



African Ministerial Conference on the Environment

African Ministerial Conference on the Environment

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Advancing the blue/ocean economy in Africa

Advancing the sustainable blue (ocean-based) economy in Africa

Note by the secretariat

I. Introduction

1. As defined in the Charter on Maritime Security and Safety and Development in Africa (Lomé Charter), the term “blue economy” encompasses economic activities from marine and aquatic spaces in oceans, coasts, seas, rivers, lakes, groundwater, wetlands, floodplains and associated water resources. African Governments are increasingly implementing a blue or ocean-based economy as a strategy for creating economic development with a view to improving human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.¹

2. The African Union defines a blue or ocean economy as “sustainable economic development of oceans using such techniques [sic] as regional development to integrate the use of seas and oceans, coasts, lakes, rivers and underground water for economic purposes, including, but without being limited to fisheries, mining, energy, aquaculture and maritime transport, while protecting the sea to improve social well-being”,² thus highlighting features that make a blue or ocean economy more locally based and more resilient, to minimize the likelihood of shocks such as economic or environmental disturbances developing into regional or even global crises, as is presently the case.

3. A sustainable blue or ocean economy, therefore, seeks to promote economic growth, responsible production and consumption, social inclusion, the preservation or improvement of livelihoods and the environmental sustainability of aquatic, marine and coastal areas.³ In Africa, the 2050 Africa’s Integrated Maritime Strategy, adopted by the African Union in January 2014, guides and sharpens the focus of the continent in delivering an integrated and multidimensional blue or ocean economy.

II. Why a blue or ocean economy for Africa?

4. Africa is endowed with a vast network of aquatic resources and extensive interconnected oceans. The African lake zones cover approximately 240,000 km², while its transboundary river basins cover approximately 64 per cent of the continent’s land area.⁴ The total length of Africa’s coastline is some 26,000 km, making the African maritime domain extremely important for commercial,

* AMCEN/17/1.

¹ For a definition of the “green economy”, see United Nations Environment Programme (UNEP), *Green Economy and Trade: Trends, Challenges and Opportunities* (Nairobi, UNEP, 2013).

² The Charter was adopted in Lomé on 15 October 2016, by the African Union Extraordinary Summit of Heads of State and Government on Maritime Security and Safety and Development in Africa. It can be found at https://au.int/sites/default/files/treaties/37286-treaty-0060_-_lome_charter_e.pdf.

³ UN-Habitat, *UN-Habitat Background Paper on Blue Economy and Cities* (Nairobi, UN-Habitat, 2018).

⁴ UNEP, *Africa Water Atlas* (Nairobi, UNEP, 2010), p. 38.

environmental, developmental and security reasons. There are more than 100 ports in Africa, 52 of which handle containers and transnational trade. The continent's maritime economy is estimated to represent some 90 per cent of its total commerce.⁵

5. For three-quarters of the African continent, the blue or ocean economy is its principal economy and, if well used, could be a potent engine for economic growth. The new and developing industries in a blue or ocean economy include aquaculture; marine renewable energy technologies for wind, wave and tidal energy; bioproducts (pharmaceutical and agrichemical); blue or ocean carbon (carbon storage in mangroves, seagrass and saltmarsh); and desalination. A blue or ocean economy open doors for Africa's industrialization and economic development.⁶ Fresh water and marine fish contribute to the food security of over 200 million people in Africa and provide an income for over 10 million people. In May 2014, the African Union estimated the first-sale value of African fisheries (marine, inland and aquaculture) to be US\$19.7 billion per annum.⁷ It also estimated that there would be an additional US\$2 billion available annually for African economies if the fisheries sector were to be managed sustainably.

6. In the Nairobi Statement of Intent on Advancing the Global Sustainable Blue Economy, the outcome document of the Sustainable Blue Economy Conference, held in Nairobi from 26 to 28 November 2018, countries charted a new paradigm for an economically vibrant, socially inclusive and environmentally resilient blue or ocean economy. The statement underscores the fact that a sustainable blue or ocean economy holds great promise for contributing towards the success of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

7. Despite the recognition that Africa's oceans are some of the richest environmental resources in the world, there remains a generally low consideration of their importance as a source of income for steering the growth of African economies.⁸ There is an urgent need for detailed discussions on the management of African oceans if the momentum of a blue or ocean economy is to be harnessed to contribute to national economies and the conservation of ecosystems.

III. Key economic sectors of a blue or ocean economy

8. The ocean and other aquatic resources contain highly valuable large schools of fish (such as cod and tuna), marine animals and plants, and highly valued minerals (such as gold, oil and gas), which are of strategic importance. Those resources are harnessed as raw materials for industries such as fisheries, aquaculture, tourism, transport, ports, coastal mining, energy, agriculture, cosmetics and pharmaceutical production.⁹ Such industries provide protection, whether direct or indirect, to coastal inhabitants from disasters such as floods and storms. Those industries are expected to expand and intensify in order to achieve the blue or ocean economy.

