

AFRICA BLUE ECONOMY STRATEGY



BLUE GOVERNANCE FRAMEWORK

Africa Blue Economy Strategy
Blue Governance Framework

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Table of Contents

List of Acronyms	vi
Foreword	ix
Acknowledgements	x
Context	1
Objectives and Contents	2
Blue Governance Principles	3
Institutional arrangements to set-up	13
Blue Governance Coordination Unit	14
Coordination mechanisms	17
Blue Governance Coordination at Continental level	17
Blue Governance Coordination at regional and national level	18
Coordination towards Member States	19
Blue Governance Coordination at international level	21
Regulatory tools to develop	24
Specific arrangements to set-up	27
Specific coordination mechanisms	28
Public-private partnership to set-up	34
Capacity building, Research and Education	39

List of Acronyms

ABNJ	Areas Beyond National Jurisdiction
ACBF	African Capacity Building Foundation
AfCTA	African Continental Free Trade Area Agreement
AFREC	African Energy Commission
AIMS	African Integrated Maritime Strategy
AMDC	African Minerals Development Centre
AOSTI	African Observatory of Science, Technology and Innovation
AU	African Union
AU- IAPSC	African Union Inter-African Phytosanitary Council
AU-IBAR	African Union InterAfrican Bureau for Animal Resources
AUDA-NEPAD	African Union Development Agency/New Partnership for African Development
AU-PANVAC	Pan African Veterinary Vaccine Centre of African Union
BE	Blue Economy
CBD	Convention on Biological Diversity
CC	Climate Change
CLC	International Convention on Civil Liability for Oil Pollution Damage
CGIAR	Consultative Group on International Agricultural Research
COLREG	International Regulations for Preventing Collisions at Sea
COMELEC	Maghreb Electricity Committee
DARBE	Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment
EAPP	Eastern African Power Pool
ECCAS	Economic Community of Central African States
ECOWAS	Economic Community of West African States
EEZ	Exclusive Economic Zone
EPA	Economic Partnership Agreement
EREP	ECOWAS Renewable Energy Policy
FIPOL	International Fund for Compensation for Oil Pollution Damage (FIPOL)
FPV	Floating photovoltaic
GDP	Gross Domestic Product
HNS	The Hazardous and Noxious Substances Convention
IGAD	Inter-Governmental Authority on Development
IMO	International Maritime Organization

IOC	Indian Ocean Commission
IORA	Indian Ocean Rim Association
ISPS	International Ship and Port Facility Security Code
ITC	International Trade Centre
IUU	Illegal Unreported and Unregulated Fishing
LME	Large Marine Ecosystem
MARPOL	The International Convention for the Prevention of Pollution from Ships (MARPOL)
MCS	Monitoring Control and Surveillance
MOWCA	Maritime Organization of West and Central Africa
MSP	Marine Spatial Planning
NAPA	National Adaptation Plan of Action
NDC	Nationally Determined Contributions
PATTEC	The PAN-AFRICAN Tsetse and Trypanosomiasis Eradication Campaign
PFRS	Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
PIDA	Programme for Infrastructure Development in Africa
PMAESA	Port Management Association of Eastern and Southern Africa
PMAWCA	Port Management Association of West and Central Africa
PPP	Public-Private Partnership
R&D	Research and Development
RCREEE	Regional Centre for Renewable Energy and Energy Efficiency
REC	Regional Economic Committees
REDD+	Reduced Emissions from Deforestation and Land Degradation in Developing Countries
RFB	Regional Fisheries Bodies
RFMO	Regional Fisheries Management Organizations
SADC	Southern African Development Community
SACREEE	Centre for Renewable Energy and Energy Efficiency
SAFGRAD	Semi-Arid Food Grains Research and Development project
SAPFA	Strategic Action Plan on Fisheries and Aquaculture
SAPP	Southern African Power Pool
SAVAGE	International Convention on Salvage
SCP	Special Containment Procedures
SDG	Sustainable Development Goals
SIDS	Small Island Developing States

SOLAS	International Convention for the Safety of Life at Sea
SSA	Sub-Saharan Africa
STI	Science Technology and Innovation
TFE	Twenty feet Equivalent
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNECA	United Nations Economic Community for Africa
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
WWF	World Wildlife Fund
WSA	Watershed Approach

Foreword

The African Union Inter-African Bureau for Animal Resources (AU-IBAR), a specialized technical office of the Department of Rural Economy and Agriculture (DREA) of the African Union Commission (AUC), is mandated to support and coordinate the utilization of livestock, fisheries, aquaculture and wildlife as resources for both human wellbeing and economic development in the Member States of the African Union. The Vision of the AU-IBAR Strategic Plan 2018-2023 is an Africa in which animal resources contribute significantly to integration, prosperity and peace. AU-IBAR's intervention in the fisheries and aquaculture sector is guided by the Policy Framework and Reform Strategy for fisheries and aquaculture in Africa (PFRS), which is aimed at improving governance of the sector for increased sustainable contribution to food security, livelihoods and wealth creation. Also within the framework of the African Union Agenda 2063, the Africa Blue Economy Strategy envisioned an inclusive and sustainable blue economy that significantly contributes to Africa's transformation and growth.

The Global Conference on Sustainable Blue Economy was organized in Nairobi, Kenya in November 2018. African leaders at the Conference directed the African Union to work with relevant stakeholders to develop a blueprint of Africa's Blue Economy Strategy that will guide sustainable development and utilization of resources of the Oceans, Seas, Lakes and Rivers for blue economy growth and livelihoods.

Accordingly, the African Union Inter-African Bureau Animal Resources (AU-IBAR) was requested by H.E The Commissioner of Rural Economy and Agriculture of the African Union Commission to lead the process of formulation of the Africa Blue Economy Strategy. The Africa Blue Economy Strategy¹ was eventually developed and subsequently endorsed in October 2019 by the African Union Specialized Technical Committee on Agriculture, Rural Development, Water and Environment (STC-ARDWE). The Blue Economy Action Plan was elaborated in September 2020, endorsed by the African Union Specialized Technical Committee on Agriculture, Rural Development, Water and Environment (STC-ARDWE) in October 2019 and subsequently adopted by the African Union Executive Council in February 2020. In this regard, a consultancy contract was signed between the blue economy team of experts and AU-IBAR on the 24th of September 2020. The objective of the consultancy was to prepare the current Blue Governance Framework.

¹ Available in 4 languages at: <https://www.au-ibar.org/strategy-documents>

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Context

The African Blue Economy Strategy (ABES) was developed and endorsed in October 2019 by the African Union Specialized Technical Committee on Agriculture, Rural Development, Water and Environment (STC-ARDWE). The African Blue Economy Strategy is consolidated based on the following five detailed thematic areas considered critical to blue economy growth in Africa:

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

These five thematic areas are driven from the framework of the November 2018 Nairobi Sustainable Blue Economy Conference. The objectives of the conference were in line with the Vision of the AU-IBAR Strategic Plan 2018-2023 and African Union Agenda 2063 both contributing to Africa's integrated, secured, transformation and growth.

Therefore, implementation of the Africa Blue Economy Strategy will contribute to drive inclusive economic growth, social prosperity and environmental management and protection. These would effectively be achieved through building upon the recommendations of STC-ARDWE in October 2019. The recommendations urged the African Union Commission to:

- support adequate awareness creation, build capacity and share best practices on application of the Blue Economy concept;
- support setting up Blue Governance mechanisms to ensure planning and coordination at continental, regional and national levels; and,
- mobilise resources for the implementation of the Blue Economy Strategy.

The second recommendation establishes a basis for AU-IBAR to develop a Blue Governance mechanism or Framework for the implementation of the Blue Economy Strategy through its Action Plan. A lack of coordination structure would constitute a major handicap not only in the ownership and compliance of the Strategy by Member States and by the Regional Economic Commissions (RECs), but would also negate any chance of effective implementation and monitoring of the Strategy's Implementation Plan.

A Blue Governance framework will ensure overall consistency, coherence and synergy, and develop bridges and leverage resources between the various implementation plans for strategies. This includes Blue Economy strategies developed by some Regional Economic Communities such as the Inter-Governmental Authority on Development (IGAD) or by some regional commissions such as the Indian Ocean Commission and national Blue Economy initiatives.

Objectives and Contents

The implementation of the African Blue Economy Strategy requires the setting-up of an effective institutional arrangement that can be defined as Blue Governance as it relates to the processes of interaction and decision-making among the actors involved in a collective problem that would lead to the creation, reinforcement, or reproduction of norms and institutions². More precisely, it refers to the coordination, planning and monitoring of the Blue Economy (BE) activities initiated by the African Union Commission, the RECs (and other regional organisations) and Member States. A governance framework is thus required to build a multi-scale organisational scheme and foster long-term collaboration among the African institutions. This framework will contribute to structure, sustain, regulate and hold accountable rules and norms established for the development of the African Blue Economy.

Notwithstanding the progress made to date on many fronts, significant institutional and governance challenges remain, constraining the ability of the AUC, RECs and Member States to effectively formulate and implement policies relating to the growth of the relatively new blue economy concept, alongside policies in favour of environmental protection and the health improvement of ecosystems. An effective policy and regulatory framework is needed to secure investments in sea exploration as well as a sound policy for innovation, transfer of technology and adaptation to encourage inventors. This should be in place for strengthening the institutional capacities of key national and regional agencies and organizations for the effective implementation of blue economy related functions. It would also entail, among others, capacity enhancement and incentivization of those entities and structures that are related to the key sectoral aspects of the blue economy.

In that regard, the two main objectives of this Blue Governance Framework document are as follows:

- To present a framework for establishing functional, integrated blue governance coordination mechanisms in AU Member States and Regional Economic Communities, for the sustainable

² Hufty, Marc (2011). "Investigating Policy Processes: The Governance Analytical Framework (GAF). In: Wiesmann, U., Hurni, H., et al. eds. *Research for Sustainable Development: Foundations, Experiences, and Perspectives*". Bern: Geographica Bernensia: 403–24.

and holistic implementation of the Africa Blue Economy Strategy. The framework incorporates guidance on the design, setting up of, institutional arrangements, operationalisation and management of blue governance coordination mechanisms as well as mechanisms with options for implementation at AU Member States' level as well as for implementation at regional levels by RECs.

- To make recommendations on strengthening cooperation and regional integration with convergence of competing interests and resources of the various blue economy actors.

The document is structured in 3 parts;

1. In the first part, the principles of the Blue Governance mechanisms, such as the coordination, the tools and the financing are presented.
2. In the second part, the institutional arrangements to set-up between AUC, RECs and Members States are detailed,
3. While in the third part, the specific arrangements of the BE sectors and components, including the public-private partnerships are described.

Blue Governance Principles

This section provides an overview of the key principles that underlie the establishment of the African Blue Governance Framework. The Coordination imperatives are presented first. They are followed by the tools to be set-up and used to ensure an effective governance.

Coordination imperatives

Alignment to other policies and strategies

The ABES is part of a number of African and global policies and initiatives, including the African Union's Agenda 2063; the 2014 Africa's Integrated Maritime Strategy (2050 AIMS); the 2014 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 2015 UN Agenda 2030 (Sustainable Development Goals, SDGs). They are elaborated in a more detailed manner as follows:

Agenda 2063 - The strategic framework for the socio-economic transformation of the continent over the next 50 years refers specifically to the Blue and Ocean Economy as Goal 6 for accelerated economic growth especially for the priority areas of Marine Resources and Energy; and Ports Operations and Marine Transport. Goal 7 also addresses BE by having priority areas such as

sustainable natural resource management and biodiversity conservation; sustainable consumption and production patterns; water security; climate resilience and natural disaster preparedness and prevention; and renewable energy. All of which are integral to BE development in Africa.

