



United Nations
Economic Commission for Africa

AFRICA'S BLUE ECONOMY

Opportunities and challenges to bolster sustainable development and socioeconomic transformation

ISSUES PAPER



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Abbreviations and acronyms

AfDB	African Development Bank
EAC	East African Communities
ECA	Economic Commission for Africa
EEZ	Exclusive economic zone
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross domestic product
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
OECD	Organization for Economic Cooperation and Development
PIDA	Programme for Industrial Development Africa
PPP	Public Private Partnership
PWC	PricewaterhouseCoopers
REC	Regional economic commission
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WTO	World Trade Organization



Far from being a burden, sustainable development is an exceptional opportunity – economically, to build markets and create jobs; socially, to bring people in from the margins; and politically, to give every man and woman a voice, and a choice, in deciding their own future.

— **Kofi Annan**



Key messages:

Invest, Develop, Engage and Protect

Why Invest in the Blue Economy? To ensure the sustainable development of Africa's natural resources. Potential is not a guarantee for success. We need financial resources to transform Africa's natural resources. The wealth that can be generated from the ocean is conservatively valued at US\$ 24 trillion, of which it is estimated that goods and services provide \$2.5 trillion annually. If, collectively, the oceans were a country, they would thus constitute the seventh largest economy in the world. (*Africa's Blue Economy: A Policy Handbook* published by the Economic Commission for Africa (ECA) provides more information on the topic and is available at <https://www.uneca.org/publications/africas-blue-economy-policy-handbook>. **Invest in:** sea and river ports infrastructure; effective logistics and supply chain; aquaculture; protection of the environment.

Why Develop the Blue Economy? To connect and stimulate the emergence of integrated productive sectors for economic and social development. **Develop:** a sustainable circular economy, where each Blue Economy component is developed in harmony with the preservation and conservation of the environment.

Why Engage in an inclusive Blue Economy? To foster inclusive growth for job creation; food security and reinforcing the fight against hunger and poverty; capacity-building for young people; gender equality and the interests of local communities. **Engage in:** gender focus, capacity-building and community inclusiveness.

Why Protect the Blue Economy? To prevent loss of habitats and cultures. Climate change and environmental mismanagement are growing threats to the integrity and sustainability of the aquatic and marine resources on which the Blue Economy is based. **Protect:** the Earth's ecosystem by carrying out sustainable uses of its' natural resources.

How to Invest, Develop, Engage and Protect Africa's Blue Economy? The desirable Blue Economy framework offers an "integrated, systemic, dynamic, inclusive, participatory and ecosystem-based approach in which sectoral barriers are minimized at the activity and governance level, and environmental, social and economic dimensions are intertwined and pursued for all Blue Economy activities" (see the report of the 21st Intergovernmental Committee of Experts on *Transformative Growth in Eastern Africa: Catalysts and Constraints*, published by ECA in 2017, available at: <https://repository.uneca.org/bitstream/handle/10855/24053/b11875999.pdf?sequence=1>).

I Introduction

The present Issues Paper aims at analysing how African countries can utilize the opportunities in the Blue Economy to bolster sustainable development and socioeconomic transformation. Agenda 2063 of the African Union declares the Blue Economy to be “Africa’s future” and recognizes the key role that the ocean plays as a catalyst for socioeconomic transformation. The paper examines the opportunities and challenges to developing the Blue Economy in Africa. It provides recommendations on how to transform these challenges into opportunities for growth, sustainable development and socioeconomic transformation.

Sustainable development is the “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”.¹ The interconnectedness of the world’s oceans, lakes and rivers calls for a holistic approach when it comes to how the global community should approach the Blue Economy. This, however, does not exclude the fact that each continent and each country has its own challenges and potentialities for development, depending on the natural resources embedded in its oceans, lakes and rivers.

This paper is an introduction to some of the discussions that will be taking place during the Sustainable Blue Economy Conference, from 26 to 28 November 2018 in Nairobi on the overarching theme of “the Blue Economy and the 2030 Agenda for Sustainable Development”.

At the request of the Government of Kenya, the Economic Commission for Africa (ECA) has prepared this paper on the opportunities and challenges for the development of the Blue Economy in Africa. It is hoped that the paper will contribute to and inform commitments to be made by various countries and stakeholders in making use of the opportunities in the Blue Economy. It is also expected that world leaders will take advantage of this opportunity to refresh the sustainability debate and adopt concrete and meaningful actions for the sustainable development of the Blue Economy. The ECA Blue Economy programme is illustrated in Figure I below.

Figure I: The ECA Blue Economy programme



1 Our Common Future, also known as The Brundtland Report by the World Commission on Environment and Development, 1987.

II Background

A. Defining the Blue Economy

In the approach promoted by the Economic Commission for Africa (ECA) and the African Union Commission, the “Blue Economy” encompasses all activities developing or deriving from marine and aquatic ecosystems including oceans, coasts, seas, rivers, lakes and groundwater, and associated resources. The Blue Economy advocates a multisectoral and integrated approach towards the sustainable management of these activities in attaining socioeconomic transformation and sustainable development. The Blue Economy supports the creation of value chains and can substantially contribute to the structural transformation of economies, job creation, fight against poverty, improvement of social conditions, among others.

The Blue Economy also highlights the interests of landlocked countries and inland water ecosystems. It involves a large number of highly productive activities whose results, if well-managed, can make a powerful contribution to the continent’s economic take-off such as trade and transport activities by sea, inland waterway and lake; port activities and industries; fishing and exploitation of fishery and aquaculture resources; mining, oil and gas resources; exploitation of renewable marine and hydraulic energies; seaside, inland waterways and lake tourism. The combination of activities varies in each country, depending on unique national circumstances and the existing vision and understanding of the “Blue Economy”.

This broad notion stemming from the African Union “Africa’s 2050 Integrated Maritime Strategy” and the ECA Handbook on the Blue Economy is in line with the requirements of the 2030 Agenda for Sustainable Development. The Blue Economy is interlinked with the 2030 Agenda in numerous ways. For instance, beyond Sustainable Development Goal 14 on the conservation and sustainable use of oceans, seas and marine resources, the Blue Economy provides an array of opportunities to contribute to ending poverty (Goal 1), to improving food security and eliminating hunger (Goal 2), and to accessing clean water (Goal 6).

B. Linkages between the Blue Economy and the 2030 Agenda for Sustainable Development

Ocean, seas and marine resources are central to the delivery of the 2030 Agenda for Sustainable Development and the Goals it enshrines. A sustainable Blue Economy seeks to promote economic growth, responsible production and consumption, social inclusion, and the preservation or improvement of livelihoods and environmental sustainability of the ocean and coastal areas. Figure I here below offers a non-exhaustive list of linkages between Blue Economy development and the 17 Sustainable Development Goals of the 2030 Agenda.

Figure II: Linkages between development of the Blue Economy and the 2030 Agenda for Sustainable Development

