

## REGIONAL BLUE ECONOMY STRATEGY AND IMPLEMENTATION ACTION PLAN





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# ACRONYMS

ABES	Africa Blue Economy Strategy
AIMS	African Integrated Maritime Strategy, 2050
AMCEN	African Ministerial Conference on the Environment
AU	African Union
AU-IBAR	African Union InterAfrican Bureau for Animal Resources
BE	Blue Economy
COMESA	Common Market for Eastern and Southern Africa
EAC	East African Community
ECCAS	Economic Community of Central African States
FAO	Food and Agriculture Organisation of the United Nations
IGAD	Inter-Governmental Authority on Development
ILO	International Labour Organisation
IMO	International Maritime Organisation
IOC	Indian Ocean Commission
IORA	Indian Ocean Rim Association
IUU	Illegal Unreported and Unregulated Fishing
LME	Large Marine Ecosystem
MASE	Maritime Security
MS	Member State
MSP	Maritime Spatial Planning
MTSP	Medium Term Strategic Action Plan
NDC	National Determined Contribution
NGO	Non-Governmental Organisation
PFRS	Policy Framework and Reform Strategy for African Fisheries and Aquaculture
PPP	Public-Private-Partnership
REC	Regional Economic Community
SADC	Southern Africa Development Community
SDGs	Sustainable Development Goals
SPS	Sanitary and Phytosanitary
UNCLOS	United Nation Convention on the Law of the Sea, 1982



UNECA	United Nations Economic Commission for Africa
UNFCCC	United Nations Framework Convention on Climate Change



COMESA  
BLUE ECONOMY **STRATEGY**

# 1. COMESA BLUE ECONOMY STRATEGY

## 1.1 Context and background

The Common Market for Eastern and Southern Africa (COMESA) is the largest REC for trade and investment in Africa, covering about two-thirds of the African continent with about 12 million square kilometres in size. It consists of 21 Member States, namely, Burundi, Comoros, D.R. Congo, Djibouti, Egypt, Eritrea, Eswatini, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Tunisia, Uganda, Zambia and Zimbabwe. COMESA region is endowed with some of the most ecologically diverse freshwater systems in the world, supporting millions of people with drinking water, food, transport, trade and livelihoods including the 3 largest lakes in Africa, namely, Victoria, Tanganyika and Malawi. Three major African rivers, namely, Nile, Congo and Zambezi are distributed in the region. The region's 21 Member States comprise nine coastal countries<sup>1</sup>, eight landlocked countries<sup>2</sup> and four Ocean States<sup>3</sup>. The estimated population of COMESA is about 583 million (2019 estimates), with a Gross Domestic Product of US\$ 805 billion and a global export/import trade in goods worth US\$ 324 billion<sup>4</sup>.

COMESA offers its Member States and partners a wide range of benefits which include: a wider, harmonised competitive market, greater industrial productivity and competitiveness, increased agricultural production and food security, rational exploitation of natural resources, harmonised monetary, banking and financial policies and reliable transport and communications infrastructure. COMESA has nine institutions that have been created to promote sub-regional cooperation and development.<sup>5</sup> In terms of the decision-making process, COMESA has requisite structures led by the Heads of State and Government (COMESA Authority) that provide policy direction. The Council of Ministers ensures the proper functioning of COMESA per the provisions of the COMESA Treaty and is supported by several technical committees and advisory bodies. The COMESA Secretariat is based in Lusaka and is responsible for, among others, facilitating and coordinating the work of the REC. Each Member State has appointed a contact person to deal with the day-to-day communication process. COMESA is implementing a five-year (2021-2025) Medium Term Strategic Action Plan (MTSP)<sup>6</sup> that includes a component on the blue economy (<https://www.comesa.int/>).

The concept of the blue economy has been embraced by COMESA MS as a turnkey to unlock sustainable development. Consequently, and with the support of the AU-IBAR, this COMESA Regional Blue Economy Strategy, its Governance Coordination Mechanisms and its Implementation Action Plan are formulated to guide the region to revitalise its economy in a resilient, agile, and sustainable manner and harness the potential for sustainable and inclusive

1 Djibouti, DR Congo, Egypt, Eritrea, Libya, Kenya, Somalia, Sudan and Tunisia.

2 Burundi, Eswatini, Ethiopia, Malawi, Ruanda, Uganda, Zambia and Zimbabwe.

3 Comoros, Madagascar, Mauritius and Seychelles.

4 <https://www.comesa.int/what-is-comesa/>

5 COMESA Trade and Development Bank, in Nairobi; COMESA Clearing House, in Harare; COMESA Association of Commercial Banks, in Harare; COMESA Leather Institute in Ethiopia; COMESA Re-Insurance Company, in Nairobi and COMESA Court of Justice, in Khartoum.

6 COMESA MTSP 2016-2021. [www.comesa.int/publications-2/](http://www.comesa.int/publications-2/)

development and maximize opportunities for a more evolved and effective blue economy in the region while also preserving countries natural capital and social heritage.

## 1.2 The Blue Economy in the global context

The concept of the blue economy was conceived at United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, in June 2012 (also referred to as Rio+20) and focuses on the sustainable utilization of aquatic and marine resources around all three pillars of sustainability. During the Conference, coastal countries were concerned about the focus of the green economy and its applicability to them. It refers to the multiple economic activities and ecosystem goods and benefits obtained and utilised sustainably and equitably. The concept recognises the many contributions from inland aquatic and ocean resources and their potential but also acknowledges the human and natural impact on the environment as well as climate change hazards.

The Small Islands Developing States (SIDs) have been the driving force in championing the inclusion of the concept of the blue economy in the Rio+20 Declaration (*The Future We Want*). The blue economy paradigm constitutes a sustainable development framework that embraces the same desired outcomes as the Rio+20 green economy initiative including achieving improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities (Martínez-Vázquez *et al.* 2021). It also endorses the same principles of low carbon use, resource efficiency and social inclusion. The Rio + 20 Declaration stressed the importance of the conservation and sustainable use of the oceans and seas and their resources for sustainable development. The core objective of the BE is therefore to realise social-economic development and a dynamic balance of resources and environment and finally achieve sustainable use of the resources (Wenhai *et al.*, 2019).

The UN 2030 Agenda for Sustainable Development adopted in 2015 provides a shared blueprint for peace and prosperity for all the people and the planet by 2030. The blue economy is perfectly aligned with the SDGs, and by unlocking its potential, it will contribute immensely to the implementation of the targets under all 17 SDGs. The Goals and their accompanying Targets focus on eradicating poverty and deprivation (SDG 1) and hunger (SDG 2), providing good health and well-being (SDG 3), delivering quality education (SDG 4) and achieving gender equality and empowering women and girls (SDG 5), providing clean water and sanitation (SDG 6), accessing affordable clean energy (SDG 7), fostering decent work and economic growth (SDG 8) enhancing industrial development, promoting innovation and infrastructure (SDG 9), reducing inequalities (SDG 10), sustainable cities and communities (SDG 11), responsible production and consumption (SDG 12), contributing to climate action (SDG 13), the life below water (goal 14) life on land (SDG 15), maintaining peace, justice and strong institutions (SDG 16) and partnerships for the Goals (SDG 17). Therefore, a sustainable blue or ocean economy holds great promise for contributing to the success of the UN Agenda 2030 for Sustainable Development Goals.

The Convention on Biological Diversity (CBD, 1992) is dedicated to promoting sustainable development. It recognizes that biological diversity is about more than plants, animals and micro-organisms and their ecosystems – it is about people and our need for food security, medicines, fresh air and water, shelter, and a clean and healthy environment in which to live. The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity aims at sharing the benefits arising from the utilization of genetic resources fairly and equitably.

The United Nations Framework Convention on Climate Change (UNFCCC, 1994) aims to stabilize greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous human interference with the climate system, in a time frame which allows ecosystems to adapt naturally and enables sustainable development.

The WTO Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) sets out the basic rules on food safety and animal and plant health standards that governments are required to follow, and together with the Technical Barriers to Trade Agreement seeks to identify how to meet the need to apply standards while avoiding disguised protectionism.<sup>7</sup>

Some of the international instruments are concerned with the sustainable development and environmental protection and are therefore relevant to the blue economy, including the 1982 United Nations (UN) Convention on the Law of the Sea; the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter; the 1973/78 International Convention for the Prevention of Pollution from Ships (MARPOL); Convention on Facilitation of International Maritime Traffic, 1965, as amended (FAL); the 1990 International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC); the 1995 Declaration on the Protection of the Marine Environment from Land-Based Activities; and the 2009 Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing; International Plan of Action to Prevent, Deter and Eliminate IUU Fishing (IPOA-IUU).

In 2017, the United Nations declared that a Decade of Ocean Science for Sustainable Development, the 'Ocean Decade', would be held from 2021 to 2030. The Ocean Decade provides a common framework to ensure that ocean science can fully support countries to achieve the 2030 Agenda for Sustainable Development, and therefore of relevance to the blue economy.

### **1.3      *The blue economy in the African context***

The Africa Blue Economy Strategy (ABES) was developed following the Sustainable Blue Economy Conference<sup>8</sup> that took place in Nairobi, Kenya in 2018. The Conference produced a Statement of Intent on Advancing the Global Sustainable Blue Economy which inscribes

<sup>7</sup> [https://www.wto.org/english/tratop\\_e/sps\\_e/sps\\_e.htm](https://www.wto.org/english/tratop_e/sps_e/sps_e.htm)  
<sup>8</sup> See <http://www.blueeconomyconference.go.ke/>

a new paradigm for an economically vibrant, socially inclusive, and environmentally resilient blue or ocean economy. The African leaders at that Conference urged the African Union (AU) to work with relevant stakeholders to develop a blueprint of Africa's Blue Economy Strategy aims to guide sustainable development and utilisation of resources of the oceans, seas, lakes and rivers to contribute to driving inclusive economic growth, social prosperity, livelihoods and environment management and protection. Such a Strategy would guide sustainable development and the utilization of aquatic resources in Africa. The ABES was endorsed by the 3<sup>rd</sup> session of the Specialized Technical Committee on Agriculture, Rural Development, Water and Environment (STC-ARDWE) in October 2019, and adopted by the side event of the 33<sup>rd</sup> Summit in February 2020.

### *The Africa's Blue Economy Strategy (ABES)*

The AU-IBAR lead the development of the Africa Blue Economy Strategy composed of six thematic areas that are considered key vectors for Africa's blue economy development, and these are:

- a) Fisheries, aquaculture, conservation and sustainable aquatic ecosystems
- b) Shipping, transportation, trade, ports, maritime security, safety and enforcement
- c) Coastal and maritime tourism, climate change, resilience, environment, infrastructure
- d) Sustainable energy, mineral resources and innovative industries
- e) Policies, institutional and governance, employment, job creation and poverty eradication, innovative financing

The Strategy is in line with AU instruments, including the 2014 Africa's Integrated Maritime Strategy (2050 AIMS), the 2014 Pan-African Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS), the 2016 African Charter on Maritime Security and Safety and Development in Africa (Lomé Charter) and the African Union Agenda 2063 and contributes to Africa's integrated, inclusive, secured, transformation and growth. Once implemented, it will contribute, in no small measure, to the successful attainment of the 2015 UN Agenda 2030 for Sustainable Development Goals (SDGs).

The United Nations Economic Commission for Africa (UNECA) produced a practical guide to the implementation of BE policies, titled Africa's Blue Economy Handbook. It defines the blue economy as incorporating a new approach to sustainable exploitation of the resources of the oceans, lakes, rivers and other water bodies, and the conservation of aquatic ecosystems (UNECA, 2016)<sup>9</sup>. A sustainable blue, therefore, seeks to promote economic growth, responsible production and consumption, social inclusion, the preservation or improvement of livelihoods and the environmental sustainability of aquatic, marine and coastal areas. The blue economy is then a set of human activities that, on the one hand, organise in an integrated, fair and circular

<sup>9</sup> <https://repository.uneca.org/handle/10855/23014>



manner the production, distribution, trade and consumption of goods and services resulting from both the exploitation of aquatic resources<sup>10</sup> and from the use of supports that constitute aquatic environments<sup>11</sup>, and, on the other hand, contribute to improving the health status of aquatic ecosystems by implementing protective and restorative measures (IGAD, 2020).

In the Indian Ocean, a review of the blue economy of the parties to the Nairobi Convention has been carried out for the entire western region of the Indian Ocean (IGAD, 2020). Further, the Indian Ocean Commission (IOC) has completely a Regional Action Plan on the Blue Economy (RAPBE), the work done for many years under the programmes related to maritime security, fishing and aquaculture, island development and coastal and marine biodiversity. IGAD has completed its Strategy by 2021 and it has greatly informed the formulation and development of this (COMESA) Regional Strategy. Many members of IOC have developed their BE strategies (e.g., Mauritius in 2019, Comoros in 2020, Seychelles in 2018, Madagascar in 2022). Madagascar and Mauritius have an administrative entity dedicated to BE and tied to a sectoral ministry while, Seychelles, a department linked to the vice-presidency was created in 2015.