PFRS - The document provides guidance to the transition of African fisheries to productivity, sustainability and profitability with options for enhanced regional collaborative management of shared resources. The PFRS enables African governments to develop appropriate fisheries-exploitation arrangements and aquaculture development, two key BE sectors, with accompanied fiscal reforms that should result in the sustainable generation of benefits at the community level as well as creating wealth throughout the value chain.

AIMS 2050 - The Strategy has been conceived as a tool to address Africa's maritime challenges for sustainable development and competitiveness. It aims to foster more 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. Some BE sectors and components (conservation, research, education and governance) are outlined in the strategy but they are largely limited to the maritime and marine areas while the BE strategy will also adequately deal with inland water bodies. Extractive mineral, oil and gas, and innovative financing mechanisms have not been taken into account in the AIMS 2050. Nor have the issues of ecosystem services such as blue carbon and their uses for climate change mitigation and adaptation, which are currently a top priority of the AU.

Lomé Charter - The Charter refers to the security and safety of the BE. It aims at preventing and curbing national and transnational crime, especially terrorism, piracy and armed robbery against ships, as well as all forms of trafficking at sea. It also aims at protecting the environment in general, particularly maritime environments in coastal and island states, as well as strengthening cooperation in the field. The Charter commits signatories to creating national, regional and continental institutions to promote maritime security and safety.

SDG14 - Being part of the Sustainable Development Goal 14 (SDG14) on Life Below Water, African coastal States have endorsed the achievement of a series of targets by 2030 from which most of them relate to a better exploitation of the sea, preservation of the environment and prevention of pollutions and other harmful changes resulting from human activities. All African States are furthermore working towards the accomplishment of SDG6 dedicated to clean water and sanitation in direct linkage with the continental dimension of the BE.

African Blue Economy sectorial activities are also mentioned in more specific continental policy instruments such as the 2009 African Mining Vision, the 2010 (revised) African Maritime Transport Charter and the 2019 African Continental Free Trade Area (AfCFTA) for the movement of goods and services among AU member States with no restrictions. BE natural components are, on their side, included in the 1969 (revised in 2017) African Convention on the Conservation of Nature and Natural Resources. They are also embedded into the 3 regional seas conventions (Abidjan, Nairobi and Jeddah) that provide a regional legal and coordinated framework that strengthens countries' capacity to protect, manage and develop their coastal and marine environments. The BE research component is currently mainly represented within the African Space Agency due to the importance of the remote sensing observation of oceans and water bodies in the context of climate change, and within the framework of development of Africa Centres of Excellence in Fisheries and Aquaculture in Africa initiated in 2018.

African Blue Economy development is furthermore receiving dedicated attention by AUDA-NEPAD (African Union Development Agency/New Partnership for African Development) with the current elaboration of the Blue Economy Programme that aims to guide the Agency's support to AU Member States and RECs. Some RECs, such as IGAD and SADC, are presently, alongside with other organisations such as IOC (Indian Ocean Commission) and IORA (Indian Ocean Rim Association), developing their own BE strategy. African SIDS are also engaged, with the SAMOA Pathway, in the process of development of their ocean-based economies.

Application of key principles

The African Blue Governance Framework should rely on the 12 principles summarised in figure 1 below.

An effective political and regulatory framework is also necessary to guarantee investments in sustainable exploration of countries' EEZs, as well as a solid policy for innovation, technology transfer and adaptation aimed at encouraging innovations. This should be implemented in order to strengthen institutional capacities in key national and sub-national (islands) agencies and organizations. This also requires a strong collaboration between key entities/structures and a consensus on defining common initiatives. Finally, this requires the strengthening of human capacity and the provisioning of technical support in the face of inequalities between countries in the region.



Figure 1: The 12 key Governance principles (Source: Council of Europe³)

Furthermore, Blue Governance should ensure that the Blue Economy follows the 3 principles below:

Circular economy - The adoption of a circular production and consumption model is linked to Blue Economy⁴. This principle consists in sharing, reusing, repairing, renovating and recycling existing products and materials as long as possible in order to retain their value. This requires rethinking not only on the use and recycling of the products but also designing them with intention to integrate the potential future uses of their components (taking into account the dismantling phase). Thus, substantial work must be done in all the sectors in Blue Economy to apply the principle of circular economy to all production sectors (it must also be inter-sectoral to allow wide possibilities in terms of recycling).

Environmental and social sustainability - Climate change and climate variability are already impacting aquatic systems and overall food production in Africa. The continent must therefore

³ See: [https://www.coe.int/en/web/good-governance/12-principles#%2225565951%22:\[\]](https://www.coe.int/en/web/good-governance/12-principles#%2225565951%22:[])

⁴ The circular economy is opposed to the traditional linear economic model which is based on the concept of "take-make-throw". The life cycle of products is extended to reduce the use of raw materials and the production of waste. When a product is at the end of its life, its components are maintained in the economic cycle. They can thus be used again and again to recreate value (EC, 2019).

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 in order to guarantee food security and livelihoods. Furthermore, mining, oil, gas and energy production in deep water should be developed within the National Determined Contribution process following the strict precautionary⁵ and compensation⁶ principles (avoid, reduce, compensate) and ensuring civil society approval, since healthy ecosystems are of vital importance for the survival of living aquatic resources (both inland and oceanic). Thus, collective reflection and decision-making should take place before allowing deep-water resource exploitation. In addition, countries must adhere to national, regional and international pollution control standards and practices, including those relating to chemicals and plastics⁷. Socially, many island communities lack education and entrepreneurial capacity. They only have few property rights over their livelihood, and they are often excluded from the decision-making process. The AUC must therefore address efforts to implement the Blue Economy in order to fight poverty, especially in remote islands and include these communities in the process of developing a Blue Economy (see 1st principle of good governance). Island communities would thus have better access to the economic sector, which would positively influence their well-being.

Empowerment and inclusive decision-making - In terms of reach, beneficiaries and human rights, international discussions on the BE raise the question of how to involve the largest group of ocean-users – the women and men who service, fish and trade from small-scale fisheries (SSF) – in the dialogue about blue economy projects and strategies. In an effort to ensure that the rights, interests and voices of SSF are respected in this dialogue, the Food and Agriculture Organization facilitated the production of the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication (FAO, 2015), which incorporated the input of around 4000 fisheries, government and community representatives from more than 120 countries in more than 20 civil-society organization-led national consultative meetings. These guidelines propose principles that are sensitive to food security and human rights, and that promote empowerment and inclusive decision-making. They are global in scope and with a focus on the needs of developing countries⁸. As such, this initiative will be guided by the FAO guidelines and ensure active, free, effective, meaningful and informed participation of small scale fishing communities, including indigenous communities, in decision-making processes related to any project affecting fishery resources and/or in areas where small scale fisheries operate, as

⁵ See: [https://www.europarl.europa.eu/RegData/etudes/IDANI/2015/573876/EPRS_IDA\(2015\)573876_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDANI/2015/573876/EPRS_IDA(2015)573876_EN.pdf)

⁶ See: [https://www.europarl.europa.eu/RegData/etudes/IDANI/2015/573876/EPRS_IDA\(2015\)573876_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/IDANI/2015/573876/EPRS_IDA(2015)573876_EN.pdf)

⁷ See Cartagena Environmental Strategy on Environmental Pollution and Ban on Styrofoam and plastic bags: <https://www.unenvironment.org/cep/news/blogpost/styrofoam-and-plastic-bag-bans-caribbean-interactive-map>

⁸ Cohen et al (2019). "Securing a Just Space for Small-Scale Fisheries in the Blue Economy". *Frontiers in Marine Science*. <https://www.frontiersin.org/articles/10.3389/fmars.2019.00171/full>; and FAO Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication <http://www.fao.org/voluntary-guidelines-small-scale-fisheries/en/>

well as adjacent land areas, and taking existing power imbalances between different parties into consideration. The African Union PFRS (2014) also underscore the role of stakeholders in fisheries management and aquaculture developed and therefore identified small-scale fisheries development, women and youth development as priority policy arenas.

Leadership in Transformative change and coherence

To ensure a transformative change of African Blue Economies, institutional changes should be promoted in the following way:

- Embeds the transformative process within the overarching climate change policies in order to change the constraints into opportunities through the enhancement of the health of the marine and coastal ecosystem services. This means to go beyond the adaptation and mitigation objectives and become a sustainable source of wealth
- Develops integrated strategies for ensuring a sustainable and inclusive blue growth and AfCFTA.
- Ensures the running of continental and sub-regional capacity building mechanisms, innovations, centers and networks of excellence for the circular economy, clean industry and innovative financing mechanisms.

The transformative change should be accompanied by a process that fosters the coherence (both internal and external ones) for:

- Ensuring the consistency of all regional and national BE initiatives, policies and strategies with the continental one;
- Developing a Blue Governance framework for ensuring the coordination of activities following the subsidiarity principle.

Tools

A set of tools have to be set-up and used for effective Blue Governance. They are mainly Blue Economy Accounting (economics, environmental and social), Marine and Freshwater Spatial Planning, Blue Economy Standards and some Blue Funding mechanisms.

Blue Economy Accounting

Crucially for African Countries pursuing Blue Economy activities, accounting for Blue Economy components has not yet been undertaken⁹. Socially, many coastal and lacustrine poor communities in Africa lack education and entrepreneurial capacity. They only have few property rights over

⁹ The need for accounting schemes specific to the Blue Economy has been identified as critical for achieving Blue Economy objectives. The elaboration of Blue Economy Accounting based on the merging of Blue Satellite accounts and Blue Ecosystems account has been inscribed in the strategy and working plans at various scales: Continental for the current Africa Blue Economy Strategy, regional such as the Indian Ocean Commission (IOC) and Intergovernmental Agency for Development Strategies (IGAD), and at the country level, such as for the Seychelles.

their livelihood, and they are often excluded from the decision-making process. African Member States must therefore address efforts to implement Blue Economy in order to fight poverty and to include these communities in the process of developing a Blue Economy. Coastal and waterway communities would thus have better access to the economic sector, which would positively influence their well-being. Thus, social sustainability should be properly recorded. From the economic point of view, African countries' accounting systems for blue economic activities are not carried in a unified manner. Currently, data are collected from different sources to provide a comprehensive view of blue economic sectors' contribution to creating added value and jobs.

Ecological components of the Blue Economy are also inadequately incorporated and critical ecosystem services, like those provided by coastal areas, are improperly valued. The implementation of a process to track Nationally Determined Contributions (NDCs) in order to facilitate 'green' and 'blue' accounting will benefit decision- and policy-makers by becoming the cornerstone for evidence-based actions, like those related to climate change. For instance, Blue Economy policies should account for the NDCs of 'blue carbon', the CO₂ sequestration by mangroves, seagrass beds, mudflats and other coastal ecosystems. To do so requires establishing specific accounting mechanisms for blue carbon and other ecosystem services that monitor and measure the evolution of the contribution of coastal ecosystems to carbon sequestration.

Overall, a critical barrier to presenting a comprehensive view of the Blue Economy contribution from the social, economic and ecological point of view is the lack of comparable data, which must first be gathered from different sources. Creating an appropriate national accounting framework which embraces social, economic and ecological components will facilitate recording annual changes to identify the contribution made by the Blue Economy. Having such a tool used at the country, regional and continental level is crucial for the implementation of the Blue Economy.