9. The industries which form part of the blue or ocean economy include traditional maritime industries, such as fisheries, coastal tourism, energy and mineral production, boat building, shipping and port activity; new and developing industries, such as aquaculture; marine renewable energy technologies for wind, wave and tidal energy; bioproducts (both pharmaceutical and agrichemical); blue carbon (carbon storage in mangroves, seagrass and saltmarsh); and desalination. African Governments have placed a high premium on the blue or ocean economy as a new economic frontier for creating employment and income.

⁵ Annette Leijenaar, "Africa should wake up to the importance of an integrated maritime strategy", ISS Today, 8 October 2012. Available at <https://issafrica.org/iss-today/africa-should-wake-up-to-the-importance-of-an-integrated-maritime-strategy>.

⁶ "If, collectively, the oceans were a country, they would thus constitute the seventh largest economy in the world"; see Economic Commission for Africa, *Africa's Blue Economy: Opportunities and Challenges to Bolster Sustainable Development and Socioeconomic Transformation*, Issues Paper (2019).

⁷ African Union–NEPAD, *Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa* (May 2014). Available at https://au.int/web/sites/default/files/documents/30266-doc-au-ibar_-_fisheries_policy_framework_and_reform_strategy.pdf.

⁸ NEPAD Planning and Coordinating Agency, *Revision of the AU/NEPAD African Action Plan 2010–2015: Advancing Regional and Continental Integration in Africa Together through Shared Values – Abridged Report 2010–2012* (Johannesburg, South Africa, NEPAD Planning and Coordinating Agency, 2011).

⁹ UNEP, *Africa Environment Outlook 3: Our Environment, Our Health* (Nairobi, UNEP, 2013).

IV. Why is a blue or ocean economy approach important for Africa?

10. In the next 50 years, Africa will need to increase food production against a backdrop of chronic water scarcity and an increased cost of living. Its youth population is projected to reach 830 million by 2050, with over 300 million joining the labour market by 2035.¹⁰ Consumer spending is projected to reach US\$1.4 trillion by 2025¹¹ and the value of agriculture and agribusiness US\$1 trillion by 2030.¹²

11. If the continent's current trend in unsustainable use of marine resources is not curbed,¹³ the potential of the ocean's resources will be severely compromised.¹⁴ Sustainable and equitable solutions are required to address the interconnected challenges of protecting the health of the natural environment and protecting the health of human populations. With regard to African oceans, there is a great deal of hope, because certain ocean and aquatic resources are potentially renewable given the proper mechanisms, and a country can achieve economic growth without depleting resources or making its communities vulnerable. To make a community resilient is to empower its members to generate wealth using locally available resources, which Africa still has in abundance, and to do so without exposing themselves to dangers resulting from their activities.¹⁵

12. African countries are endowed with a vast coastline and abundant fish resources from oceans, seas, lakes, rivers, floodplains and fish farms, which generate a range of benefits including food and nutrition security, livelihood, exportation and biodiversity. In the abundance of business opportunities deriving from marine and coastal resources, young people must know where to look for those opportunities.

13. Small-scale projects will be a mainstay for coastal communities, ensuring food and income, and providing important ecological and biodiversity components that offer opportunities for individual or collective engagement.

14. The strength of Africa lies in its youth; the continent has the largest number of young people of any continent, currently estimated at 200 million, and young people will influence the economic revival of the continent over the next 15 years. When harnessed positively, this combination can unlock opportunities for wealth for Africa's young people in the affluent consolidated global market.

15. The African population is largely poor and is thus the worst affected by environmental degradation and the least able to rebound. The degradation of ocean and aquatic resources has significant implications for human well-being and health, with the resulting environmental risks accounting for approximately 28 per cent of the disease burden in Africa.¹⁶

V. Opportunities for the growth of a blue or ocean economy in Africa

16. Africa is underusing, arguably even wasting, its blue or ocean economy potential. That is a situation which must be rectified. The blue or ocean economy will be, as Agenda 2063 of the African Union describes it, "a major contributor to continental transformation and growth".¹⁷ According to a 2014 study by the Food and Agriculture Organization of the United Nations,¹⁸ the total gross value added of the fisheries and aquaculture sector in Africa was estimated to be US\$24 billion, or 1.26 per cent of the combined gross domestic product of all African countries. Seafood continues to be a major

¹⁰ African Development Bank Group, *Jobs for Youth in Africa: Strategy for Creating 25 Million Jobs and Equipping 50 Million Youth 2016–2025*, report (2016).

¹¹ Jacques Bughin, and others, *Lions on the Move II: Realizing the Potential of Africa's Economies*, McKinsey Global Institute report (2016).

¹² World Bank, *Growing Africa: Unlocking the Potential of Agribusiness*, report (2013).

¹³ Food and Agriculture Organization of the United Nations (FAO), *Post-2015 and the Sustainable Development Goals: Nourishing People, Nurturing the Planet*, Issue Papers (May 2015). Available at www.fao.org/3/a-az775e.pdf.

¹⁴ FAO, *The State of World Fisheries and Aquaculture 2014* (Rome, FAO, 2014).

¹⁵ Timothy Walker, "Reviving the AU's maritime strategy", Policy Briefs, 8 February 2017. Available at <https://issafrica.org/research/policy-brief/reviving-the-aus-maritime-strategy>.

