Africa Integrated Maritime Policy, blue growth and a new ocean governance: case studies from the Atlantic and the Indian Ocean

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Abstract

Integrated maritime and blue economy policies are changing ocean governance by introducing new policy drivers, reshaping institutional frameworks, as well as demanding new management instruments (e.g., Maritime Spatial Planning (MSP)). This started in 2007 though the European Union Integrated Maritime Policy approach, and in 2009 the Africa Union initiated a similar process, leading both to the Africa integrated maritime strategy as well as a blue economy strategy. Several countries, particularly in sub-Saharan Africa, began to look to blue economy as a booster to socioeconomic welfare and initiated the development of national strategies, together with the necessary adaptation of institutional and legal networks. Case studies address those processes at the transition from the Atlantic to the Indian Oceans, focusing on Angola, Namibia, South Africa, Tanzania and Kenya in the Southern African Development Community (SADC) region, as well as several African Small Islands Developing States (SIDS), particularly Cape Verde, S. Tomé and Príncipe, Seychelles, Madagascar and Mauritius. Findings show that all countries covered in the case studies are developing national ocean and/or blue economy strategies and adapting their governmental, institutional, and legal frameworks, although there is a deeper political impact in SIDS. Overall, these new policy drivers are leading to a new model of ocean governance by addressing integrated maritime policies and blue growth strategies, as well as introducing MSP as a new EEZ governance tool.

Keywords: Africa, SIDS, marine governance, blue economy, maritime policy, MSP

Introduction

The United Nations Convention on the Law (UNCLOS) entered into force in 1994 after a long process, triggered by the 1945 Truman Declaration, claiming the unilateral right of the United States to explore mineral resources, namely oil, within the continental shelf. This led to a strong reaction from other nations and paved the way for the 1st UNCLOS conference in 1958 (UN General Assembly, 1958), aiming to establish the global ocean governance

model. Following the Lisbon 1998 World Ocean Exhibition, "The Oceans, A Heritage for the Future" (EXPO98), within the UN International Year of the Oceans, the World saw an explosion of new ocean science and technology. This technological evolution at the turn of the century also brought to the ocean new uses, from deep sea mining to offshore wind farms, causing a demand for maritime space, not seen since the end of World War II and the race for oil exploitation on the continental shelf.

These new uses triggered a new ocean blue economy¹, "Blue Growth"² and a demand for maritime spatial planning, leading to a new challenge to ocean governance (Guerreiro, 2021). There was a need for new rules and instruments as social and political ideas about ocean resources and governance processes changed (Campbell *et al.*, 2016).

The globalization of the concept and debate surrounding the Blue Economy became institutionalized at the United Nations (UN) Conference on Sustainable Development, held in Rio de Janeiro in 2012 (Rio +20), in which the themes of the oceans, its governance and the blue economy were formally discussed and were the subject of several side events (Campbell *et al.*, 2013; Silver *et al.*, 2015). At the 2nd preparatory meeting in March 2011 the issue of the blue economy was formally debated (IOC - UNESCO, 2011) and, at that same

There is no concrete and global definition for "Blue Economy", nor for "Ocean Economy" or "Maritime Economy", and these three concepts have been used in a wide range of situations (Lee et al., 2020). The Blue Economy concept was formally defined at the UN in 2014, aiming at: "improving human well-being and social equity, significantly reducing environmental risks and ecological fragilities" (United Nations, 2014a). Also, the World Bank (2014) defined Blue Economy "... a sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean." Ocean economy was also defined by the Economist Intelligence Unit (2015) as: "... a sustainable ocean economy, where economic activity is in balance with the long-term capacity of ocean ecosystems to support this activity and remain resilient and healthy". In 2019 the African Union Blue Economy Strategy considers that the concept of the Blue Economy (BE) integrates into a new approach the economic exploitation of the resources of oceans, lakes, rivers and other bodies of water and the conservation of aquatic ecosystems. It represents a basis for rational and sustainable use and conservation of natural resources (both renewable and non-renewable) and their natural habitats (AU, 2019). In 2012 the EU considered Maritime Economy as a part of the economy composed of different interdependent sectors, such as maritime transport, tourism, energy and fishing, which are based on common skills and shared infrastructures (such as ports and electricity distribution networks) and depend on the sustainable use of the sea (EC, 2012a)

² On SD, Rio + 20 held in Rio in 2012, a group of small island nation states (SIDs) emphasized the importance of the blue economy - that is the multifaceted economic and social importance of the ocean and inland waters and the importance of "blue growth". At the Rio + 20 conference, the Food and Agricultural Organization (FAO) supported these views and sent a very strong message to the international community that a healthy ocean ecosystem ensured by sustainable farming and fishing operations was a prerequisite for a blue growth. Since the Rio + 20 conference, the blue growth concept has been widely used and has become important in aquatic development in many nation states, regionally as well as internationally (Eikeset et al., 2017). Also in 2012 the EU, following the approval of its Integrated Maritime Policy / Blue Book (EC, 2007), approved the Marine and Maritime Agenda for Growth (EC, 2012a), which introduced the Blue Growth Strategy and concept, emphasizing the importance of marine areas for innovation and growth in five sectors (aquaculture, coastal tourism, marine biotechnology, energy from the oceans and deep sea mining), together with the need to support it in three main axes: i) Knowledge of the marine environment; ii) Maritime spatial planning; and iii) Integrated maritime surveillance.

meeting, where the Pacific Small Island Developing States (SIDS) suggested that their development interests would be better served by blue economy, rather than green economy3. This idea would later be consolidated at the third SIDS conference in Apia, Samoa, on September 3, 2014, concluding that "... Sustainable fisheries and aquaculture, coastal tourism, the possible use of seabed resources and renewable energy are among the main sectors of a sustainable ocean economy in small island developing states" (UN, 2014b). In 2014, a UNECA report identified the key strategic areas for blue growth in SIDS to be: i) Fisheries, ii) Aquaculture, iii) Shipping and transport, iv) Tourism, v) Marine (blue) energy (fossil and renewable), vi) Pharmaceutical and cosmetic industries, genetic resources and general sea-based products, and vii) Blue carbon market (UNECA, 2014).

The specificity of SIDS has been recognized since the Rio Conference in 1992, reinforced in 1994 at the first UN Global Conference on the Sustainable Development of SIDS in Barbados. It resulted in the adoption of the Barbados Programme of Action (BPOA) which identified key areas requiring urgent action, such as climate change and sea level rise, coastal and marine resources, energy, biodiversity and tourism resources. BPOA was reviewed in 2005 and the Mauritius Strategy was adopted for further Implementation of the Barbados Programme of Action. The outcome document of Rio+20 reaffirms SIDS have placed sustainable development prominently on their agenda for twenty years and the BPOA and the Mauritius Strategy of Implementation have clearly outlined the way forward. Following this trend, the FAO in 2014 identified blue growth as a way to promote sustainable development through key sectors such as Tourism, Water, Energy, Waste and small-scale Fisheries and Aquaculture in the Blue Growth Initiative for SIDS (FAO, 2014). The World Bank reinforced this path by launching the report "The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries" in 2017, pointing out not only established sectors, such as fisheries, maritime transport, and tourism, but newer and emerging sectors and emerging industries, such as deep-sea mining, marine biotechnology, and renewable ocean energy (World Bank, 2017).