Marine and Freshwater Spatial Planning

Marine and Freshwater spatial planning (MFSP) is a “public process of analysing and allocating the spatial and temporal distribution of human activities in marine and freshwater areas to achieve ecological, economic and social goals and objectives that are usually specified through a political process”¹⁰. MFSP can be considered as a strategic planning process, undertaken through a consistent and agreed upon framework that enables integrated, future-looking and consistent decision-making on the spatial use of the sea, rivers and inland water bodies.

¹⁰ Adapted from Ehler CN, Douvrou F, 2009. *Marine Spatial Planning: A Step-by-step Approach toward Ecosystem-based Management*. UNESCO/IIOC Manuals Guide 53, 99 p.

MFSP aims to attain consensus around the regulation of sea and water body uses among sectors through a ‘brokerage process’ in which conflicting or competing interests are identified and workable solutions are sought. MFSP is a transparent, comprehensive and integrated approach for a range of decision-makers responsible for particular sectors to balance demands for development with the need to protect marine and freshwater ecosystems. Implementation of MSP is achieved through the application of appropriate tools or activities, which could include regulations, integrated coastal and lake and river management, resource use zoning, mapping and collected data, databases, software packages, and other tools and information that contribute to the development of marine and freshwater spatial plans.

AU member states have not yet institutionalized the large marine ecosystem (LMEs) approach, as well as the watershed approach for sustainable governance of freshwater ecosystems. However, these approaches help to understand the evolution of coastal and marine ecosystems using a set of ecological indicators, including biological productivity (particularly plankton abundance for fish biomass), habitat degradation and pollution (plastic and chemical among others), ecosystem health etc. Consequently, the actual resource and ecosystem management is less efficient. Maritime spatial planning is also lacking in several countries although it constitutes a public process aiming to achieve the objectives specified in the framework for the implementation of Blue Economy by analysing and distributing spatio-temporal data on socio-economic uses and environmental conservation zones. While some countries such as Kenya, Seychelles and South Africa have launched a Maritime Spatial Planning (MSP) process over the years, this has been designed as a spatial planning tool rather than an analytical and functional tool aimed to develop a Blue Economy.

The aims of the African MFSP will be:

- to set out priorities and directions for future development within the planned area;
- to inform on the sustainable use of freshwater and marine resources; and
- to help marine users understand the best locations for their activities, including where new developments may be appropriate.

For that, it should have the following characteristics:

- Integrated and multi-objective: across sectors among levels of government; aims to achieve the “triple-bottom line” of ecological, social and economic objectives
- Area-based: defined by spatial boundaries
- Adaptive: capable of learning from experience
- Strategic and anticipatory: MFSP is focused on the long-term and future planning

- Participatory: stakeholders are actively and effectively involved in the process
- Ecosystem-based: focusing on an ecosystem instead of on a single species, sector, or activity

The competition for maritime and freshwater spaces – for renewable energy equipment, aquaculture and other uses – has highlighted the need to manage African waters more coherently in order to avoid negative externalities¹¹. MFSP works across borders and sectors to ensure human activities at sea and in waterways take place in an efficient, safe and sustainable way.

Blue Standards

Implementation of blue policies should be accompanied by the setting-up of Blue Standards to ensure the sustainability of production, trade and consumption of Blue Economy goods and services. In that regard, the UN¹² has defined Voluntary Sustainability Standards (VSS), which are rules that producers, traders, manufacturers, retailers or service providers may be asked to follow so that the things they make, grow or do, don't detriment people and the environment. These standards help keep workers healthy and safe, protect communities and land, and uphold human rights, as well as moderate the environmental impacts of production and consumption. Such standards can be specifically developed for the African Blue Economy. They are already well elaborated in the seafood sector¹³ but need development in the other sectors. Alongside the ISO¹⁴ current standards that defined the international norms and have already been applied by some companies of the Blue Industry, a set of VSS standards are already available to be operationalised for the African Blue Economy:

- **One Planet network** was formed to implement the 10-Year Framework of Programmes on Sustainable Consumption and Production, which supports the global shift to SCP and the achievement of SDG 12. This platform is where the lead organisations of each programme can coordinate their efforts, to showcase what the programme is doing, who is taking part, and how interested stakeholders can engage.
- **ITC Sustainability Map** is a platform that provides concrete and scalable tools, technical assistance and advisory services for every stage of the value chain, from micro, small and medium sized enterprises in developing countries to retailers and brands in developed markets.
- UNCTAD Fostering green exports through Voluntary Sustainability Standards aims to help developing countries build their capacity to use VSS as a tool to achieve win-win-win outcomes, i.e.:

¹¹ Negative externalities occur when production and/or consumption impose external costs on third parties outside of the market for which no appropriate compensation is paid. This causes social costs to exceed private costs.

¹² See: <https://unfss.org/>

¹³ See: <https://www.iisd.org/publications/state-sustainability-initiatives-review-standards-and-blue-economy>

¹⁴ See: <https://www.iso.org/standards.html>

- Inclusive economic growth through fostering green exports
- Production practices that are complementary to environmental protection
- Business environment that is complementary to better social development
- **UNCTAD Non-tariff measures** (NTMs) are policy measures other than tariffs that can potentially have an economic effect on international trade in goods. They are increasingly shaping trade, influencing who trades what and how much. For exporters, importers and policymakers, NTMs represent a major challenge. Though many NTMs aim primarily at protecting public health or the environment, they also substantially affect trade through information, compliance and procedural costs.
- **UNCTAD BioTrade Initiative.** Since its launch by UNCTAD in 1996, this initiative has been promoting sustainable BioTrade in support of the objectives of the Convention on Biological Diversity. The Initiative has developed a unique portfolio of regional and country programmes. UNCTAD is currently implementing the Global BioTrade Programme: linking trade, biodiversity and sustainable development with the support of the Swiss State Secretariat for Economic Affairs SECO.
- **Circular Economy Standards.** The International Organization for Standardization (ISO), responsible for harmonizing international economic standards, announced it was beginning to work on establishing an international circular economy standard. The technical committee, ISO/TC 323¹⁵, will base its work on the new AFNOR¹⁶ standard. France has been appointed leader and will drive this strategic issue forward. The response was so positive that an international committee was proposed and was born.

Despite the numerous existing standards, a need for proper Blue Standards exist. For instance, there are no standards for Blue Carbon and other Blue Ecosystem Services. Furthermore, there are no Blue Economy Standards that can be applied throughout Blue Economic Sectors and Blue Components.

Blue Funding mechanisms

The elaboration of innovative funding mechanisms should be carried on at the continental level to ensure consistent blue investments. From access to international financing to continental delivery of funds, efforts should aim to set-up proper and sustainable blue funding mechanisms. Tools such as Blue Bonds¹⁷ emitted by Seychelles, proven to be successful instruments, can be up-scaled while

¹⁵ See: <https://www.iso.org/news/ref2402.html>

¹⁶ See: <https://www.afnor.org/en/news/practical-guide-circular-economy/>

¹⁷ The debt restructuring is based on a sophisticated scheme that takes a while to be operational. It works on the principle that a third party purchases a country's debt at a discount, restructures it and then uses the proceeds to fund conservation and activities for ecosystem-based adaptation to climate change. For Seychelles, the conversion used a combination of US\$15.2 million of impact capital and US\$5 million of grants to buy back a portion of the Seychelles' debt at a discount. The cash flow from the restructured debt is payable to and managed by the Seychelles Conservation and Climate Adaptation Trust (SeyCCAT). See: <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/rising-tides-debt-for-nature-swaps-finance-climate-resilience/>

other types of international funding can be developed¹⁸ in the vein of the debt-for-nature swaps. Other funding mechanisms should also be considered such as the emerging Transition Bonds¹⁹. The Climate Green Fund should be sought for the implementation of actions towards carbon mitigation and adaptation and the implementation of large continental and regional climate change projects. The African Development Bank should play a key role in this process.

Diversifying funding schemes can also help financing Blue Economy initiatives. The private sector should access it with match-funding. This will encourage the private-public partnership towards the transition to a sustainable Blue Economy, including a zero-carbon footprint. Blue Funding development could therefore be addressed by first assessing financial needs from both Blue Economy development and the carbon transition pathway, then by elaborating a consolidated and costed work plan based on consultations with public and private stakeholders. Following the Sustainable Blue Economy Finance Principles²⁰, innovative international funding mechanisms could be considered and mainstreamed alongside the diversification of sources and improvement of access to domestic blue funding.

Thus, the African Union should send a clear signal about its willingness to invest in the Blue Economy. For instance, significant financing could be made in infrastructure to improve Blue Economy performance (both economic and environmental).

Institutional arrangements to set-up

The coordination of actions for the implementation of the ABES requires the establishment of a coordination unit/office within the African Union Commission. This special body will have to develop its coordination initiatives in several directions, particularly at the continental, regional and national levels, as well as with international organizations at the global level. The coordination of actions at the institutional level can only be fully successful if it is complemented by the development and implementation of legislative and regulatory frameworks.

¹⁸ See for instance: <https://www.nature.org/en-us/what-we-do/our-insights/perspectives/an-audacious-plan-to-save-the-worlds-oceans/>

¹⁹ See: <https://cib.bnpparibas.com/documents/markets-360-brief-on-transition-bonds.pdf>

²⁰ The 14 Blue Finance Principles that have already been unveiled are a welcome step in the codification of financial instruments. Such support from political and non-governmental bodies alike shall serve as catalyst for further development. Blue Finance will certainly take its place alongside Green Finance and will undoubtedly follow the steps of its elder sibling in its organization and codification from the industry's bodies. For the 14 Principles, see: https://ec.europa.eu/maritimeaffairs/sites/maritimeaffairs/files/declaration-sustainable-blue-economy-finance-principles_en.pdf

Blue Governance Coordination Unit

At the 11th Extraordinary Session of the Assembly of the African Union in November 2018, the Department of Rural Economy and Agriculture was renamed the “Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment” (ARBE) to reflect its evolving mandate²¹. This new denomination aims to show the important emphasis on the blue economy and its diverse components. According to the report “this has necessitated the creation of a specific division that will coordinate the efforts of the Commission in driving forward the development of the blue economy in Africa”.

This Report, having been published before the adoption of the ABES, lays emphasis on the fact that the new BE division will facilitate the formulation, adoption, and advocacy of continental-level frameworks that will guide AU Member States to positively respond both to the implementation of the African Union’s 2050 Africa Integrated Maritime Strategy and the Lomé Charter on Maritime Security, Safety and Development in Africa. Furthermore, the BE Division will work in close collaboration with divisions in the Infrastructure and Energy (I&E) and the Economic Development, Trade, Industry and Mining (ETIM) Departments to avoid duplication and ensure coordination in this area. This precision is very important to guarantee the mandate and the effectiveness of the BE Division. The Report schematically describes the restructuring and the location of the BE Division as follows within the ARBE.

In addition to the absolute need for strong close internal collaboration with the other divisions dealing with the BE at the AUC, the same collaboration will be strongly recommended externally, with all the different organizations, partners and areas of the vast and rich domain of the blue economy.

Since this restructuring and the mandate given to the ARBE were instituted from the highest decision of the Heads of States and Governments, it is important, at the present stage of things, to try first to test the new BE Division as it stands to see whether, over the years, it meets the expectations hoped for and placed upon it.