¹⁶ World Health Organization and UNEP, *Environmental Determinants and Management Systems for Human Health and Ecosystem Integrity in Africa: First Synthesis Report* (Geneva, 2010). Available at www.climhealthafrica.org/wp-content/uploads/2016/01/First-Synthesis-Report_2010.pdf.

¹⁷ African Union, *Agenda 2063: The Africa We Want*, final edition (popular version). Available at www.un.org/en/africa/osaa/pdf/au/agenda2063.pdf.

¹⁸ Gertjan de Graaf and Luca Garibaldi, "The value of African fisheries", *FAO Fisheries and Aquaculture Circular*, No. 1093 (2014), p. 41.

economic product of the living sea and the study found that the seafood sector employed approximately 12.3 million people,¹⁹ yet remained largely underexploited. There is a clear need to professionalize the aquaculture and fisheries sector to fulfil its potential for providing employment.

17. The throughput of African ports is projected to rise from 265 million tons in 2009 to 2 billion tons in 2040.²⁰ The value of the African maritime industry is currently estimated at approximately US\$1 trillion a year.²¹ With the right economic policies in place, it is estimated that the industry could triple in just two years.²² In 2018, the total annual economic value for maritime-related activities in Africa stood at US\$1.5 trillion and is forecast to reach US\$3.5 trillion in 2020.²³ Ninety per cent of the continent's imports and exports are transported via the sea,²⁴ and much of Africa's growth potential depends on ocean-land connections, which still lag behind those in other regions.

18. A common feature of African countries is the generally poor coverage and inconsistent availability of electricity; countries rely on oil to fuel power stations in order to generate electricity. Furthermore, projections of power demand in Africa are that it will rise from 125 gigawatts in 2010 to 700 gigawatts by 2040.^{25,26} Increased energy supply is needed to power blue or ocean economy industries, which in turn will be a driving force for alternative sources of energy, such as tides, currents and waves.

VI. Threats to the development of the blue or ocean economy in Africa

19. Across Africa, important fish stocks have declined, with 70 per cent of species estimated to be at or over the sustainable limit.²⁷ Most larger fish and invertebrates have been overfished, to supply a population that is doubling in size every 10 to 15 years.²⁸ In 2014, the United Nations Environment Programme (UNEP) assessed that global mangrove deforestation was resulting in economic losses valued at US\$42 billion annually. In the Western Indian Ocean region, coral cover, which is a major tourist attraction in the countries of the region, had declined to 30 per cent by 2017.²⁹

20. Litter reaching the ocean from land-based sources represents a major problem for the natural beauty of beaches and marine life. It is estimated that by 2050, there may be more plastics, by weight, than fish in the ocean.³⁰ The visibility of plastics and the length of time that they take to degrade means that they remain a sore sight for decades, with a visible and highly detrimental impact on the

¹⁹ Ibid., p. 54.

²⁰ E/ECA/COE/31/17-AU/CAMEF/EXP/17(VII).

²¹ World Bank and United Nations Department of Economic and Social Affairs, *The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries* (Washington, D.C., World Bank, 2017).

²² Nikkei Shimbun, "Blue economy: the new frontier for Africa's growth & how Japan can help", Inter Press Service News Agency, 8 February 2019. Available at www.ipsnews.net/2019/02/blue-economy-new-frontier-africas-growth-japan-can-help/.

²³ Sustainable Blue Economy Conference Technical Documentation Review Committee, *Report on the Global Sustainable Blue Economy Conference 26th–28th November 2018, Nairobi, Kenya* (Naivasha, Kenya, 2018). Available at www.blueeconomyconference.go.ke/wp-content/uploads/2018/12/sbec-final-report-8-december-2018-rev-2-1-2-pdf2-3-compressed.pdf.

²⁴ Moritz Bollmann, and others, "Maritime highways of global trade", in *World Ocean Review 2010: Living with the Oceans* (Hamburg, Maribus gGmbH, 2010). Available at https://worldoceanreview.com/wp-content/downloads/wor1/WOR1_english.pdf.

²⁵ E/ECA/COE/31/17-AU/CAMEF/EXP/17(VII).

²⁶ African Union, *The Programme for Infrastructure Development in Africa: Transforming Africa through Modern Infrastructure – The PIDA Energy Vision*. Available at www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/PIDA%20brief%20Energy.pdf.

²⁷ FAO, *The State of World Fisheries and Aquaculture 2008* (Rome, FAO, 2009).

²⁸ Alasdair Harris, "Plenty more fish in the sea: preserving stocks in Madagascar", *The Guardian*, 15 October 2014.

²⁹ David Obura, and others, eds., *Coral Reef Status Report for the Western Indian Ocean* (Ebène, Mauritius, Global Coral Reef Monitoring Network/Indian Ocean Commission, 2017).

³⁰ World Economic Forum, *The New Plastics Economy: Rethinking the Future of Plastics* (Geneva, World Economic Forum, 2016).

environment. Moreover, marine creatures are dying after ingesting plastic litter,³¹ their stomachs filled with small pieces of non-degraded plastic debris.^{32,33}

21. Other challenges within a blue or ocean economy include invasive species and ocean acidification, which lead to biodiversity loss and compromise human health and food security. In addition, a weak legal, policy, regulatory and institutional framework, combined with poorly planned and unregulated coastal development, exacerbate existing challenges. One of the key solutions to the challenges facing a blue or ocean economy centres on the way in which resources are governed.