³ SD, Rio + 20 held in Rio in 2012, a new concept took center stage at the backdrop of the international financial crisis. The concept was "green growth". According to the OECD "green growth means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies (Eikeset, 2017).

Africa has 38 coastal states, from which 74 are considered SIDS, reaching collectively 13 million km² of the ocean space, considered as the African Maritime Domain (AMD). Not surprisingly, Africa was one of the first regions in the world to embrace these new policies and challenges. At the 13th Ordinary Session of the AU Assembly, African Heads of State and Government called upon the AU Commission "to develop a comprehensive and coherent strategy"5 to improve African maritime security and safety standards, as well as African maritime economy for more wealth creation from its oceans and seas, ultimately ensuring the well-being of African people. At the AU level, the Africa Integrated Maritime Strategy 2050 (AIMS 2050) Strategy Task Force, was constituted on the 3rd of June 2011 and, in 2012, the AIMS 2050 (AU, 2012)6 was issued, together with the identification that Blue Economy was vital for the development of the African continent (Republic of Seychelles, 2014).

In 2016 the United Nations Economic Commission for Africa drew up Africa's Blue Economy: A Policy Handbook (UNECA, 2016). Also, in 2016 the AU approved a key stone maritime policy instrument, the Lomé Charter on Maritime Security and Safety and Development in Africa, considering security and safety indispensables for the success of Blue/Ocean Economy⁷. Finally, the Sustainable Blue Economy Conference that took place in Nairobi, Kenya in 2018, 8 under the theme "Developing a sustainable blue economy; increasing momentum for Africa's Blue Growth", paved the way for the approval of the Africa Blue Economy Strategy (African Union -Inter-African Bureau for Animal Resources, 2019). The Africa Blue Economy Strategy focusses on five critical blue economy sectors, considered as thematic areas: i) Fisheries, aquaculture and ecosystems conservation; ii) Shipping, transportation and trade; iii) Sustainable energy, extractive minerals, gas, innovative industries; iv) environmental sustainability, climate change and coastal infrastructure; and v) governance.

New policies soon triggered a more profound political change at the higher level, leading several governments to create dedicated Sea/Ocean Ministries from Maritime Economy to Ocean Affairs (Guerreiro et al., 2021). Following this, the need for new legal and institutional frameworks, including but not limited to maritime spatial planning (MSP) became clear, as well as agencies with a clear mandate and know-how to implement policies (Ehler and Douvere, 2009). The need to improve management authorities, management capacity and resources, together with the commitment of officials and intergovernmental coordination/collaboration, was considered critical to the successful implementation of MSP (Liu et al., 2011). Accordingly, more and more actors stand for the need to create an authority for MSP as a guarantee of the success of the process and interface among agencies and stakeholders (Albotoush and Shau-Hwai, 2021).

The holistic approach to cross cutting sectoral policies and a new universe of stakeholders, demanded both horizontal and vertical coordination to facilitate governance, but in reality it was revealed that there is an increased difficulty in coordinating policies at the horizontal level, compared with the vertical level. Martino (2016), addressing this issue, found that some regions have developed institutions based on an inter-sectoral coordination committee or an advisory body, while others have chosen an internal proactive collaboration to resolve conflicting interests between directorates. Moreover, these regions are also extending coastal management into maritime spatial planning, trying to tackle conflicts emerging from land/ sea interactions based on two different spatial planning systems and instruments (Casimiro and Guerreiro, 2019). A wide range of authorities, from fisheries to environment and ecology, maritime authorities, shipping, and harbours industries, councils and urban planning are involved in the administration of maritime and coastal space, a mishmash that Freire-Gibb et al. (2014) considered 'institutional ambiguity'. Peart (2017), when pointing out this increasing complexity, suggested the establishment of a governance entity with certain powers and representatives from different sectors. Several governments follow this path and have created Inter-ministerial Commissions, or similar bodies, to articulate sectoral policies.

This article addresses the impacts of the African political options for Integrated Maritime Policy and Blue Growth at the legal, institutional and government level, changing the model of ocean governance. Several case

 $^{^4\,\,}$ Cape Verde, Guinea-Bissau, S. Tomé and Príncipe, Mauritius, Madagascar, Comoros and Seychelles

Decision [Assembly/AU/Dec.252(XIII)] adopted by the 13th Ordinary Session of the AU Assembly held in Sirte, Libya, on July 2009

⁶ Formally approved in 2014

⁷ Blue/Ocean Economy is defined as: sustainable economic development of oceans using such techniques such as regional development to integrate the use of seas and oceans, coasts, lakes, rivers, and underground water for economic purposes, including, but without being limited to fisheries, mining, energy, aquaculture and maritime transport, while protecting the sea to improve social weilbeing,

⁸ http://www.blueeconomyconference.go.ke/

studies, focused on SIDS (e.g., Cape Verde, S. Tomé and Príncipe, Madagascar, Mauritius and Seychelles) as well as continental countries linking the transition from the Atlantic to Indian Ocean and the Large Marine Ecosystems (LME): i) Benguela Current (Angola, Namibia and South Africa); and ii) Agulhas/Somalia Current (South Africa, Mozambique, Tanzania and Kenya).

Methods

Research was performed during a 6-year period between 2017 and 2022 and followed three main criteria based on the existence of: i) Integrated Maritime Policies, National Ocean strategies and Blue Economy/Blue Growth strategies; ii) Institutional framework for maritime and marine governance; and iii) Legal framework for maritime governance and MSP. Data were obtained by: i) a comprehensive literature review carried out on scientific data bases using the key words ocean strategy, integrated maritime policy, blue economy, blue growth, maritime economy, marine governance, MSP, plus the name of the country; ii) directed search of the institutional websites; iii) specific questionnaires addressed to national authorities; iii) direct interviews, particularly in Cape Verde, Angola and Mozambique.

Information was analysed according to the following three main themes and criteria:

Integrated Maritime Policies & Blue Economy

- Integrated Maritime Policies/National Ocean Strategies
- Blue economy strategies/initiatives.

Government structure and mandates:

- Ministry/ministries with a mandate to promote blue economy and/or MSP policies;
- Institution/Agency with a mandate to develop and implement the blue economy/MSP;
- Coordinating structure for blue economy and/or MSP.

Legal Framework

- Governance of Maritime Space
- Specific legal framework for MSP.