Potential POSITIVES of proper development of the Blue Economy	SDG Goals	Potential NEGATIVES of improper development of the Blue Economy
Improved livelihoods and employment Investment in enterprises	1 NO POVERTY	Space conflicts Marginalization
Enhanced sustainable food production Improved food distribution	2 ZERO HUNGER	Increased food waste Harmful commoditization of food
Improved water quality Increased funding to health services Improved occupational safety of seafarers	3 GOOD HEALTH AND WELL-BEING	Pollution Weak revenue capture at national level
Enhanced knowledge infrastructure Increased funding for the education sector Skill development	4 QUALITY EDUCATION	Outsourcing of skilled labor Unwillingness to invest in local training and education Brain drain
Increased equal rights to economic resources Increased participation in decision making	5 GENDER EQUALITY	Increased gender disparity in wages Proliferation of income gap
Increased funding for access to clean water and sanitation Investments in nature-based water provision services	6 CLEAN WATER AND SANITATION	Water pollution Destruction of nature-based water provision services
Enhanced access to renewable energy Improved knowledge base to build and maintain infrastructure	7 AFFORDABLE AND CLEAN ENERGY	Continued incentivization of carbon-based energy Population displacement Environmental impacts
Job creation Economic diversification	8 DECENT WORK AND ECONOMIC GROWTH	Wealth concentration Over-reliance on quantitative growth
Increased and improved infrastructure Technological progress	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Environmental impacts High dependency on technology
Enhanced benefit distribution Enhanced participatory engagement of all stakeholders	10 REDUCED INEQUALITIES	Business as usual Concentration of influence
Improved cycling, harvesting, and use of water Cities have access to clean renewable energy	11 SUSTAINABLE CITIES AND COMMUNITIES	Increased pressure on freshwater resources Pollution
Removal of inefficient fossil-fuel subsidies Promotion of more equitable trade of goods and services	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Unsustainable production practices Increased waste flows
Transition to low-carbon economies Resilience to uncertain climate future	13 CLIMATE ACTION	Increased carbon intensity Coastal degradation leading to climate vulnerability
Enhanced health of aquatic and marine ecosystems Increased stock abundance supporting sustainable fisheries	14 LIFE UNDER WATER	Overexploitation of aquatic and marine resources Environmental degradation
Increased water security Enhanced sustainable transboundary water sharing	15 LIFE ON LAND	Nutrient pollution Biodiversity loss
Improved governance Promotion of continental peace and security	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Resource conflicts Failure to implement and enforce laws and regulations Dutch disease and resource curse
Improved partnerships between public, private, and civil society actors Strengthened continental cooperation	17 PARTNERSHIPS FOR THE GOALS	Insufficient partnerships Bureaucratic complexity

Source: "Africa's Blue Economy: A Policy handbook, ECA March 2016, p.10

The Blue Economy concept includes recognition that the productivity of healthy freshwater and ocean ecosystems is a pathway for aquatic and maritime based economies and can ensure that islands and other coastal countries, as well as landlocked States benefit from their resources. The current Blue Economy framework is sectoral in many jurisdictions as illustrated in Figure II below. This framework consists in a linear, compartmentalized and sectoral approach with weak connections, linkages and synergies between various scales of intervention (global, international, and national), including among the concerned sectors. The desirable Blue Economy framework offers an "integrated, systemic, dynamic, inclusive, participatory and ecosystem-based approach in which sectoral barriers are minimized at the activity and governance level, and environmental, social and economic dimensions are intertwined and pursued for all Blue Economy activities", as shown in Figure III.

Figure III: The Blue Economy Sector Framework

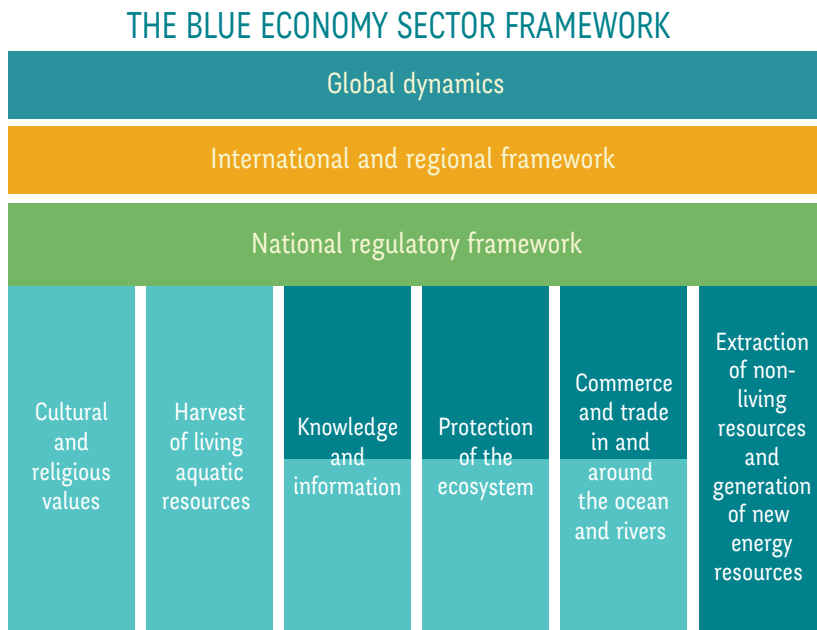
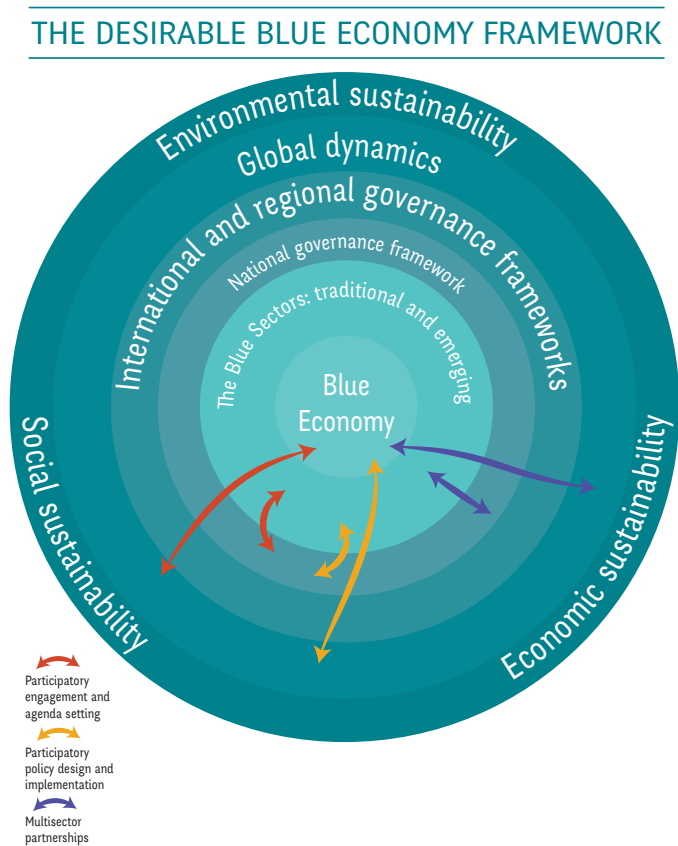
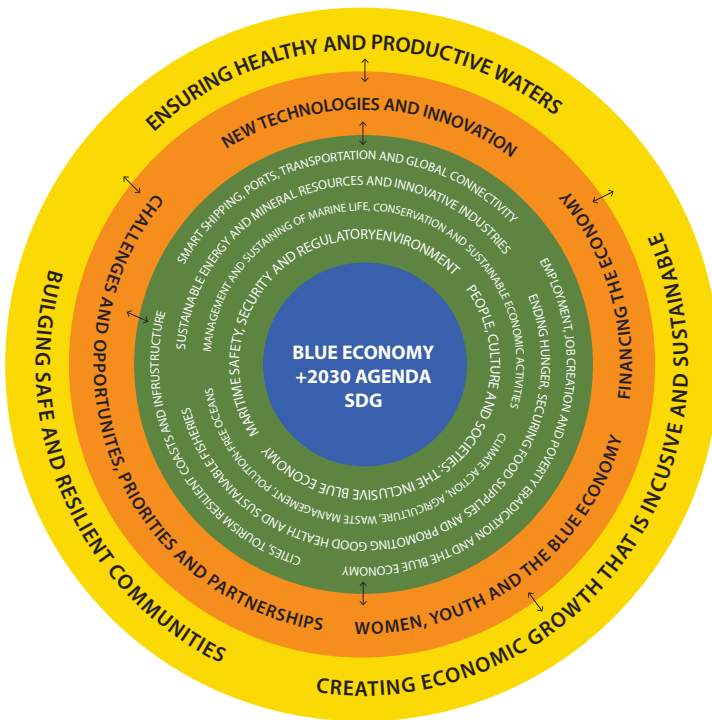


Figure IV: The Desirable Blue Economy Framework



Source: ECA, Africa's Blue Economy: A Policy Handbook

Figure V: The Sustainable Blue Economy conference themes



Source: Author

The Conference for the Sustainable Blue Economy Conference is structured around 9 sub-themes that, if approached from the standpoint of the desirable Blue Economy framework, will provide an integrated and interconnected flow with the 2030 Agenda for Sustainable Development.