Seychelles and Mauritius are pioneers in the development of the blue economy in Africa and their experiences can be replicated in the other COMESA Member States. For example, the Government of Mauritius has emphasized developing the ocean economy as well as consolidating the traditional BE sectors started in 2013 with the formulation of the strategy document "Ocean Economy, A Roadmap for Mauritius". Then in 2015 the Ministry of Ocean Economy, Marine Resources, Fisheries and Shipping has been set up in line with the Government's vision to develop the ocean economy. By 2019, an administrative entity specifically dedicated to BE was established and, under the three-year strategic plan 2018/19-2020/21 (Vision 2030), strategic directions for BE development have been identified and are being implemented focussing on areas, namely: i) manage ocean resources rationally ii) ensure sustainable use of marine resources and regulate activities of the offshore extractive industry iii) safeguard our territorial integrity and sovereignty and enhance maritime security iv) develop local capacity in the BE sector and v) promote employability in the maritime sector

### *The instruments*

The concept of the blue economy is enshrined in various African Union instruments. **The AU Agenda 2063, 'The Africa We Want'** is Africa's blueprint and master plan that aims to deliver on its goal for inclusive sustainable development. Agenda 2063 encapsulates not only Africa's Aspirations for the Future but also identifies key Flagship Programmes which can boost Africa's economic growth and development and lead to the rapid transformation of the continent. For example, Goal 6 is dedicated to the blue economy 'for accelerated economic growth' focusing on: i) marine resources and energy ii) ports operations and marine transport, while Goal 7 is dedicated to 'environmentally sustainable and climate-resilient economies and communities with a focus on: i) sustainable natural resource management and biodiversity conservation ii) sustainable consumption and production patterns iii) water security iv) climate resilience and natural disasters preparedness and prevention v) renewable energy.

<sup>10</sup> For instance, fisheries, mining and petroleum, biotechnologies and alternative energies.

<sup>11</sup> For instance, maritime transport and coastal tourism.

**The 2050 Africa's Integrated Maritime Strategy (2050 AIM Strategy)** - has been created as an instrument to address Africa's maritime challenges for sustainable development and competitiveness. It aims to stimulate wealth creation from Africa's oceans, seas and inland waterways by developing a thriving maritime economy and realizing the full potential of sea-based activities in an environmentally sustainable manner. The Strategy outlined some blue economy sectors and components including conservation, research, education and governance.

**The African Union Charter on Maritime Security and Safety and Development in Africa (Lomé Charter)** - adopted in 2014 deliberately focuses on security and safety at sea. It aims at preventing and suppressing national and transnational crimes such as terrorism, piracy and armed robbery against ships, and all kinds of trafficking at sea and IUU fishing. The Charter further aims to protect the environment in general. One of the objectives of the Charter (Articles 3c) is to 'promote a flourishing and sustainable blue/ocean economy'. The Lomé Charter is one of the AU instruments that provides a clear definition of the blue economy as "sustainable economic development of oceans using such techniques 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 wellbeing".

**Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (2014)** - offers guidance to the transition of African fisheries and aquaculture to productivity, sustainability and profitability through reform of governance frameworks at all levels that should result in the sustainable generation of benefits to the communities as well as creating wealth throughout the value chain. Its full implementation remains a key to unlocking the full potential of this blue economy sub-sector.

**The African Continental Free Trade Area (AfCFTA)** - launched in 2019, to eventually integrate all 55 African States into a single free trade area is strengthening intra-COMESA trade, thereby catalysing the blue economic activities in no small measure. The COMESA MS are urged to implement this instrument to the fullest.

**The Nairobi Convention (as amended) for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean** - has expanded its original mandate to include areas such as environmental degradation, biodiversity loss, restoration and monitoring of ecosystems and ocean governance. Six of the parties to the Nairobi Convention are also parties to COMESA Treaty. The Secretariat of the Nairobi Convention has a wealth of baseline information in areas such as transport/shipping, energy/oil and biodiversity (necessary for blue bioprospecting) and inevitably, closer collaboration with COMESA is advocated.

#### **1.4      *The blue economy in the COMESA context***

The COMESA Treaty implicitly enshrines the concept of the blue economy in its various provisions. In Article 84, the Member States undertake to take all necessary steps to, among others, maintain, upgrade, and rehabilitate the roads, railways, airports and harbours in their

territories. The blue marine transport and ports are detailed in Article 88 where the Member States shall, *inter alia*, promote the development of efficient and profitable seaport services and encourage their respective national shipping lines to form sub-regional associations. For the inland waterway transport, the Member States, wherever possible, shall promote cooperation among themselves by undertaking joint ventures in inland waterway transport including the establishment of joint shipping services (Article 89). In Article 106, the Member States undertake to co-operate in the joint development and utilisation of energy resources including hydro, fossil and biomass. Recognising that economic activities are often accompanied by environmental degradation, (Article 122), the Member States agree to take concerted measures to foster cooperation in the joint and efficient management and sustainable utilisation of natural resources. The Member States undertake to develop a collective and coordinated approach to the promotion of tourism in the Common Market (Article 138). The Treaty further provides that the Member States shall endeavour to establish a common code of ethics for private and public tour and travel operators, to standardise hotel classification and harmonise the professional standards of agents in the tourism and travel industry within the Common Market.

COMESA has adopted a clear definition of the blue/ocean economy: it covers economic activities in aquatic and marine areas, including oceans, seas, coastlines, lakes, rivers and underground water<sup>6</sup> and encompasses a range of several productive sectors such as fisheries, aquaculture, tourism, transport, shipbuilding, energy, bio-prospecting and underwater mining to accelerate structural transformation (COMESA Industrial Strategy 2017-2026, MTSP 2021-2025). The concept of the Blue Economy has been embraced by the COMESA Member States as a mechanism to realize sustainable ocean-based economic development. Currently, there is limited information on the blue economy as the focus has been primarily on land-based economic development or on conservation rather than on the sustainable use of the investment in an ocean-based economy, for national benefit. With an integrated approach to ocean-based and inland water, sustainable development is crucial which brings together the economy, environment and society, consistent with *inter alia*, the Sustainable Development Agenda 2030 (SDGs).

The ocean economy approach provides a prospect of sustained, environmentally sound, but also socially inclusive, economic growth based on COMESA countries' strengths in coastal and marine sectors as well as freshwater inland rivers and lakes (COMESA Annual Report 2020)<sup>12</sup>. Its value chain would provide opportunities for industrial activities, job creation, improved investment and economic development for landlocked and land-linked countries, as much as for coastal and Island States<sup>13</sup>. To illustrate, Ethiopia is utilising the blue economy opportunities through the development of rail connectivity to the port of Djibouti, where it is producing more than 500 ship officers annually for the global shipping industry (Grey, 2018).

For the first time, the Blue Economy Programme was one of the nine strategic pillars identified in COMESA's Medium-Term Strategic Plan (MTSP, 2016-2021). It envisions the transformation by unlocking investments and the generation of jobs for citizens through rebranding the use of the water bodies to realize the potential for economic advancement and tapping into new areas of economic operations. The Programme was designed to emphasize the importance of

<sup>12</sup> <https://www.comesa.int/publications-2/>

<sup>13</sup> ECA-Blue Economy, Inclusive Industrialization and Economic Development in Southern Africa.

balancing sustainable economic development and environmental protection, anchoring this to SDG 14 of the Sustainable Development Goals (SDGs).

The programme was ambitious and involved multiple initiatives including the development of legal, fiscal and other institutional frameworks for exploration and exploitation of hydrocarbon and mineral resources; developing fisheries and aquaculture to reposition the Member States as sources of seafood in the region; exploring deep ocean water applications such as for cooling of buildings and generation of renewable energy; promote marine tourism; strengthening port facilities; developing a policy for maritime security and safety and the development of marine spatial planning to make informed and coordinated decisions on sustainable use of marine resources. However, its implementation was largely unsuccessful due to the absence of institutional arrangements for coordination at the COMESA Secretariat and in the Member States and limited requisite resources.

### 1.5 *Overview of the blue economy sectors in the COMESA region*

COMESA countries have a great blue economy potential that is hugely underdeveloped or underutilised. Traditional sectors such as fisheries, tourism, energy, mineral extraction and marine and river transport are showing evidence of significant development capacities while emerging sectors such as aquaculture, renewable energy (hydro, wind, wave, tidal, solar), marine biotechnology and bioprospecting, blue carbon (carbon storage in mangroves, seagrass and salt marshes), desalinisation do not feature in national priority lists.

#### 1.5.1 Blue fisheries and aquaculture

There is a paucity of reliable fisheries data for the entire COMESA region. However, based on FAO statistics<sup>14</sup>, the total capture fishery production (freshwater and marine) in the COMESA region in 2019 represents about 2.4 million tonnes of which three-quarters originate from lakes and rivers. During the period, the total value of fish imports amount to USD 2.2 billion while the export value was USD 1.4 billion, and that implies that the COMESA region is a net importer of fish and fisheries products. Although the total number of fishers is not available, the Democratic Republic of Congo had 440,088 fisherfolks, with Uganda at 124,805 and Egypt at 96,183. In some countries, for instance, Seychelles, the fisheries are the second contributor to the GDP after tourism, accounting for 20% of the GDP and employed 17% of the population in 2017<sup>15</sup>.

The total aquaculture production in the COMESA region was 1.87 million tonnes in 2019. Of the total, Egypt produced 1.6 million tonnes (88%), followed by Uganda at 102,943 tonnes (5.5%), while Zambia ranked third with 38,480 tonnes (2%). Despite the huge potential in the region, mariculture is remarkably underdeveloped.

Some of the major fisheries and Aquaculture development challenges include overexploitation of capture fisheries, weak value-chains and value addition, growing pressure from alternative uses of aquatic resources and IUU, low investments in a fisheries management capacity, research and monitoring, and trade and market infrastructure, institutional and political challenges in

<sup>14</sup> FAO Yearbook, 2020. Fisheries and Aquaculture. <https://www.fao.org/fishery/en/statistics/yearbook/en>  
<sup>15</sup> <https://documents1.worldbank.org/curated/en/394051505478217219/pdf/SEYCHELLES-PAD-09122017.pdf>







the management of trans-boundary fisheries resources, limited institutional and technical capacity and governance (planning, implementation and monitoring, control and surveillance) and uncertain financial sustainability, low level/Lack of coordination among Regional Fisheries Bodies (RFBs) and RECs, medium/ low level of cooperation between Duly Mandated Regional Organisations (DMRO) with RFBs and Regional Fisheries Management Organisations (RFMOs), limited capacity to implement fisheries programs and to implement MCS<sup>16</sup>.

### 1.5.2 Blue tourism

Tourism is the world's largest and fastest-growing service industry. However, the full potential of blue tourism to contribute to economic growth, job creation and foreign exchange earnings in the COMESA region is far from being realised. The region is richly endowed with some of the most spectacular, and majestic sceneries along the rivers, lakes, and coastal and marine environs. Ecotourism and other forms of environmentally friendly tourism activities are getting increasingly more attention. In 2019, the number of tourists who visited the COMESA region was about 36 million, and on average, the share of the sector to GDP in real-time was 3.7% (MTSP, 2021-2025)<sup>6</sup>. In COMESA island countries (Seychelles, Madagascar, Mauritius, Comoros) tourism contributes between 14% -25% of GDP and more than half of their export earnings<sup>17</sup>. Limited data/information on blue tourism is one of the existing challenges as national statistics do not separate records of blue tourism from general tourism. To influence and sustain tourism growth, policymakers will need to raise awareness of tourism's pivotal role, government expenditure on the sector will need to increase, and measures will need to be taken to address the regulatory framework, standards development, and product development with a focus on diversification, strong destination marketing, improve the business environment, improve infrastructure to service tourists and encourage investments, facilitate air accessibility, and implement open skies policy, single visa regimes and statistics and data collection (COMESA Sustainable Tourism Development Framework, 2012).

### 1.5.3 Blue energy

The oceans, seas, lakes and rivers of Africa offer huge potential and opportunities to develop non-renewable (oil and gas) and renewable (including hydro, wind, tidal and wave) energy sources, of which only a fraction has been exploited to date (AMCEN, 2019, COMESA Industrial Strategy 2017-2026). The COMESA region is richly endowed with power generating natural resources, but most are currently untapped or underdeveloped. Constraints include the absence or limited capacity and lack of policy frameworks and legal-institutional arrangements that are necessary for investment, lack of finances to fund exploratory activities and inability to attract investments in these emerging sectors. The total installed power generation capacity in the COMESA region is 92,000 megawatts (MW, 2019 data) from 48,352 MW in 2012 with thermal power dominating at more than 69% and hydro (large and small) accounting for 30% largely from Ethiopia and Uganda<sup>18</sup>. Generation capacity is not enough to cover the country's own needs and allow for cross-border trade. The Grand Inga Project on Inga Falls in the DRC could

<sup>16</sup> <https://www.comesa.int/comesa-fisheries-program/>

<sup>17</sup> Economic Commission for Africa, Climate Change in the African Small Island Developing States: from Vulnerability to Resilience – the Paradox of the Small. Addis Ababa, Economic Commission for Africa, 2014.