Results

The mapping of policies, institutional and legal frameworks is summarized in Table 1, showing that although all studied countries address Integrated Maritime Policies/Ocean Strategies and Blue Growth, they do this at different levels. Nevertheless, there

are clearly different stages of maturity, more evident when considering the institutional and legal framework, particularly regarding government structures and the status of implementation of MSP.

Cape Verde

Cape Verde is an archipelago situated in the Macaronesian Region of the central Atlantic and its economy depends mainly on fisheries, tourism (25 % of GDP) and services9, these accounting for an overall value around 60 % of the GDP¹⁰. The country embraced blue growth and approved the: i) Chart for the promotion of blue growth in Cape Verde (2015); ii) National Blue Economy Investment Plan (2018); and iii) Programme for the Promotion of the Blue Economy (2018). The government structure was reshaped accordingly to new political drivers and a Ministry for Maritime Economy was created alongside a new agency, Directorate General for Maritime Economy, clearly empowered to enhance blue economy and develop MSP supported by the National Institute for Spatial Management articulating with the Directorate General for Marine Resources. In 2021, the new government, although maintaining the institutional framework, changed the governmental structure and maritime affairs were assigned to the Ministry of Culture, Creative Industries and Minister of the Sea11. Blue economy continues to be one of the priority policies with strong support from EU cooperation. Areas such as fisheries, nautical tourism and shipping, aquaculture and blue biotechnology are the core of ocean economy, on which the country depends. Ocean science is also one of the new political drivers supported by the recently created Technical University of the Atlantic, focused on ocean sciences. The legal framework on spatial planning addresses integrated coastal zone management plans, some recently approved (Guerreiro et al., 2021). However, specific legislation for MSP covering the exclusive economic zone (EEZ) is still under development as well as a National Maritime Spatial Plan.

⁹ Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling.

¹⁰ See https://pt.theglobaleconomy.com/Cape-Verde/Share_of_services/

The same minister heads two different ministries. See https://www.governo.cv/governo/ministerios/ministro-da-cultura-e-industrias-criativas/

Table 1. Country governmental structures, policies, institutional and legal frameworks for Ocean strategies, Blue Economy and Maritime Spatial Planning.

Country	Ministry	Policy/strategy	Agencies	Msp	Legal instrument for msp
Cape Verde	Culture, Creative Industries and Ministry of the Sea*	Chart to Promote Blue growth Programme to Promote Blue growth	General Directorate for Maritime Economy General Directorate for Marine Resources	Underway	Under development
Angola	Agriculture and Fisheries	National Ocean Strategy	General Directorate for Maritime Affairs	Under final approval	Under development
S. Tomé e Príncipe	Planning, Finances and Blue Economy	Under development	Strategic Intelligence Unit for Blue Economy (UIE)		
Namibia	Fisheries and Marine Resources	Strategic Plan 17/22 Namibia's Marine Resources Policy Sustainable Blue Economy Policy (draft) 2022-2031	Directorate Policy, Planning and Economics	Pre-planning complete Management Plans underway	Marine Spatial Planning National Working Group
South Africa	Environment, Forestry and Fisheries	Operation Phakisa	Department of Forestry, Fisheries and the Environment	MSP ongoing	MSPACT
Mozambique	Sea, Inland Waters and Fisheries	Ocean Policy and Strategy	National Directorate of Maritime and Fishing Policies Blue Economy Development Fund (ProAzul)	National MSP ongoing	Law Decree establishing the legal National MSP ongoing regime for the use of maritime space
Tanzania	Livestock and Fisheries State Minister Vice President Office	National Integrated Coastal Environment Management Strategy	Policy and Planning Division National Environment Management Council	MSP Projects undergoing	
;	Transport, Infrastructure Housing, Urban Development and Public Works		Department for Shipping and Maritime Affairs/Kenya Maritime Authority (KMA)		
Kenya	Agriculture, Livestock, Fisheries and Co-operatives	National Ocean and Fisheries Strategy	Department for Fisheries, Aquaculture and Blue Economy Kenya Marine and Fisheries Research Institute	Multi-sectoral Interagency Working Group	
Seychelles	Fisheries &Blue Economy (presently Fisheries) Environment, Energy and Climate	Blue Economy: Strategic Policy Framework and Roadmap	Department of Blue Economy	Seychelles Marine Spatial Plan Initiative	Maritime Zones Act – under development
Madagascar	Fisheries and Blue Economy Spatial Planning and Land Management	Proposal for National Strategy on Blue Economy	General Directorate for the Sea and Blue Economy General Directorate for Spatial Planning	Pre-planning	
Monwitine	Prime Minister's Office		Department for Continental Shelf, Maritime Zones Administration	MSP for the exclusive	Marine Spatial Planning Bill
Maurinus	Blue Economy, Marine Resources Fisheries and Shipping	Ocean Strategy underway	and Exploration/MSP Coordinating Committee	republic of Mauritius	Coordinating Committee
* The same mini	* The same minister oversees two ministries, one of which is the Ministry of the Sea	ch is the Ministry of the Sea.			

Angola

Angola has an important geostrategic position in the transition from central Africa/Gulf of Guinea to Southern Africa influenced by the Guinea Gulf Current (Angola current) in the north and the Benguela Current in the south (Angola, Namibia and South Africa). Traditionally, the economy strongly depends on oil and gas, representing almost 90 % of exports, followed by fisheries. In 2009, the Angolan government decided to embrace an Ocean Strategy and the Presidential order N°147/19 Decree from 12th August orders the development of the Angola Nacional Ocean Strategy (ENMA), the development of Maritime Spatial Planning and creates a Multisectoral Commission gathering 14 different ministries. Politically the process is headed by the head of the Civil House of the Angola President and co-coordinated by the Ministry of Agriculture and Fisheries. A General Directorate for Maritime Affairs (DNAM) was created under the Ministry for Agriculture and Fisheries and assigned the task of supporting the technical group in charge of developing ENMA and the legal framework for MSP. At the same time, pilot projects on MSP are being developed, with the support of projects financed by the Benguela Current Convention¹², which are being developed by DNAM. The Angola National Ocean Strategy was approved by the Council of Ministers in May 2022, pursuing the vision of "promoting an increase in social well-being, employment and national wealth, boosting the blue economy within a framework of sustainable development, supported by scientific knowledge and affirming Angola as a maritime reference in its geostrategic context". ENMA focuses on seven strategic goals: i) Foster and diversify the maritime economy; ii) Increase employment and professional qualifications at sea; iii) Optimize the means, instruments and mechanisms for security and maritime surveillance; iv) Promote scientific knowledge, technological development and literacy of the oceans; v) Promote and guarantee the good environmental status of the marine environment and the sustainable management of biological resources; vi) Optimize the governance model for maritime space and intersectoral coordination; and vii) Strengthen Angola's role in maritime policies both at the international and regional geostrategic contexts.