²¹ See: *Indeed, as explained in a Report to the Chairperson published in May 2019 “Restructuring the African Union Commission - Report of the Chairperson of the AUC through the Reform Implementation Unit on a proposed interdepartmental structure of the Commission”, May 2019.*

Recommended

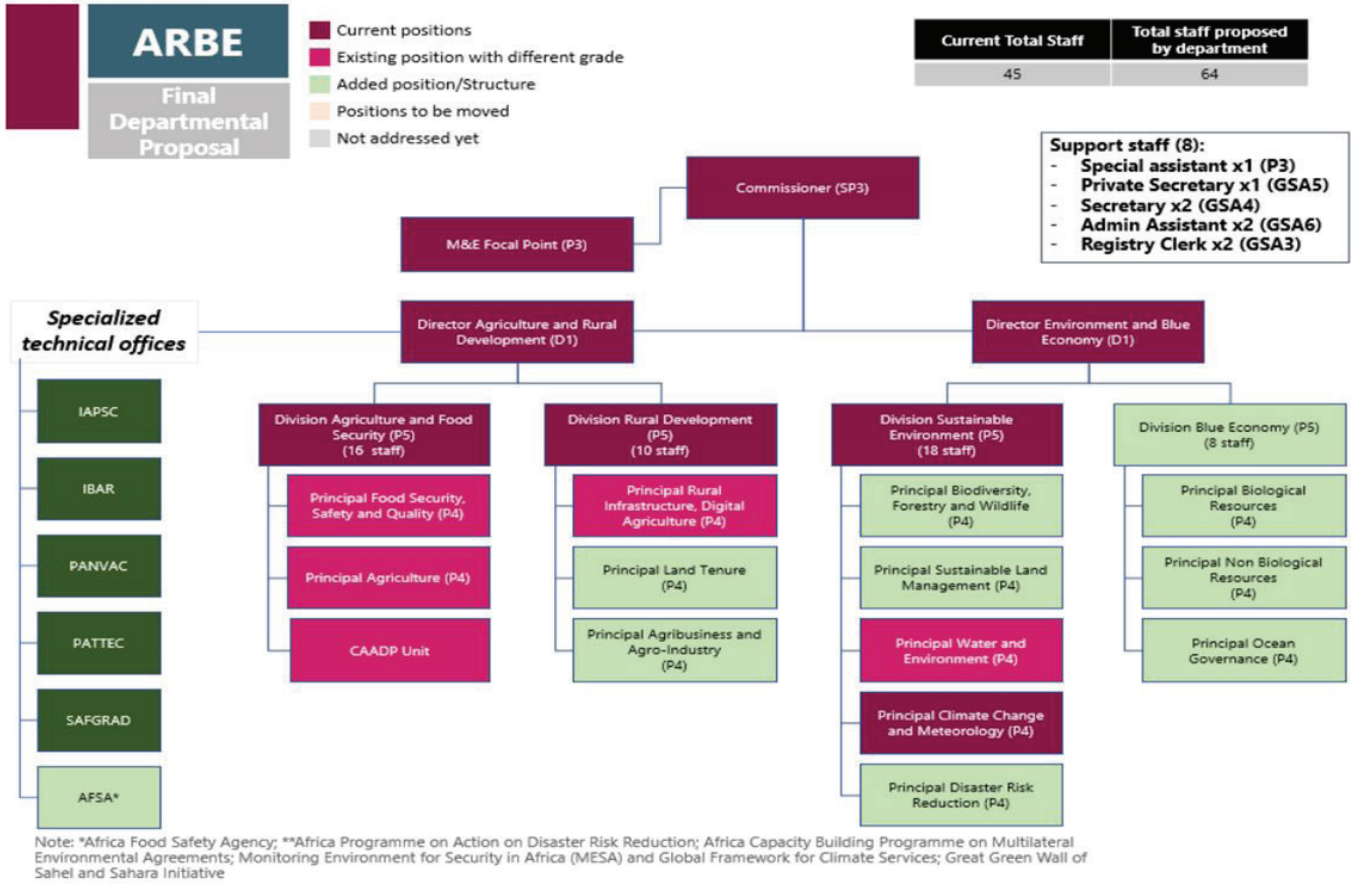


Figure 2 : The structure of the new « Department of Agriculture, Rural Development, Blue Economy and Sustainable Environment », ARBE²²

The Blue Economy development and coordination division is based on 3 pillars: biological resources (mainly referring to the fishery and aquaculture resources); non-biological resources (petroleum, gas and mineral resources and renewable energy); and ocean governance of both resource types. However, it's clearly mentioned in the Report that components of blue economy range from the traditional ocean industries such as fisheries, tourism, and maritime transport, to new and emerging activities, such as offshore renewable energy, aquaculture, seabed extractive activities, and marine biotechnology and bio prospecting²³. These activities are therefore located outside of the area of intervention of the new Blue Economy Division. The ABES also stipulated that the environment should be at the heart of BE development, however, it is not represented here.

Furthermore, the continental aspects of the blue economy are eluded with the focus on ocean activities. Rivers, lakes and streams, as well as particular problems faced by the landlocked countries should be taken into consideration. In other words, the conception of the new Division seems to

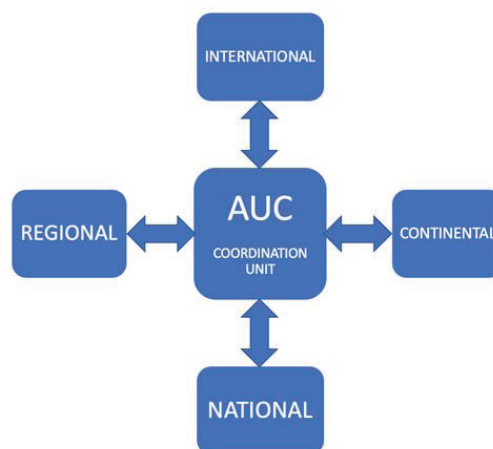
²² Source: "Restructuring the African Union Commission - Report of the Chairperson of the AUC through the Reform Implementation Unit on a proposed interdepartmental structure of the Commission", May 2019, p.25.

²³ Blue economy and the regional integration through the AfCFTA should also be present.

be “ocean centred” to the detriment of the continental aspects of the blue economy. For these reasons it is important, in the short-term, to establish a concerted mechanism with divisions in the AUC in charge of the other BE components, including the environment and trade. To initiate the implementation of the ABES, a light coordination mechanism would suffice momentarily, as long as it is based on the entire institutional network that exists within the African Union and across the continent.

In the medium-term, it will be critical to have a reflection on the Blue Governance Coordination Mechanism. The current location of the blue economy within the ARBE is convenient only for a few years, during the launching of the ABES, and cannot be a sustainable long-term solution. Indeed, a Blue Governance Office (BGO) should be set up in the future as an autonomous institution, in order to better guarantee the independent dimension, multidisciplinary and transversal blue economy. If the blue economy is really, as repeatedly mentioned, “the new economic frontier of the African renaissance”, it should be institutionally erected, at least, at the level of a “specialized technical office”, such as the existing ones (IBAR, IAPSC, PANVAC, PATTEC or SAFGRAD, etc).

If this Coordination Unit is definitively supervised in the future by a technical department like currently planned within the ARBE, there would be large temptation to favour a purely sectoral approach to the blue economy, to the detriment of a global, multisectoral and holistic approach. The future BGO should also be led by experts with high-level skills and a global and non-sectarian vision of the blue economy. It would be headed, for example, by 3 permanent representatives (one Head of Office, one Deputy Head of Office, and one Secretary) and these would be assisted by a team of Technical Advisors (4-5 people). The main task of the BGO will be to conduct trans-sectorial initiatives.



Partnerships Collaborations Synergies Funding

Figure 3: Multidirectional vision of the action of the Blue Governance Office within the African Union Commission

Thus, within the framework of its coordination missions, if the current BE Division (within the ARBE) or the BGO, are later to be created as a “Special Technical Office”, it would be especially responsible for facilitating multidirectional action at all levels (international, continental, regional, and national). Furthermore, it would be particularly responsible for managing the various strategic partnerships, mechanisms of cooperation, collaboration and synergy, as well as working for the international mobilization of financing to promote the BE across the continent and under the aegis of the African Union. This Office will also be the linchpin and the focal point of the African Union Commission to organize each year, in the month of July, an African Day of the Blue Economy.

Coordination mechanisms

The coordination mechanisms developed will ensure an effective coordination with the continental partners, the RECs and the Members states as well as between the African Union and the international institutions working at the world level.

Blue Governance Coordination at Continental level

Overall approach

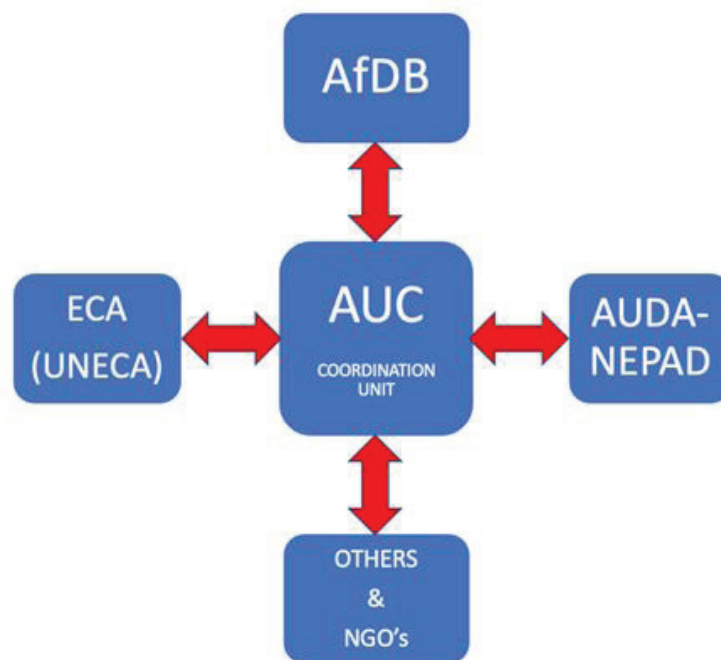
At the continental level, the strategies of partnership, collaboration, synergy and mobilization of funds are also required, because the greatest risk here would be to allow intra-community initiatives to take place and coexist competing African and ultimately counterproductive.

To this end, the coordination unit will have to draw particularly closer to certain continental institutions (including NGOs), that are all already engaged in the field of the Blue economy, in order to better coordinate their respective actions and cooperate imperatively, for example, by supporting each other in their respective strategies, or by considering joint action programmes (for example, in technical assistance to aquaculture or small-scale fishing, capacity building of operators, support for women and youth, statistics and planning for the Blue economy, or on the development of maritime and river transport as factors for the integration and promotion of the CFTA, etc.).

Among the institutions referred to here are, of course, the following:

- African Union-NEPAD Development Agency (AUDA-NEPAD),
- African Development Bank (AfDB),
- United Nations Economic Commission for Africa (UNECA/ECA)
- Number of NGOs (such as WWF, WorldFish/CGIAR and others) heavily involved in the development of the blue economy across the continent.

BLUE ECONOMY CONTINENTAL STRATEGIES OR B.E POLICIES AND INITIATIVES



Partnerships

Collaborations

Synergies

Fundings

Figure 4: Coordination between the Blue Governance Office, BGO (AUC Coordination Unit) and the main continental partners

Overall, at continental level, it is necessary to develop the instrument for rules of procedures: steering committee meetings involving partners to monitor or exchange information on activities.

Blue Governance Coordination at regional and national level

Preliminary precautions for better coordination at national and regional levels

The coordination of the Blue economy between the African Union and the Member States on the one hand, and between the latter and regional or specialized economic organizations on the other, is the one that presents the most important challenges in the field of implementation of the African Blue Economy Strategy: problems of the degree of progress of each country or region in its own national or regional “Strategy”, institutional and political challenges, sovereignty of States, conflicts of competences, degree of voluntarism of States, challenges related to legal systems and economic models, cultural and linguistic communities, geography (landlocked or not, island territory or not), other regional or national specificities, etc.