III The Blue Economy – from challenges to opportunities

The territorial waters and exclusive economic zones (EEZs) under the jurisdiction of African Coastal States (39 out of Africa’s 54 countries are coastal and island States) are extensive, measuring some 13 million km², and their continental shelves extend over a total area of some 6.5 million km². With an area of approximately 30 million km², Africa is the second largest continent, equivalent to two-thirds of the size of Asia, and three times that of Europe. The continent is surrounded by oceanic expanses (Atlantic Ocean and Indian Ocean), and by two semi-enclosed seas: the Mediterranean Sea and the Red Sea). Africa is also home to the second-largest and longest rivers and aquatic areas in the world (the Nile and the Congo). There are 63 international river basins covering approximately 64 per cent of the continent’s land area. The African Great Lakes constitute 27 per cent of surface freshwater, the largest proportion in the world.²

The Blue Economy has the potential to create wealth and economic growth and to transform the lives of Africa’s citizens. Africa is endowed with a variety of natural resources – living and nonliving, such as water, and diverse flora and fauna, including fish stocks, minerals and hydrocarbons.³ The wealth that can be generated from the ocean is conservatively valued at US\$ 4 trillion, which is equivalent to the GDP of countries in East Asia and the Pacific in 2017⁴ and of which it is estimated goods and services provide \$2.5 trillion annually. If, collectively, the oceans were a country, they would thus constitute the eighth largest economy in the world just after India and before Italy.⁵

Yet, the continent still suffers from large-scale poverty, with 46 per cent of the population living in extreme poverty. Africa will account for much of the exponential growth in the world’s population this century, and a quarter of the population on Earth in 2050 will be based in Africa. Growth has generally not been accompanied by broad-based social progress and structural transformation of the economy. African countries can tap into this wealth by investing in the Blue Economy sectors described in table 1 below:

Table 1: Blue Economy ecosystem and services and Blue Economy sectors

Type of ecosystem and services	Blue Economy sectors
Harvesting of living aquatic resources (seafood, plant marine organisms and marine-biotechnological products)	Fishing (inland, coastal and deep seas) Aquaculture Mariculture Pharmaceuticals, chemicals, cosmetics, genetic research
Extraction of non-living resources and generation of new energy resources	Deep-sea and seabed mining Offshore oil and gas Renewable energy Marine salt harvesting Coastal mining of sand, gravel and other construction materials
Commerce and trade in and around the ocean and rivers	Maritime transport and services Port infrastructure Shipbuilding and repairs River transport Tourism and recreation
Protection	Coastal protection Marine ecosystem protection Water resource protection
Cultural and religious values	Cultural and religious practices
Knowledge and information	Biophysical, socioeconomic and political research

Source: ECA, *Africa’s Blue Economy: A Policy Handbook*, 2016

² <https://www.uneca.org/es-blog/maritime-safety-security-and-development-africa>

³ ECA, *Africa’s Blue Economy: A Policy handbook* (Addis Ababa, 2016), p. 4.

⁴ World Bank, World Development Indicators database, 21 September 2018.

⁵ Based on IMF data on the world’s biggest economies, 2018.

A. Achieving sustainable development in Africa through the Blue Economy

The strength of the relationship between trade and development cannot be overemphasized: Trade has been recognized as the engine for inclusive sustainable development and growth (UNCTAD, 2016).⁶ Maritime transport and its related activities are motors for trade facilitation. The present paper identifies seven key blue economy sectors that governments and stakeholders should focus on.

Seaports

Key opportunities

The importance of seaports for trade in Africa and the continent's economic performance cannot be overstated. A 2017 ECA study underlines that ports are crucial for trade in most African countries due to their high dependency on exports of raw materials and imports of food, manufactured goods and fuel.⁷ Port throughput in the continent is expected to rise from 265 million tonnes in 2009 to more than 2 billion tonnes in 2040.⁸ Seaport competitiveness will improve access of landlocked countries in Africa (16 out of 54 countries), to regional, continental and world markets.

Key challenges

A PricewaterhouseCoopers report⁹ estimates that a 25 per cent improvement in port performance could increase GDP by 2 per cent. Poor port performance is one of the root causes of congestion in ports. Other challenges to port improvement in Africa is attracting sufficient external investment. There is also an imbalance between imports and exports. The nature of goods imported and exported poses major challenges to the cost of imports and exports. Imports to Africa are predominated by containerised cargo, while exports are mainly raw materials and agricultural products, which are mostly handled as bulk freight.

Below is a list of five major port development projects currently under way in Africa:

Table 2: Major port development projects currently in Africa

Lamu, Kenya	The Lamu port is 300 km north of Mombasa port and is part of the wider Lamu, Port-South Sudan-Ethiopia Transport Corridor (LAPSSSET) project, which involves the building of transport infrastructure and oil pipelines connecting Kenya, South Sudan and Ethiopia. The project also aims to partially meet the tourism and regional integration objectives of the countries involved.
Badagry, Nigeria	The Badagry MegaPort and Free Zone project is situated west of Lagos Apapa port and is expected to have an annual throughput capacity of 1.8 million TEUs. It is being developed by a PPP consortium led by the Dutch port operator, APM terminals.
Lekki, Nigeria	Lekki Deep Seaport is located in the Lagos Free Trade Zone (LFTZ), east of the city of Lagos. It is scheduled to be completed in 2019 and is estimated to have annual throughput of 2.7 million TEUs. The port is a PPP with the Government of Nigeria, Lagos State and Singapore's Tolaram Group. Construction is handled by China Harbour Engineering Company (CHEC).
Bagamoyo, United Republic of Tanzania	This port is situated 75 km from Dar es Salaam and will be capable of handling 20 million TEUs per year making it the largest in Africa. The project is estimated to cost about \$11 billion. It is partly funded by China Merchants Holdings International and Oman's State Government Reserve Fund.
New Suez Canal	The construction of a new lane, parallel to the former Suez Canal, that would allow the transit of ships in both directions. The project also aims to promote the development of the area around the Suez Canal, thus transfer it to the primary centre for logistics and industry and trade services.
Kribi, Cameroon	A new port is currently under construction at Kribi. The port is due for completion in 2020.

Source: Mostly from Knight Frank Report - Logistics Africa 2016

TEU: twenty equivalent units

⁶ <https://unctad.org/en/Pages/DITC/Trade-Analysis/TAB-Trade-and-SDGs.aspx>

⁷ ECA, "Empirical study on the determinants of the seaports competitiveness in Africa" (Addis Ababa, 2017).

⁸ Programme for Infrastructure Development in Africa, 2012, available at: https://www.icafrica.org/fileadmin/documents/PIDA/PIDA%20Executive%20Summary%20-%20English_re.pdf

⁹ PricewaterhouseCoopers, Strengthening Africa's gateway to Trade (PWC, 2018).

Intermodal and multimodal transport

Key opportunity

Africa is home to some of the longest rivers in the world. Rivers can be used to integrate a transport network across the continent. Various categories of cargo (e.g. bulk, containerized) can be moved using multimodal transport. River transport will take away the burden from the road and thereby reduce costs and time. It is also more environmentally friendly as it will generate less pollution. River ports can be used to create an efficient supply chain of products as inland container depots can be developed at the nexus of road, rail and water transport networks.

Key challenges

The cost of moving goods in Africa is, on average, estimated to be two or three times higher than in developed countries and transport costs can represent as much as 50 per cent to 75 per cent of the retail price of goods. “The AfDB’s Private Sector Development Strategy estimates that infrastructure services in Africa cost twice as much on average as those in other developing regions and notes that tariffs are exceptionally high. East Asian firms save close to 70 per cent in transportation costs compared to African firms, while Latin American and South Asian firms save approximately 50 per cent”.