<sup>18</sup> <https://www.comesa.int/status-of-energy-in-the-comesa-region/>





have the capacity to produce 42,000 MW, sufficient to supply entire sub-Saharan Africa with power but currently producing about 1,775 MW<sup>19</sup>. It is estimated that the energy deficit causes about a 2% loss of growth of gross domestic product (GDP) in most of COMESA MS. Off-shore wind turbines, floating solar panels, waves, and geothermal energy have not yet been received specific attention.

Most COMESA Member States are faced with serious challenges that include low-level access to modern energy, limited energy infrastructure, inadequate financing mechanisms and unclear regulatory environments for private sector involvement in renewable energy projects. The main areas of power are generation and transmission to facilitate electric power trade and cross-border trade in electricity to narrow down the high discrepancies in the prices of electricity in various countries in the region. In terms of policy and regulatory frameworks, COMESA has in place the Energy Programme<sup>20</sup> that aims to promote regional cooperation in energy development, trade and capacity building. The programme is also intended to, among others, facilitate trade in energy services through the development of harmonized standards, develop regional energy infrastructure through the development of medium to long-term energy master plans and harmonize energy policy and regulatory frameworks. A Model Energy Policy Framework adopted in 2007 provides the Member States with harmonized guidelines that would facilitate energy policy harmonization in the region and its overall goal is to meet the energy needs, in an environmentally sustainable manner, by providing an adequate and reliable

19 <https://www.hydroreview.com/hydro-projects/grand-inga-hydropower-project/#gref>  
 20 <https://www.comesa.int/the-comesa-energy-programme/>

supply of energy at least cost; to support social and economic development and sustainable economic growth and to improve the quality of life of the people. The Renewable Energy and Energy Efficiency Strategy and Action Plan for Eastern Africa Southern Africa and the Indian Ocean region (EA-SA-IO) are in place to support the region in addressing the production capacity of energy in the context of climate change challenges which are increasingly affecting the generation of energy and the resultant cost of living.

The Regional Association of Energy Regulators for Eastern and Southern Africa (RAERESA) has been established to enhance the integration of energy systems and energy trade within the region and beyond, facilitate capacity-building in the energy sector at both a national and regional level, and deliberate and make recommendations on issues affecting the economic efficiency of energy interconnections and energy trade among members. The Cape to Cairo electricity corridor is on course with the ongoing implementation of the Zambia-Tanzania-Kenya (ZTK) power interconnector project which will interconnect the Southern Africa Power Pool and East Africa Power Pool, enhance and pave the way for a competitive regional power market.

#### 1.5.4 Blue transport, ports and shipping

Marine, River and Lake Transport, Ports and Related Services such as shipping and Shipbuilding are currently developing quickly with massive infrastructures planned and under construction in coastal countries. Most inland waterways in the COMESA region are not being used to their full potential, as the potential for transportation on the Nile and Zambezi rivers, lakes Victoria, Tanganyika and Malawi and the Congo River is greatly underutilized. Although rivers can contribute to the nexus of road, rail and water transport networks, relieve the pressure on roads, allay cost and time pressures, and their use can be more environmentally friendly than other forms of transport, most inland waterways require rehabilitation and integration into multimodal transportation networks. Promoting maritime transport by building and expanding ports and shipping facilities to extend maritime reach is a frequently identified measure for the advancement of the blue or ocean economy. Revenue on imports and exports handled through major ports contributes over 50% of total tax revenue in most coastal African countries, meaning that port efficiency has a major impact on the economy of those countries (AMCEN, 2019). Data are currently lacking to provide an estimate of the value-added of this blue economy sector.

The development of the BE in the region is dependent on the introduction of an efficient and affordable maritime and river transport network. State strategies must therefore come together and ensure that maritime and river transport becomes a continuous link between the countries. The current competition between the countries for the monopolization of maritime traffic from and to the outside is currently stimulating the port development of each coastal country. This dynamism must be used to develop complementarity between the countries in terms of maritime and river logistics. This will allow better management of maritime and river traffic between the countries and the rest of the world, which will be a significant increase in the years to come. Both international and regional flows should be thought of in a logic of interconnected bursting ports and proximity ports. Thus, inter and intra country cabotage must

be developed in the continuity of the existing international network. For instance, the major maritime transport companies are in the process of planning and defining regional secondary routes from Kenya to Djibouti. There is a proposal at the level of IOC for setting up a regional line in the Indian Ocean to serve countries in the region however its viability would largely depend on the volume of regional trade. States must therefore commit to the facilitation of transshipment conditions (priority to regional traffic), and customs clearance of products as well as payment mechanisms. Regional trade should be further boosted and generate significant effects on national economies. The development of the emerging ocean liner cruise industry must also be done in this spirit of inter-country complementarity. It should, to the extent that shore calls are well organized, benefit country economies<sup>21</sup>.

Trade with Asia constitutes the major driving force both for the export and import of raw materials and manufactured products. Shipbuilding remains focused on artisanal fishing boats and small size passenger ferries and boats. Mombasa Port is a point of origin of the Northern Corridor which covers Uganda, Rwanda, Burundi, South Sudan, and Congo. Lamu Port is located as a gateway of Lamu Port Southern Sudan-Ethiopia Transport (LAPSSET) which passes through Ethiopia and South Sudan (Data collection survey on BE in the Rep of Kenya, 2018).

#### 1.5.5 Underwater extractive industries

According to the current COMESA MTSP, oil and gas remain among the most critical sources of energy for the COMESA region. Some Member States have discovered or potentially have offshore oil and gas resources, and these include Somalia, Kenya, Comoros, Seychelles and Mauritius. Uganda is at the advanced stage of commercially exploiting its Albertine Graben reserve. COMESA's focus is on facilitating trade and sharing of experiences within the region (MTSP, 2021-2025). While the oil and gas sector is poised for tremendous growth in the region, proper environmental management will be critical to maintaining its ability to operate effectively. Offshore and deep-sea exploration and production, high shipping volume, port terminal and refining operations and transport of oil and gas through pipelines present several environmental risks.

Mining of seabed and lakebed in the COMESA Member States is broadly undeveloped, primarily due to the absence of significant R&D capacity, absence of seismic, geomorphological and geospatial information and finance. These constraints hinder COMESA members' ability to maximise the potential of their mineral resources, develop strategies for minerals exploitation, and develop infrastructure, among others (ISA, 2017). As such, no economic data are currently available to assess the value-added of this sector. However, the demand for metals (including critical metals) is increasing, fuelled by the consumption of material goods from electronics to automobiles at a time when the supplies from land-based mineral deposits/reserves are being depleted. Thus, the resources beneath the seafloor are seen as the next frontier for mineral exploration and extraction (Sakellariadou, 2021). Marine mineral deposits with a great resource potential include deep-sea mineral deposits, such as polymetallic sulfides, polymetallic nodules, cobalt-rich crusts, phosphorites, and rare earth element-rich muds (Sakellariadou, 2021, ISA 2017) as well as gold, copper, cobalt, nickel and rare earth minerals (ISA, 2017). The International

<sup>21</sup> With, as an indication, an average expenditure of around 100 US dollars per person per stopover in the Caribbean countries.





Seabed Authority (ISA) under the UNCLOS, is the responsible authority for granting exploration contracts for the ocean floor in international seabed areas and has by now approved 29 contracts for exploration involving 22 different countries, covering 0.7 per cent of the world's seabed. The African States are yet to participate in the prospecting, exploration and exploitation of deep-sea mining in the international seabed Area (ISA, 2017). Thirteen COMESA members are members of ISA.<sup>22</sup> Strategically, it would be desirable for at least some of the coastal and island states of COMESA to be actively involved in deep-sea mining to reverse the status quo. The ISA allows regional entities, for instance, the African Union to be members if they have the mandate to act on behalf of the states they represent.

## 1.5.6 Environment

The environment/ecosystem remains a noteworthy component that ought to be integrated into the implementation of policies related to blue economies. It provides numerous ecosystem goods and services that contribute to socio-economic development and sustain the human well-being of the people. There are four major categories of ecosystem services, namely, provisioning, regulating, cultural and supporting services<sup>23</sup>. A provisioning service (food-fish, shellfish, oil, diamonds, fuel, recreational activities) is any type of benefit that can be extracted from nature, such as food, drinking water, wood fuel, natural gas, oils, and medicinal products. A regulating service (e.g., protection of shoreline from erosion and storm surges), regulates and moderates ecosystem processes to make life possible for the people and include carbon storage and climate regulation, erosion and flood control, water purification and protection from extreme events such as storms and tidal surges. The environment/ecosystem plays an increasingly important role in the mitigation<sup>24</sup> and adaptation<sup>25</sup> to climate change effects through the range of ecosystem services<sup>26</sup> it provides. For instance, the blue carbon from CO<sub>2</sub> sequestration by mangroves, seagrass beds, mudflats and other coastal ecosystems must be taken into account in the National Determined Contributions (NDC)<sup>27</sup> and, as such, must appear as an element to value in any BE policy. In this regard, specific accounting for blue carbon and other ecosystem services<sup>28</sup> should be set up to monitor and measure the evolution of the contribution of coastal ecosystems to carbon sequestration. Some countries (e.g., Kenya) have adopted specific environmental policies for the BE. In the same way, nature-based solutions<sup>29</sup> have to be put forward in national BE documents. Ecosystem restoration (along with maintaining their health status) is one of the main environmental issues of COMESA countries to contribute to the well-

22 Comoros, Djibouti, DR Congo, Egypt, Kenya, Eswatini, Mauritius, Seychelles, Somalia, Sudan, Uganda, Zambia and Zimbabwe.

23 The Millennium Ecosystem Assessment by the United Nations (<https://www.millenniumassessment.org>).

24 Climate change mitigation involves reducing, through natural processes or technological means, the amount of greenhouse gases in the atmosphere (IUCN France, 2016). Mitigation includes all the actions to reduce sources of greenhouse gases or to improve carbon sequestration. As an indication, it is currently estimated that natural ecosystems absorb half of the CO<sub>2</sub> emissions generated by human activities each year. Preserving and restoring functional ecosystems is, therefore, a major issue in mitigating climate change.

25 Adaptation involves the reduction of risks and impacts of the harmful effects of climate change (storms, floods, droughts, etc.). As for mitigation, adaptation can rely on the functioning of natural environments or technical or technological solutions. Ecosystems provide ecological services that can help human societies to protect themselves from climatic consequences (mountain forests allowing to fight against landslides, wetlands acting as a buffer against flood or drought episodes, green spaces allowing to reduce heat in the city, etc.)

26 See <https://ipbes.net/>.

27 See <https://unfccc.int/fr/news/registre-interimaire-ndc>

28 See in particular the setting up of the specific "Water" account in Rwanda [https://programme.worldwaterweek.org/Content/ProposalResources/PDF/2018/pdf-2018-7955-8-Rwanda%20NCA%20Water%20Accounts\\_26%20Aug%202018.pdf](https://programme.worldwaterweek.org/Content/ProposalResources/PDF/2018/pdf-2018-7955-8-Rwanda%20NCA%20Water%20Accounts_26%20Aug%202018.pdf)

29 See <https://www.iucn.org/fr/commissions/commission-ecosystem-management/solutions-fondees-sur-la-nature>

being of populations and cope with future climate change-related events. Supporting services (such as habitats for fish and nesting for turtles and seabirds, transport of eggs/larvae, carbon sequestration, and coastal protection) are those that sustain fundamental natural processes to allow the Earth to sustain basic life forms, and these include primary production, nutrient cycling and the water cycle. Cultural services are non-material benefits that contribute to the development and cultural advancement of people obtained from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experiences.

#### 1.5.7 Research and innovation

Research and innovation are emerging components of the blue economy that need to be consolidated and promoted in each sector. Therefore, the COMESA Regional BE Strategy will promote research and innovation within its Member States.

#### 1.5.8 Marine biotechnology and bioprospecting

From time immemorial, mankind has utilised biological materials from plants and animals for a variety of purposes, including medicinal purposes of which terrestrial has been the primary source. The oceans cover more than 70% of the Earth's surface, and their biological evolution began several million years before that of the land. The abundance of marine organisms is yet to be adequately explored. The marine biomes are a rich reservoir of organisms with unique biological properties which are underutilized biological resources, making them an attractive target for bioprospecting for the identification and development of potential drug molecules for human therapeutics (Bhatia and Chugh, 2014). Indigenous communities have developed, preserved as well as evolved the marine traditional knowledge from one generation to the next (Bhatia and Chugh, 2014, Shweta, 2020). Drugs from aquatic weeds, algae, other marine organisms, terrestrial plants and animals are being developed and are crucial need of time with a priority for aquaculture, pharmaceutical and cosmetic industries, among others (Shweta, 2020).

Africa's marine biodiversity is generally poorly described especially from marine biota found in the more remote and largely inaccessible areas along Africa's 30,500-km-long coastline. South Africa is fairly advanced in this field with dozens of marine natural products being patented, including those for their anti-cancer activity. (Chibale *et al.*, 2012). Pharmaceutical companies utilize marine life based on traditional knowledge developed by the communities at various stages of drug development, unfortunately, many times without having a mechanism of access and benefit-sharing in place (Bhatia and Chugh, 2014). To mitigate the lack of benefits, African countries are beginning to enact access and benefit-sharing (ABS) legislation (Chinsebu and Chinsebu, 2020).