The dedicated “coordination unit”, will therefore have to take the necessary measures on a case-by-case basis, in order to better understand and adapt its approach to the reality of each national or regional field. In the islands of the Indian Ocean, for example, maritime and oceanic problems are

quickly and better perceived than in Central and Western Africa, and conversely these islands do not give much attention to the earth dimension of the Blue economy, unlike those in Central and Western Africa who understand these issues better because they have a very important hinterland and many landlocked States as neighbours.

Coordination towards Member States

More and more States have already developed their own national strategies or are completing their preparation (Seychelles, Comoros, Madagascar, Mauritius, Togo, etc.). Here there is a need to align the National Strategies with the Continental Strategy. The necessary step will be to warmly encourage the States concerned to either revise their existing Strategy to integrate an authentic Blue economy approach and the accompanying Implementation Plan, or to integrate urgently the inputs of the African Strategy into the drafting work of the new National Strategy (in progress). For those States that have not started this important work at all (and there are more of them), the time has now arrived, because a model of African Blue economy Strategy is now proposed to them. In any case, Member States will be strongly advised to work with the African Union to develop or review the BE strategies for alignment with ABES.

The Coordination Unit will also encourage each State to establish a national Blue Economy Coordination Body with which it will be easier and more effective to work together to advance the Blue economy in the country. Experience shows that a coordination structure attached at the highest level, e.g. to the services of the Prime Minister or even to the technical services of the Office of the Head of State, proves to be more effective and above all generates less institutional conflicts than a coordination which would be entrusted to a sectoral department (transport, fisheries, oil and gas, mining and energy, national defence, etc.). 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 proposed to the States by the African Union.

A National Monitoring Committee for the implementation of the Strategy and compliance with its Implementation Plan must be established in each State and this Committee will be placed under the supervision of the National Coordination Committee, or be fully ensured by the latter. This Committee, surrounded by experts, will also make all the necessary recommendations to the Government to carry out the legal and regulatory reforms necessary for the construction of a national Blue economy, but also to encourage the Government to find adequate sources of finance to promote this economy.

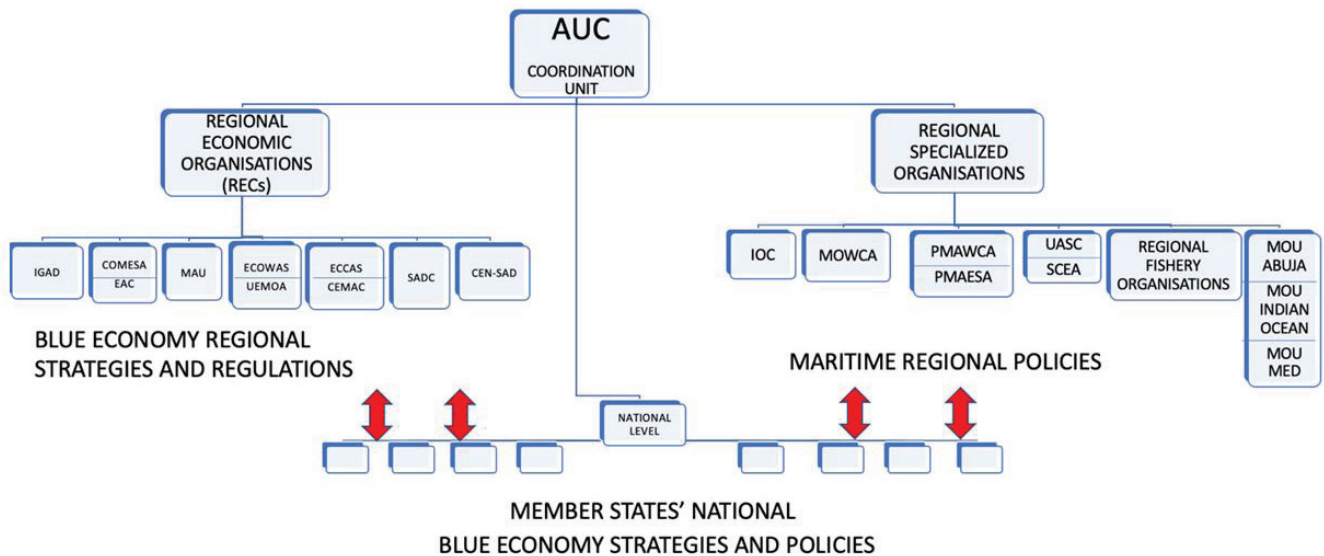


Figure 5: The coordination mechanisms at National and Regional levels

Coordination with the Regional Economic Commissions (RECs) and Regional Specialised Commissions

It's important here to clearly establish a difference between traditional Regional Economic Committees (RECs) and Regional commissions or organizations specializing in one or more sectors of the Blue economy. Few RECs and Regional specialized organizations already have their own Regional Strategies for Blue economy; among the most advanced in this preparation are IGAD, ECOWAS and IOC.

This means that the alignment project, adoption and implementation of the Continental Strategy developed by the African Union is still likely to prosper in all regions, if the African Union is able to immediately launch its team of experts on the regional ground to make known its Strategy and have it adopted collectively by States within the RECs.

As at the national level, it will also be necessary to establish in each REC a coordination structure for the Blue economy that is capable of understanding it in a multidisciplinary, transversal and holistic manner, and to be able to work in perfect synergy with the Coordination Office of the African Union.

The situation of specialized regional Commissions (or Organizations) is different, as unlike RECs they often have a sectoral approach (Regional maritime transport organizations, port management organizations, shipping companies, shippers' associations, regional fisheries commissions, organization of oil producing countries, Memoranda of fight against maritime insecurity, 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 African Strategy and in particular its corresponding Annexes.

Special attention and enhanced cooperation will have to be given to the two organizations which are most representative here and which have a more global and transversal policy; on the one hand, the Indian Ocean Commission (IOC) which shines with unquestionable dynamism, and on the other hand, the Maritime Organization of West and Central Africa (MOWCA), which is the oldest of all (almost 50 years), which necessarily has an immense competence in the field of the ocean blue economy, and which also includes up to 25 Member States, that is to say half of the African continent, landlocked countries included!

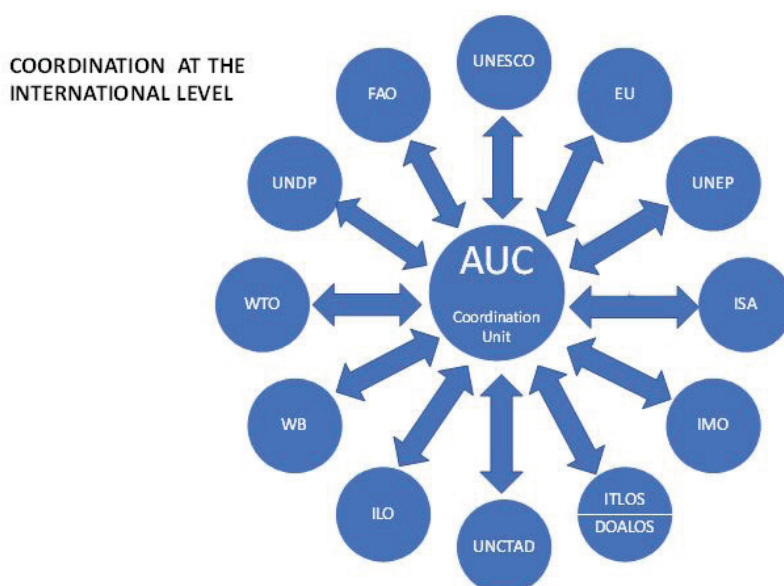
The Coordination Unit will be able to rely on all these specialized organizations to capitalize and strengthen their missions while inviting them to get involved in a new transdisciplinary and holistic dynamic of the Blue economy.

Blue Governance Coordination at international level

At the international (world) level, and faithful to its strategy of partnerships, collaborations, synergies and mobilization of funds, the Coordination Unit will necessarily have to cooperate with all world specialized institutions and international organizations working in the field of the Blue economy or its related sectors.

A very meticulous work of approach and loyalty will have to be led by this Unit (or Office) to make each institution or international organization a partner of the African Union. For instance, the Coordination Unit should approach each international organization operating 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 African Union will gain in efficiency, in international expertise, in respectability, but will also be able to significantly limit its own spending on projects to be initiated across the continent. For example, what would be the purpose of it to launch all alone new and very costly initiatives in the fight against IUU fishing or maritime piracy when we know that the African Union could very effectively partner with the FAO on the one hand and the IMO and the BMI on the other to combat these criminal activities?



Partnerships Collaborations Synergies Fundings

Figure 6: Coordination between the Blue Governance Office, BGO (AUC Coordination Unit) and the International Organizations

Alongside the ratification of global instruments or treaties or conventions especially bidding in e.g. UNCLOS, MARPOL, UNFCCC, CBD, ABNJ, etc., key entities, institutions or organizations to which the AUC should develop an international Blue Governance Coordination are (but are not limited to):

- **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;
- **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);
- **European Union (EU)** which accompanies and finances numerous programmes on fisheries and aquaculture (for example on the fight against IUU Fisheries), renewable energy, maritime transport and ports, 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;
- **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 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 Maritime Organization (IMO)** that 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, or against piracy, illegal activities and all forms of crime at sea);
- **International Tribunal for the Law of the Sea (ITLOS)** and the International Court of Justice (ICJ) which judge all disputes between States in the field of the Law of the Sea (maritime delimitations, conflicts in terms of marine and oceanic resources, etc.);
- **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;
- **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 Trade and the conditions of participation of developing countries in this highly competitive universe and requiring very important infrastructures;
- **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;
- **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;
- **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.

Regulatory tools to develop

The current Coordination Unit (or later, the Blue Governance Office, BGO) within the African Union Commission must, first of all, ensure that the existing legal and political instruments are well receptive by the Member States and by the Regional Economic Commissions. In addition to the ABES itself and its Implementation Plan, the Coordination Unit should ensure that the following strategies and policy documents are ratified by Member States:

- 2050 AIM Strategy on Seas and Oceans,
- 2016 Lomé Charter on Maritime Security and Development,
- 2010 Revised Charter on Maritime Transport,
- 2009 African Mining Vision.

The Coordination Unit should also ensure their integration into regional and local legal and policy frameworks and their effective implementation by regions and States.

More widely, a close and regular collaboration between the Coordination Unit and the various regional and national coordination offices, as well as with the specialized regional institutions, will be required.

As we have already pointed out, the African Union Commission must strongly encourage each REC and each Member State to set up an institution to coordinate the Blue Economy at regional or national level.

These coordination units or offices thus created in each Region or Member State would be responsible for reporting to the AUC Coordination Unit, the conditions for receiving and implementing the Strategy and these various other legal and policy instruments at the local level.

This same work will have to be carried out in favour of the application of the Strategy and the other instruments of the African Union by the various specialized regional organizations (IOC, MOWCA, PMAWCA, PMAESA, Shippers' Associations, Regional Fisheries Commissions, etc.).

This collaborative work should also serve to encourage the modernisation and efficiency of legal and regulatory frameworks in Member States through the ratification and effective implementation of the most relevant international conventions in the field of the Blue economy (1982 Montego Bay Convention on the Law of the Sea, IMO Conventions, FAO Texts and Resolutions, etc...).

- **In the legal and regulatory field**, it is noted here that the CEMAC (or ECCAS) in Central

Africa is the only regional community in Africa (and even in the world) which has been able to adopt a Community Code of Merchant Shipping applicable to its six Member States and which could be taken as a reference by the Coordination Unit as a legislative model for the other regional communities (subject to minor corrections and updates).