VII. Governance of Africa’s oceans to advance a sustainable blue or ocean economy

A. Governance

22. In Africa, governance significantly influences the way in which the wealth of natural resources is managed and coordinated. Good ocean governance will achieve the full potential of the oceans and return more enduring outcomes in a sustainable blue or ocean economy. In the Cairo Declaration on Managing Africa’s Natural Capital for Sustainable Development and Poverty Eradication, adopted at the fifteenth session of the African Ministerial Conference on the Environment (AMCEN), held in Cairo from 2 to 6 March 2015, ministers agreed to “develop a governance strategy, in accordance with the United Nations Convention on the Law of the Sea and regional seas conventions, on oceans and seas in Africa for the effective management of the region’s shared maritime resources”. It also called for a “regional conference to address the matter by 2016”.

23. In the Nairobi Declaration on Turning Environmental Policies into Action through Innovative Solutions for Environmental Challenges in Africa, which was adopted at the seventh special session of AMCEN, held in Nairobi from 17 to 19 September 2018, ministers agreed to “urge African states to promote the growth and development of the regional ocean sector in a sustainable blue economy pathway and support the mainstreaming of aquatic biodiversity in all productive sectors with a view to sustainably harnessing the blue economy”. In response to the decisions adopted by the seventh special session, UNEP, in its role as the secretariat for AMCEN, carried out background studies and organized a consultative meeting on the development of an African strategy for ocean governance, which was held in Nairobi on 29 and 30 November 2018. Participants discussed elements for possible inclusion in the African strategy and agreed upon the scope of the strategy, institutional and capacity -strengthening, cross-sectoral cooperation, the science-policy interface and stakeholder engagement. Subsequently, UNEP developed an issues paper on ocean governance for discussion at the expert segment of the seventeenth regular session of AMCEN, to be held in Durban, South Africa, from 11 to 15 November 2019.

24. The following mechanisms are already in place and could be used to advance a sustainable blue or ocean economy in Africa. The identification of the gaps in existing frameworks for ocean governance is intended to strengthen the path towards the achievement of a blue or ocean economy.

B. Regional frameworks

1. African Union

25. The African Union is considered to be the engine that drives successful economic development in the region and its organs and institutions are the principal frameworks for advancing a blue or ocean economy.³⁴ However, few of its strategies or plans emphasize the trade and economic growth that could be gained from the region’s coastal and marine resources.

³¹ Ibid.

³² Britta Denise Hardesty and Chris Wilcox, “Marine debris: biodiversity impacts and potential solutions”, *The Conversation*, 22 August 2011.

³³ British Broadcasting Corporation News, “Seabirds ingesting plastic pollution warn scientists”, 20 September 2017.

³⁴ The seven specialized technical committees of the African Union established under the Constitutive Act of the African Union are the Committee on Rural Economy and Agricultural Matters; the Committee on Monetary and Financial Affairs; the Committee on Trade, Customs and Immigration Matters; the Committee on Industry, Science and Technology, Energy, Natural Resources and Environment; the Committee on Transport, Communications and Tourism; the Committee on Health, Labour and Social Affairs; and the Committee on Education, Culture and Human Resources (art. 14, para. 1).

2. Agenda 2063 of the African Union

26. Agenda 2063, adopted in 2015 by the African Union, is a concrete manifestation of the way in which the continent aims to deliver inclusive and sustainable development. It identifies key flagship programmes and projects,³⁵ and core activities to be undertaken during its 10-year implementation plan for the period 2014–2023. Among those key flagship programmes identified, none are marine, coastal, ocean or blue economy-related.³⁶ However, the sixth goal of the 10-year implementation plan states that a blue or ocean economy will accelerate economic growth, and the priority areas for that goal are identified as marine resources and energy, and port operations and marine transport.³⁷

3. Agreement Establishing the African Continental Free Trade Area

27. The Agreement Establishing the African Continental Free Trade Area supports the assertion by many policymakers that a blue or ocean economy could make a strong contribution to economic development across the continent. The Agreement, which entered into force on 30 May 2019, establishes the largest free trade area in terms of participating countries since the formation of the World Trade Organization³⁸ and creates a single continental market for goods and services, with free movement of persons and investments. Coastal and marine resources offer various goods and services that will be boosted by intra-African trade. The Agreement is also expected to enhance competitiveness at the industry and enterprise levels through exploitation of opportunities for scale production, continental market access and improved resource reallocation.

4. 2050 Africa's Integrated Maritime Strategy

28. Africa's maritime domain has increasingly been dominated by discussions of piracy and armed robbery at sea. African actors, including African Union member States, its regional mechanisms for conflict prevention, management and resolution, and its regional economic communities, have to date focused primarily on security-related policies more than those related to the economy. The need to rectify that imbalance led to the development and adoption of the 2050 Africa's Integrated Maritime Strategy.