Case study 1: Zambia, Lusaka logistics hub: Lusaka is set to be a key logistics hub at the crossroads of trans-African transport corridors running from north to south, and from east to west. Through roads connect with ports in Mozambique, Namibia, South Africa, and the United Republic of Tanzania and. The north-south corridor from South Africa through Zambia is currently the busiest route for freight coming in and out of the country. As a landlocked nation, Zambia is reliant on its road and rail connections with other countries, but its domestic transport infrastructure is relatively good compared with some of its neighbours.

- The Ather Ennaby river port in Cairo, which is under way to help boost Egypt’s container throughput to 350 million TEU by 2020.
- The Bollore ICD in Kampala serves the rest of Uganda, and also services Burundi, the eastern part of the Democratic Republic of the Congo, Rwanda, and South Sudan.

The Northern and Central Corridors are two distinct multimodal routes connecting the seaports of Mombasa in Kenya and Dar es Salaam in the United Republic of Tanzania, respectively, by road, rail and inland waterways to the landlocked countries of the Great Lakes Region including Burundi, the Democratic Republic of Congo, Rwanda, South Sudan and Uganda. Both corridors form the backbone of regional transport in Eastern Africa. They include Lakes Victoria and Tanganyika waterways as well as their major ports (Kisumu-Kenya, Mwanza-United Republic of Tanzania, Port Bell-Uganda on Lake Victoria, Bujumbura-Burundi, Kalemie-Democratic Republic of the Congo and Kigoma- United Republic of Tanzania on Lake Tanganyika).

Governments and stakeholders should consider the rehabilitation of inland waterways and their integration into a multimodal transportation network. Ports today are centres of industrial development and, if competitive, can reduce transportation and logistics costs for sea-borne trade.

African fleet, shipbuilding and ship repair

A merchant fleet provides means of transport, connectivity to global trade and livelihoods to people in the industry. Only a few African countries can boast of having a national fleet (such as Algeria, Egypt and Ethiopia). The existence of national shipping companies makes it possible to effectively transport the country's foreign trade. This has a very positive impact on the balance of payments by limiting the outflow of foreign exchange, and guarantees the independence and security of supplies for the country as well as the international influence of its flag and its entire economy. No African country is listed within the top 35 countries of shipowners. The contribution of the African continent to shipbuilding and repair is less than 2 per cent of the total value added of shipbuilding and repair.¹⁰ Governments and stakeholders should consider investing in ship acquisition to develop a national fleet and ship repair facilities. In that regard, the African Union has developed "Africa's 2050 Integrated Maritime Strategy", which encourages the promotion of a pan-African fleet¹¹.

Table 3 : Total fleet of number of ships in North Africa in 2016

Total fleet	2012	2014	2016
Algeria	111	111	111
Egypt	383	384	385
Libya	89	88	99
Mauritania	5	4	6
Morocco	82	83	82
Sudan	16	16	18
Tunisia	57	58	66
Total NA	743	744	767
Total Africa	5632	6036	6321
Share of NA / Africa	13%	12.2%	12.1%

Source: (UNCTAD Stat, 2018)¹²

Case study 2: Kenya, Twiga Foods: In Africa, access to smallholder farmers can be challenging for both farmers and consumers. Through the use of an online platform, Twiga Foods is connecting farmers and consumers by providing improved market access to farmers. The company buys the fresh farm produce and ensures a regular, hassle-free supply chain to vendors. This has empowered vendors to increase their product offering and income as well as ensures availability of fresh and low-cost produce to lower income residents of Nairobi. Similar platforms can be created, to enable producers in the fisheries and aquaculture for example, create market access for their products.

Source: <https://twiga.ke/>

10 OECD, The Ocean Economy in 2030 (Paris, 2016). Available at <https://doi.org/10.1787/9789264251724-e>

11 The African Union's "Africa's 2050 Integrated Maritime Strategy 2050", p. 14.

12 This table was extracted from the Working Paper on the Blue Economy in North Africa: "Structural analysis of maritime transport and tourism", ECA, 2018.

Global connectivity, logistics and modern supply chains

Port competitiveness can be improved through the use of intermodal and multimodal transport as well as logistics services. The use of different modes of transport will foster a better distribution network of goods for all. The rise in retail commerce in Africa will foster the development of more sophisticated logistics services. Retail ecommerce is on the rise and is currently estimated by the research house eMarketer to be a \$2 trillion global industry. This has shaped logistics property markets worldwide over the last decade¹³. Africa's online retail sector is growing at a fast pace. It is primarily driven by the increased penetration of smart mobile devices into the continent's markets. -Africa is the fastest-growing mobile telephone market in the world, with GSMA Intelligence estimating that, in 2018, the number of unique mobile subscribers has reached 467 million¹⁴. The smartphone usage across Africa is estimated to rise and therefore will support the continued rise of online retail activity; Frost and Sullivan forecasts that ecommerce in Africa will be worth \$50 billion in 2018, up from \$8 billion in 2013. This will foster higher demand for an increasingly sophisticated range of logistics solutions.

E-commerce has transformed trade globally. The costs of physical infrastructure are reduced, thereby reducing the overall costs of business (such as storage costs). E-commerce holds a potential to boost trade¹⁵. Also, it provides access to larger markets, particularly the opportunity to export a diverse number of goods to a greater number of countries. Consumers enjoy a wider selection of goods and lower prices¹⁶.

Between 2013 and 2015, the value of global online trade jumped from \$16 trillion to \$22 trillion¹⁷. Africa's online retail sector is growing at a fast pace. Importantly, African digital businesses are on the rise, which is changing the dynamics of trade and investment. This is a key strength for African economies, in respect of the different Blue Economy value chains.

Tourism and recreation

"Africa is in the best ever position as a global tourism player".¹⁸ According to the Secretary-General of the World Tourism Organization (WTO), tourism is one of Africa's most promising sectors in terms of development. In his view, Africa has a major opportunity to harness the potential of tourism to foster development and increase its participation in the global economy. In addition, he says that tourism creates opportunities for millions of host communities in Africa and provides revenues for cultural and environmental preservation.

Key opportunities

In recognition of its potential, the African Union has now prioritized the tourism sector in its Agenda 2063, as an avenue through which the continent's developmental goals could be realized. The sector currently generates for 8.1 per cent of the continent's GDP valued at over \$177 billion and 6.5 per cent of total employment or over 22 million jobs¹⁹. The sector further accounts for 9.7 per cent of the continent's exports valued at \$48.7 billion and

13 Knight Frank Report – Logistics Africa, 2016. <https://content.knightfrank.com/research/1114/documents/en/2016-4022.pdf>

14 <https://www.gsmaintelligence.com/research/?file=809c442550e5487f3b1d025fdc70e23b&download>

15 UNCTAD, 2015

16 World Trade Organization, 2017

17 World Trade Organization, 2017

18 Carmen Nibigira, UNCTAD Report – Economic development in Africa – Tourism for Transformative and Inclusive Growth (2017).

19 WTTC Travel and Tourism Economic Impact 2018 Africa. Available at <https://sp.wttc.org/-/media/files/reports/economic-impact-research/regions-2018/africa2018.pdf>

5.7 per cent of total investments. The bulk of the tourism sector in Africa falls within the category of Blue Economy, with coastal countries accounting for over 95 per cent of the continent's total tourist arrivals and tourism receipts. What is more, and as already observed, tourism is the primary economic sector in a number of small island developing States, including Cabo Verde, Mauritius and Seychelles, where it contributes 45 per cent, 24 per cent and 65 per cent of GDP, respectively²⁰. Similarly, the sector also plays an important role in the economies of coastal member States. Indeed, it has become a major source of revenue and holds huge potential for growth and development in the majority of coastal areas in Africa.

Key challenges

Lack of diversity in tourism products: The industry is faced with a narrow range of tourism products, lack of prioritization and insufficient capacity. Cruise-ship companies are seeking new destinations, given that traditional destinations are gradually declining in their appeal (the Caribbean and the Mediterranean, for example, command 50 per cent of the cruise industry market, at 35 per cent and 16 per cent, respectively).

Yet, despite the immense opportunities that exist on the African continent, these remain underexploited. There is a lack of mapping of tourism resources within the context of the Blue Economy. The result is that the formulation of appropriate policies and strategies is lagging behind.

