial planning.

They intervene in a sectoral manner and manage specific activities in the marine environment. Some are responsible for marine pollution, others for coastal erosion, others in the conservation of marine biodiversity or the exploitation of marine resources. Harmonisation of policies and legal texts is one of the main challenges in Senegal.

HASSMAR: an institution with general jurisdiction

- 34 The High Authority for the Coordination of Maritime Safety, Security and the Protection of the Marine Environment (HASSMAR) was created by Decree No. 2006-322 of 7 April 2006. Under the terms of Article 3, it “is invested with general responsibility for coordination in all areas relating to security, safety and environmental protection in maritime and river waters under Senegalese jurisdiction”. This body was the first step towards taking the marine environment into account in Senegal. The powers devolved to it in terms of protection of the marine environment are diverse. One of its powers is to coordinate, in the event of an emergency, and with other authorities concerned, the National Marine Emergency Response Plan. This integrates within a single mechanism specialist plans relating to different fields of intervention, in particular those relating to search and rescue at sea, maritime security and environmental protection.
- 35 However, there is a limit to this progress towards greater integration, as HASSMAR’s jurisdiction does not hinder the prerogatives conferred on other agencies and public services – such as the National Agency for Maritime Affairs (ANAM) – by legislative and regulatory texts²⁵.

ANAM: an institution with specific jurisdiction

- 36 The National Agency for Maritime Affairs was created by Decree No. 2009-583 of 18 June 2009. It is overseen by the Minister of the Merchant Navy. Its missions include: (i) prevention of pollution of the marine environment due to the discharge of hydrocarbons and harmful substances from ships, discharge due to the exploration or exploitation of the seabed or its subsoil, dumping of toxic waste, and incineration and discharge from land-based sources; (ii) research, recording and investigation of infractions.

Institutions with a variety of jurisdictions

- 37 Faced with the socio-economic challenges and vulnerability of the coastline, the Ministry of the Environment, and in particular the Directorate of the Environment and Classified Sites, set up the Coastal Management Division in December 2012²⁶. The main missions of this division are to manage, prevent and combat all forms of coastal degradation, including coastal erosion, implement integrated coastal zone management and define appropriate action plans for sustainable coastal management²⁷.
- 38 In addition, the Directorate of Marine and Community Protected Areas²⁸ is responsible for setting up and managing a network of protected areas sufficiently representative of coastal, estuary and marine ecosystems. Its aim is to ensure the conservation of marine

and coastal biological diversity by consolidating and strengthening the network of marine protected areas.

- 39 To enable concerted management with all marine environment stakeholders, a national observatory for coastal protection is being set up by the West African Coastal Area Management Programme²⁹. This national observatory is an integral part of the national coastal body that is also being established.
- 40 It is crucial that the institutional body responsible for MSP, while taking into account international requirements, respects, works with and adapts to these existing national structures in order to maximise its relevance and ownership.
- 41 Beyond this institutional complexity, the capacity of institutions to enforce legislation is also a challenge for MSP.

Better protection of the marine environment: the latest developments

- 42 Texts and institutions aimed at protecting the marine environment are very often dispersed (BONNIN *et al.*, 2016). Yet cooperation and institutional synergies are a prerequisite for MSP – and ideally also a product of the process. A law on the coastline that is currently being drafted could help to better achieve this in Senegal³⁰. This draft policy has gone through several versions that have circulated for more than a decade. Initially, the aim of this first government initiative to legislate on the matter was to address shortcomings in the procedures for occupying, classifying and declassifying the coastline in order to amend the legal system in force. The option chosen by the government was not to revise Law 76-66 of 2 July 1976 on the State Domain Code or the 2002 Merchant Navy Code by making amendments and additions to these two laws (which would have been the most practical solution), but rather to draft a new law whose content and preparation give broad responsibilities to the Ministry of the Environment and also involve other sectoral ministerial departments (ministries in charge of the public domain, the maritime economy, town and country planning, tourism, local authorities). This draft law provides for the creation of a National Authority for Integrated Coastal Management attached to the Ministry of the Environment and bringing together the ministries responsible for the coast to coordinate the various institutions (Article 11).
- 43 The draft law on the coastline is still in the preparation phase; the current objectives of public authorities are to accelerate the study of the feasibility of the coastal management body (statutory aspects and institutional oversight) in order to aid the work of the commission drafting the law and its application decree. The adoption of the policy is dependent on the results of this study³¹.
- 44 The adoption on 12 January 2021 of the Framework Law on the Planning and Sustainable Development of Territories (LOADT) introduces new challenges that the draft law on the coastline must take into account. The former includes a number of major legislative innovations, determining the fundamental principles of territorial planning and development policy, legally officialising the National Territorial Development Plan (PNAT), sectoral master plans and other spatial planning documents on a territorial scale, and creating national and territorial planning and development bodies. These institutions include a Presidential Council for Territorial Planning and Development (Article 13), a national commission for territorial planning and development (Article 14), and regional and municipal commissions for territorial