29. The 2050 Africa's Integrated Maritime Strategy has been defined as “the elaboration of a continental strategy for the management of the continent's maritime domain and the involvement of the [African Standby Force] in efforts to promote maritime security and safety”.³⁹ The Strategy strongly emphasizes the economic dimension and aims to foster increased 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. Accordingly, the Plan of Action for Operationalization for the Strategy⁴⁰ outlines the objectives necessary for implementation, which cover projections for new institutions and structures, wealth creation and human resource development, and capacity-building for maritime governance.

30. The Strategy further elaborates that “there cannot be sustainable sociodevelopment without peace and security, and without development and empowerment no sustainable peace will occur”.⁴¹ Therefore, to further boost maritime viability, building on the security-sociodevelopment nexus, the Strategy asserts the need to “establish a cross-sectoral Strategic Foresight Marine Task Force (SFMTF) to assess the broad spectrum of current marine activities, bearing in mind the future potential for wealth creation from sustainable development in the [African maritime domain] and how to make Africa's maritime industry more competitive for international and regional trade and as a source of sustainable food supply and energy. This would require identifying sectors with the most growth potential (such as ports, aquaculture, renewable energy, submarine telecommunications, tourism and marine biotechnology) as well as the sustainability and security of Africa's energy supply not only

³⁵ African Union, “Agenda 2063: the Africa we want”, overview. Available at <https://au.int/pt/node/34993>.

³⁶ African Union, *Agenda 2063: Framework Document* (September 2015). Available at www.un.org/en/africa/osaa/pdf/au/agenda2063-framework.pdf.

³⁷ African Union, *Agenda 2063: The Africa We Want – First Ten-Year Implementation Plan 2014–2023* (September 2015). Available at www.un.org/en/africa/osaa/pdf/au/agenda2063-first10yearimplementation.pdf.

³⁸ United Nations Conference on Trade and Development, *Economic Development in Africa: Report 2019* (United Nations publication, Sales No. E.19.II.D.7), p. 16.

³⁹ https://au.int/sites/default/files/documents/30847-doc-15th_ordinary_session_kampala_july_2010_eng.pdf.

⁴⁰ African Union, *2050 Africa's Integrated Maritime Strategy* (2012), annex C. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/11151/2050_aims_sratgy.pdf.

from hydrocarbons but from renewable marine resources which could further support economic development and sustainable job creation”.⁴²

31. The challenges facing the implementation of the Strategy lie primarily in how to achieve coherence as it engages with wide-ranging maritime security threats while seeking to achieve maritime safety. On the one hand, efforts to address that challenge should take account of the need to achieve developmental goals for a blue or ocean economy; on the other hand, the marine environment must be protected. The Strategy culminated in the adoption of a binding maritime security and safety charter in Lomé in 2016.

5. Lomé Charter on Maritime Security and Safety and Development in Africa

32. The Lomé Charter aims to promote a flourishing blue or ocean economy and contains measures for the sustainable exploitation of marine resources and the optimization of development opportunities for sectors related to the sea. Article 5, under chapter II, expressly mentions the creation of jobs along the coasts, by promoting artisanal fishery, encouraging local processing of fishery products and facilitating their marketing at the national, subregional and international levels.⁴³

33. Chapter IV is dedicated to the development of a blue or ocean economy and includes articles on the exploitation of the African maritime domain, fisheries and aquaculture, wealth and job creation, integrated human resource strategy and improved competitiveness. Article 21, on wealth and job creation, mandates each State party to undertake the promotion of coastal and maritime tourism as a key sector, with due consideration paid to the environmental dimensions, that generates considerable revenue and creates jobs, and to promote the sustainable development of all associated activities.

34. The coherence between the Lomé Charter and 2050 Africa’s Integrated Maritime Strategy indicates strategic commitment on the part of African Governments to develop a blue or ocean economy. In fact, the Lomé Charter calls for high-level political will in the discharge of the responsibilities of States in reinforcing the provisions of the Strategy.

35. Nevertheless, it should be noted that focusing on security alone is not sufficient and it can be argued that the Lomé Charter places too much emphasis on restriction rather than on development. Moreover, the Charter obligations translate to national requirements for equipment, logistics, technology, training and doctrine. Therefore, it would be realistic to view the implementation of the Lomé Charter in African States as challenging.

6. African Ministerial Conference on the Environment

36. In March 2015, at the fifteenth session of AMCEN, ministers adopted the Cairo Declaration on Managing Africa’s Natural Capital for Sustainable Development and Poverty Eradication. The Declaration mandated member States to integrate the green economy into their development planning. As set out in the outcome document of the United Nations Conference on Sustainable Development, held in Rio de Janeiro, Brazil, from 20 to 22 June 2012, entitled “The future we want”,⁴⁴ the same should apply *mutatis mutandis* to the blue or ocean economy, to industrialize and add value in harnessing natural capital for poverty reduction, job creation and sustainable development.

7. Ministerial forum on transport

37. At the first session of the African Sustainable Transport Forum, held in Nairobi from 28 to 30 October 2014, African ministers for the environment and transport adopted the Action Framework of the Forum.⁴⁵ At the first session of the African Sustainable Transport Forum, held in Nairobi from 28 to 30 October 2014, African ministers for the environment and transport adopted the Action Framework of the Forum. The Action Framework sets out a priority list of actions for sustainable transport in Africa, including actions on road safety, vehicle emissions and energy efficiency, and accessibility and sustainable infrastructure. Under the road safety priority area, actions include

⁴² *Ibid.*, para. 83.