Maritime insecurity, whereby incidences of piracy in the high seas and terrorist attacks on islands – including the case of coastal tourism in Kenya – has resulted in a sharp drop in tourism activity in the past, coupled with the compounded ripple effect across the tourism value chain.

Fisheries and aquaculture

The Food and Agriculture Organization of the United Nations (FAO) estimates that fish provide more than 4.2 billion people with more than 15 per cent of their animal protein intake²¹. It is also believed that there may be more than 10,000 marine species in ocean waters that are still largely unknown and that could be exploited to create food, pharmaceuticals, cosmetics or bioenergy²².

Key opportunities

In 2011, fisheries and aquaculture directly contributed \$24 billion to the African economy, representing 1.3 per cent of the total African GDP. A study showed that Africa contributed to 9 per cent of global catch. The number one market for the top 10 African exporters of fish products was Europe (70 per cent), followed by Asia (15 per cent), Africa (11 per cent), North America (2 per cent). Oceania and South America are each estimated at 1 per cent. In 2015, production had raised to 11 million tonnes, of which 5.5 million tonnes came from wild catch. The total African production thus represented 5 per cent of global fish production. In 2017, it is estimated that total African imports of fishery products represented a value of \$5.6 billion, while exports represented \$6.5 billion.

Key challenges

Illegal, unregulated and unreported fishing:

The African Progress report²³ describes Africa's coastal fisheries as a resource under threat. According

20 ECA, Climate Change in the Africa Small Island Developing States: From Vulnerability to Resilience - The Paradox of the Small (Addis Ababa, 2014).

21 FAO, 2014. State of the World Fisheries and Aquaculture: Opportunities and Challenges.

22 ECA, Blue Economy, Subregional Office for East Africa, November 2016, p. 26.

23 African Progress Panel, Grain Fish Money (2014).

to the report, illegal, unregulated and unreported (IUU) fishing represents between \$10 billion and \$23 billion worldwide every year, of which \$1.3 billion from West Africa (\$300 million from Senegal alone, equivalent to 2 per cent of its GDP in 2012). Most of the IUU catches can be tracked down to foreign flagged vessels. One third to half of African fish harvested are affected by IUU fishing. The World Bank experts estimate losses due to overexploitation of fishery resources at \$225 million for Indian Ocean islands economies alone. The optimal development of fishing and aquaculture activities at sea and in freshwater to satisfy the people's consumption needs is an emergency and a major challenge for African States.

Deep-sea mining and renewable “Blue Energy”

It is widely recognized today that access to reliable, affordable and secure energy is fundamental to supporting the ongoing economic structural transformation in Africa.

The rapid expansion of energy capacity in the continent compels the consideration of all energy sources for development. The oceans and seas of Africa offer tremendous potential and opportunity to develop both non-renewable (oil and gas) and renewable energy sources (including wind, tidal and wave), of which only a fraction has been exploited until now. For example, TC's Energy, a renewables developer from Ghana has signed a contract with Sweden's Seabased for the design, manufacture and installation of a 100 MW wave energy project off the coast of Ada Foah²⁴.

Case study 3: Ghana – Ocean energy development: Ghana has adopted a scaled-up wave energy technology. The country signed a contract with Sea-based, contracted by TC's Energy, to develop 100 MW wave energy. The development is the first and largest in Africa, and among the few in the world, in commercially developing the emerging wave energy industry on the continent. Ghana has also negotiated for a 1,000 MW plant with Yam Pro Energy under a long-term contract to generate wave energy-based electricity. The Ghanaian experience indicates that with resource endowment, engagement of the private sector for finance and technology, negotiation of long-term contracts and provision of the necessary incentives (power purchase agreement), ocean energy resources development in Africa at a large scale is possible.

The reserves of iron, platinum, cobalt, gold, vanadium and diamonds make the African continent one of the key players in the global resource geopolitics²⁵. The average of African mining exports, in oil and gas, was \$301 billion annually, between 2007 and 2016, while the continent's total exports for the same period averaged \$481 billion. More than 90 per cent of Africa's imports and exports are conducted by sea. A significant amount of the African petroleum and gas resources come from the oceans and aquatic areas. It is estimated that the continent accounts for about 30 per cent of all proven global mineral reserves with a large part of these resources located in its internal and offshore maritime zones. Its oil reserves account for 8 per cent of the world's reserves, and natural gas accounts for 7 per cent of the world's reserves.

African coastal States supply about 12 per cent of the world's oil. Algeria, Angola, Egypt, Libya and Nigeria produce 81 per cent of African oil. The Gulf of Guinea itself accounts for almost 50 per cent of oil and gas production in Africa, or 10 per cent of the world total. Statisticians estimate the reserves in this area at 24 billion barrels of oil. Africa has 7.6 per cent of the world's total oil reserves, with two coastal States, Libya and Nigeria, holding almost 79 per cent of Africa's oil reserve

The continent has proven natural gas reserves of 513 trillion cubic feet, with 91 per cent of the annual natural gas production of 7.1 trillion cubic feet coming from four coastal States: Algeria, Egypt, Libya and Nigeria. At least 15 African coastal States are oil and gas exporters, namely, Algeria, Angola, Cameroon,

²⁴ <https://www.hydroworld.com/articles/2018/03/seabased-signs-deal-to-install-100-mw-wave-energy-park-in-ghana.html>

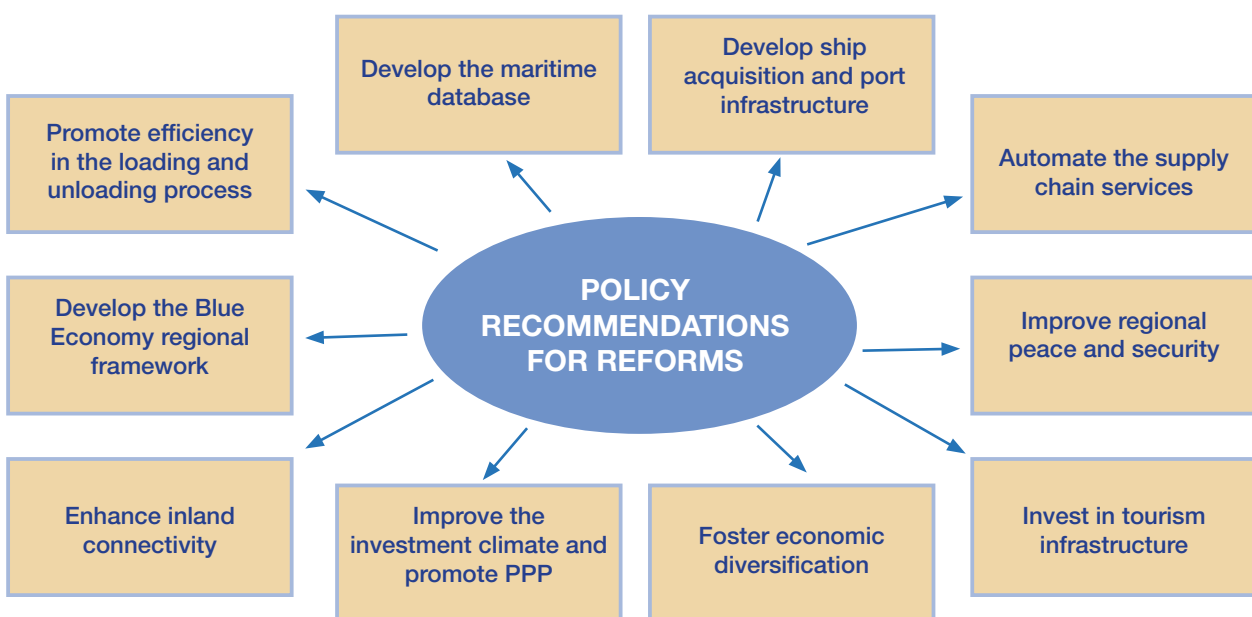
²⁵ <https://www.idea.int/sites/default/files/events/Mining%20Indaba%20Concept%20Note.pdf>

Congo, Côte d'Ivoire, the Democratic Republic of Congo, Egypt, Equatorial Guinea, Gabon, Ghana, Libya, Mauritania, Nigeria, Sudan, and Tunisia. Africa's total natural gas reserves have increased from 9.9 trillion cubic metres in 1995 to 496.7 trillion cubic metres in 2015. In 2015, it is estimated that some Africa coastal States (Algeria, Egypt, Libya, Nigeria) held 7.5 per cent of the world's natural gas. Other reports have shown that in 2011, Africa was estimated to have proven natural gas reserves of 14.53 trillion cubic metres, 6.97 per cent of the world's reserves and equivalent to 71.7 years of current production.