planning and development (Articles 15 and 16). The draft coastal law will need to take into account these new bodies, whose remit covers the entire national territory, although the coast has specific features that must also be considered.

- 45 Protected fishing areas (*zones de pêche protégées*, ZPPs) are another development in Senegal that are relevant to MSP. In some localities, these areas allow several activities aimed at the sustainable exploitation of resources. For Senegal's artisanal fisheries, the integrated management approach is favoured to build up coastal demersal stocks by promoting local co-management initiatives and implementing measures to restore degraded coastal marine ecosystems such as ZPPs and artificial reef zones (SSC, 2018, p. 128).
- 46 In the Hann ZPP³², fishing activity is subject to authorisation. According to Article 4, paragraph 1 of the decree creating this ZPP, "fishing, in all its forms, is strictly forbidden within the zone delimited in Article 2. Only experimental fishing and underwater diving operations duly authorised by the Directorate of Maritime Fisheries for the purposes of scientific and technical research or monitoring and evaluation of the ZPP are permitted". Paragraph 2 of the Article specifies that "in the area defined in Article 3, only single-line fishing is permitted"³³. Protected fishing areas require the cooperation of different stakeholders in planning the sustainable exploitation of resources. This integrated approach is one of the pillars of Senegal's local co-management model and seeks to reconcile the three-fold objective of rebuilding coastal demersal fisheries, rehabilitating marine ecosystems and habitats and improving the living conditions of fishing communities (SSC, 2018).
- 47 Another recent development is Decree 2020-1784 of 23 September 2020 on devolution. This decree will apply to all administrative districts (including the coastal regions and departments of Saint-Louis, Louga, Thiès, Dakar, Fatick and Ziguinchor). The devolution charter sets out the principles of the decentralisation of public policy, public services, and the pooling of devolved services. Any development of the coastline must take into account the rules defined by the charter.
- 48 In short, the process of finalising the coastal law must take into account a wide range of political and legal factors, and is a precondition to achieving coordinated and effective MSP.

Conclusion: a priority on development?

- 49 In 2014, Senegal adopted a new development strategy to accelerate its progress with the Plan for an Emerging Senegal (PSE). The PSE is the benchmark for economic and social policy in the medium and long term and the main reference framework for "governance policies aimed at leading Senegal towards development by 2035". The PSE specifically includes environmental goals through the promotion of a green economy, the prevention of the degradation of environmental resources and the depletion of biodiversity, the enhancement of natural resources and biodiversity, the strengthening of institutional and technical capacities, the improvement of environmental knowledge, and the mobilisation of financing for green jobs.
- 50 While MSP can be a key tool in achieving these goals, many challenges remain. One of these is legal. The production of atlases of marine environmental law in West Africa (BONNIN *et al.*, 2019) has shown that the various administrative bodies have little

knowledge of the rules outside their sector of activity (LE TIXERANT *et al.*, 2020). As knowledge of the law is a necessary prerequisite for the implementation of marine spatial planning, this will be an important challenge to overcome.

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2. From the definition of marine spatial planning by the United Nations in 2009.
3. Law no. 82-31 of 23 July 1982, Journal officiel de la République du Sénégal of 21 August 1982, p. 557.
4. The Abidjan Convention includes the Protocol for Combating Pollution in Cases of Emergency as well as four additional protocols: (1) the Protocol on Environmental Norms and Standards for Offshore Oil and Gas Activities, (2) the Protocol on Integrated Coastal Zone Management, (3) the Protocol on Cooperation in the Protection and Development of the Marine and Coastal Environment of the Western, Central and Southern African Region against Pollution from Land-based Sources and Activities, and (4) the Protocol on Sustainable Management of Mangroves. The 2nd Plenipotentiary Conference held in Abidjan on 2 and 3 July 2019 led to the signature of these protocols, opening the perspective of their ratification and implementation (see <http://abidjanconvention.org/>).
5. Annex 1 deals with integrated water resources management, Annex 2 with coastal zone protection, Annex 3 with specific coastal ecosystems, Annex 4 with recommendations for socio-economic activity, Annex 5 with risks that may affect the coastal zone, Annex 6 with coastal zone protection and water resources management works, and Annex 7 with environmental assessment of the coastal zone.