São Tomé and Príncipe

São Tomé and Príncipe is an archipelago in the Gulf of Guinea, off the western equatorial coast of Central Africa. Traditionally, its economy depended both on agriculture as well as fisheries and tourism. However, since 2004, a joint venture with Nigeria to explore oil reserves in waters claimed by the two countries of the Niger Delta geological province, changed this focus considerably.

Although no Ocean or Blue growth Strategy is in force, the latest government created a Ministry of Planning, Finances and Blue Economy with a specific body to promote Blue Economy – the Strategic Intelligence Unit for the Blue Economy, which has a mandate to develop a National Strategy. Although no MSP initiative recognized by IOC/UNESCO is in place, the legal framework for spatial planning considers Coastal Zone Management (ICZM) instruments.

Namibia

Namibia is the middle state of the Benguela Current Convention (BCC). Namibia's economy is strongly dependent on mining, but also on tourism and fisheries. Fisheries, benefiting from the effect of the Benguela current, is the fastest growing economic sector and the coast of Namibia is considered to be home to some of the richest fishing grounds in the world. Namibia's government and institutions are involved in several projects under the BCC, particularly on MSP. At the present the pre-planning phase of the National Maritime Spatial Plan is completed, and the management plans are underway. The Ministry of Fisheries and Marine Resources (MFMR) was given the mandate to coordinate and guide the process of institutionalising MSP, and an inter-ministerial and cross-sectoral National Working Group (NWG) on MSP was established by MFMR in 2016. The National Development Program 2017-2022 introduces the concept of "blue economy", understood to comprise existing maritime industries, such as fisheries and mariculture, shipping and transport, tourism and minerals, as well as prospective uses such as marine renewable energy, the utilization of genetic resources for bio-prospecting and other sea-based products such as seaweeds for pharmaceutical and cosmetic uses. In 2019 a Draft Sustainable Blue Economy Policy was published (MFMR, 2019) focusing on Fisheries, Tourism, Blue Biotechnology and Bioprospecting, Mining, Desalinization, Renewable energy and Blue Carbon Trading. This Blue Economy policy is supposed to enter into force for the period 2022-2030.

¹² The Marine Spatial Management and Governance Programme (MARISMA) of the BCLME promotes sustainable ocean use in the Benguela Current, focusing on implementing Marine Spatial Planning (MSP). See https://www.benguelacc.org/index.php/en/marisma

South Africa

South Africa has a unique geostrategic position facing both the Atlantic and the Indian Ocean with a coastline of 3 900 km including the sub-Antarctic islands. South Africa's economy is the second largest in Africa¹³ and although natural resource extraction industries remains one of the main pillars, in the last three decades the economy became more diversified with a rise of the tertiary sector. The ocean economy of South Africa plays a strong role, consisting mainly of fisheries, aquaculture, tourism, transport, ports, coastal mining, and energy. The last decade showed a slowdown in the growth rate of economy and in 2014 the government launched a specific programme to reboot South Africa's economy - Operation Phakisa¹⁴ (based on the Malaysian experience "Big Fast Results Methodology"). The aim was to tap into other sustainable alternative resources, one of which is the ocean economy. With the introduction of Operation Phakisa, it was estimated that the ocean had the potential to contribute up to R177b to Gross Domestic Product (GDP) and provide between 800 000 and 1 million direct jobs annually by 2033. With effective implementation, it was expected that these estimates will produce at least 4 % annual growth in both GDP contribution and job creation. (Odeku, 2021). The Oceans Phakisa Initiative¹⁵ initially, under the specific programme called Ocean Economy Lab, reviewed eight industry sectors and an associated ocean governance sector for their potential in advancing the South African oceans economy. The reviewed sectors included Marine Transport and Manufacturing, Tourism, Offshore Oil and Gas, Construction, Renewable Energy, Fisheries and Aquaculture, Communication, Desalination, and the Marine Protection Services and Governance Aspect. Three industry sectors (Marine Transport and Manufacturing, Offshore Oil and Gas, and Aquaculture) and Marine Protection Services and Governance were initially selected for advancement, with two further industry sectors (Tourism and Small Harbour and Infrastructural Development) selected. Each of the Oceans Phakisa Focus Areas identified a set of target initiatives to advance their sectors within the oceans economy (Findlay, 2018). Following the implementation of Operation Phakisa (and in line with Objective 10 of the Marine Protection Services and Ocean Governance delivery area) the government approved a MSP Act, being the first African country to do so.

At the present, the National MSP Data and Information Report is finalized and provides the evidence base and knowledge collated by the National Working Group (NWG) regarding the spatial layers that are needed to embark on spatial planning. The NWG is currently identifying the spatial priorities and claims of each sector and marine activity to draft marine area plans. Furthermore, South Africa is also involved in the BCC programmes, particularly the already mentioned MARISMA project¹⁶.

The institutional framework is led by the authority for MSP in South Africa, the Department of Forestry, Fisheries and the Environment (DFFE), which chairs the NWG. The established Directors-General Committee and Ministerial Committee on Marine Spatial Planning are comprised of 17 sectoral departments. While the MSP authority DFFE chairs the committees, the Department for Planning, Monitoring and Evaluation is the co-chair of both committees¹⁷. Politically the process is coordinated by an inter-ministerial committee.

Mozambique

Mozambique possesses the third longest coastline in continental Africa with over 2 700 km. The Mozambique Channel is an important source region for the Agulhas Current, which is one of the major western boundary currents flowing along the south-eastern coast of South Africa. The Mozambique Channel is also one of the two routes through which the South Equatorial Current feeds the Agulhas Current. The coral reefs of Mozambique are the southern limit of the well-developed reefs that occur along the continental shelf of the East African coast. Together with South Africa, Tanzania, Kenya and Somalia, as well as Seychelles, Madagascar, Mauritius and Comoros, Mozambique constitutes one of the hotspots of marine biodiversity of the world: the Western Indian Ocean Region. Mozambique's economy is traditionally dependent on agriculture and fisheries (10 % of GDP), whch also support exports. In the last decade, projects on exploitation of natural gas (NLG) began to shift this focus¹⁸, despite the armed conflicts in Cabo

 $^{^{\}rm 13}$ See https://www.statista.com/statistics/1120999/gdp-of-african-countries-by-country/

¹⁴ See https://www.operationphakisa.gov.za/pages/home.aspx

¹⁵ See https://www.operationphakisa.gov.za/operations/oel/pages/default.aspx

¹⁶ See https://www.benguelacc.org/marisma-2/

¹⁷ See https://www.dffe.gov.za/msp/structuresresponsible

 $^{^{18}}$ See https://data.worldbank.org/indicator/NY.GDP.NGAS.RT.ZS?locations=MZ $\,$

Delgado. Tourism, particularly coastal and safari tourism, has also shown a growing trend accounting for more than 6 % of GDP before the COVID pandemic¹⁹.