The recent discovery of oil and gas resources offshore, particularly in eastern Africa, and the large number of offshore exploration block identification and licensing witnessed in the last 10 years attests to the opportunity to develop oil and gas resources and stronger economies in Africa within the context of a better governance of the Blue Economy. While the world is rapidly moving towards fossil-free futures, it is envisaged that natural gas will become a major component of energy mix, contributing significantly towards closing Africa's energy gap (625 million people are without power in Africa).

B. Policy recommendations for development

Figure 2: Policy recommendations for development



Policy recommendations for development include the following:

- **Develop ship acquisition and port infrastructure** (size and TEU): Developing port infrastructure allows the ports to accommodate the ongoing trend of the growing size of vessels and increase their efficiency.
- **Enhance inland connectivity:** Enhance the availability of dry ports for storage, which are connected to inland transport (roads and railway) and thus improve the intermodal inland transport and trade connectivity especially to landlocked neighbouring countries where the subregion holds a comparative advantage.
- **Improve the investment climate and promote PPP:** Address the several challenges encountered

by the PPP in maritime industry in the region that include legal complexities, a set of jurisdictions and procedures, which involves analysing the nature of the investment and the barriers to it.

- **Automate the supply chain services:** Quality and competence, tracking and tracing as well as timeliness. It is recommended to automate the supply chain production and adopt worldwide standards in terms of customs. Single treasury accounts.
- **Promote efficiency in the loading and unloading process:** Promoting efficiency in cost-effective approaches, including capital intensive investments in infrastructure. This requires investment in ICT and capacity-building to foster efficiency.
- **Develop the maritime database:** Generate a comprehensive maritime database that will allow the collection of several maritime indicators as well as a comprehensive resource base where data for both natural and human capital aspects are to be evaluated and quantified.
- **Develop the Blue Economy regional framework:** A regional framework on transboundary resource management and development is also required as well as mapping the energy resource profile of ocean and sea beds, which remain largely unexplored. This is a costly but valuable step.
- **Improve regional peace and security:** This will foster the development of all the Blue Economy sectors, including easing tensions linked to maritime boundaries.
- **Foster economic diversification:** Tourism products are a key pillar in the development of any tourism destination. The range and quality of the tourism products offered defines the competitiveness and attractiveness of tourism destinations and the visitors' experience. Developing strong inter-sectoral linkages is necessary to ensure greater capture of tourists' expenditures. This will facilitate the transfer of economic benefits from the sector to the local communities thereby contributing to improved livelihoods and poverty reduction²⁶.
- **Invest in tourism infrastructure:** The Blue Economy approach provides opportunities for investment in tourism infrastructure, such as hotels and resorts, and specific infrastructure, including dedicated terminals in ports for the cruise tourism industry and marinas for leisure boat activity. As a result of increased cruise ship tourism, high revenues and benefits are injected into the economy and a significant number of jobs created. To achieve this, strong partnerships with member States would be required, both inland and ocean-based.

IV Africa's Blue Economy: towards a sustainable future

A. Fostering social inclusion and protection of the environment

Key strengths: the Blue Economy as a catalyst for socioeconomic transformation

The Blue Economy implies the need to optimize the socioeconomic benefits of sustainable development in the marine and aquatic environments, with the participation of stakeholders at all levels and at all stages.²⁷

In particular, if fully exploited and well managed, the Blue Economy provides inclusive growth that creates jobs, is capable of ensuring food security and reinforcing the response against hunger and poverty, improving training and caring for young people, but also respect for gender equality and the interests of local communities.

The realization of the full potential of the Blue Economy requires the effective inclusion of all societal groups, especially women, young people, local communities, and all minority groups as well as the marginalized and underrepresented sectors of the population. The Blue Economy has a strong gender component emerging from the requirement of Sustainable Development Goal 5 (Gender equality) and Goal 10 (Reduction of inequalities).

Job creation: If African countries invest and develop the Blue Economy in a sustainable manner, this can lead to the generation of jobs and economic growth for the continent. ECA's study on Blue Economy in Eastern African and the Indian Ocean shows that, where data were available, Blue economy-related sectors have recorded sectoral labour productivity that is significantly higher than the economy-wide average (+26 per cent in the United Republic of Tanzania, +150 per cent in Uganda, +500 per cent in Madagascar)²⁸.

In Mauritius, in recent years, the "Ocean Economy" has been dominated by three sectors: the seaside tourism industry (at least 60 per cent of income generated in the national economy since 2012), then port activities (18 per cent) and, lastly, the fishing industry (14 per cent). Figures relating to the ocean economy's contribution to Mauritian GDP also speak volumes and are extremely encouraging: 11 per cent of GDP in 2013, 14 per cent in 2015, 17 per cent projections in 2020 and 20 per cent in 2025. The same holds for job creation: 18,000 in 2013, 21,000 in 2015, projections of 26,000 in 2020, and 35,000 in 2025.

Source: ECA, Blue Economy2016

Industrialization of the fisheries and aquaculture sector will create jobs and contribute to increase GDP. According to the World Bank, fisheries and aquaculture directly contribute \$24 billion to the African economy, representing 1.3 per cent of the total African GDP in 2011. The sector provides employment to over 12 million people (58 per cent in the fishing and 42 per cent in the processing sector). While fishing jobs are almost entirely taken by men, 59 per cent of the processing work is done by women. Employment multiplier effects are remarkable: for example, for every fisherman's job, 1.04 additional onshore jobs are created in Mauritania, while this ratio reaches 3.15 in Guinea, illustrating the potential for further job creation through value chain development²⁹.

The "total value added of fishing and aquaculture in Africa is \$17.4 billion". (FAO, 2014)³⁰.

27 ECA, Blue Economy, Subregional Office for East Africa, November 2016, p. 30.

28 ECA, Blue Economy, Subregional Office for East Africa, November 2016.

29 World Bank, Africa Program for Fisheries. Available at: <http://www.worldbank.org/en/programs/africa-program-for-fisheries>

30 FAO, The Value of African Fisheries (Rome, 2014), p. 3. Available at: <http://www.fao.org/3/a-i3917e.pdf>

Case study 4: Seychelles Blue Economy Bond

Seychelles Blue Economy Strategic Framework and Roadmap 2018-2030 (the Blue Economy Roadmap), approved by the Government of Seychelles on 31 January 2018, is an integrated approach to ocean based sustainable development which brings together economy, environment and society, consistent with the 2030 Agenda for Sustainable Development, Aichi Target 11 of the Convention on Biological Diversity and the Paris Agreement on Climate Change. The country has launched the world's first "Blue Economy Bond". The bond is an innovative financial instrument used to finance ocean and marine-based projects that have positive economic, environmental and climate benefits (World Bank, 2018).

The bond will support expansion of marine protected areas up to 30 per cent of the country's exclusive economic zone (EEZ) as well as improve governance of priority fisheries and development of the blue economy in the Seychelles. The main beneficiaries of the bond are Seychellois who depend on marine resources and the ocean for their livelihoods, including artisanal and semi-industrial fisheries, tourism operators and operators engaged in seafood value chains, among others (IISD, 2018).

Community development: Communities that live around the coast play an important role in protecting the environment and ensuring a healthy marine ecosystem. Community involvement in Blue Economy sector development will not only foster inclusion but enable the communities to benefit directly from the opportunities derived from the waters and oceans surrounding their homes.