⁴³ See footnote 2 above for the Charter.

⁴⁴ In the outcome document, States committed themselves to protecting and restoring the health, productivity and resilience of oceans and marine ecosystems and to maintaining their biodiversity, thus enabling their conservation and sustainable use for present and future generations, and to effectively applying an ecosystem approach and the precautionary approach in the management, in accordance with international law, of activities having an impact on the marine environment, to deliver on all three dimensions of sustainable development (see <https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf> (para. 158)).

⁴⁵ Africa Sustainable Transport Forum, Summary of the Outcomes of the Inaugural Forum. Available at https://wedocs.unep.org/bitstream/handle/20.500.11822/16816/ASTF_OutcomedocumentFinal.pdf?sequence=1&isAllowed=y.

implementation of the African Action Plan for the Decade of Action for Road Safety 2011–2020; the establishment and funding of dedicated institutions for road safety; ensuring comprehensive data collection and reporting mechanisms on road safety incidents and trends; and developing and adopting a non-motorised transport policy and design guidelines. Under the vehicle emissions and energy efficiency priority area, actions include ensuring air quality monitoring in all major cities; developing vehicle emission standards and inspection and testing regimes; developing vehicle importation regulations at both the national and regional levels, based on vehicle age, mileage or emissions; developing regulations for the adoption of cleaner fuels, in particular low-sulphur fuels, at the national level; and undertaking a fuel economy analysis at the national level with a view to developing national policies to improve fuel economy. Under the accessibility and sustainable infrastructure priority area, actions include developing a national policy on sustainable urban transport; developing integrated transport plans with a specific focus on multimodal transport; and undertaking an assessment and developing a national policy on mass-transit systems. Supporting activities for the three priority areas include data generation and monitoring, financing, capacity-building, and advocacy and championing. These clearly identified areas for action on substantive priorities will make a major contribution to the rolling-out of sustainable transport across Africa.

8. Ministerial forum on water

38. Governance of water resources is ensured through many transboundary agreements, with bilateral and multilateral commitments supporting integrated water management in the seven basins of Africa.⁴⁶ Principle 4 of the 1992 Dublin Statement on Water and Sustainable Development (“the Dublin Principles”) states that “water has an economic value in all its competing uses and should be recognized as an economic good”.⁴⁷ The Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic Development has been designed to avoid the disastrous consequences of natural and human threats to African water resources and to stimulate and sustain growth for economic development and social well-being in the region.⁴⁸

39. Through the declarations adopted by the African Ministers’ Council on Water, African ministers responsible for water have agreed on commitments to accelerate the achievement of water and sanitation goals in Africa. At the tenth ordinary session of the Governing Council of the African Ministers’ Council on Water, held in Dar es Salaam, United Republic of Tanzania, from 15 to 22 July 2016, ministers prioritized water security and sanitation, and the monitoring of African water and sanitation.

40. Many countries in Africa are struggling to meet the objectives of water security, reliable supplies of water for productive activities and water safety, owing to extreme events, such as floods and droughts. Analysis of governance frameworks reveals that the nexus between water and the blue or ocean economy is constantly broken, and that water is treated as an isolated resource, with essential features, such as its connectivity to ocean resources, and its natural resources, including fisheries, simply not appearing in governance frameworks. On a more positive note, however, many countries have been using water to generate hydropower.

41. The main feature of the African water agreements of the twentieth century is the creativity with which they were formulated to meet the unique hydrological, economic, political and cultural settings of individual basins. African agreements relating to water have also tended to use multi-resource linkage, thus broadening benefits, including peace. For example, in the 1986 Lesotho Highlands Water Project agreement, South Africa supported the financing of hydroelectric power generation and a water diversion facility in return for receiving rights to drinking water for its Gauteng Province. The 1969 agreement between South Africa and Portugal with regard to the first phase of development of the water resources of the Cunene river basin allows humanitarian diversions for human and animal requirements in Namibia as part of a hydropower project. Creativity is also demonstrated in the flexibility with which the agreements adapted to changes in the conditions and priorities of basins. An example is the 1987 agreement on the action plan for the environmentally sound management of the common Zambezi River system, which allows for future accession of additional riparian States.

⁴⁶ Oregon State University, “International freshwater treaties database”. Available at <https://transboundarywaters.science.oregonstate.edu/content/international-freshwater-treaties-database>.

⁴⁷ See www.un-documents.net/h2o-dub.htm.

⁴⁸ Economic Commission for Africa, African Union and African Development Bank, *Africa Water Vision for 2025: Equitable and Sustainable Use of Water for Socioeconomic* (Addis Ababa, Economic Commission for Africa, 2003).

42. A range of private initiatives to monitor and assess performance on the sustainability of water management and use have emerged at the local (company and community), regional (river), national and global levels. Other processes and tools have been developed for use by corporations or consumers, which could be promulgated through trade. In cases involving hydropower generated on rivers shared by more than one country, there is a further incentive for regional cooperation and trade.