A similar initiative is under way in the mining and oil sector in the same region. The same work should be carried out in other areas of economic activity (fisheries and aquaculture, tourism, environment) respecting the fundamental and transversal principles present in the African Blue Economy Strategy.

Another major concern of the Coordination Unit in the field of legislative and regulatory coordination for the implementation of the ABES will be to ensure that Member States and the various regional communities have an adequate legal framework for the emergence of a “sustainable” Blue economy in Africa, and in line with the Sustainable Development Goals (SDGs). A sustainable Blue economy requires a number of legislative and regulatory tools in various areas to be considered fundamental.

- **In the area of economic competitiveness:** the Coordination Unit will have to ensure that Member States, RECs and other specialized regional institutions 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 (modernization of the Fisheries Code, Legislative Model Agreements for Better Negotiation of Fisheries Agreements); 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); etc.

- **In the field of 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, in accordance with the SDGs (notably 1, 2, 3, 8 and 10).

The Coordination Unit will thus have to verify that Member States and RECS and other specialized regional institutions 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).

- **In the area of environmental protection and marine and aquatic ecosystems:** This issue remains at the heart 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 ABES in all regions and Member States of the continent. The Coordination Unit should therefore check with States and with RECs and other specialized regional institutions that this concern is supported by an appropriate legal and regulatory arsenal.

Thus the Coordination Unit will strongly encourage the generalized application of the 1982 Montego Bay Convention on the Law of the Sea (The 1982 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 UNEP-led regional seas protection programme in Africa: the Nairobi Convention applicable to Indian Ocean Coastal States; the Abidjan Convention applicable to Atlantic Coastal States in West and Central Africa; and the Barcelona Convention applicable to 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 Member States, of FAO normative initiatives in favour of a rational and sustainable management of fisheries resources in accordance with the Montego Bay Convention; or its regulations and agreements for combating IUU fishing. And the same should apply to climate change provisions (Paris Agreement 2015 + SDG 13).

- **In the area of 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: SOLAS 1974 on the Safety of Life at Sea; COLREG 1972 on Collision Prevention; SALVAGE 1989 on Maritime Assistance and Rescue; MoU Abuja, MoU Indian Ocean, MoU Casablanca, etc.); and the enforcement of international regulations and regional agreements to combat piracy, armed robbery and other criminal and illicit acts at sea (2016 Lome Charter and its different Annexes ; ISPS Concept, Djibouti/Jeddah Code of Conduct on Piracy and Maritime Crime in the Gulf of Aden and the Indian Ocean; Yaounde Code of Conduct on Piracy and Maritime Crime in the Gulf of Guinea; etc.

Clearly said, the success of the ABES can only be real and profound if the current Coordination Unit (or the future and very expected Blue Governance Office, BGO) works effectively for the implementation of this new continental Strategy, as well as for the enforcement across the continent of all the legal and regulatory instruments contributing to the establishment of a sustainable Blue economy.

Specific arrangements to set-up

The Blue Economy economic and environmental components require specific attention in terms of governance. Dedicated coordination mechanisms, private-public partnership initiatives and capacity building programs are presented below for Fisheries, Transport, Tourism, Environment, Energy, Mineral resources and Innovations as complementary to the overall governance framework. As we have already pointed out, the African Union Commission (AUC) must strongly encourage each REC and Member State to set up an institution to coordinate the Blue Economy at regional or national level.

These coordination units or offices thus created in each Region or Member State would be responsible for reporting to the African Union Blue Governance Office (BGO) with the conditions for receiving and implementing the Strategy and these various other legal and policy instruments at the local level.

This same work will have to be carried out in favour of the application of the Strategy and the other instruments of the African Union by the various specialized regional organizations (IOC,

MOWCA, PMAWCA, PMAESA, Associations of shippers, Regional Fisheries Commissions, etc.). Close and regular collaboration between the AUC and the various regional and national coordination offices, as well as with the specialized regional institutions, will be required. This collaborative work should also serve to encourage the modernisation and efficiency of legal and regulatory frameworks in Member States through the ratification and effective implementation of the most relevant international conventions in the field of the Blue Economy (1982 Montego Bay Convention on the Law of the Sea, IMO Conventions, FAO Texts and Resolutions, etc...).

Specific coordination mechanisms

Fishery and aquaculture

The ministry, department or agency (hereafter referred to as the Authority) in-charge of the fisheries and aquaculture serves as an engine that drives growth and provides a new impetus to unlock the full potential of the sector. It has oversight responsibility for setting-up effective coordination mechanisms through broad consultative processes with other stakeholders. The coordination mechanisms can consider the following elements:

- A Directorate or Unit be established, if not already in existence, to oversee the planning, coordination, implementation, monitoring and evaluations;
- Under the Directorate/Unit, set up an all-inclusive Steering Committee composed of members from, among others, ministries/departments/agencies that have a stake in the sector (multi-sectorial approach/spatial planning, including environment, shipping, tourism, energy, agriculture, trade), representatives from the commercial fishing industry, small scale fishing representatives, private aquaculture farmers or their associations, fishing cooperatives/associations, academics and NGOs. The Steering Committee may establish tasks teams or/and co-opt additional members of experts, as the need arises from time-to-time. The primary responsibility of the Steering Committee is to domesticate the plan and steer its implementation;
- The Authority appoints/delegates a senior official to provide strategic leadership to the Steering Committee and serve as a primary liaison/link with the national Blue Economy Coordination Unit and as a contact point with the DREA-AU-IBAR, Secretariat of Aquaculture Network for Africa (ANAF), Committee on Inland Fisheries and Aquaculture in Africa (CIFAA), RECS, LMEs, AUDA-NEPAD, RFMOs, RFB, Inland Water Commissions and Regional Seas programs;
- The Authority mainstreams the plan into general government development policies to ensure coherence in policy and unlock national public resources to help jumpstart implementation;
- The Authority carries out its sectoral national, regional and international obligations, including the implementation of this plan, supported by DREA-AU-IBAR and partners;
- The Authority and DREA-AU-IBAR conduct periodic monitoring and evaluation (M&E).

Transport

In order to ensure the coordination of policies and programs in maritime transport, the AU should put in place:

- A continental body for the coordination of regional cooperation activities in the fields of maritime transport and port operations;
- The Continental Association of African Maritime Administrations (AAMA) whose coordination will be ensured by the African Union Commission;
- sub-regional organization of cooperation in the fields of maritime transport, navigation by inland waterways and port operations, responsible for (like the “Maritime Organization of West and Central Africa”):
- Encouraging the creation of sub-regional shipping companies to promote intra-African trade and organizing auxiliary maritime transport services;
- encouraging transit and landlocked countries to conclude transit agreements;
- strengthening cooperation in the field of shipbuilding and repair;
- establishing an effective communication network with a view to optimise use of intervention mechanisms at sea and the better organization of maritime traffic;
- promoting the use of information and communication technologies and encouraging, at the national and sub-regional level, the creation of maritime traffic facilitation committees;
- sub-regional body for the coordination of ports;
- sub-regional coordinating body for shippers’ councils;
- sub-regional coordination body for shipping companies;
- national administration responsible for coordinating and harmonizing maritime, multimodal and inland waterway transport activities, for the application of laws and regulations in the fields of navigation, safety and maritime security, the marine environment and port operations.

Tourism

The specific arrangements to set-up the blue governance of coastal and marine tourism require a plan of action that constitutes a framework and coordinating mechanism for regional cooperation to facilitate and promote the sustainable management of the marine and coastal resources of the AU Member States. This needs to be on the basis of regional policies, programmes, strategies and measures agreed and drawn up in response to national tourism needs, interests of regional and global importance, for the benefit of local communities and the well-being of present and future generations. In its turn, the blue economy governance programme of activities also establishes, where appropriate, part of the African continent component of the Global Programme of Action for Coastal and Marine Tourism inclusive of inland-based activities.

The blue economy governance represents the principal instrument for the implementation of the Africa Blue Economy Strategy (ABES). The ABES is geographically encompassed by the plan of action including the area covered by the AU Member States and UN Convention on the Protection and Sustainable Development of Marine and Coastal Areas. This in turn corresponds, where appropriate, to the area of application of the AU Member States and RECs component of the Protection of the Marine Environment from Land-based Activities and Sustainable Use of Marine Resources. The specific arrangements to set-up coastal and marine tourism will rely and build on interests of the AU Member States in accordance with the ABES' coordinating mechanism. The elements and activities which form the basis of the blue economy governance plan of action are derived from the ABES and AU documents and also from current international treaties pertinent to the implementation of the plan of action and the agreements, conclusions and recommendations arising from the meetings that formed part of the preparatory process of the ABES. The activities will be undertaken in context of blue economy governance covering and not limited to: reviewing policy frameworks regulating the tourism sector in Africa, and methodological frameworks for tourism statistics internationally recognised and adopted, in particular: Systems of National Accounts (SNA) for Gross Value Addition (GVA) and Gross Domestic Product (GDP), including the utilization of a harmonized blue economy governance approach and framework benefiting from The Tourism Satellite Account (TSA) with the System of Environmental Economic Accounting (SEEA). The TSA and SEEA will make references to the Continental Tourism Strategic Framework, the Tourism Baseline Study Report and Tourism Action Plan as well as other related initiatives.

Environment

The specific arrangements to set-up coastal and marine tourism require effective and efficient coordination mechanisms. In most cases, coastal and marine ecosystems provide potential opportunities to a constantly growing number of human economic and social activities and infrastructure facilities. Most of the facilities for coastal and marine tourism depend on the ecosystem and the environment. Environmental ecosystems being one of the largest segments of the maritime economic sectors, as well as the largest component of the tourism industry, coastal and marine tourism often raises controversy regarding the environmental impacts and the compatibilities with other human activities. Therefore, an effective and efficient coordinating mechanism in part to mainstream Marine Spatial Planning (MSP), is considered to be an opportunity for blue economy governance. The specific arrangement is a procedural requirement in tackling developmental and management issues related to the marine environment and ecosystems, and thus issues related to coastal and marine tourism. Indeed, the blue economy governance stipulates the significant role of MSP in organizing and planning coastal and marine tourism activities and especially in ensuring:

- good environmental conditions for the tourism industry to prosper;
- quality of seascapes and coastal landscapes and other resources of importance to tourism;
- adaptation to climate change effects;
- spatial regulations so that coastal and marine space is not overwhelmed by tourism facilities and activities; and,
- equitable allocation of resource uses in the coastal zone so as to avoid conflicts and create synergies among sectors.
- The institutional set-up arrangements to ensure governance of the blue economy is efficient and effective for the coastal and marine tourism will include:
 - Enhancing or setting-up a proper tourism coordination mechanism drawing from the Tourism Satellite Account (TSA), a statistical framework for economic measurement of tourism, and from the System of Economic and Environmental Accounting (SEEA), a framework that integrates environmental and economic data;
 - Developing their tourism sectors based on the System of National Accounting (SNA) structures of supply and demand of goods and services, adapted to countries' development priorities and policy needs;
 - Ensuring links between the SNAs to the overall integration of both the TSA and the SEEA as required to generate information that will be used by Member States and RECs in decision making, policy review and formulation, analysis and research in tourism;
 - Fixing current institutional inefficiencies, data gaps and information problems originating from inbound, domestic tourism and outbound tourism expenditure; internal tourism expenditure; production accounts of tourism industries; The Gross Value Added (GVA) and Gross Domestic Product (GDP) attributable to tourism; employment, investment and non-monetary indicators;
 - Ensuring coherence and synergies between AU Tourism institutional coordination based on the TSA and SEEA with Member States SNA; and,
 - Developing institutional mechanisms to promote Africa's tourism with potential to increase GVA and GDP

The specific arrangements for the blue economy governance will therefore: prevent, reduce and control degradation of the marine environment so as to maintain and improve its life system and productive capabilities; develop and increase the potential of marine living resources to meet human nutritional needs as well as social, economic and development goals; and, promote the integrated management and sustainable development of coastal areas and the marine environment.