Key threats: Climate change, waste management and maritime security

*"Climate change is here with us. We cannot stop it. The only way is to see how to work around it."*³¹

Threat 1: Climate change and environmental mismanagement are growing threats to the integrity and sustainability of the aquatic and marine resources on which the Blue Economy is based.

Kenya is part of the International Coral Reef Initiative and has followed Seychelles (which is planning to protect 30 per cent of its exclusive economic zone of 1.37 million km² by 2020) on restoring some of the damaged coral reefs. On land, during 2004–2016, the total glacier area on Mt. Kenya (Africa's second highest mountain and Kenya's tallest and a major water tower) decreased by 44 per cent. At this pace, all glaciers may disappear by 2030.

Wide areas of Africa have seen climate changes, sea levels rise, coastal erosion, saltwater intrusion, warming seawaters, ocean acidification, coral bleaching and an upsurge of invasive species as a result of global warming. Kenya's coral reefs in the western Indian Ocean represent one of the largest systems in the world.

Two severe coral bleaching episodes due to El Niño climate events that occurred in 1998 and 2016 caused 25 per cent and 10 per cent loss, respectively, of the coral coverage in the region. Though slowly recovering, these ecosystems are still highly vulnerable.

Threat 2: Climate change by causing physical and biological changes poses significant threat to fish yield; fish production, displacement of fish species, reduced fish production for export and a reduction of resilience of coastal communities and infrastructures.

Temperature increase affects the physiological process and sea upwelling, which leads to decline in fish stock. Subjective evidence in Guinea-Bissau indicated that a reduction in precipitation and increase in temperatures have contributed to a decrease of some lake species. Sea level rise affects spawning and nursery grounds and also fishing facilities, which impact negatively on fish production and access to fish

³¹ Peter Ekai Lokoel, Deputy Governor Turkana, September 2014. "There is no time left", Climate Change, Environmental Threats, and Human Rights in Turkana County, Kenya – Human Rights Watch, 2015.

for consumption. In West Africa, sea surface temperature increased by 0.52, 0.46 and 0.24 °C, respectively, from 1982 to 2006. Also, an increase in salinity and ocean acidification affects physiological processes such as impaired fertilization, and the ability of organisms to osmo-regulate, as well as habitat destruction leading to a decrease in fish reproduction. Also, the increasing intensity and frequency of extreme weather events can decrease safety at sea for fishers. Scarce quantitative and qualitative data about underground water reserves remain a challenge.

Threat 3: Plastic pollution has been identified as a major threat to both aquatic and marine ecosystems.

Plastic production has indeed increased exponentially since the early 1950s and reached 322 million tonnes in 2015. Future production is likely to double by 2025 if no effective actions and policies are taken. It has been estimated that in 2010, between 4.8 million and 12.7 million tonnes of plastic waste entered the oceans. Moreover, a proportion of the materials used in fisheries and aquaculture may become marine debris³². This affects fish production and other marine organisms and it also affects humans. Furthermore, the scenic beauty and tourism sector is greatly affected by waste pollution.

Threat 4: The Office of the United Nations High Commissioner for Human Rights has identified climate change as posing particular risks to the rights to life, food, water and health.

Increasing temperatures and unpredictable rainy seasons place a lot of pressure on water resources, resulting in less grazing land during the dry season, diminished livestock herds and increased competition over grazing lands (such as in the Lake Chad and Lake Turkana areas). Water pollution has become a leading cause of death and disease in Africa. In Kenya, the recent outbreaks of cholera have underlined the risks associated with insufficient improved water sources and sanitation facilities. The country faces a water crisis, with a population of 46 million, 41 per cent of Kenyans still rely on unimproved water sources, such as ponds, shallow wells and rivers. The inadequate management of wastes has led to increased contamination of freshwater, estuarine and marine environments.

Threat 5: Neither a Blue Economy nor economic development are possible if security and safety conditions are not provided.

Maritime safety and security are considered key conditions for the development of the Blue Economy in Africa by the 2016 Lomé Charter, as well as by African Union's "Africa's 2050 Integrated Maritime Strategy". They can also be linked to Sustainable Development Goal 16, which emphasizes the absolute need for "peace, justice and efficient institutions" as key conditions for economic and social progress. Criminal activities (such as piracy and armed robbery at sea, illicit trafficking of goods and people, and environmental crimes) pose a serious threat to the sustainable use of Blue Economy resources and thereby have a negative impact on the social development and economic growth of the continent.

32 Lusher, A.L., P.C.H. Hollman and J.J. Mendoza-Hill. Microplastics in fisheries and aquaculture: status of knowledge on their occurrence and implications for aquatic organisms and food safety. FAO Fisheries and Aquaculture Technical Paper. No. 615 (Rome, 2017).

B. Policy recommendations to create a sustainable Blue Economy

Recommendation 1: Clear delimitation of maritime boundaries and dispute resolution resulting from maritime boundaries.

The 1982 United Nations Convention on the Law of the Sea recognizes and governs the rights on the ocean spaces and their huge resources: internal waters and territorial seas, economic exclusive zones (EEZ), high sea, and continental shelf. Countries should make submissions to the Secretariat of the United Nations (Division of Ocean Affairs and the Law of the Sea) in New York. Disputes pertaining to maritime delimitation can be resolved through the International Tribunal for the Law of the Sea. Other alternative forms of dispute resolutions exist such as Mediation and Arbitration³³. The regional courts in Africa can also play a role in settling disputes and claims between neighbouring countries.

Recommendation 2: The Blue Economy can be used by African countries to meet their objectives under the Paris Climate Change Agreement and thereby contribute to reduce the effects of climate change on the continent.

The Paris Agreement on climate change has been hailed as a breakthrough in the trajectory of the United Nations Framework Convention on Climate Change. The main mechanism by which nations commit towards achieving the objectives of the Paris Agreement is through nationally determined contributions to climate action. In the case of most African countries, their intended nationally determined contributions were developed in haste and, for the most part, by external entities with a view to meet the deadline for the 21st Conference of the Parties to UNFCCC.

Given the context in which the nationally determined contributions of many African countries were formulated, it is becoming increasingly clear that the objectives identified are very ambitious. Many African countries will not be able to meet these objectives. The Paris Agreement, through the global stocktakes that are due to begin in 2023, provide opportunities for Parties to revise the level of ambition of their climate actions. However, these adjustments can only be revisions towards higher ambition. Since many African countries have already overcommitted in their current climate actions, there is an urgent need to assist member States with the revisions of their nationally determined contributions to capitalize on opportunities in sectors not previously considered.

Recommendation 3: Enforcement of existing international laws.

Ratify and enforce relevant international and regional instruments related to maritime safety and security, as well as illegal practices³⁴ and harmonize national legislation with international laws. Enforcement of the Lomé Charter on maritime safety and security to combat piracy and trafficking of drugs, arms, humans on the continent's shore.

³³ Countries where contentions have arisen due to the discovery of mineral resources such as oil could consider a joint exploitation and sharing agreement of the resources, such as the case of the Joint Development Agreement between Nigeria and Sao Tome and Principe.

³⁴ Ports State Measures Agreement; Barcelona, Nairobi and Abidjan Conventions, International Maritime Organization Conventions.

A brief guide to some marine and maritime policies

Three international conventions governing regional seas:

- Regarding States bordering the Mediterranean Sea, the legal and regional reference instrument is the 16 February 1976 Barcelona Convention for the Protection of the Mediterranean Sea against Pollution and its different additional Protocols.
- Regarding States bordering the Indian Ocean, the legal and regional reference instrument is the Nairobi Convention “for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region” (the new name of the original agreement of 21 June 1985, amended in 2010); it brings together 10 States of East Africa and the Indian Ocean: Comoros, France (Reunion Island), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa and the United Republic of Tanzania. The Convention is currently supplemented by four protocols which reinforce the legal mechanism applicable to the member States;
- As for States of the Atlantic coast (from Mauritania to South Africa), they are subject to the Abidjan Convention of 23 March 1981 for Co-operation in the Protection, Management and Development of the Marine and Coastal Environment of the Atlantic Coast of the West, Central and Southern Africa Region.