43. The missing element remains the management of water as an economic resource, as well as the idea of “getting the price of water right”, which is a priority for economic policymakers. Mechanisms for managing demand for water should be assessed in the context of the search for institutional mechanisms as an economic resource while facilitating sustainable use in the blue or ocean economy.

44. The ministerial platforms foster dialogue among experts and policymakers from two groups: those who approve ideas and plans, and those who implement them in the field. However, there lacks a nexus approach to bring together the interlinked development agenda, given that different issue areas are generally intrinsically interconnected and thus need to be similarly governed.

9. New Partnership for Africa’s Development

45. The New Partnership for Africa’s Development (NEPAD) Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa offers the region the “opportunity to transition its fisheries to productivity, sustainability and profitability, with options for enhanced regional collaborative management of shared resources”.⁴⁹ The Policy Framework makes use of several approaches, including economic, ecosystems, social and welfare approaches. The Framework remains a stand-alone document, isolated from and not integrated into existing frameworks on the blue or ocean economy. With effect from 29 July 2019, NEPAD became the African Union Agency for Development.

C. Subregional frameworks

1. Regional economic communities

46. The regional economic communities have regional integration and the advancement of social and economic development as their primary objectives. In the East African Community, the 2003 Protocol for Sustainable Development of Lake Victoria Basin, which designated the basin as an economic growth zone, provided that States should cooperate to conserve and sustain basin resources, such as in the areas relating to using water resources, fisheries resources, agricultural practices, forestry resources, wetlands and industrial development.⁵⁰ The 2001 Southern African Development Community (SADC) Protocol on Fisheries is concerned with fisheries management within the exclusive economic zones, although to date it has not been ratified.⁵¹ The Indian Ocean Commission recognizes that cooperation on economic development is essential to create a conducive environment for economic growth, private sector investment, food security, responsible fisheries development and a blue or ocean economy. The Intergovernmental Authority on Development recognizes that fisheries are major anchors for achieving food security in the horn of Africa, but the body focuses on priorities that limit exploitation for economic income and supports the protection of natural resources and the environment.

47. The challenge faced by most regional economic communities is poor connectivity and weak mechanisms between natural resource management and the various economic sectors, which results in unsustainability, parallel efforts and low value addition. Most regional economic communities are able to deal with natural resource management and environmental sustainability, but lack mechanisms to advance the blue or ocean economy.

2. Regional seas programmes

48. In Africa, the regional seas programmes traditionally have no direct management or regulatory mandate relating to economic activities.

⁴⁹ African Union–NEPAD, *Policy Framework and Reform Strategy* (see footnote 7 above).

⁵⁰ See www.internationalwaterlaw.org/documents/regionaldocs/Lake_Victoria_Basin_2003.pdf (art. 3).

⁵¹ Revised Protocol on Shared Watercourses in the Southern African Development Community (SADC). Available at www.internationalwaterlaw.org/documents/regionaldocs/Revised-SADC-SharedWatercourse-Protocol-2000.pdf.

3. Regional fisheries management organizations

49. Regional fisheries management organizations focus on the conservation of fish stocks, which is a major trade factor in a blue or ocean economy.⁵² Protecting natural resources will ensure that fish stocks are available for advancing the blue or ocean economy.

50. Two-thirds of stocks fished on the high seas are either depleted or overexploited and not all human activities in areas beyond national jurisdiction are adequately regulated; not all regions are fully covered; and some organizations exercise their mandate with limited reference to modern governance principles. The fragmented nature of fisheries management organizations and the lack of adequate mechanisms for cooperation hinder the growth of the fisheries economy. The lack of a clear mandate in promoting a blue or ocean economy hinders conservation efforts.

D. Key sectors of a blue or ocean economy

1. Fisheries

51. As global demand for fish rises, more and more foreign fishing vessels are entering African oceans, which are relatively abundant in marine life,⁵³ threatening the livelihoods of local fishers⁵⁴ and costing Africa some US\$1 billion every year.^{55,56} The artisanal sector consists of smaller vessels requiring lower capital investment. Artisanal fishers primarily use sustainable small-scale gears (such as hand lines or gillnets) or fixed gears (such as weirs or traps) for sustainable yields, achieving the sustainability required in a blue or ocean economy.

52. In theory, Africa's fishing waters are protected under international law. The 1982 United Nations Convention on the Law of the Sea sets a zone of 200 nautical miles off the shores of coastal States, within which fishing and exploitation of other marine natural resources are regulated.⁵⁷ However, the efforts of African countries to stop illegal fishing within those limits are hampered by a lack of expertise and of capacity to enforce the regulations and to measure and monitor the vast maritime areas. Almost none of the coastal countries can afford to set up costly and complex fisheries control structures in their territorial waters or exclusive economic zones.

53. The lack of well-defined property rights in fisheries creates an increased presence of fishers in the high seas, which is compounded by weak tax regimes, which make illegal, unreported and unregulated fishing highly attractive. It is unlikely that foreign fishing would persist at its current intensity in Africa if subsidies were phased out. Equally problematic is the fact that Africa is dominated by small domestic markets and limited export volumes.