These emerging and promising sectors remain underdeveloped in the COMESA region, although some MS such as Kenya have started developing their biotechnologies, and Mauritius has keen interest. The current annual value added generated by the Kenyan sectors approaches USD 800 000 million<sup>30</sup>.

<sup>30</sup> IGAD Regional Blue Economy Strategy.



## 1.6 Challenges to the implementation of Blue Economy in the COMESA region

The countries of the region and the COMESA Secretariat are facing strategic and technical challenges in the implementation of the Blue Economy. These challenges are largely interlinked and cut across all BE sectors and components. These challenges are strategic and technical in their features/characteristics and are briefly described below<sup>31</sup>:

### Strategic challenges

- 1. Economic:** Most MS are faced with financial constraints to effectively implement and sustain the COMESA programmes. Similarly, COMESA does not have adequate resources to implement its programmes. In addition, there is also limited value addition and diversification of products for export markets. Delays are experienced in transmitting data from MS to COMESA Secretariat. There are limited skills and access to affordable internet for citizens to enable the effective use of digital platforms. It is therefore imperative to cement the existing partnership and establish new partnerships that include the private sector, financial institutions, academia and development partners to unlock the blue economy potential.
- 2. Social:** Most coastal, lake and riverine communities in Africa are underprivileged, less educated, have few rights of tenure over resources of their livelihoods and are often excluded from the decision-making process. Youth unemployment remains high across the region and the population is rapidly increasing. The urban and rural disparities are widening, and diseases outbreak such as the COVID-19 pandemic exacerbate the already precarious situation. There is a need to conduct awareness-raising about the career opportunities in the blue economy sector and appropriate training facilities be created to render job seekers employable in the sector.
- 3. Nutritional shortfall:** The demand for fish and fish products globally, driven by factors such as population growth, preference for fish as a diet of choice for health reasons, the growing affluent middle-class and growing demand for aquaculture products will continue to increase. Food exports often occur to the detriment of the nutritional needs of the local population. Some MS are highly dependent on food imports. The nutritional shortfall could increase in the future if measures are not taken, and the region must produce and trade enough fish to meet its nutritional requirements and only allocate the excess to export. The promotion and supporting the development of fish farming at community levels offer an alternate option for ensuring food and nutritional security.
- 4. Environmental:** Multiple stressors (including youthClimate change and climate variability are already impacting Africa's aquatic systems and food production. Climate change considerations are weakly incorporated into the programmes of COMESA. There is an urgent need to build resilience and reduce the vulnerability of the communities to climate change and variability. Ecosystem services must be

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They are drawn from UNECA (2020), African BE Strategy and IGAD BE Strategy 2021.

integrated into the National Action Plan for Adaptation (NAPA) and the Member States are urged to work in collaboration with regional and international partners and specialised institutions for synergies and complementarity. Healthy ecosystems are critically important for living aquatic resources to survive. BE sectors particularly non-renewable should be developed based on acceptable international standards and best practices. Furthermore, countries must adhere to national, regional and international pollution instruments, standards and practices. The pollution of water bodies and coastlines should be mitigated, and appropriate policies and regulations should be developed, implemented and enforced. Member States are urged to ratify and implement the requirements of environmental instruments described in section 1 in addition to the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM, 2004).

5. **Blue governance:** There exist weak and incoherent policies, regulations and institutional arrangements governing the blue economy sector in the region. Investing in blue governance will create a pipeline of investable opportunities to grow the blue economy in a way that benefits national economies and local communities while protecting resources for future growth. Effective governance is an essential condition to promote sustainable management of aquatic resources and the environment and ensure biodiversity and ecosystem resilience, which in turn contribute to building community resilience against various shocks, including climate change<sup>32</sup>. The BE development can accelerate if MS are prepared to make strategic adjustment in designing the legal, regulatory and institutional frameworks for the BE implementation. By so doing, it will enhance their ability to effectively formulate and implement blue growth policies, alongside the policies to protect the environment and improve ecosystem health by applying the concept of Blue Economy. Legal instruments in the blue economy are often not domesticated. An effective policy and regulatory framework are needed to secure investments in traditional and new BE sectors as well as a sound Policy for innovation, transfer of technology and adaptation to encourage private sector investments. It would also entail capacity enhancement and incentivization of those entities and structures that are related to the key sectoral aspects of the blue economy, among others. Policies must be harmonised and consistent to ensure the successful implementation of the blue economy. Member States are encouraged to abide by the requirements of the IMO instruments Implementation Code (III Code) to ensure that IMO legal instruments are domesticated in national law.

## Technical challenges

6. **Limited knowledge of the economic potential of the blue economy:** There is limited data and evidence to foster reforms and transformation. Thus, the potential of blue sectors remains largely unknown. Knowledge of the blue economy and its benefits should be enhanced and the information should trickle down to the level

<sup>32</sup> Blue Economy development framework. Oceans 2030. Financing the blue economy for sustainable development. World Bank Group.

of communities living in coastal and inland areas, deliberately targeting the youth, women and grass-roots implementers, both public and private to have a collective understanding of the concept. However, knowing the potential of sustainable blue sectors and their monetary value is necessary to sway policy and decision-makers on the value of the BE to society. Further, and equally important factor, it stimulates investments. Lack of information has inhibited development initiatives, for example in the knowledge of marine and lake species, seabed and lake mapping, bio-prospecting and biotechnology. Thus, research and innovation should be encouraged to stimulate blue economic growth. Targeted blue economy training and capacity development interventions must be conducted.

**7. Inadequacy of accounting for Blue Economy activities and components:**

Accounting for Blue Economy activities and components is not recorded in a unified manner in the Member States. Data needs to be collected from various sources to provide an overall picture of the contribution of BE to value addition and job creation. A proper national accounting system should be set up to centrally record annual changes in BE sectors and ecological components. With the implementation of the NDC, under the UNFCCC the green and blue accounting will become a cornerstone for the assessment of the climate change actions.

**8. Limited value addition, weak value chain and restricted market access:**

COMESA Member States export many raw materials (fish, minerals, oils), unprocessed and very few processed products. It is time to support the investments and innovation in value-added products to enable optimum profit/gains from the aquatic and mineral products and create needed employment and earnings from foreign currency. There is a need to transfer appropriate technology to the Member States or improve existing technologies to meet international requirements for processing, packaging and marketing. Almost all sectors suffer from limited or lack of value addition, and the status quo deprives countries of needed revenue and jobs. Value chain improvement is required in most of the blue economy sectors to maximise investment returns. International may be restrictive of goods from the region due to sanitary and phytosanitary requirements or product certification requirements.

**9. The absence of an integrated and prospective approach to marine ecosystems and spatio-temporal management tools:**

COMESA Member States have not institutionalized the large marine ecosystem approach (LMEs of the Red Sea and the Somali coastal Current) approach yet, as well as the watershed approach (Nile Basin) for sustainable governance of these ecosystems (using the prescribed modular approaches). These approaches help to assess the ecosystems using a set of ecological indicators. Widely applicable tools aiming to achieve the objectives specified in the framework for the implementation of Blue Economy such as MSP are not institutionalised in the Member States. Integrated ocean management brings together all relevant government bodies, sectors and stakeholders for more effective, inclusive and sustainable development and management. Member States

should consider institutionalising the Large Marine Ecosystem (LME) approach and Watershed Approach (WSA) for the assessment of the changing state of the ecosystem using a suite of indicators that are suitably selected to assess, namely, productivity, fish and fisheries, pollution and ecosystem health, socio-economics and governance. The LME approach and WSA will furthermore enhance the regional management of resources and ecosystems and improve governance.

10. **Maritime and inland water bodies' safety and security:** The security of maritime and inland water bodies of COMESA Member States is of paramount importance to develop and guarantee the sustainability of their blue economic sectors. However, most countries have limited infrastructure and capacities to provide adequate maritime security and coastal protection, both of which are essential for establishing a viable blue economy. Safety is paramount, not only in the ocean but also in other activities on the seas and lakes. Safety of people, cargo, vessels, equipment and infrastructure must be guaranteed. Waters must be patrolled continuously to ensure safety and security for all users and deter illegal activities. Piracy is a serious problem as it poses a real threat not only to the safety of vessels and their crew but also to the economies of affected countries. The African Member States need to collaborate by coordinating their monitoring, control and surveillance (MCS) operations and sharing information on time to ensure freedom of navigation at sea, curb Illegal Unreported Unregulated (IUU) fishing, illicit trafficking, piracy and maritime criminality. The regional approach through joint operations through the RECs and LME commissions could be the most effective way of addressing this challenge. Therefore, Member States should be encouraged to: i) reinforce their surveillance systems ii) share information about suspicious activities such as piracy, IUU fishing and other illicit trafficking. In the context of piracy, there exists a Piracy Information Sharing System under the Djibouti Code of Conduct (DCoC) and to avoid duplication of such a platform, the COMESA may coordinate with DCoC to integrate the COMESA Member States under the system.
11. **Limited resources:** COMESA and its MS need to increase their investment in technology, infrastructure and innovation and implement policies to attract investors to unlock the blue economic potential into meaningful and sustainable development that can improve the livelihood of the people. Equally important is to invest in human and institutional capacities to be able to cope with the challenges identified herein.
12. **Weak Common African Voice in the global arena on blue economy issues:** One of the aspirations under the AU Agenda 2063 is 'Africa that stands strong, united, resilient and influential global player and partner.' This aspiration is relevant in the context of the blue economy. It remains essential to have a single African Voice when engaging and negotiating international issues such as those concerning blue trade and blue investment and fishing agreements. The African Voice will ultimately enhance the benefits accruing to the Member States associated with blue economic activities.

## 1.7 The Vision and Goal of COMESA Blue Economy

### 1.7.1 Vision

This Regional BE Strategy envisions an inclusive and sustainable blue economy that significantly contributes to COMESA's and Africa's transformation and growth, and that is socially inclusive economically sustainable environmentally resilient.

### 1.7.2 Goal

To facilitate and guide the promotion, development and transformation of an inclusive and sustainable blue economy sector in the COMESA region for livelihoods, income, food and nutritional security.

## 1.8 Areas of strategic intervention

Following the objectives outlined above, and consistent with the MTSP (2021-2025)<sup>6</sup>, the COMESA Regional Blue Economy Strategy's four areas of intervention are: a) blue fisheries and aquaculture b) blue tourism c) blue energy and d) blue transport. Strategic objectives of each of the intervention areas are provided in the Table below and these are elaborated in the COMESA BE Implementation Action Plan (section 11).

Areas of Interventions	Strategic objective
1. Blue fisheries and Aquaculture	To catalyse an inclusive sustainable transformation of the blue fisheries and aquaculture.
2. Blue tourism	To catalyse an inclusive sustainable transformation of blue tourism.
3. Blue energy	To improve regional physical infrastructure for the development and application of sustainable blue energy.
4. Blue transport/shipping	To improve regional physical and communications infrastructure for the development and application of sustainable blue transport and shipping.
5. Underwater extractive industries	To attract investment and harness the application of technology and innovation in the sector to unlock its potential.
6. Blue environment	To enhance the blue environment and conservation.
7. Blue research and blue innovation	To promote blue research and blue innovation in the Member States.
8. Blue marine biotechnology and bioprospecting	To promote marine biotechnology and bioprospecting in the Member States

# COMESA BLUE ECONOMY **GOVERNANCE COORDINATION MECHANISMS**



## 2. COMESA BLUE ECONOMY GOVERNANCE COORDINATION MECHANISMS

### 2.1 Objectives

The successful implementation of the COMESA Regional Blue Economy Strategy Implementation Action Plan requires the setting-up of an effective institutional arrangement that can provide coordination, planning and monitoring of the Blue Economy activities initiated by COMESA and its MS. This section is structured in 3 parts, namely, a) relevant principles for the Blue Governance Mechanisms b) institutional arrangements c) Blue governance coordination mechanisms. Given the wide nature of decision-making processes, the Strategy's governance coordination mechanism will have a wide spectrum of players (COMESA, Member States, RECs, AU). The governance coordination mechanism is non-prescriptive as its practical implementation will depend on the unique circumstances at COMESA Secretariat and in the Member States.

### 2.2 Relevant blue governance principles

Four main principles strengthen the implementation of the Blue Economy, namely, the a) circular economy b) good governance c) environmental and social sustainability<sup>33</sup> d) inclusivity and integrative e) ecosystem-based

- a) Circular economy:** The circular economy is based on: (1) the design of manufactured products with added value and maximum use in longer life cycles (2) the creation of versatile products with different uses, in different periods of their useful life, thus guaranteeing the reuse of a single good (3) restitution of solid waste to the industrial sector in an orderly manner, where the cost of secondary raw materials from recycling is competitive in the market and (4) as well as a systemic approach to supply chain management, evaluating the interconnections between the energy produced, the extracted material, and the natural environment (Arruda *et al* 2021). The goal of the circular economy is to transition from today's take-make-waste linear pattern of production and consumption to a circular system in which the societal value of products, materials, and resources is maximized over time (Walzberg *et al*, 2021). Recognizing the fundamental role played by the environment, its functions, and its interactions with the economic system, the circular economy has emerged as an alternative to the neoclassical economic model (Ghisellini *et al*, 2016). It incorporates a regenerative system that minimizes the entry and waste of resources, emissions, and expenditure of energy by slowing down, closing, and straightening material and energy circuits (Sucheck *et al*. 2021). It is therefore a resilient system that is good for business, people and the environment and can contribute to tackling challenges like climate change, biodiversity loss, waste and pollution. Thus, substantive work must be done in all the sectors in Blue Economy to apply the principle of circular economy to all production sectors, and it must also be inter-sectoral to allow wide possibilities

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These principles are contained various blue economy strategies include the African Blue Economy Strategy and the IGAD Blue Economy Strategy.

in terms of recycling.