Prevention of risks of accidents on water

- Casablanca Memorandum of Understanding on Port State Control in the Mediterranean Sea;
- Memorandum of Understanding on Port State Control in the Indian Ocean;
- Abuja Memorandum of Understanding on Port State Control in the Western and Central Africa.

Maritime security and Terrorism

- the 2009 Djibouti Code of Conduct reviewed in Jeddah in 2017: 20 States involved in the Gulf of Aden, Red Sea and the Western Indian Ocean Regions.
- the 2013 Yaounde Code of Conduct: 25 States involved in Central and West Africa.
- the 2016 Lome Charter on Maritime safety and security for the development.

Recommendation 4: Engage in the activities of the international seabed area.

Commercialization of marine minerals in the area is within reach and could be attained in the foreseeable future.³⁵ Therefore, strategically speaking, Africa cannot afford to be left behind while the other regions of the world have forged ahead in acquiring technology and are positioned for the eventual commercial exploitation of the area. Africa is the only regional group that has so far not engaged with activities in the international seabed area by obtaining exploration contracts from the International Seabed Authority.

Recommendation 5: Foster regional integration of the Blue Economy through the African Continental Free Trade Area.

The Agreement on the Establishment of the African Continental Free Trade Area (AfCFTA) is expected to accelerate efforts towards continental integration through its potential to consolidate markets and remove barriers to intra-African trade. There were 44 African Union member States signatories to the Agreement in March 2018, with a further five signatories added at the July 2018 African Union Summit. Expected gains of AfCFTA include: increased levels of trade in industrialized goods and the attendant increase in levels of industrialization of African countries, trade liberalization through the removal of tariffs and non-tariff barriers, and the development of regional value chains. The Blue Economy is central to the implementation of AfCFTA and the achievement of its aims. Higher levels of investment will be required in the infrastructure, transportation services, and skills that will underpin the movement of goods across the continent. Through AfCFTA, African countries will deepen economic integration and ease trade between parties to the Agreement. The Blue Economy can form part of a structured and integrated process in bringing African countries together to exchange information (on matters including cargo movements

through ports, or illicit traffic of goods and persons), best practices, including the promotion of sustainable tourism and harvesting of living and nonliving ocean resources.

Recommendation 6: Support gender focused initiatives to foster social inclusiveness and community integration.

Some initiatives that have been taken include:

- In March 2015, the first Continental Conference on the Empowerment of African Women in Maritime took place in Luanda, which promoted the development of a common agenda or platform of action for African maritime women and set up the basis for the creation of an adequate continental institutional framework to support its implementation;
- The creation of the “Women in Maritime in Africa Association”, a continental and regional association for women working in the Blue Economy sectors.

V Conclusion

The present Issues Paper demonstrates that despite the many challenges faced by African countries to develop a sustainable Blue Economy, opportunities are in abundance for the continent to become a leader in the sustainable development of our continental resources. African nations have to develop a common vision of the sustainable use of its natural resources. Then they have to transform this common vision into goals, targets and actions, particularly in order to achieve the targets set out in the Agenda 2063 of the African Union, but also to achieve the 2030 Agenda for Sustainable Development. The private sector plays an important role in financing and developing the Blue Economy.

To support the process, ECA has developed tools that can guide its member States and financial donors to develop long-term prosperity for the continent and attain “the future we want” for future generations of African citizens.

VI The ECA Blue Economy programme

The Economic Commission for Africa plays an important role in assisting member States to achieve their economic and social development goals. This is done through providing technical assistance to countries and includes:

- a. Carrying out surveys, baseline studies, assessments of aquatic and marine ecosystems and associated resources (including impacts from identified threats) to inform policy development;
- b. Enhancing the capacity development of stakeholders, in particular policymakers, and other officials in regional economic communities, intergovernmental organizations and member States (including strengthening of their negotiation skills);
- c. Exploring the application of tools (such as the Drivers- Pressures-State-Impact-Response) to identify, analyse and propose responses to sustainably address conflicting and competing uses of water resources and other natural resources, as well as uses of these resources beyond sustainable thresholds and ecological boundaries;
- d. Strengthening the formulation of climate change policy by:
 - Mainstreaming climate change and environmental sustainability into existing and new Blue Economy continental, subregional and national plans, policies, and relevant legislation;
 - Incorporating the use and effective implementation of Environmental Impact Assessments and Strategic Environment Assessments to mainstream and streamline climate and environmental considerations and the Blue Economy principles at policy, programme and project levels;
 - Creating Natural Capital Accounting systems that would enable a better valuation of Blue Economy services as well as targeted resource mobilization;

- Developing and strengthening legislation and policies for the promotion of green and blue technologies;
- Establishing a harmonized regional or continental approach for review of National Adaptation Programmes of Action and other UNFCCC instruments within the context of the Blue Economy. Blue forests can be mangroves, seagrasses, and salt marshes, and the benefits they bring can include protecting people from coastal erosion, storms and flooding, making them invaluable in terms climate change adaptation. Blue carbon is the carbon stored and sequestered in these forests. Blue carbon markets may offer African countries additional economic incentives to manage resources sustainably and to restore their coastal and marine ecosystems;
- Policy research and capacity-building support to institutions and member States of regional economic communities to assist them in addressing bottlenecks in domesticating and implementing treaty provisions, programmes and norms to facilitate an integrated blue economy approach to enhance regional cooperation and facilitate trade and commerce within the continent.

Some of the work on the Blue Economy carried out by ECA includes:

a. A policy handbook on Africa's Blue Economy

ECA has been active in developing policy tools such as *Africa's Blue Economy: A Policy Handbook*, which was officially launched during ECA Africa Development Week. The *Handbook* provides a seven-step methodology for policy formulation as well as key principles for consideration, including mainstreaming of climate change; a multi-stakeholder approach fostering social inclusion, capacity-building and skills development; interinstitutional coordination; and cooperation at all levels, including ratification and implementation of relevant international and regional instruments. In conjunction with the *Handbook*, a study on the Blue Economy in Eastern Africa was published in 2016, focusing on key sectors such as fisheries, maritime transport, mining, energy and tourism. Geopolitical dimensions as well as natural resource management and climate considerations were analysed.

b. An Atlas of the African Blue Economy

The ECA is currently preparing an Atlas of the African Blue Economy to support decision-making, investment and governance of the African Maritime Domain. The main result expected of this project is the Atlas in a digital and print format, containing all the available geospatial information on the African Blue Economy. The data will be accessible by ECA member States online and can be used as a reference and guide for the technical and scientific activities to be carried out by member States, government agencies, scientific community, fishing communities, and mineral prospectors.

Marine geospatial information is crucial for planning several important areas, such as legal, economic, social and environmental. It will assist countries and the private sector to make better decisions when investing in a country. In addition, it will assist in the formulation and implementation of public policies for resource development, environmental protection, public health, safety and infrastructure planning.

c. Support to tourism marketing strategies

ECA is currently supporting the East African Community to review its tourism marketing strategy, which focuses on selling East African tourism products firstly to East Africans, secondly of East Africa selling to the rest of the continent, and finally, the region selling to the world. With a population of over 177 million people, it is estimated that the tourist market in East Africa stands at 34 million people (based on the African Development Bank middle-class ratios),³⁶ yet the region only receives a total of 5.4 million arrivals.

d. Preparation of a policy brief on AfCFTA and the Blue Economy

This brief would highlight the imperatives for a continental Blue Economy policy framework and outline the opportunities to frame trade-related policy aspects of the Blue Economy through AfCFTA.

³⁶ AfDB has defined the category of middle class in Africa as being based on purchasing power parity in US dollars. This excludes the floating class and only takes into consideration: the lower middle class whose daily expenditure is between \$4 and \$10 (representing 9 per cent of population); upper-middle-class with daily expenditure of \$10-20 (5 per cent of population); and the upper class with daily expenditure of above \$20 (6 per cent of population).