Energy

An effective sustainable energy governance hinges in having a coordination mechanism of member states, RECs, government entities, private sector, and academic and research institutions. As most of the challenges require policy actions, governance is critical in helping to address the challenges and pave a way for collaboration among RECs, attract private investments, and increase access to electricity. Some of the coordination mechanisms for the realization of successful sustainable blue energy could include:

- Institutionalizing sustainable blue energy at national level;
- Integrating sustainable blue energy and creating linkages among concerned entities at the national level;
- Coordinating regional efforts with RECs and other entities;
- Coordinating and interacting at continental level through African Energy Commission (AFREC), AU-IBAR, NEPAD and other entities;
- Integrating sustainable blue energy in the work program of the regional energy centres such as:
- Centre for Renewable Energy and Energy Efficiency (SACREEE) of Southern African countries,
- Regional Centre for Renewable Energy and Energy Efficiency (RCREEE) of African pan-Arab countries, and
- ECOWAS Renewable Energy Policy (EREP) of West African countries;
- Strengthening regional collaborations among the power pools such as Southern African Power Pool (SAPP), the Eastern African Power Pool (EAPP), and the Maghreb Electricity Committee (COMELEC) to make use of the offshore wind energy potential and other ocean energy technologies;
- Establishing coordination between mature sectors (e.g. shipping, ports, and maritime logistics) to share experience especially about coping with security challenges as they could provide valuable lessons to the new emerging sectors (e.g. offshore renewable energy) to adequately respond to security threats.

Mineral resources

Deep sea mining is a complex process that requires multi-level and multi sectoral coordination mechanisms that ensure equitable wealth creation, marine ecology protection, safety, and transparency. Global experience has shown that modest mining revenues that are well managed has led to a larger development outcome compared to larger revenue streams that are poorly managed. Thus, without creating a mining coordination mechanism, the benefits of deep-sea mining could not be realized, nor activities implemented to produce results. Most importantly, without having adequate blue governance, it would be very difficult to attract the scarce global investment.

Deep sea mining, like surface mining, has several unique characteristics that influence fiscal policy design, tax design and administration. Thus, from the lessons learned in the mining sector, some of the key requirements that strengthen governance include²⁴:

- Institutionalizing deep sea mining with clear roles and responsibilities at national level;
- Creating good management to ensure efficient and effective exploitation;
- Designing good tax structures to ensure appropriate government revenue and adequate incentives for investors;
- Integrating good revenue administration to ensure that revenue is collected in practice; and
- Exhibiting good public expenditure management to ensure that volatile and temporary natural resource revenue translates to permanent benefits for the nation and to manage the risk that resource wealth poses to the wider economy;
- Developing, adopting and implementing a regulatory framework to ensure transparency and attract investment;
- Designing an integrated and coherent seabed protection policy;
- Enforcing strict environmental management plan that ensure the protection of marine environment; and
- Understanding the economics of deep-seabed mining that considers the benefits of local communities and externalities.

Innovation

Due to the lack of good governance, inadequate fiscal budget and policies that drive innovation, the continent's industries are relatively obsolete and need modernization. A well-structured and coordinated governance mechanism in innovative industries could increase efficiency of financial spending, increase productivity, increase the transfer and adoption of knowledge and technology, improve local capacity, and encourage entrepreneurship. Hereafter are some of the coordinating mechanisms that could drive innovation in blue economy.

- Understanding the value of innovation in the blue economy for the improvement of livelihoods and economic development;
- Institutionalizing and integrating innovation at the Member States level in order to expedite the realization of blue economy;
- Coordinating the application of innovative industries to power the blue economy and benefiting from the mature sectors;
- Establishing systems to record and measure the performance of innovative industries; and
- Createing cross-organization governance mechanisms for innovation and R&D.

²⁴ *Precautionary Management of Deep-Sea Mining Potential in Pacific Island Countries*: <http://pubdocs.worldbank.org/en/125321460949939983/Pacific-Possible-Deep-Sea-Mining.pdf>

Public-private partnership to set-up

Fishery and aquaculture

Public-Private Partnership (PPP) in the fisheries and aquaculture sector plays a significant role in, among others, improving access to national and international markets, food safety and quality, marketing, financial services, improving cost-effectiveness, increasing investment, bettering the allocation of risks, increasing the speed of implementation, research and development, physical and technical infrastructure, capacity building and extension services, bio-security and bio-safety. The considerations for PPP to set up may include the following elements:

- The ministry, department or agency (hereunder referred to as the Authority) to put in place an appealing and attractive regulatory framework, if it does not exist, for private investments; establish an investment fund for SMEs in fisheries and aquaculture; and establish a PPP Committee focusing specifically on the aquaculture sector;
- The PPP Committee to advise, case-by-case, on the most suitable PPP category (E.g., management/ service contracting or outsourcing, leases, concessions, joint venture arrangements, corporate social responsibility projects, grants or conditional transfers (AU, 2019)); as well as to conduct the evaluation of the PPP projects; develop best practice guidelines and appropriate business models for the sector; and identify funding opportunities;
- A senior official from the Authority to chair the Committee with members with suitable qualifications, having knowledge and experience relevant to the functions of the Committee and drawn from public and private sectors;
- DREA-AU-IBAR and partners to support Member States in adopting the PPPs and implementing PPPs' projects.

Transport

To implement the blue economy strategy, AU member countries should establish a public-private partnership in the following areas:

- Creation and development of African shipping companies through a partnership between the State / shippers / shipping operators / financial institutions;
- Acquisition of modern port materials and equipment, construction, rehabilitation and modernization of port infrastructure, ship repair yards and container terminals;
- Participation of the private sector in the management of ports and port terminals for greater efficiency of port services and the promotion of port competitiveness;
- Establishment of port communities for better consultation between port authorities and the various private port stakeholders;
- Establishment at the sub-regional and national level in partnership with the financial institutions

of national and/or sub-regional maritime funds, including the creation of financing institutions for the development of the maritime and inland waterway transport industry;

- Establishment at the continental and sub-regional levels of partnership with international and African financial institutions for the development of transport corridors through the construction of modern roads and railways to promote inter-African trade;
- Establishment of partnerships between landlocked countries and/or coastal countries and financial institutions for the creation of warehouses and dry ports for the promotion of trade.

Tourism

Using PPP to set-up blue economy governance for tourism requires building trust among AU Member States and RECs. Building trust is a key process of PPP development required to promote collaborative and constructive interactions between potential partners in order to create an atmosphere of mutual trust to generate benefits from cross-cutting opportunities in the tourism sector. Mutual trust does not arise spontaneously, but rather needs to be managed through governance and collaborative arrangements. A primary requirement for the set-up to facilitate trust-building include: producing a minimal structure and ground rules to provide security, equity and fairness to the AU Member States and RECs. The mutual trust for blue economy governance will be achieved by AU Member States and RECs involved in the PPP, who perceive the tourism opportunity with potential to generate value. The PPP set up for tourism is characterized by:

- A “segregated” tourism model, dominated by foreign multinationals; a “relative integration” tourism model that integrates the segregated model with the population and local entrepreneurship; and,
- An “integrated” tourism model, managed by local small and medium enterprises, wherein community interests prevail.

In the Africa Blue Economy Strategy (ABES) the tourism sector development has been predominantly segregated, with a strong dominance of foreign exchange earnings, investment companies and the building of large hotels. In addition, collaborative advantages can capitalize on PPP. Although PPP will explore how they can work together and find common ground for action, in implementing the blue economy governance a partnership is a contractual arrangement where partners have to obtain advantages and share risks. Collaborative advantages may consist of the acquisition of resources, skills, relationships or consent and, concretely, arise when partners connect their own interest with the common objectives of the PPP. In this regard, a constitution of a role of system is a necessary activity of the internal interaction of the PPP process according to ABES implementation framework. This comprises internal aspects, which define the mutual obligations of AU Member

States and RECs, and external aspects, which are related to how the PPP will interact with other organizations.

The formalization of PPP aspects for set-up requires different transactional and procedural elements, such as commitments, different tasks and resources, how the PPP will deal with decision-making processes, monitoring and enforcement. Once identified, the PPPs' obligations/commitments are encapsulated in a memorandum of understanding that detail how the decision-process structure would be established. It would consist of working procedures and the monitoring and internal communication required for effective coordination between the stakeholders.

Environment

The PPPs set-up for the environment widely depend on an array of policy instruments for governing ecosystem services, reducing pollution, promoting biodiversity conservation, and managing land and marine resources at the local, national, regional and global levels. As a specific approach to governing blue economy ecosystem services, PPPs for sustainable development have become a highly visible and much discussed element of sustainability governance. PPP for environmental management in the blue economy relate to the 2002 Johannesburg World Summit on Sustainable Development (WSSD). In this regard, transnational PPPs have emerged and multiplied with different institutional set-up mechanisms. In policy and academic debates alike, partnerships are promoted as a solution for blue economy governance. Thus, PPPs for the environment for AU Member States and RECs will provide solutions to intergovernmental negotiations and many other real or perceived current problems of blue economy governance.

However, systematic evidence of the impacts of PPPs is scarce and the broader consequences of outsourcing and privatizing environmental governance are not well understood. The emergence and effectiveness of PPPs for sustainable development that utilizes a large environmental database to understand the role and relevance of PPPs in blue economy environmental governance, requires effective institutional coordination, and advanced skills, techniques and technology. In addition to PPPs providing a general assessment of environmental impacts, it also presents an analysis of the subset of environment in blue economy governance most closely related to governing ecosystem services.

Although most countries have National PPP Acts that are operational, no regional PPP contracts with environmental mandates or focus have been concluded to date. However, some of the AU Member States and RECs have regional PPP projects concluded prior to the regional environmental

PPP Act being operationalised. In this regard, blue economy governance for the ABES provides a basis for the set-up of regional PPPs with environmental mandates and focus. The set-up should be integrated including regional environmental, research and academic institutions.

Energy

The implementation of sustainable blue energy requires high capital investment and as most of the technologies, except FPV and offshore wind, are not matured, the risk of investment could be high. For the fact that Member States and global financial institutions could be strapped with funding, an increased number of countries are turning to Public-Private Partnerships (PPPs) in order to tap private capital. In recent years, PPP in renewable energy projects in Africa has been substantially increasing. The lesson learned on the application of PPP from traditional renewable energy projects could be applied for sustainable blue energy that include (a) starting small and gradually incrementing on larger PPPs based on lessons learned, and (b) higher risk allocation to government in the first generation of PPP projects can provide many advantages and go a long way in unlocking the flow of private capital into PPPs once investors and lenders develop enough comfort with the PPP environment of a country.

In order to successfully realize PPP, Member States need to address some of the barriers hindering the application PPP, which include:

- financial impediments due to high power projects' initial cost and limited access to finance;
- inadequate legal and regulatory framework for PPP;
- lack of technical skills to manage PPP program and projects;
- unfavourable investor perceptions of country risk;
- Africa's limited role in global trade and investment;
- small market size;
- limited infrastructure;
- limited financial markets;
- boated government structures, weak legal and judicial systems; and
- lack of political will.