- b) Good governance:** According to Africa Peer Review Mechanisms, good governance has the following major components: legitimacy, whereby the government has the consent of the governed; accountability that ensures transparency and answerability for actions; respect for law and protection of human rights; and competence, which consists of effective policymaking, policy implementation and service delivery (Africa Governance Report, 2019). As for the United Nations, good governance also includes participation, responsiveness, consensus-oriented, equity and inclusiveness, effectiveness and efficiency. An effective and efficient political and regulatory framework is necessary to guarantee investments in the sustainable blue economy in addition to a solid policy for innovation, technology transfer and adaptation. This should be implemented to strengthen institutional capacities in key national and regional agencies and organizations (COMESA and institutional partners). Institutional capacities in key national and regional agencies and organizations within COMESA need to be strengthened, and this would require a strong collaboration between key entities/structures and a consensus on defining common initiatives. It is imperative to strengthen human capacity and to provide technical support in the face of inequalities between countries in the region. As reflected in these principles, governance is a cross-cutting issue and thus should be at the centre of Blue Economy development. It is indispensable that national and regional blue governance mechanisms be set up within the COMESA region that would integrate all the critical sectors of the blue economy.
- c) Environmental and social sustainability:** According to the UN, environmental and social sustainability is the adaption and integration of precautionary environmental and social principles and considerations into decision-making processes<sup>34</sup>. The principles adopted by the UN which are inextricably linked and relevant to strengthen the blue economy in COMESA are: 1) leave no one behind – mainstream marginalised or disadvantaged groups, youths persons with disabilities. Coastal and waterway communities would thus have better access to the economic sector, which would positively influence their well-being. Socially, many coastal and lacustrine poor communities in the COMESA region lack education and entrepreneurial capacity. They only have few property rights over their livelihood, and they are often excluded from the decision-making process 2) pursue gender equality and empower women - sustainable development cannot occur without the equal and active participation of women and girls at all levels 3) protect the health, safety and security of all - upholding the right to the highest attainable standard of health, 4) protect and restore biodiversity and ecosystems - identify and avoid adverse impacts on biodiversity and habitats. Furthermore, mining, oil, gas and energy production in deep water should be developed following the strict precautionary<sup>35</sup> and compensation<sup>36</sup> principles

<sup>34</sup> United Nations System, October 2021, Chief Executives Board for Coordination Strategy for sustainability management in the United Nations system, 2020-2030 Phase II: Towards leadership in environmental and social sustainability.

<sup>35</sup> See [https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS\\_IDA\(2015\)573876\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS_IDA(2015)573876_EN.pdf)

<sup>36</sup> See [https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS\\_IDA\(2015\)573876\\_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDAN/2015/573876/EPRS_IDA(2015)573876_EN.pdf)

(avoid, reduce, compensate) and following civil society approval, since healthy ecosystems are of vital importance for the survival of living aquatic resources (both inland and oceanic ones). Thus, collective reflection and decision should take place before allowing deepwater resources exploitation 5) prevent pollution and maximise resources efficiency – each MS commitments regarding air, soil, water and marine pollution in conformity with various international agreements. In addition, countries must adhere to national, regional and international pollution control standards and practices, including those relating to chemicals and plastics<sup>37</sup>. 6) take action on climate change - climate change and climate variability are already impacting aquatic systems and overall food production in the Region. Member States must commit to fulfilling their national, regional and international obligations including those under the UNFCCC and strengthen the resilience of blue ecosystems and the reduction of communities' vulnerability in the face of climate change within the framework of the Blue Economy to guarantee food security and livelihood 7) prevent conflicts, reduce disaster risks, and foster resilience - A conflict-sensitive and risk-informed approach to humanitarian and development work and peacebuilding, that empowers and gives voice to local actors, can significantly limit human, environmental, and economic losses in the event of a crisis or disaster. In the long run, it also reduces vulnerabilities and builds resilience 8) be transparent, inclusive and accountable - the 2030 Agenda for Sustainable Development includes a strong commitment of all stakeholders for greater accountability towards each other and towards citizens. Transparency, inclusiveness, and accountability are human rights principles that are closely connected. The COMESA Member States must therefore take into account these environmental and social sustainability principles in the process of developing a Blue Economy.

#### **d) Inclusive and integrative**

For a successful implementation of the blue economy strategy, a principle of inclusivity must apply. The Strategy must be developed and implemented through a participatory, transparent, equitable and accountable process that ensures all relevant interests are heard and addressed. The process should include representatives from relevant government agencies, economic sectors, local communities, research institutions and other stakeholders. The plan should establish cross-sectoral and cross-administrative coordination mechanisms that bring together relevant authorities (COMESA, MS, RECs, AU). It should combine sustainable use by blue economy sectors with effective protection of aquatic ecosystems in a holistic manner.<sup>38</sup>

#### **e) Ecosystem-based**

The plan should be grounded in an ecosystem approach or ecosystem-based management, namely, the management of natural resources focusing on the health, productivity and resilience of a specific ecosystem, group of ecosystems or selected natural assets as the nucleus of management—recognising the full array of interactions

<sup>37</sup> See COMESA Environmental Strategy on Environmental Pollution.  
<sup>38</sup> <https://www.oceanpanel.org/ocean-plans>

within an ecosystem, including with people. It acknowledges that to maintain healthy, resilient and functioning ecosystems, aquatic areas need to be protected from unsustainable use. It also integrates the needs of human communities that rely on marine ecosystems for food security and livelihoods and it underpins nature-based climate solutions.<sup>38</sup>

## 2.3 *Institutional arrangements for blue economy coordination*

### 2.3.1 Blue governance coordination mechanisms at national and regional levels

The coordination mechanisms developed will ensure effective implementation of the Strategy at the national, regional (COMESA and AUC, RECs) and international levels.

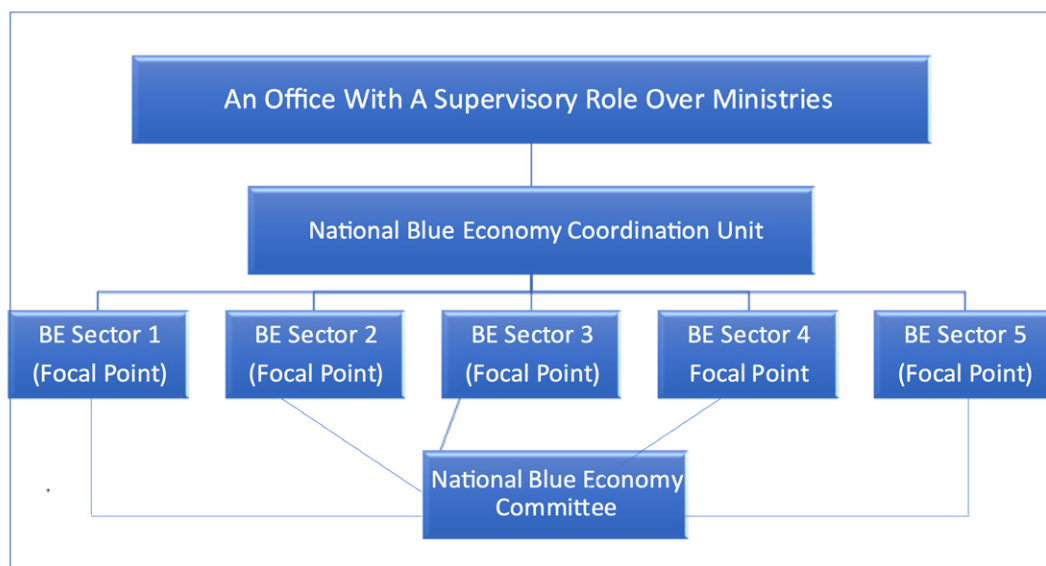
#### 2.3.2 Coordination at national levels

Each Member State is expected to assign or set up a National BE Coordinating Office/Unit to:

- a) Coordinate the Blue Economy activities at the national level,
- b) Act as a focal point with COMESA Secretariat,
- c) Monitor and report the status of the BE implementation.

The establishment of a Coordination Office/Unit is a prerequisite for the implementation of the blue economy. Experience (for example in Mauritius and Seychelles) shows that a coordination structure attached to an office with a supervisory role over ministries, e.g. under the National Planning Commission, Office of the Prime Minister or Presidency, proves to be more effective and above all generates less institutional conflicts than coordination which would be entrusted to a sectoral department (e.g., transport, fisheries, oil and gas, mining and energy, national defence). This national interdepartmental structure will also be able to better perceive the richness of the model of an inclusiveness and integrative, multidisciplinary, transversal and holistic blue economy. Therefore, place the National BE Coordinating Office/Unit under the umbrella of the high-level office (**Figure 1**).

**Figure 1. Coordination Mechanism at National Level**



Close and regular collaboration between the Unit and national blue economy ministries/sectors as well as with relevant BE institutions will be required. The implementation of this plan calls for close collaboration and participation between these actors. It is recommended that a National Blue Economy Coordination Committee be created to, among others:

- a) Develop National BE Strategy and align it to COMESA Regional BE Strategy,
- b) Domesticated the plan and steer its implementation,
- c) Make recommendations to the government on legal and regulatory reforms and resources needed to promote blue economic growth.

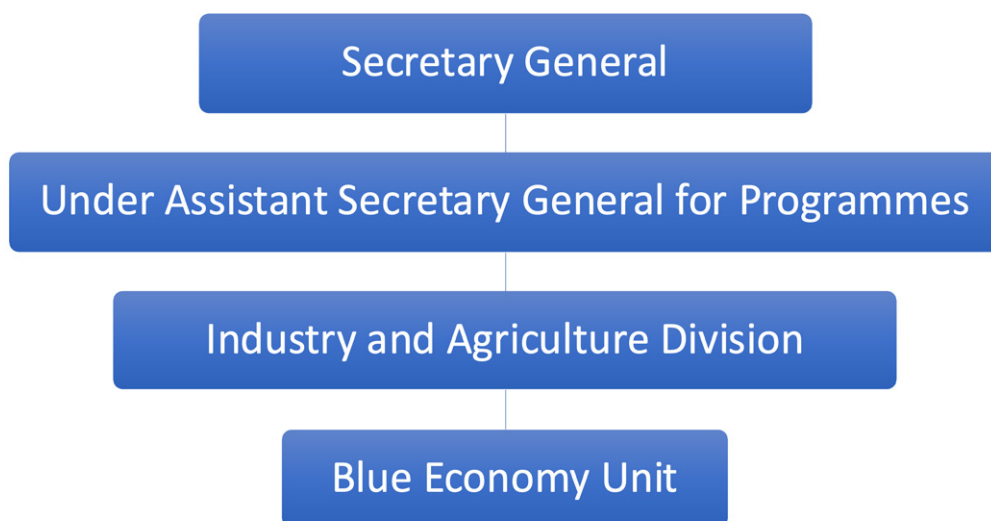
The National Blue Economy Coordinating Committee is composed of focal persons from, each blue economy sector ministry/department, and they constitute National BE Coordinating Committee. The focal persons will report to the National Coordinating Office/Unit. The Committee may establish tasks teams or/and co-opt additional members of experts, from time to time, as the need arises.

The many COMESA Member States have already developed their national strategies or are completing their preparation (Seychelles, Comoros, Madagascar, Mauritius). There is a need to align the national strategies to COMESA Regional BE Strategy, and MS are urged to do so. For MS that are about to commence with the formulation of their national strategies, they can align them to COMESA Regional BE Strategy and Implementation Action Plan, as well as to the African Union BE Strategy and its Implementation Action Plan.

### 2.3.3 Coordination at the COMESA level

The COMESA Secretariat will provide technical assistance and support the development and strengthening of the capacities of Member States to implement the Strategy. It will also provide an interface between Member States and development partners particularly in resources mobilization and investments. The coordination of actions for the implementation of the COMESA Regional BE Strategy requires the establishment of a Coordination Unit/Office within the COMESA Secretariat in Lusaka. The creation of a Coordination Unit is critically important to the successful implementation of the Regional BE Strategy. At the Secretariat, the Unit will be under the Industry and Agriculture Division which is accountable to Assistant Secretary General for Programmes (Figure 2)<sup>39</sup>. This special structure will have to develop its coordination initiatives.