Mozambique embraced blue growth and developed a National Ocean Policy and Strategy in 2017 (Resolução 39/2017) focusing on six priority sectors: i) Ports and infrastructure; ii) Maritime transport and shipping industry; iii) Fishing and aquaculture; iv) Culture, tourism and sport; v) Minerals and hydrocarbons; and vi) Energy. In 2019 a Blue Economy Development Fund (ProAzul) was created, partly financed with the incomes of the licensing of the activities in the maritime space²⁰. The ProAzul is dedicated to fostering and guiding private investment for priority projects and actions in the blue economy, as well as providing assistance in drawing up business plans, as well as economic and financial advisory services, among other duties. Like South Africa, Mozambique also developed its legal framework for MSP under the Law Decree 21/2017 and approved the National Maritime Spatial Plan (POEM) in May 202121. The institutional framework for maritime governance is headed by the Ministry of the sea, inland waters and fisheries (MIMAIP). The National Directorate of Maritime and Fishing Policies is the agency responsible for the development and implementation of MSP.

Tanzania

Tanzania has a coastline of 1 450 km, and its territorial water includes 64 000 km2 thus making the country a significant player in regional fisheries, contributing about 2.6 % of the GDP. Following two decades of sustained growth, Tanzania reached an important milestone in July 2020, when it formally changed from low-income country to lower-middle-income country status²². However, Tanzania's economy strongly depends on tourism accounting for 10,9 % of the GDP in 2019²³, before the COVID 19 pandemic.

Although there is potential for blue economy development in Tanzania, a specific blue growth or Ocean Strategy has not been developed yet. The Government of the semi-autonomous region of Zanzibar

19 Source: WTTC https://www.statista.com/statistics/1257785/contribution-of-travel-and-tourism-to-gdp-in-mozambique/

- 20 See https://www.proazul.gov.mz/quem-somos/
- 21 See https://poem.gov.mz/
- ²² See https://www.worldbank.org/en/country/tanzania/overview#1
- 23 See https://www.statista.com/statistics/1255025/contribution-of-travel-and-tourism-to-gdp-in-tanzania/

recognized Blue Economy as a driver for social economic development and approved Zanzibar Blue Economy Policy²⁴ in 2020. This policy targeted 5 sectors to boost the region's economy and welfare: i) Fisheries and Aquaculture; ii) Maritime Trade and Infrastructure; iii) Energy; iv) Tourism; and v) Marine and Maritime Governance. The regional government also includes a Ministry for Blue Economy and Fisheries.

Tanzania has not yet developed MSP, nor a legal framework to support it, however several MSP pilot projects were developed or are undergoing, as is the case in the Rufiji, Mafia and Kilwa District with the support of WWF and the coordination of the National Environment Management Council (NEMC), which is the national authority for MSP. The National Integrated Coastal Environment Management Strategy (NICEMS) in Tanzania exists (2003 - 2025) and although 'Spatial planning' is not mentioned in NICEMS, it is recognized as having the same action plan as NICEMS. Furthermore, Tanzania is conducting a coastal and marine dataset study and developing a "Geonode Platform", which will help update its Spatial Data and Environmentally Sensitive Area maps and the Atlas Map of Tanzania Coastal Resources (onshore, offshore, terrestrial). The Northern Mozambique Channel (NMC)²⁵ project, aimed at designing a methodological tool for enhancing the sustainability and suitability of national MSP in NMC countries produced a situational report and a methodological tool was put in place to contribute to the development of MSP in Tanzania and Madagascar.

Kenya

Kenya has a coastline of 1 420 km and an EEZ of 142 000 km². Kenya's economy is the third largest in Sub-Saharan Africa behind Nigeria and South Africa. Agriculture, Forestry and Fisheries are the sectors that most contribute to Kenya's GDP, accounting for almost 25 %26 with the fisheries sector accounting for around 5 %. The other critical sector, tourism, accounted for more than 8 % before the COVID 1927pandemic.

²⁴ See http://planningznz.go.tz/doc/new/BE%20Policy-2020.pdf

²⁵ See https://wio-c.org/projects-by-members/wwf/northern-mozam-bique-channel-initiative/

 $^{^{26}}$ See https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=KE

²⁷ See https://www.statista.com/statistics/1219642/contribution-of-travel-and-tourism-to-gdp-in-kenya/

Although having not yet developed a specific blue growth strategy, Kenya has since 2008 a National Ocean and Fisheries Policy in place. Political priority has been given to the blue economy and a Presidential Blue Economy Task Force was created in 2017 as well as a Blue Economy Implementation Standing Committee. Kenya is a member of the High-Level Panel for Sustainable Ocean Economy. Furthermore, in 2018 the Blue Economy conference hosted with Japan and Canada, included over 16 000 participants from 184 countries, which resulted in the Nairobi Statement of Intent on Advancing a Sustainable Blue Economy²⁸. A specific governmental Department on Fisheries, Aquaculture and Blue Economy was also constituted under the Ministry of Agriculture, Livestock, Fisheries and Co-operatives (Benkenstein, 2018).

Present blue economy drivers are focused on shipping, aquaculture, expansion of tourism and fishing, and expansion of port and shipping activities (new ports foreseen in Lamu and Shimoni areas).

MSP is in the stage of preplanning and a multi-sectoral Interagency Working Group has been constituted under the State Department for Fisheries, Aquaculture and the Blue Economy. The MSP planning process will involve a review of legislation and the development of policy framework which is expected to be approved by the Government. Although no legislation on MSP is being developed yet, Kenya has an ICZM Policy (2015), an ICZM National Action Plan (currently under review) and a National Spatial Plan (2015-2045). The Blue Economy Implementation Standing Committee also gives oversight to the Marine Spatial Planning process. In June 2022 Kenya co-hosted, with Portugal, the UN Ocean Conference held in Lisbon²⁹.

Seychelles

Seychelles is an archipelago comprising 115 islands at the eastern and south regions of the Somali area. Seychelles has the highest GDP per capita in Africa, but the economy is highly dependent on tourism and fisheries, and climate change poses long-term sustainability risks. The government of Seychelles embraced the concept of blue growth early and is strongly committed to it. The Government of Seychelles and the Government of the United Arab Emirates co-hosted the first 'Blue Economy Summit' during the Abu Dhabi

 $\begin{tabular}{ll} \hline & & & \\ \hline & 28 & See & https://www.fao.org/fi/static-media/MeetingDocuments/SustainableBlueEconomy/3.pdf \end{tabular}$

Sustainability Week of January 2014, to explore ways in which the Blue Economy concept could be utilized as a tool to enable the transition of development models for island and coastal states towards sustainable development. The main output was the Abu Dhabi Declaration³⁰ which presented the Blue Economy concept as one that emphasizes conservation and sustainable management of oceans and complements the green economy. This conference paved the way to the critical UN Third International Conference on SIDS in September 2014, in Apia, Samoa. In 2018 Seychelles approved, the Seychelles Blue Economy Strategic Policy Framework and Roadmap³¹ focusing mainly in 8 sectors: i) Coastal and Marine Tourism; ii) Sustainable fisheries; iii) Ports infrastructure and maritime transport; iv) Mariculture; v) Biotechnology and marine biological resources; vi) Oil & gas and renewable energies; vii) Digital connectivity and e-government; and viii) Enhanced trade. The governance framework was adapted, and a specific Department of Blue Economy was created, under the Ministry of Fisheries and Blue Economy, at the time.