6. Article 5 Integrated Coastal Zone Management Protocol of the Abidjan Convention.
7. Annex 1: Indicators of the status and trends of the mangrove ecosystem; 2: Sustainable use of mangrove ecosystem resources; 3: Environmental impact assessment; 4: Guidelines for sustainable management of mangrove ecosystems.
8. Article 2 of the Protocol on Pollution from Land-based Sources and Activities.
9. Article 6 of the Protocol on Pollution from Land-based Sources and Activities.
10. Theme of the 18th Assembly of the African Union Summit. The Assembly met in Addis Ababa, Ethiopia, in January 2012 and adopted a decision (Assembly/AU/Dec.394 [XVIII]) to establish a Pan-African Continental Free Trade Area (AfCFTA) by the indicative date of 2017.
11. JORS no. 7398 of 30 January 2021, p. 88.
12. Law No. 76-66 of 2 July 1976 on the State Property Code (CDE).
13. The natural public maritime domain comprises the covered and uncovered coast at the highest tide; navigable waterways up to the first obstacle to maritime navigation; a zone 100 m in width on each bank from the limits determined by the height of the water flowing full bore before overflowing.
14. The artificial public maritime domain includes sea and river ports with their immediate and necessary dependencies, dikes, piers, quays, medians, basins, locks, semaphores, lighting and beacons, lighthouses, buoys, canals and their dependencies.
15. Art. 2, § 1: “A set of voluntary measures and actions aiming, through the organisation of space, to use a territory rationally, according to its resources and potential and with the aim of satisfying the immediate and future needs of the whole population.”
16. Art. 2, § 2: “A development model that reconciles economic efficiency, social equity and rational management of natural resources and the environment in order to ensure that the needs of present and future generations are met.”
17. Art. 2, § 10: “An area designed to be an investment pole par excellence by offering a competitive business and investment environment.”
18. Art. 3, § 4: “Any policy for the planning and sustainable development of territories must promote and guarantee effective participation of all stakeholders, at all relevant territorial levels, in its drafting.”
19. Article 6 of Law No. 2021-04 of 12 January 2021 on the Framework Law for the Planning and Sustainable Development of Territories (LOADT).
20. Planning instrument adopted by the Interministerial Council for Spatial Planning in 1994.
21. Article 48 of the Environmental Code.
22. Book 1 of the Town Planning Code (Law No. 2008-43 of 20 August 2008) deals with the general provisions and rules of urban planning.
23. Article L 8 of the Environmental Code.
24. Public policy is defined as “the intervention of an authority invested with public power and governmental legitimacy in a specific area of society or territory” (BOUSSAGUET *et al.*, 2006).
25. Article 4 of Decree No. 2006-322 establishing the High Authority for the Coordination of Maritime Safety, Maritime Security and the Protection of the Marine Environment.
26. <http://www.denv.gouv.sn/index.php/divisions/division-gestion-du-littoral-dg>, accessed on 12 October 2021.
27. <http://www.denv.gouv.sn/index.php/divisions/division-gestion-du-littoral-dgl>, accessed on 14 January 2020.
28. Decree No. 2012-543 of 24 May 2012 establishing the DAMCP.
29. The West African Coastal Areas (WACA) programme was developed in partnership with the people of West Africa who live on the coast and depend on it for their livelihoods, nutrition, food security and prosperity. The programme supports countries' efforts to improve the management of their shared coastal resources and to reduce the natural and anthropogenic risks faced by coastal communities.

30. Draft law on the coastline, version of 5 May 2021.
 31. Ongoing study on updating the national strategy for integrated coastal zone management.
 32. Decree No. 341 P/D/DK of 13 December 2017 creating the Hann protected fishing area.
 33. Ibid.
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