**Figure 2. Coordination Mechanism at COMESA Secretariat**



The coordination of actions at the institutional level can only be fully successful if the Unit is integrated into the programmes of COMESA and fully resourced (human, financially, among others). Further, there is an absolute need for strong close internal collaboration with the other structures dealing with the BE at COMESA Secretariat and in COMESA institutions. The Unit should be headed by experts with high-level of skills and a global and non-sectarian vision of the blue economy. Specific functions of the Unit include:

- a) Liaison with MS (national coordination offices/units),
- b) Coordinate technical assistance and support resource mobilisation to MS to implement the Strategy,
- c) Facilitate, coordinate, monitor and report the status of implementation of the Strategy,
- d) Managing various strategic partnerships, mechanisms of cooperation, collaboration and synergy,



- e) Liaison and work closely with institutions in the COMESA region that are all already engaged in the field of the blue economy, to better coordinate their respective actions,
- f) Work closely and liaise with the AUC, AUDA-NEPAD, RECs, Regional Specialised Commissions or Organisations and Developing Partners,
- g) Map out partners with interests in the BE in the COMESA region and explore the possibilities for cooperation, collaboration, synergy and financing of the BE Implementation Plan
- h) Facilitating multidirectional actions at all levels (international, continental, regional, and national).
- i) Encourage each Member State to establish a national Blue Economy Coordination Committee with which it will be easier and more effective to work together to advance the blue economy in the country.

#### 2.3.4 Coordination with the RECs and Regional Specialised Commissions

All COMESA MS have ascribed to the African BE Strategy and its Action Plan that was adopted in 2020. It creates an enabling environment for the COMESA Regional BE Strategy to be effectively implemented. Few RECs and Regional specialized organizations such as IGAD and IOC, already have adopted their regional BE strategies while EAC, ECCAS and SADC are among the most advanced in this preparation. As some members of COMESA are also members of these organisations, there is a need for alignment of these strategies to benefit from complementarity and synergies and to avoid ambiguities in implementation at national levels.

The specialized regional Commissions or Organizations (for example, Lake Victoria Fisheries Organisation) often have a sectoral approach (for example, regional maritime transport organizations, port management organizations, shipping companies, shippers' associations, regional fisheries commissions, member countries of a river basin, etc.). All these sectoral entities are already, in most cases and for a long time, equipped with sectoral maritime (or river) policies in their field of competence. It is, therefore, necessary to work with them to align or reconcile their policies with the COMESA Regional BE Strategy. The Coordination Unit will be able to rely on all these specialized organizations to capitalize and strengthen their missions while inviting them to get involved in a new transdisciplinary and holistic dynamic of the blue economy.

#### 2.3.5 Coordination at the international level

COMESA has several developmental partners and many specialized institutions and international organizations working in the field of the blue economy or its related sectors (Annex). Co-operating Partners provide financial and technical support for the achievement of the strategic objectives, support aid effectiveness by promoting harmonization, coherence, rationalization, alignment and ownership of development partner assistance; and require mutual accountability concerning the commitment, provision, utilization and reporting on all adjustment support and

regional integration resources (MTSP 2021-2025)<sup>6</sup>. Therefore, the Unit needs to collaborate and partner with these institutions for synergies and resources mobilization. In this context, the Coordination Unit could approach each international organization with interest in the blue economy in Africa, understand its programme of action, and explore with it the possibilities for cooperation, collaboration, synergy, and possibly benefit from its financing to supplement and extend the action on the ground. By favouring this path of technical and institutional cooperation, the COMESA will be able to significantly boost blue economic activities in the Member States.

## 2.4 *Requisite instruments for the blue economy*

Member States should be encouraged to ratify and or implement the most relevant African and global instruments in the field of the blue economy including the African Union's Agenda 2063; the 2014 Africa's Integrated Maritime Strategy (AIMS 2050); the 2014 Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa (PFRS); the 2015 UN Agenda 2030 (Sustainable Development Goals, SDGs); and the 2016 African Charter on Maritime Security and Safety and Development in Africa (Lomé Charter); UNCLOS, IMO Conventions, FAO Agreement on Port State Measures and the UNFCCC. A sustainable blue economy requires several legislative and regulatory tools in various areas to be in place, and these include:<sup>40</sup>

- a) **Economic competitiveness:** The Coordination Unit will have to ensure that the Member States, establish legal frameworks to enhance the overall and sectoral competitiveness of the different activities of the Blue Economy at the national and regional levels (SDG 9, 14 and 17). For example, the adoption of laws and regulations or the signing of international treaties and agreements enabling the development of modern maritime and river transport: the case of the Hamburg Rules of 1978, or the case of the Rotterdam Rules of 2008; or the case of PPPs in the field of port and multimodal infrastructures; development of fisheries and aquaculture activities; promotion of national offshore mining, oil and gas industries (Mining, oil and gas codes with an off-shore component; joint venture schemes involving local economic operators).
- b) **Social and human development:** There is no sustainable blue economy without an improvement in the social condition of the populations involved in this economy, and therefore without the mobilization of adequate means to fight poverty and inequality, following the SDGs (notably 1, 2, 3, 8 and 10). The Coordination Unit will thus have to verify that the Member States adopt legal and regulatory frameworks aimed at improving wage conditions and social protection of seafarers, offshore workers, fishermen and fish farmers: the case of the 2006 ILO Convention on Maritime Labour, health insurance schemes; or the case of collective agreements adopted by dockworkers for port activities; or the introduction and application of regulations concerning vocational training (the case of the ILO STCW Convention) or concerning the work of young people and women (SDG 4, 5).

40

These tools are largely drawn from the Blue Governance Framework for the African Blue Economy Strategy.

- c) **Environmental protection and marine and aquatic ecosystems:** This issue remains at the core of the Sustainable Development Goals (SDG 6, 7, 12, 13, 14 and 15), and must therefore remain at the centre of the application of the COMESA Regional BE Strategy by the Member States. The Coordination Unit should therefore verify with the Member States that the environmental concern is supported by appropriate legal and regulatory frameworks. The Coordination Unit will strongly encourage the generalized application of UNCLOS, which provides, in its Part XII, a global framework for the protection of the marine environment to be enforced by most of the States of the world. The Coordination Unit will also encourage the implementation of the UNEP-led regional seas protection programme in Africa: the Nairobi Convention applicable to Indian Ocean Coastal States, and the Barcelona Convention applicable to the Mediterranean Coastal States.

The same shall apply to all international regulations relating to the prevention and control of pollution of all kinds, whether arising from hydrocarbons (the case of the IMO Convention MARPOL 1973/1978, or the case of the CLC and FIPOL Conventions applicable in the event of accidents resulting in pollution); or whether they arise from chemicals (the case of the Basel Convention and the HNS Convention) or radioactive products or plastics.

Similarly, the Coordination Unit will have to strongly promote the implementation, in the regions and the Member States, of FAO normative initiatives in favour of rational and sustainable management of fisheries resources per UNCLOS; or its international and national plans of action for combating IUU fishing. The same should apply to climate change provisions (Paris Agreement 2015 + SDG 13).

- d) **Maritime safety and security:** For the Blue economy as for all other areas of economic life, no development can be “sustainable” in a context of insecurity. The Coordination Unit must, therefore, on the one hand, encourage the application in the Member States of all international, continental and regional regulations relating to the prevention and fight against maritime and river accidents (IMO Conventions: Safety of Life at Sea Convention, 1974; Convention on the International Regulations for Preventing Collisions at Seas (COLREG 1972) on Collision Prevention; SALVAGE 1989 on Maritime Assistance and Rescue; and the enforcement of international regulations and regional agreements to combat piracy, armed robbery and other criminal and illicit acts at sea (2016 Lomé Charter and its different Annexes; International Ship and Port Facility Security Code (ISPS) Concept, Djibouti/Jeddah Code of Conduct on Piracy and Maritime Crime in the Gulf of Aden and the Indian Ocean.

Clearly said, the success of the COMESA Regional BE Strategy can only be real and profound if the current Coordination Unit works effectively for the implementation of this new regional Strategy, as well as for the enforcement of all the legal and regulatory instruments contributing to the establishment of a sustainable Blue economy in COMESA region.

Taking everything into account, Member States are encouraged to ratify and or implement the most relevant African and global instruments in the field of the Blue Economy as mentioned above as well as those described in sections 1.2-1.4.

# COMESA BLUE ECONOMY **IMPLEMENTATION ACTION PLAN**



### 3. COMESA BLUE ECONOMY IMPLEMENTATION ACTION PLAN

#### 3.1 *Intervention areas*

The COMESA Blue Economy Implementation Plan is based on eight areas of interventions listed below<sup>41</sup>.

1. Blue fisheries and aquaculture
2. Blue tourism
3. Blue energy
4. Blue transport
5. Underwater extractive industries
6. Blue research and blue innovation
7. Blue environment
8. Blue biotechnology and bioprospecting

Developed on a ten-year base<sup>42</sup>, the COMESA BE Implementation Action Plan integrally captures the strategic objective, targets, activities, intended results, indicators and means of verification for each area (Tables 3.1 – 3.8). The Plan will therefore contribute to the achievement of the COMESA Regional BE Strategy and hence to the COMESA Treaty, the African Union's Agenda 2063 (*The Africa We Want*) and the UN Agenda 2030 (Sustainable Development Goals, SDGs).

#### 3.2 *Financing of the Action Plan*

Borrowing from the IGAD BE strategy, financing of the COMESA Regional Blue Economy Implementation Plan must be envisioned from the early stage. There are many financial solutions available including, equity, soft loans<sup>43</sup>, bond issuance<sup>44</sup>, exchange or cancellation of debt for blue investments<sup>45</sup>, international aid in the form of grants<sup>46</sup> for the implementation of national and regional initiatives. Each financial instrument must be carefully studied to ensure that it best meets the needs. States must stimulate a dynamic capable of attracting investors by giving, in particular, clear signals of long-term institutional investment<sup>47</sup>.

#### 3.3 *Monitoring framework for progress in SAP implementation 2022-2032*

Annex 1 provides a template for documenting the level of implementation of each activity, as well as the financial resources mobilised and number of partnerships established.

41 The first five are deduced from the MTSP (2021-2025)<sup>6</sup> while the 6<sup>th</sup> and 7<sup>th</sup> emerging sectors were recommended at the Regional BE Validation Workshop held on 26-27 April 2022 in Lusaka and the 8<sup>th</sup> is introduced by Mauritius.

42 The ten-year duration was recommended by the BE Validation Workshop held on 26-27 April 2022, Lusaka.

43 For the least developed countries. For example, Bangladesh has contracted such a loan from the World Bank for US \$ 240 million and is in the process of concluding a second loan from the same institution for US \$ 500 million.

44 Seychelles has issued securities valued at US \$ 15 million.

45 Also implemented by the Seychelles.

46 Particularly within the framework of the cooperation of countries and COMESA with the EU and the use of the European Development Fund.

47 COMESA Member States must therefore institutionalize MSP so that specific spaces are allocated to economic activities and the preservation of blue ecosystems. It constitutes a solid institutional base capable of guaranteeing long-term private and public investments.

### **3.4 *Blue fisheries and aquaculture***

Strategic objective: To catalyse an inclusive sustainable transformation of the blue fisheries and aquaculture.

Result	Indicator	Base-line	Target	Activity
Enhanced fisheries management and governance	The annual value of fish production (absolute number)		Value increased annually by at least 5% of the baseline	<input type="checkbox"/> Reform the fisheries sectors in line with (AU) PFRS <input type="checkbox"/> Implement right-based management <input type="checkbox"/> Use the best available scientific information and data to inform management
	Value of private sector investment in fisheries and processing		Value increased annually by at least 5% of the baseline	Attract the private sector (incentives, PPP, long-term tenure)
	Value of intra-COMESA trade (constant US\$) in fish and fish products		Value increased at least by 5% of the baseline	Implement African Continental Free Trade Area (AfCFTA)
	Employment in industries related to fisheries value chains		Employment increased by 5% annually from the baseline	<input type="checkbox"/> Manage fisheries sustainably <input type="checkbox"/> Adopt ecosystem-based management
	Value addition in the fishery sector in the real term		Value increases by 10% annually from the baseline	Member States are supported in value addition and innovation
Enhanced fisheries management and governance	Progress by MS in the degree of application of frameworks that recognizes and protects access rights for SSF		By 2027, the fisheries are reformed considering right-based management frameworks	Member State are supported to reform of the fisheries sector to address open access fishery, taking into the interests of small-scale fisheries
	Number of local administration and social organisations empowered		By 2024, 50% of Member States have inclusive fisheries management	Member States are supported to empower local administrations and social organisations
	Number of agencies that are capacitated		By 2025, 10% capacity interventions programmes are implemented	Member States are supported to improve the capacities of the regional and national agencies in implementing appropriate fisheries management policies/strategies