MSP is under development and the Ministry of Environment, Energy and Climate is the leading authority, coordinating the Seychelles Marine Spatial Plan Initiative³². At present planning is underway, and the sectors involved in MSP are mainly biodiversity conservation, financing, fisheries, marine infrastructure, maritime security, tourism, recreation, non-renewable energy and renewable energy. Accordingly, a new Maritime Zones Act is being prepared to accommodate the new management and planning instruments.

Madagascar

Madagascar is the fifth largest island in the world and has a coastline of 5 600 km and an EEZ of 1 200 000 km². Its economy depends on agriculture, tourism, textile and mining industries and before the pandemic it was one of the fastest-growing economies. The Government of Madagascar also targets Blue Economy as a critical policy to boost the economy and, in 2017, the Council of Ministers adopted the Resolution on National Framework for Blue Economy followed, in 2018, by a Proposal for National Strategy on Blue Economy, which however is not yet approved.

²⁹ See https://www.un.org/en/conferences/ocean2022

 $^{^{\}rm 30}$ See $\,$ https://sustainabledevelopment.un.org/content/documents/ 2983BE declaration.pdf

 $^{^{31}}$ See $\label{lem:htp://www.seychellesconsulate.org.hk/download/Blue_Economy_Road_Map.pdf$

³² See https://seymsp.com/

Also ongoing, with FAO support, is a project under the Finances Ministry comprising a National Plan for the Investment in Blue Economy. Preliminary drivers of Blue Economy include: i) Blue tourism and recreational marine activities; ii) Fisheries, shrimp farming and sea cucumber farming; iii) Food production and processing of marine products; iv) Marine renewable energies; iv) Innovative marine biotechnology; v) Creation and multiplication of Marine Protected Areas; and vi) Exploitation of offshore strategic resources.

Madagascar is also part of the Northern Mozambique Channel Initiative³³ and several workshops were organized with representatives from tourism, finance, economy, planning, industry, energy, environment, research, land use, fisheries and defence. Such an inclusive process aimed at developing a methodology for ensuring an enhanced integrated approach to MSP. As in Tanzania, the roadmap to MSP implementation is completed, and a methodological tool was put in place to contribute to the development of MSP in Madagascar. The Ministry in charge of Spatial Planning and the Ministry in charge of the Blue Economy, supported by World Wildlife Fund for Nature, are working together to advance MSP in Madagascar, and more particularly lately on the design of a methodological tool that aims to improve the contribution of spatial and temporal management tools to MSP. In November 2021 the actors of MSP in Madagascar met to remobilize all the stakeholders concerned and discuss how to improve the design of the MSP. Although no specific legal framework for MSP is yet developed in Madagascar, the Law on the Maritime Space (Loi, 2018) approaches integrated maritime space management and Blue Economy.

Mauritius

Mauritius, located east of Madagascar, spans 2 040 km² and has an EEZ covering 2 300 000 km². The economy of Mauritius strongly depends on Tourism making up around 24 % of GDP, while before the pandemic, fisheries accounted for around 2 % of GDP. Agriculture, textile and financial services are the other main clusters of Mauritius' economy. According to Bolaky (2020), various sectors have been earmarked by the Government for development of Blue Economy such as fishing, seafood and aquaculture, seaport related activities (investment opportunities in establishing regional trans-shipment base, bunkering, petroleum storage for re-export, ship building,

repairs and allied services, ship supply and handling, ballast water treatment, ship waste treatment, home porting for cruise lines and ancillary services to vessels and the cruise industry), marine services including marine ICT, marine finance and marine biotech, deep sea-water applications, game-changer industries and the oil and gas support sector. In 2017 the World Bank prepared a report intitled "The Ocean Economy in Mauritius - Making it happen, making it last"34 paving the way to an Ocean Strategy and in the budget of 2018-2019, it was announced that an Ocean Economy Unit will be set up with the responsibility of preparing a National Ocean Policy Paper, which is under approval. The task to develop national strategies and enhance Blue Economy is attributed to the Ministry for Blue Economy, Marine Resources, Fisheries and Shipping. Targeted areas are: i) mineral resources development; ii) ship building; iii) ship registration; iv) communication cable laying; v) pharmaceutical enterprises; vi) sustainable energy from waves and currents; vii) seaside leisure tourism; and viii) fisheries and aquaculture. MSP was developed in Mauritius and a EEZ Maritime Spatial Plan was approved, under the coordination of the national authority for MSP, the Department for Continental Shelf, Maritime Zones Administration and Exploration. However, a specific Bill for MSP is still under consideration by the MSP Coordinating Committee.

Discussion

Integrated Maritime Policies (IMP), Ocean Strategies and Blue growth proved to have a deep impact on ocean governance at four different levels: i) Policy drivers; ii) Government structures; iii) Institutional frameworks; and iv) Legal frameworks.

AIMS 2050 defines a framework of strategic actions and assumes as its final objective: "Increased wealth creation from AMD that positively contributes to socio-economic development, as well as increased national, regional and continental stability, through collaborative, concerted, cooperative, coordinated, coherent and trust-building multi-layered efforts to build blocks of maritime sector activities in concert with improving elements of maritime governance." (AU, 2012). In 2015 the core objective of AIMS 2050 was formulated in Aspiration 1 in Agenda 2063 for Africa, as a priority for achieving inclusive growth and sustainable development, assuming that: "Africa's blue/ocean economy ... for continental transformation and growth, through knowledge of marine and aquatic

³³ See https://cordioea.net/category/northern-mozambique-channel/

³⁴ See https://documentsl.worldbank.org/curated/en/193931508851670744/pdf/120633-WP-PUBLIC-329p-Mauritius-text-10-20-17-web.pdf

biotechnology, the growth of the naval industry, the development of maritime, river and lake transport and fisheries; and exploration and exploitation of deep sea minerals and other resources" (AU Commission, 2015)