Thus, for PPP to work in sustainable blue energy and ensure the flow of finance, Member States need to:

- Enact a regulatory framework to attract private sector investments
- Develop many bankable projects;
- Undertake government reform conducive for PPP;

- Establish functioning and politically independent PPP units to deliver transparent procurement processes that will attract foreign players;
- Determine real electricity demand;
- Integrate transparent and efficient procurement mechanisms;
- Demonstrate the enforceability of contracts;
- Demonstrate equitable sharing of risks with the public sector
- Demonstrate the certainty of the envisaged future cash flows

Mineral resources

Deep sea mining requires permission from the International Seabed Authority (ISA) where the exploration contracts provide the right to explore a specific part of the seabed for 15 years. As of mid-2020, 30 mining groups have signed exploration contracts in different parts of the world. The projects have mixed investment arrangements including governments, public-private partnerships, international consortiums and private multinational companies. The lesson learned of the application of PPP from land-based mining that could be applied for deep sea mining include that PPP

- promotes the quick delivery of public infrastructure projects
- reduces governments' financial burden, and
- allows for shared risk.

Based on land-based mining experiences, African governments need to realize the benefits of partnering with the private sector. As commercial deep-sea mining seems imminent, having regulatory systems in place is critical for the Member States to encourage PPPs. Though most of the recommendations identified for sustainable blue energy apply for deep sea mining, hereunder are specific actions needed to implement PPPs to attract investment and expedite the benefits.

- Adopt a holistic strategy which is anchored in Public Private Partnership (PPP);
- develop regulatory framework;
- learn from land based PPPS and make amendments to apply for dee sea mining; and
- formulate, facilitate and implement appropriate policies that promote joint ventures with the private sector.

Innovation

As developed countries provide adequate financing for innovation through PPP arrangements, they are always at the top of their game. Africa member states need to encourage PPP to drive innovation. Though the first step is to have a clear policy that allocates funding to share the burden,

it is important to encourage private sector to work with the government in advancing innovative technologies in the blue economy. Some of the actions needed to expedite the application of PPP to drive innovation could include:

- ensuring innovative industries benefit both public and private investors;
- promoting technology transfer that is adaptable to the local characteristics and application;
- structuring PPPs to foster innovation;
- developing a database of innovative technologies that could be adopted by another Member State;
- developing innovative financial and business mechanisms;
- promoting a private finance initiative, where the government takes advantage of private-sector management skills by awarding long-term franchises to a private-sector partner.

Capacity building, Research and Education

Fishery and aquaculture

Knowledge, research, innovation and education are essential cross-cutting ingredients for driving the fisheries and aquaculture sector to reach its potential. Therefore, the ministry, department or agency (hereunder referred to as the Authority) in-charge of the fisheries and aquaculture should:

- Prioritise investments in the training and capacity development, research and education interventions at all levels (technical, managerial, strategic) and in all areas of fisheries and aquaculture (including, fisheries research, stock assessments, fisheries management planning, fishing management, regional cooperation, fisheries economics, marketing, human rights-based approaches to management) covering public, private and small scale fishers;
- Mainstream fisheries and aquaculture courses in the educational system and be part of the curricula development to ensure that what is taught is relevant to the needs of the sector
- Establish fish farms / laboratories / aquaculture demonstration centres that provide, among other things, training and extension services as well as seeds and fingerlings to the small scale fishers;
- Utilize existing centres of excellence in fisheries and aquaculture for enhancement of expertise and knowledge, research and innovation. Egypt, which produces nearly two-thirds of the total aquaculture in Africa has two first-class centres, namely the Central Laboratory for Aquaculture Research (CLAR) and the Worldfish Centre both located in Abbassa. These centres are specialised in fish nutrition and feed technology, hatchery, limnology, processing and quality control, production systems, breeding and genetics, fish health and fish extension services, policy and marketing innovations and can transform aquaculture and fish value chains. The Egyptian farming model has worked and should be replicated;

- Enter into agreements and MoUs for training and exchange programmes with the AU-IBAR identified six centres of excellence to produce a critical mass of expertise in various fields of fisheries and aquaculture;
- Establish closer collaboration and networking in capacity building, research, education, and innovation at national, regional and continental levels as well as north-south partnerships
- DREA-AU-IBAR and partners to support the Member States in mobilising resources for capacity building, research and education.

Transport

In order to have quality human resources for the management of the blue economy, it is necessary to:

- create or strengthen training establishments, universities, specialized academies, institutes and maritime research centres, by inland waterways and port operations, at national, regional and continental levels;
- provide training establishments and institutes with teachers and instructors specializing in navigation, commerce and maritime legislation techniques;
- encourage collaboration between training and research institutes with a view to co-operate in the fields of research, innovation and training in matters of policy, strategy and regulation of maritime navigation and ports;
- mobilize financial resources for maritime training, research and education institutes at national and regional levels, as well as the granting of training grants;
- introduce and adopt a common standard for the recognition of diplomas and certificates issued by national and regional training institutions in order to promote the employment of seafarers on the continent;
- build the capacities of port operators and set up training programs for a qualified workforce, focusing on information and communication technologies;
- create centres of excellence;
- promote the professionalisation of actors, capacity building and employability of young people.

Tourism

Capacity building, research and education are key drivers for tourism motivations and collaborative advantages that are interdependent. The reasons that drive tourism into capacity building, research and education in blue economy, is to promote collaborative advantages. In the ABES, from the beginning of the strategy formulation, the motivations of tourism to participate in the capacity building, research and education legitimises the position of AU Member States and RECs in ABES

and its implementation of a blue governance mechanism.

Specifically, AU Member States and RECs would benefit from the specific know-how developed in the capacity building, research and education as well as from the capacity, co-financing and the technical support of the other stakeholders to achieve the priorities of the AU public policies. Furthermore, the implementation of ABES in AU Member States and RECs would enable it to standardize a working practice for blue economy governance embracing capacity building, research and education.

In terms of blue economy governance on tourism for hotels and resorts, the main motivation for capacity building, research and education would be corporate social responsibility and inclusive participation of AU Member States and RECs. So far, capacity building, research and education in “sustainability policy” is limited in regional integration and consists of taking action to meet the sustainability certification as required by global best practices. The application requires know-how in the Information, Communication and Technology (ICT) that is very much capacity building, research and education oriented.

The capacity building, research and education, would promote tourism certifications that primarily benefit the AU Member States and RECs’ hotels’ processes and procedures. The blue economy governance, would therefore, standardize an action plan for promoting actions directed at involving the local community in relation to social and environmental sustainability in the tourism sector. Through the AU Member States and RECs, the sector would have the opportunity to develop a more complete/holistic sustainability approach for its core businesses, basing it not only on the legislative model of capacity building, research and education, but also on the possibilities for contributing actively to the corporate social responsibility of the hotel value chain.

Environment

Capacity building, research and education for the environment in blue economy governance will contribute to differentiating environmental products and services – thereby increasing competitive advantage in the blue economy. AU Member States and RECs need to embrace capacity building, research and education with teams of experts. These teams would bring their skills, knowledge, competence and experience in the design, implementation and evaluation of blue economy governance and initiatives to the area of maintaining a sustainable environment. The AU Member States and RECs’ particular interest should be to increase the knowledge of blue economy in the field of the environment. Involvement in a blue economy governance would offer the opportunity to have direct contact with the businesses and an opportunity to test methodologies developed

theoretically through capacity building, research and education.

AU Member States and RECs internal interaction of the blue economy governance process should be perceived in the role of the environmental system that is cross-cutting and requires integrated regional efforts. This comprises internal aspects, which define the mutual obligations of AU Member States and RECs, and external aspects, which are related to how the capacity building, research and education will interact with other regional organizations. The formalization of these aspects requires different transactional and procedural elements, such as institutional commitments, different tasks and resources, and how the AU Member States and RECs will deal with decision-making processes, monitoring and enforcement of capacity building, research and education at regional levels.

Energy

The lack of skills in sustainable blue energy, advancement in research and education play a key role in how governance functions. As the advancement of blue energy in leading energy research institutions in developed countries is progressing, African member states need to invest in capacity building, research and academic institutions to catch-up. Hereunder are some of the capacity building, research and education requirements that promote good governance in sustainable blue energy such as:

- partnering with international research and educational institutions to build local capacity in policy, financing mechanisms, business models, operation and maintenance and procurement;
- strengthening research and development of the AU research and development bodies such as the African Union – Inter-African Bureau for Animal Resources (AU-IBAR) and African Union Development Agency (AUDA-NEPAD);
- seeking regulatory, institutional and technical support from international energy centres such as IEA and IRENA;
- including elements of national security, human security, marine safety and ecological integrity, both in planning and operations;
- creating linkages with multi-lateral, private, and government entities in training, research and education advancement;
- ensuring project partners provide on the job training to other project partners;
- organizing and undertaking awareness workshops;
- creating technical experts' database to promote collaboration; and
- enhancing collaborations among African research and development institutions specialized in these sectors.

Mineral resources

The International Seabed Authority (ISA) in collaboration with the African Mineral Development Centre (AMDC) have been engaged in capacity building activities in deep-sea mining. For example, in 2017, the ISA, AMDC, and GRID-Arendal (Norway) with the support of the African Union Commission (AUC), United Nations Economic Commission for Africa (UNECA) and the PEW Charitable Trust, held a workshop and recommended capacity building as a means to achieve responsible deep seabed mining activities. In general, some of the capacity building, research and education needs for good governance for deep sea mining could be described as follows.

- Harmonize the capacities and capabilities of Member States' institutions and organizations through a regional workshop where they could all be invited to present their capacities and capabilities;
- Put together a scoping study document of the potential capacities and capabilities for African marine mineral resources institutions and organizations;
- Engage existing African institutions on marine scientific research to reassemble the existing data and incorporate seabed mining components;
- As some Africans have already been trained through the ISA Contractors training programs and the ISA Endowment Fund, there is a need to obtain information from ISA of contact details of African nationals who have been trained to involve them in the process of capacity building;
- Create a directory of African experts, including those in diaspora, in the Blue Economy, including deep seabed mining;
- Recognizing that deep seabed mining is multidisciplinary, the strategy for dissemination should be multidimensional to reach the widest number of potential candidates in the African continent;
- Gender representation, especially female, should be considered in candidates of capacity building, training and research offered by ISA/Contractors and other entities. In order to ensure women's inclusion in potential capacity building initiatives, some of the relevant women's associations that need to be informed include the Association of Women in Geosciences, the African Women in Mining Association and Women in Maritime in Africa (WIMAFRICA);
- As some countries like Namibia have already started seabed mining, member states could benefit from countries with experience;
- Integrate marine ecology protection and sustainable seabed mineral extraction components in existing research and educational institutions to document, monitor and evaluate activities;
- Produce guidelines on how to strengthen the Africa-based production, management and dissemination of geospatial information and how to create spatial data infrastructures (SDIs); and
- Issue recommendations on how best to promote prospecting and exploratory activities on the African continental shelf and adjacent oceanic areas by African initiatives.

Innovation

The continent is at the bottom of world rankings in innovation, research and educational standing. Many research and educational institutions are suffering from the lack of funding which is the driver for innovation. Unless the continent increases its effort to allocate funding, coordinate its efforts and enforce policies that encourage innovation, the benefits of a blue economy might not be fully realized. Some of the elements that drive innovation could include:

- Demonstrating political will to invest in research and educational institutions;
- allocating fiscal funding to research and educational institutions to build local capacity to help transfer and adopt innovative technologies to the continent;
- integrating technology transfer and on the job training in blue economy projects;
- enhancing collaborations among African research and development institutions specialized in these sectors;
- enhancing collaboration among African research and educational institutions; and
- establishing African Centres of Excellence, to provide African States with increased access to marine geoscientific information and high-quality marine research, education and training.



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