Result	Indicator	Base - line	Target	Activity
	<input type="checkbox"/> Number of Member States compiling a blue economy basic set of statistics <input type="checkbox"/> Number of MS compiling ocean fisheries satellite accounts		By 2026, 50% of MS have harmonised fisheries statistical systems  By 2027, 50% of shared stocks are managed sustainably in line with agreed plans	Member States are supported improve fisheries statistics and economic data for informed policy-making management, monitoring and evaluation  Member States are supported to develop joint management plans for all shared fish stocks in the region to avoid unsustainable exploitation of these resources;
	Number of joint management plans developed		By 2026, traceability systems harmonised to 100%	Member States are supported to develop harmonized /standard and traceability certification system
	A system developed and adopted		By 2027, 50% of aquatic resources are sustainably managed	Member States are supported to promote conservation and sustainable management of aquatic resources by better informing and involving fishermen in decision-making processes
Value addition and trade supported	Number of MS involving fishermen in the decision-making process		By 2027, value addition conducted and the market accessible	Member States are supported to promote an inclusive blue value chain with a strong focus on quality improvement and achieving a responsible and equitable fish trade and marketing
	Targeted interventions for value addition initiated			
	The proportion of the budgetary increase in investments and industrialisation		By 2027, at least a 10% increase in investment in the development of the sector	<input type="checkbox"/> Member States are supported by investment and industrialization in the sector <input type="checkbox"/> MS prioritise the sector
	Number of MS that have removed NTBs		By 2026, 40% NTBs are eliminated.	Member States are supported to improve value-added product trade among MS by removing non-tariff barriers (NTBs)

Result	Indicator	Base-line	Target	Activity
	Number of MS that improved sanitary conditions and maintain standards		By 2025, at least 25% of sanitary conditions are improved and standards maintained	Member States are supported to improve sanitary conditions and maintain standards
	Number of co-management in place		By 2027, at least 30% of co-management regimes are operational	Member States are supported to promote co-management by promoting fishers' associations, community-based management organizations, cooperatives and social enterprises
	Number of fishing fleets established		By 2027, all fleets (100%) are acquired to operate within the biological limits of the resources, and the seafood hub established	<input type="checkbox"/> Member States are supported to establish fishing fleets to expand on the current processes and come up with a seafood hub <input type="checkbox"/> Member States are supported to manage fleet overcapacity
	Number of MS receiving capacity building interventions for women and youth in business incubation and business management		By 2026, the number of women and youth with established viable businesses increased by 10% from the baseline	Member States are supported to establish the Women and Youth in Fisheries business platform and support training in business incubation and business management
	Number of beneficiary fishers of finance and insurance		By 2025, the number of fisherfolks with access to finance and insurance increased by 15%	Member States are supported to facilitate access to finance and insurance.
IUU fishing combated	Number of MoUs on a joint patrol in place		By 2027, joint patrols conducted annually	Member States are supported to improve control through improved cooperation and collaboration (COMESA will work with DMRO, IOC, RFBs and other NGOs to support the Joint Fisheries Patrol program)
	Number of personnel capacitated		By 2027, personnel capacitated increased by 30% from baseline	Member States are supported to improve the monitoring capacity and traceability of fisheries products



Result	Indicator	Base-line	Target	Activity
	Number of successful prosecution		<input type="checkbox"/> By 2026, MS trained and specialised prosecutors in fish crime <input type="checkbox"/> The number of successful prosecutions increases by 50%	Member States are supported to improve the prosecution systems – legal regimes
	Number of countries making progress in adopting/ratifying legal, policy instruments		By 2024, all Member States adopt or enact policies to combat IUU fishing	Member States are supported to comply with national legislation and international and regional agreements
	Percentage of injuries or deaths reduced		By 2027, safety and security improved; the number of deaths and injuries reduced to a bare minimal	Member States are supported to ensure security onboard fishing embarkations and overall create safe working conditions and security
Small-scale fisheries supported	Percentage of post-harvest loss reduced		By 2025, efficiency enhance in the entire value chain	Member States are supported in reducing post-harvest losses – enhancing value chain and value addition
	Number of NTB removed; the number of SPS improved		By 2025, NTB is eliminated; and SPS improved	Member States are supported in improving value-added product trade among MS by removing NTB; improving SPS
	Number of co-managements in place		By 2027, the co-management regime mainstreamed	Member States are supported to promote co-management by promoting fishers' associations, community-based management organizations, cooperatives and social enterprises

Result	Indicator	Base-line	Target	Activity
	SSF policy adopted		By 2027, 30% of SSF have rights secured	Member States are supported to develop of small-scale fisheries whilst minimising the negative impacts on the environment
	Number of MS supported to implement national adaptation measures and disaster risk reduction strategies		By 2027, measures are in place in all MS for resilience and adaptive capacity	Member States are supported to strengthen resilience and reduce vulnerability to climate change
	Number of MS supported to comply with SPS		By 2027 at least 75% of Member States are in compliance	Develop and strengthen capacity regarding SPS
	Number of PPP arrangements in place		By 2027, PPP in aquaculture development increased by 20% from the baseline	Member States are supported by attracting and promoting private-public-partnership (PPP) investment for aquaculture to realise the full potential of fish farming
	The proportion of endemic species farmed		By 2027, the production of endemic species contribute to food security and profit and increased by 20% from the baseline.	Member States are supported to engage in the production of endemic species
	Number of hydroponic aquaculture systems per country		By 2026, at least 20 pilot projects of hydroponic aquaculture implemented	Member States are supported to develop of hydroponic aquaculture systems

Result	Indicator	Base - line	Target	Activity
	Percentage of capacitated fishers		<input type="checkbox"/> By 2025, targeted interventions in place to address capacity <input type="checkbox"/> Capacitated fisherfolks increased by 25% from the baseline	Member States are supported to accelerate the development of aquaculture fish processing capacities
	Number of MS with programmes promoting the effective participation of women and youth in aquaculture sectoral development		By 2027, equity and fairness are attained in the sector	Member State are supported empower women and youth in aquaculture

### 3.5 Blue Tourism

Strategic objective: To catalyse an inclusive sustainable transformation of blue tourism.

Result	Indicator	Baseline	Target	Activity
Increased contribution of tourism to the economic growth of COMESA region	Number of tourists in the region	36 million (2019 estimate)	Increase by 30%	Support Member States to promote a conducive regulatory and policy environment for the tourism industry including tax policy, visa regime, business incubation, and decent jobs for youth
	Number of Member States supported		At least coalition established by 2025	Support Member States to establish a coalition in the tourism industry, that that provides regional cooperation amongst players in the tourism sector and including the creation of Transboundary Tourism Circuits to improve product attractiveness.
			By 2026 policies in place	Provide support to the Member States to develop policies and regulations for managing the sector including conserving biodiversity for tourism development, promoting policies, resources and awareness for resource management, and conservation.
Share of eco-tourism enhanced	Share of tourism to GDP in real-time	3.7% (2019)	Increased by 10%	Support Member States to promote tourism at the regional level

### 3.6 Blue Energy

Strategic Objective: To improve regional physical infrastructure for the development and application of sustainable blue energy.

Result	Indicator	Base-line	Target	Activity
Improved environment for renewable energy investments	Number of MS and private investors provided with Technical Assistance (Tas) in domesticating energy policy and regulatory instruments		At least 5 countries and 10 private investors were provided with Technical Assistance	Member States are assisted in the promotion of local industrialization of renewable energy and associated transmission and distribution equipment.
	Number of Energy policies, Strategies and Regulatory instruments revised or developed		At least 5 instruments were reviewed or developed	<input type="checkbox"/> Member States are supported in the development of regulations, policies and strategies that promote renewable energy. <input type="checkbox"/> Member States are supported in the development, adoption and harmonisation of standards to encourage quality products in the region.



Result	Indicator	Base-line	Target	Activity
Increased production and access to clean energy	Number megawatts of clean added to the national grid		At least 100%	Support is provided to the Member States in the promotion of large-scale renewable energy to increase the share of renewable components in the power generation mix.
	Share of renewable energy (wind, solar, hydro, bio and geothermal) in total energy production		At least 15%	
	Access to electricity (% of the population)		At least 65%	Member States are supported in the promotion of Off-grid electrification solutions to increase energy access in the region.
Improved capacity for implementation of energy projects particularly renewable energy	Commencement of regional electricity trading in the EAPP region		Commencement of trading by 2025	
	Number of capacity building interventions implemented		12	Member States are supported in building capacity on renewable energy technologies, policies, regulations, finance and business models
	Number of people whose capacity is built-in renewable energy		100	

### 3.7 Blue Transport, ports and shipping

Strategic Objective: To improve regional physical and communications infrastructure for the development and application of sustainable blue transport and shipping.

Result	Indicator	Base-line	Target	Activity
Standard management and operations of water transport improved	Number of resources for the feasibility studies on operations and management of water resources		USD 20 M	<input type="checkbox"/> Conduct a feasibility study on the establishment of a shipping line for the Indian Ocean islands <input type="checkbox"/> Facilitate the signing of agreements and registration of the shipping line.
	Feasibility study for VIMED Project		Feasibility study completed	Mobilise resources for implementation
	Feasibility study for Lake Tanganyika RO-RO Project		Feasibility study completed	<input type="checkbox"/> Conduct a feasibility study on the establishment of a navigational route between the Mediterranean Sea and Lake Victoria <input type="checkbox"/> Mobilize resources for feasibility studies and project development <input type="checkbox"/> Conduct a feasibility study on the establishment of Ro-Ro facilities at Lake Tanganyika <input type="checkbox"/> Facilitate the development of Inland Water Transport Standards and Regulations; and Coordinate capacity building.
	A feasibility study was undertaken on the establishment of a shipping line for the Island Member States		The approved feasibility study report	Mobilise resources for implementation
	Standards and regulations on management and operations of inland water transport development		Approved standards and regulations	Support Member States to implement standards and regulations

Result	Indicator	Base-line	Target	Activity
Improved regional maritime and inland water communication	Coordinate capacity development		By 2027, 15% capacity developed from the baseline	Provide support to the Member States to develop the capacity
	Number of Member States supported improving communication		At least 25% improvement from baseline	Provide support to the Member States to develop the capacity

### 3.8 Underwater extractive industries

Strategic objectives: To attract investment and harness the application of technology and innovation in the sector to unlock its potential.

Result	Indicator	Base-line	Target	Activity
Improved business environment leading to increase in direct investment	Foreign Direct Investment (FDI) in underwater mining and deep-sea extractive industries		20 % increase in FDI.	Support Member States to mobilise FDI
Strengthened institutional and human resource capacity for investment promotion and coordination of joint investment promotion strategies	Requisite capacity is strengthened for the sectoral development		5 Member States relevant institutions that are equipped with trained staff on specific skills for underwater and deep-sea extractive industries	Support Member States to develop the capacity
	Capacity strengthened		3 projects on underwater and deep-sea extractive industries initiated/ jointly promoted by two or more Member States	Support Member States to develop capacity for investment promotion and coordination of joint investment promotion strategies in underwater and deep-sea extractive industries

Result	Indicator	Base-line	Target	Activity
	Harmonised strategy in place		4 Member States coming up with a harmonized strategy for investment promotion of under-water and deep-sea extractive industries	Member States are supported to develop their harmonised strategies
Capacity of Member States to compile FDI Statistics strengthened	Capacity developed		6 Member States compiling FDI statistics according to international recommendations	Support Member States in compiling FDI statistics for the under-water and deep-sea extraction industries
The capacity of Member States to undertake under-water extractive industries developed	The number of Member States benefited from capacity development		At least 15 Member States supported by 2030	Develop and deliver capacity interventions
Promoted inclusive and sustainable industrial development	Intra-regional manufactured exports relative to total manufactured imports to the region from under-water and deep-sea extractive industries		Manufacturing value added as % of GDP from under-water and deep-sea extractive industries increased at least by 10%	Support Member States to develop the sector to its full potential
		-	Increased by at least 10%	Facilitate and promote trade



Result	Indicator	Base-line	Target	Activity
Improved environment for private sector investment in manufacturing	Enabling legal and policy environment in place for private sector investment		At least a 20% increase in the involvement of the private sector in underwater and deep-sea extractive industries	Support Member States to formulate policies and legal frameworks
Capacity for innovation and effective application of science and technology in industrialisation strengthened and developed	Science, technology and innovation capacity to meet the industrialization needs of the region are re-enforced		The feasibility study was conducted to evaluate the science, technology and innovation needs for underwater and deep-sea extractive industries	Members are supported to establish Regional Centres of Excellence in technology transfer and diffusion for the development of underwater and deep-sea extractive industries; Establish an R&D information database and information sharing
	Regional platforms to facilitate networking among research institutions, governments, academia and industry to encourage and promote collaborative national and regional R&D are set up		At least 3 more regional platforms established	Support Member States to identify best practices and success stories from the region and the rest of the world, to build and/or strengthen institutions and human capacities in the area of innovation and effective application of science and technology in industrialisation related to underwater and deep-sea extractive industries

## 3.9 Blue environment

**Strategic objective: To enhance the blue environment and conservation.**

Result	Indicator	Base-line	Target	Activity
1. <b>Improved ecological ecosystem and environmental services</b>	Percentage of degraded ecosystems that are under restoration and sustainable management		Value increase at least by 20% from baseline	Identify and prioritise habitats (habitats include vulnerable coastal habitats, mangroves, and salt pans) for rehabilitation and develop a regional habitat restoration programme.
	Coverage of protected areas in relation to marine area, number and area of MPAs, EBSAs, fish refugia		Area increased by 20% from baseline	Expand coverage of areas under area-based conservation approaches such as MPAs and EBSAs including transboundary areas, and link into networks as necessary.
	Number of communities involved		By 2026 at least 6 countries have communities involved	Promote community-based habitat rehabilitation and conservation programmes (NAPs).
	Percentage of improved services		By 2026 ecosystem services integrated	Integrate ecosystem services into National Action Plan for Adaptation (NAPA)
2. <b>Minimised environmental pollution</b>	The proportion of Member States adopting relevant national and international instruments on pollution		At least 30% identified by 2028	Identify major land-based sources and activities that affect marine and coastal ecosystems in the COMESA region.
	Number of MS that delivered the services		At least 40% upgraded and 30 constructed	Promote upgrade of wastewater treatment facilities and construction of new facilities (focus on innovative and low-cost technology), with the support of new investments, policies and legislation.