Reinforcing their position, the 3rd SIDS conference in Apia, Samoa, on September 3, 2014, concluded that "...Sustainable fisheries and aquaculture, coastal tourism, the possible use of seabed resources and renewable energy are among the main sectors of a sustainable ocean economy in small island developing states" (UN, 2014). Again, the AU embraced this challenge at the Sustainable Blue Economy Conference (Nairobi, Kenya, 2018) under the theme "Developing a sustainable blue economy; increasing momentum for Africa's Blue growth" (Sustainable Blue Economy Conference Technical Documentation Review Committee, 2018) paving the way for the approval of the Africa Blue Economy Strategy (African Union Inter-African Bureau for Animal Resources, 2019). The Africa Blue Economy Strategy focuses on five critical blue economy vectors, considered as thematic areas: i) Fisheries, aquaculture and ecosystems conservation; ii) Shipping, transportation and trade; iii) Sustainable energy, extractive minerals, gas, innovative industries; iv) Environmental sustainability, climate change, and coastal infrastructure; and v) Governance, Institutions and social actions. This approach is in line with the Africa Agenda 2063 (Africa Union Commission, 2015) which already highlighted that: "Africa's Blue/ocean economy, which is three times the size of its landmass, shall be a major contributor to continental transformation and growth, through knowledge on marine and aquatic biotechnology, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport and fishing; and exploitation and beneficiation of deep sea mineral and other resources". It becomes clear that in Africa the blue economy is seen as a key driver for economic growth and job creation, overcoming the environmental sustainability dimension.

This panoply of policy instruments and drivers is reflected at the national and sub-regional levels in Africa, particularly in the Southern Africa Development Community (SADC) region. South Africa, with its key geostrategic position in the transition from the Atlantic to Indian Ocean, was a pioneer, not only by being the first African country to develop a specific legal framework for MSP, the Marine Spatial Bill (2017) but particularly, with the implementation of Operation Phakisa addressing ocean economy. According to Odeku (2021), Operation Phakisa is a clear example of how the South African government

seeks to unlock the ocean economy, with the aim of fast-tracking transformation in identified priority areas, namely marine transport and manufacturing, offshore oil and gas exploration, and aquaculture, as well as marine protection services and ocean governance. Overall, the focus of Operation Phakisa is to promote economic growth and job creation.

Findlay and Bohler-Muller (2018) analysed the lessons learned from the Operation Phakisa Ocean Economy initiative and how this experience could be useful for the Western Indian Ocean region, addressing seven particular aspects relating to ocean governance, namely: i) Consolidation of ocean governance; ii) Capacity development within ocean economies, including within ocean governance; iii) Advancement of research innovation and technology; iv) Enhancement of compliance, monitoring and enforcement; v) The establishment of marine protected areas; the use of MSP and other decision support tools in ocean governance; and vii) Stakeholder engagement. One of their main conclusions highlights that it is essential that an ecosystem-based approach is followed, including MSP, by a full evaluation of ecosystem services and their associated externalities and trade-off decision-making within a sustainable ocean-governance model. These pressures on maritime space led South Africa to be the first African country to develop MSP, also making a commitment to sustainable use of the oceans. Although these policies did not impact at the government structure, a new institutional framework was put in place with a Directors-General Committee and Ministerial Committee on Marine Spatial Planning.

These types of initiatives spread at the sub-regional level, both in the Atlantic and Indian Oceans. In the Indian Ocean, the case studied countries are also part of the LMEs of the Agulhas current (east South Africa, Mozambique and the South of Tanzania) and the Somali Current (centre and north Tanzania and Kenya), as well as SIDS of the Indian Ocean. The potential for blue economy in the Indian Ocean comprises the sectors of: i) Fisheries and aquaculture ii) Marine mining; iii) Offshore oil and gas; iv) Shipping and ports; v) Marine leisure and tourism; and iv) Digital blue economy (Llewellyn et al., 2016). Like South Africa, Mozambique embraced an Ocean Policy and Strategy and is betting on blue growth, supported also by an MSP legal framework. Tanzania has a recognized potential for blue growth, but seems to be behind as a result of insufficient capacity for management of marine resources and delays in marine aquaculture

development hinders blue economy growth in Tanzania economy (Lyimo, 2021). Although no specific agency was created nor specific legislation on MSP developed, pilot projects are in progress and the political coordination is assured at the Vice-Presidents office level, supported by the NEMC. Kenya seems to be more committed to blue growth, with strong political support for the development of Kenya's Blue Economy with flag projects being carried out, such as the expansion of the Mombasa Port reinforcing Kenya's importance as a regional transport node. Although a National Ocean Strategy is in place and a Multisectoral Interagency Working Group is working to develop MSP, for the effective development of the Blue Economy, Kenya needs, among other things to build human resource capacity through investing in marine education and training, boost marine scientific research support the traditional industries of fisheries, aquaculture, tourism, blue biotechnology, ports and shipping, develop a Blue Economy database, resolve outstanding boundary disputes, and reduce illegal unreported and unregulated fishing (Rasowo et al., 2020). In the countries which did not develop governmental departments or agencies dedicated to Ocean Governance/Economy, the ministry of fisheries and a specific agency for fisheries and blue economy lead the processes, supported by multisectoral interagency working groups.

The ecosystem approach to MSP at the sub-regional level highlights the importance of transboundary cooperation within LME's. Although transboundary cooperation at Agulhas and Somalia Current Large Marine Ecosystems (ASCLME) level is less strong and binding than is the case with the Benguela Current Convention, the existing institutional arrangements within the ASCLME system facilitate transboundary cooperation among countries, enhancing regional projects and institutions, such as the South West Indian Ocean Fisheries Project (SWIOFP); the UNEP WIO-Lab Project (Western Indian Ocean Land-Based Sources and Activities); the Seamounts Project (Applying an Ecosystem-Based Approach to Fisheries Management), among others (Satia, 2016). The ASCLME Project³⁵ developed a Transboundary Diagnostic Analysis (TDA) and a Strategic Action Plan, aiming to introduce an ecosystem approach to managing the living marine resources of the western Indian Ocean region, which could constitute grounds for an integrated approach to MSP at a sub-region level.

35 See www.asclme.org

In the Atlantic, the Benguela Current region is under significant pressure for ocean space, particularly related to the abundance of economically valuable non-living marine resources, including petroleum, gas, precious stones and other minerals such as phosphate (Anon, 2014). Exploration and exploitation of these resources is a priority for all three countries of Benguela Current Convention (BCC), all pursuing blue growth to boost their economies. This exploration also leads to intense shipping, particularly from oil tankers which, together with fisheries and mariculture, contributes to increased pressure on maritime space. Angola, Namibia and South Africa developed strong cooperation aiming at an integrated approach to the governance and management of this LME, which became stronger with the entry into force of BCC in 2015 (Hamukuaya et al., 2016). According to Finke et al. (2020), all countries have developed a similar spatial management approach, which is neither solely policy led, nor entirely zoning based, which consists of: i) general development guidelines, ii) sector development guidelines, and iii) a zoning scheme with spatial regulations. The national MSP schemes are in progress with specific legal support being considered. Although at the governmental/institutional level these policies did not lead to structural changes or the creation of new agencies, all BCC countries have put in place similar inter-ministerial and cross-sectoral mechanisms to enable the introduction of MSP and preparation of the first plans. Lead ministries and departments were identified to deal with national ocean strategies, blue growth and MSP, supported by formally established National Working Groups, also to work closely with other relevant ministries/departments and government agencies. The Nairobi Convention³⁶ also plays a role in assisting countries at a technical level in relation to blue economy, MSP, the SDG's and AU Agenda 2063, as was noted at the 8th Conference of the Parties in 2015 (Mahe, Seychelles). Since then, different programmes addressing these issues have been launched, in particular the Western Indian Ocean Governance Initiative (WIOGI)37 to support the development of a Sustainable Blue Economy.