Result	Indicator	Base - line	Target	Activity
	Number of MS involved		A plan in place by 2025	Develop and implement a regional COMESA oil contingency plan (oil-spill prevention and response strategy), including an agreement to mitigate against, prepare for and respond to oil spills, including sharing oil-spill response infrastructure.
3. <b>The innovative financial mechanism developed</b>	Number of MS benefiting from the financial mechanism		The financial mechanism in place by 2026	Develop a regional sustainable financial mechanism.
4. <b>Promoted integration of blue carbon services into climate change policies</b>	Number of MS with integrated blue carbon services into climate change policies		At least 50% of MS fully integrated carbon services into climate change policies	Include climate change mitigation and adaptation in the national development plans or strategies
	Number of MS supported		At least 90% commitment annually implemented	Strengthen implementation of commitments under the UNFCCC/ Paris Agreement and other relevant frameworks
			By 2025 mitigation and adaptation mainstreamed	Mainstream climate change mitigation and adaptation into sector policies and sustainable development planning and decision-making.
				Implement Nationally Determined Contributions (NDCs), National Communications, National Inventory Report.

Result	Indicator	Base - line	Target	Activity
5. <b>Promoted carbon trading with- in the blue economy</b>	Number of reports produced		By 2025 study conducted	Investigating the feasibility of including blue carbon (BC) resources (e.g., seagrass meadows and mangrove forests) in Nationally Determined Contributions
				Exploring the likelihood of trading BC credits
				Assess the viability of trading in Blue Bond for which the proceeds are used for strengthening the resilience of the ecosystems (e.g., for expanding the current marine protected areas (MPAs) and the development of the blue economy
	Number of ships using renewable energy while docking		25% increased from baseline	Use renewable energy to decarbonising the blue economy sector to contribute to the reduction of GHG emissions

Strategic objective:		To	promote	blue	research	and	blue	innovation	in	Member	States.
Result	objective:	Indicator		Baseline	Target		Activity				
1. Improved research		Number of the partnership established			The value increased annually at least by 15%		Partner with other research institutions in Africa and abroad to deliver excellence in research and innovation and in entrepreneurship on blue economy				
2. Supported innovation		Number of institutions supported			At least 50% of MS supported		Strengthen and support the capacities of institutions of high learning to drive a culture of research and innovation, and partner with the private sector and regional and international collaborators – on the blue economy				
3. Integrated research and innovation into strategies, plans and programmes		Number of policies, strategies, plans and programmes			Regulatory frameworks in place by 2027		Develop policies, strategies, plans and programmes to guide the promotion of research and innovation in the blue economy				
4. Mobilized resources for research and innovation		Number of MS supported with resources mobilisation			At least a 20% increase from baseline		Increase budgetary allocation (nationally and externally secured) to training, research and innovation in the blue economy sector				
5. Enhanced technical capability and the institutional ability for research and innovation		MS supported			A 'think tank' in place by 2024		Establish a COMESA 'think tank' composed of the blue economy experts from blue industries, academia and government scientists and advisors to advise on the blue economy sector.				
					Universities capacitated annually		Introduce targeted blue economy learning modules at institutions of high learning and strengthen the research department with requisite facilities and a conducive environment for researchers to conduct research and innovation				

3.10 Marine biotechnology and bioprospecting

Strategic objective: To promote marine biotechnology and bioprospecting in the Member States

Result	Indicator	Baseline	Target	Activity
1. Developed legislative frameworks for marine biotechnology and bioprospecting	Number of MS assisted		Policy in place by 2025	Develop a regional and national policies on marine biotechnology and bioprospecting
2. Conducted pilot projects on marine biotechnology and bioprospecting	Number of MS assisted with resources mobilisation		Resources mobilised annually	Mobilized resources for biotechnology and bioprospecting to strengthen the capacity of research institutions
	Number of pilot projects		At least 5 pilot projects conducted by 2030	Pilot projects



# ANNEX

ANNEX I: IMPLEMENTATION ACTION PLAN MONITORING FRAMEWORK

Monitoring framework for progress in SAP implementation 2023-2033

Shows the level of implementation of each activity, as well as the financial resources mobilised and number of partnerships established.

Activity		Responsible entity	Indicator	Expected completion the SAP 2023	timeframe (as specified in the SAP)	Level of implementation (%) (insert more columns as needed)			
						2024	Year ...	2033	
1	List activity								
2									
3									
Add more rows as needed									
Financial resources mobilized by source						\$	\$	\$	\$
Number of partnerships established									

## ANNEX II SOME OF THE ORGANISATIONS AND ENTITIES WITH INTEREST IN THE BLUE ECONOMY

### **Africa Development Bank**

Division of Maritime Affairs and the Law of the Sea (DOALOS), which is the central body responsible for coordinating the global activity of the United Nations and the Secretary-General of the Organization in the field of Maritime Affairs and the Law of the Sea;

**European Union (EU)** accompanies and finances numerous programmes on fisheries and aquaculture (for example the fight against IUU Fisheries), renewable energy, maritime transport and ports, and maritime safety and security. For example, the Coordination Office could work here with the EU (but also with many other multilateral partners) to launch and promote the idea of creating a "Blue Fund" for the development of the Blue Economy in Africa;

**Food and Agriculture Organisation of the United Nations (FAO)**, whose multiple and diverse interventions and programmes aim to develop, alongside agriculture and livestock, a prosperous fisheries and aquaculture sector capable of ensuring the food security of the planet and developing countries, but with a strong focus on protecting ecosystems and the environment in general;

**High-Level Panel for Sustainable Ocean Economy** that *developed a transformative set of recommendations and actions to advance a sustainable ocean economy, prioritizing a healthy ocean alongside sustainable production to benefit people everywhere.*

**United Nations Environment Programme (UNEP)** which oversees all matters relating to the environment and marine, coastal and aquatic ecosystems and the various programmes on the regional seas;

**International Labour Organization (ILO)** whose mission is to provide for all regulations in the field of Labour Law and Social Protection and thus the right to work and social protection of seafarers and seafarers;

**International Maritime Organization (IMO)** is the world normative authority and the master of all the action and the technical assistance of the United Nations in the field of marine safety and security (prevention and fight against maritime accidents and disasters, piracy, illegal activities and all forms of crime at sea);

**International Seabed Authority (ISA)** which conducts all Global Programmes on the Exploration and Exploitation of Mineral, Oil and Gas Resources, particularly in the Deep Sea (known as the "Common Heritage of Humanity"), and also cooperates in the important work of the Commission on the Limits of the Continental Shelf (CLCS);

**International Tribunal for the Law of the Sea (ITLOS) and the International Court of Justice (ICJ)** adjudicate all disputes between States in the field of the Law of the Sea (maritime delimitations, conflicts in terms of marine and oceanic resources, etc.);

**United Nations Education, Scientific and Cultural Organisation (UNESCO) (with its International Oceanographic Commission, IOC)** for all initiatives and programmes in the fields of oceanography and the study of marine and aquatic ecosystems. This is the case with its "Global Ocean Observing Systems in Africa" Programme (GOOS-AFRICA);

**United Nations Conference on Trade and Development (UNCTAD)** which, although having

very general missions is very closely concerned with the problems of the International Maritime Start and the conditions of participation of developing countries in this highly competitive universe and requiring very important infrastructures;

**United Nations Development Programme (UNDP)**, whose interventions aim to accompany States very closely in their economic and social development policies, including in the sectors of the Blue Economy.

**World Bank**, which carries out in-depth studies, offers technical assistance programmes and provides financing in all areas of economic life, including those of the blue economy such as ports and maritime and river transport, all marine and aquatic infrastructure, fisheries and aquaculture, marine renewable energy, shipbuilding, marine biotechnology, etc;

**World Trade Organization (WTO)**, which intervenes in particular on questions of liberalization of world trade and in this capacity ensures to maintain a liberal context in all sectors of the blue economy, and therefore to combat all forms of abuse of a dominant position or State protectionism in these areas (the case of aid to fisheries or shipbuilding);

**World Tourism Organization (UNWTO)**, which, in addition to its general mission in the field of world tourism, especially encourages the emergence of "blue tourism" and eco-tourism, in maritime and coastal areas as well as in rivers, lakes and rivers;

## REFERENCES

#### 4. REFERENCES

1. AU-IBAR, 2019. Africa Blue Economy Strategy. Nairobi, Kenya. October 2019.
2. Africa Governance Report, 2019: Promoting African Union Shared Values Prepared by The African Peer Review Mechanism (APRM) In Collaboration with the African Governance Architecture (AGA) January 201
3. AMCEN 2019. African Ministerial Conference on the Environment Seventeenth session Ministerial segment Durban, South Africa, 14 and 15 November 2019 Item 5 (d) of the provisional agenda\* Advancing the blue/ocean economy in Africa Advancing the sustainable blue (ocean-based) economy in Africa.
4. Arruda, E.H. et al. 2021. Circular economy: A brief literature review (2015–2020). Sustainable Operations and Computers. Vol 2, 2021. 76–89pp. <https://www.sciencedirect.com/journal/sustainable-operations-and-computers>.
5. Chinsembu, W.W and Kazhila C. Chinsembu. 'Poisoned Chalice': Law on Access to Biological and Genetic Resources and Associated Traditional Knowledge in Namibia.. Resources 2020, 9(7), 83; <https://doi.org/10.3390/resources9070083>.
6. Chibale et al. In book: Drug Discovery in Africa (pp.193-209) Chapter: Publisher: Springer Berlin Heidelberg Editors: Kelly Chibale, Mike Davies-Coleman, Collen Masimirembwa. 2012. DOI:10.1007/978-3-642-28175-4\_8.
7. COMESA Sustainable Tourism Development Framework. A Basis for Development of a Regional Tourism Strategy and Policy for the COMESA Region. 2012. COMESA Secretariat, Lusaka, Zambia.
8. Data collection survey on the blue economy in the Republic of Kenya. 2018. Ministry of Agriculture and Irrigation & Ministry of Transport and Infrastructure Development.
9. Sakellariadou, F., Gonzalez, F.J., Hein, J.R., Rincón-Tomás, B., Arvanitidis, N., and T. Kuhn. 2021. Seabed mining and blue growth: exploring the potential of marine mineral deposits as a sustainable source of rare earth elements. (MaREEs) (IUPAC Technical Report). Pure and Applied Chemistry. <https://doi.org/10.1515/pac-2021-0325>.
10. Grey, E. (2018). Can landlocked countries develop a blue economy? Ship Technology, 29 January. Available from [ship-technology.com/features/can-landlocked-countries-develop-blue-economy/](http://ship-technology.com/features/can-landlocked-countries-develop-blue-economy/).
11. IGAD, 2020. Regional Blue Economy Strategy and Implementation Plan for 5 years Ghisellini P, Cialani C, Ulgiati S (2016) A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. J Clean Prod 114:11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>
12. ISA, 2017. Marine mineral resources of Africa's continental shelf and adjacent international seabed area: Prospects for Sustainable Development of the African Maritime Domain in Support of Africa's Blue Economy. ISA Technical Study: No. 20. Kampala, Uganda 2–4 May 2017.
13. Pooja Bhatia and Archana Chugh. 2014. Role of marine bioprospecting contracts in developing access and benefit-sharing mechanism for marine traditional knowledge holders in the pharmaceutical industry. Global Ecology and Conservation, Volume 3, January 2015, Pages 176–187. <https://doi.org/10.1016/j.gecco.2014.11.015>
14. Shweta, P. 2020. Marine Bioprospecting: Bioactive Compounds from Cnidarians and Molluscs - A Review (April 2, 2020). Proceedings of the National Conference on Innovations in Biological Sciences (NCIBS). <http://dx.doi.org/10.2139/ssrn.3567752>.
15. UNECA. 2020. Blue Economy, Inclusive Industrialization and Economic Development in Southern Africa
16. Walzberg *et al.* 2021. Do We Need a New Sustainability Assessment Method for the Circular Economy? A Critical Literature Review. Front. Sustain., 07 January 2021. <https://doi.org/10.3389/frsus.2020.620047>
17. Wenhai, L. et al. 2019. Successful Blue Economy Examples With an Emphasis on International Perspectives Front. Mar. Sci. 07 June 2019. June 2019 Frontiers in Marine Science 6:261 DOI:10.3389/fmars.2019.00261







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