All the African SIDS studied embraced the Blue Economy as a booster for economic growth, employment and social welfare as well as a political priority. In all

³⁶ See https://www.nairobiconvention.org/,

³⁷ The project involves several countries in the region, namely: Comoros, Reunion (France), Kenya, Madagascar, Mauritius, Mozambique (Pilot Country), Seychelles, Somalia, South Africa, and Tanzania. See https://www.nairobiconvention.org/nairobi-convention-projects/wiogi/.

these countries, Ocean Strategies and/or dedicated Blue Economy Strategies are ongoing, under approval or being elaborated. Moreover, there are clear common drivers based on traditional sectors such as: i) Fisheries, ii) Tourism iii) Shipping and ports, but also focusing on value addition, value chains, exploring new and emerging sectors such as: i) Mariculture; ii) Renewable energy; iii) Biotechnology; and iv) Digital connectivity/smart trade. At the governmental and institutional level, SIDS clearly assumed blue economy as a political priority by creating dedicated ministries and governmental agencies, as is the case with Cape Verde and S. Tomé and Principe in the Atlantic Ocean. Although the latter does not yet have a structured Ocean/Blue Economy strategy, it did create a specific Unit for Blue Economy under the new ministry of Planning, Finances and Blue Economy. In Seychelles and Madagascar, specific Departments and General Directorates for blue economy were created and in Mauritius it was announced that an Ocean Economy Unit will be set up (Bolaky, 2020). MSP has also received attention from African SIDS and some legal initiatives or Pilot Projects are going on, but it has not received the same political priority, as no legal specific framework for MSP is yet in force in the studied SIDS. Nevertheless, some Maritime Spatial Plans are already underway and, once approved, will be regulatory, as is the case of Seychelles38. In Mauritius a Marine Spatial Planning Bill is envisaged and is under consideration by the MSP Coordinating Committee to support the implementation of MSP³⁹. The Ecosystem-based approach is also being considered, as is the case of the 2012 treaties for the joint management of the Mascarene Plateau region, a submerged volcanic plateau, between Mauritius and Seychelles.

The initiatives for MSP under the Northern Mozambique Channel Initiative favour an ecosystem approach, setting specific goals for 2030⁴⁰, aimed at: i) High biodiversity value coral reef and associated ecosystems are maintained and enhanced through effective spatial management of marine uses to secure a sustainable future for coastal communities and economies; and ii) The institutional and knowledge foundations are laid for the application of multi-stakeholder-based MSP across the NMC region. Thus, although

it seems not to have the same political priority as blue economy drivers, MSP and the ecosystem approach to the management of marine space are being considered and developed.

The SIDS studied clearly adapted their governmental structure to the new drivers of AIMS 50 and Blue Growth, by creating specific ministries dedicated to the Sea/Blue Economy, together with specific agencies. The continental countries, with the recent exception of Mozambique, maintained the "old" governmental structure, linked to fisheries and marine resources. However, the continental countries within SADC did develop specific agencies dedicated to maritime policy and blue growth, while putting in place inter-ministerial commissions to develop national ocean/blue economy strategies as well as MSP processes. There is direct inclusion of blue economy in the ocean governance models and institutional framework in all studied countries.

Conclusions

It is clear that Africa is moving towards development of a Blue Economy and since 2009, has not only addressed this through an Integrated Maritime Strategy but also by developing specific policies and guidelines to improve the Blue Economy, and integrate the main goals in the long-term vision for Africa in the Africa Agenda 2063, aiming at a coherent approach. Blue economy has been described as the "new frontier of African Renaissance" (Bolaky, 2020) and its potential to boost economic growth, generating employment and increasing social welfare has become clear for governments in the SADC region. Even in countries where the oil and gas sector are the major contributor to GDP, such as Angola and, lately, Mozambique and S. Tomé and Principe, the need for economic diversification and the importance of the Blue Economy is clear. These policies are more developed in the Indian Ocean, with South Africa and Mozambique and SIDS in the lead. Moreover, this policy driver is also supported by regional organizations, such as the Indian Ocean Commission41 which launched a Regional Plan for Blue Economy in 202142 (CEA, 2021). However, Africa's coastal states lack financial and technologi-

 $^{^{38}}$ See https://www.mspglobal2030.org/msp-roadmap/msp-around-theworld/africa/seychelles/

³⁹ See https://www.mspglobal2030.org/msp-roadmap/msp-around-the-world/africa/mauritius/

⁴⁰ See https://wio-c.org/projects-by-members/wwf/northern-mozam-bique-channel-initiative/

⁴¹ The Indian Ocean Commission is an intergovernmental organisation that links African Indian Ocean nations: Comoros, Madagascar, Mauritius, Réunion (an overseas region of France), and Seychelles. There are also seven observers: China, the European Union, the Organisation internationale de la Francophonie, the Sovereign Order of Malta, India, Japan and the United Nations

⁴² See https://www.commissionoceanindien.org/wp-content/uploads/ 2021/07/COI-PAREB-FINAL_29avril21.pdf

cal capacity to fully harvest ocean assets (Akpomera, 2020). The lack of skilled human resources, limited maritime security against piracy and illegal activities, and political issues, including corruption, limit the strategic use of the states' advantageous maritime resources for more locally beneficial development.

African SIDS emphasize the blue economy as a booster for their economy, mainly following FAO and World Bank guidelines (FAO, 2014; Cervigni and Scandizzo, 2017). The impact on the governmental and institutional structures and networks is greater in the SIDS, with the creation of dedicated ministries and agencies, while the "continental states" mostly opted for intersectoral commissions/working groups, with a specific ministry and agency that leads the process, both for Ocean/Blue Strategies as well as for MSP.

MSP is seen as a tool to facilitate Blue Growth and the process is supported politically. There are several encouraging signs towards the use of an ecosystem approach to MSP, with several initiatives going on at the LME level, both in the Atlantic and Indian Ocean, favouring transboundary approaches (Sacko, 2020).

Africa's vison for an Integrated Maritime Policy, which introduced the Blue Economy as the "new frontier for Africa Renaissance", has the potential to change the socio-economic approach to the maritime economy, contributing to human welfare, but this process has also triggered new horizons for ocean governance models and frameworks, at national and regional levels.

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