2. Coastal tourism

54. The tourism sector currently generates 8.1 per cent of the continent's gross domestic product, valued at over US\$177 billion⁵⁸ and 6.5 per cent of total employment or over 22 million jobs.⁵⁹ The sector accounts for 9.7 per cent of the continent's exports, valued at US\$48.7 billion and 5.7 per cent of total investments. The bulk of the tourism sector falls within the category of blue or ocean economy, with coastal countries accounting for over 95 per cent of the continent's total tourist arrivals and tourism receipts. More importantly, tourism is the primary economic sector in several Small Island Developing States, including Cabo Verde, Mauritius and Seychelles, where it constitutes 45 per cent, 24 per cent and 65 per cent of gross domestic product respectively.⁶⁰ The focus on infrastructure

⁵² Ransom A. Meyers and Boris Worm, "Rapid worldwide depletion of predatory fish communities", *Nature*, vol. 423 (May 2003), pp. 280–283.

⁵³ Africa Progress Panel, *Grain Fish Money: Financing Africa's Green and Blue Revolutions*, Africa Progress Report (2014), p. 89.

⁵⁴ World Wide Fund for Nature, *Living Blue Planet Report: Species, Habitats and Human Well-Being* (Gland, Switzerland, WWF International, 2015).

⁵⁵ Africa Progress Panel, *Grain Fish Money*.

⁵⁶ World Bank, "Oceans, fisheries and coastal economies", 6 April 2018. Available at www.worldbank.org/en/topic/environment/brief/oceans.

⁵⁷ United Nations, *Treaty Series*, vol. 1833, No. 31363.

⁵⁸ See <https://africasustainableconservation.com/2019/02/06/kenya-the-need-to-build-on-growing-wildlife-tourism-market/>.

⁵⁹ See www.uneca.org/sites/default/files/uploaded-documents/sros/ea/high-level-sustainable-blue-economy-conference-2018/the_eca_issues_paper_nairobi_2018_sbec.pdf.

⁶⁰ Economic Commission for Africa, *Climate Change in the African Small Island Developing States: from Vulnerability to Resilience – the Paradox of the Small* (Addis Ababa, Economic Commission for Africa, 2014).

development supporting increased profitable tourism is on land tourism, while coastal tourism receives only secondary and associated benefits.

55. Coastal tourism is faced with a narrow range of tourism products, lack of prioritization and insufficient capacity. For example, very few countries own or operate cruise ship tourism businesses. The ability of Governments to govern coastal and maritime tourism is often hindered by weak municipal authorities and illegal or shadow business deals and practices.

56. The lack of mapping of tourism resources within the context of a blue or ocean economy leads to a complete lack of related policies and strategies. Planning the use of marine spaces is still underdeveloped and land use is not yet integrated into planning for the ocean space.

57. In the regional seas conventions, tourism is viewed as a source of greenhouse gases and not as a source of income. For example, the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region (Nairobi Convention) recognizes tourism as a significant source of greenhouse gases and an agent of climate change.

3. Renewable “blue” energy

58. The oceans and seas of Africa offer tremendous potential and opportunity to develop non-renewable (oil and gas) and renewable (including wind, tidal and wave) energy sources, of which only a fraction has been exploited to date.

59. Hydropower development lies at the intersection between trade and investment and water management. Hydropower energy trade is very limited in the Southern African Power Pool and mainly bilateral in East Africa. Nonetheless, plans for increased trade are ambitious, with hydropower generation forming a significant proportion of that trade.⁶¹

60. The African Water Facility, managed by the African Development Bank, increased infrastructure investment to €1.4 billion for the implementation of projects in 52 countries in 2018.⁶² However, there remains a huge requirement for further investment if the targets of the Africa Water Vision for 2025 are to be met.

61. The governments and business sectors of most African countries have limited capacity to engage in the development of marine-based energy options. Clear weaknesses in capacity include the lack of a maritime sector, combined with inadequate safety and security considerations, limited technical skills in the geological, petrochemical and technological sectors, and a lack of capability in engineering, construction, logistics and supplies, and health and safety. The policy frameworks and legal-institutional arrangements that are necessary for investment in ocean energy are also absent. Furthermore, not only is there no international regulatory mechanism applicable to ocean thermal energy conversion systems in place, but none is close to development.⁶³

4. Infrastructure

62. **Transportation.** Most inland waterways are not being used to their full potential. For example, the potential for transportation on the Nile and Zambezi rivers, lakes Victoria, Tanganyika and Malawi and the Congo River is greatly underutilized. Although rivers can contribute to the nexus of road, rail and water transport networks, relieve the pressure on roads, allay cost and time pressures, and their use can be more environmentally friendly than other forms of transport, most inland waterways require rehabilitation and integration into multimodal transportation networks. Promoting maritime transport by building and expanding ports and shipping facilities to extend maritime reach is a frequently identified measure, but it omits other important issues which are also necessary for the advancement of the blue or ocean economy. Revenue on imports and exports handled through major ports contributes over 50 per cent of total tax revenue in most coastal African countries, meaning that port efficiency has a major impact on the economy of those countries.

63. **Research and knowledge gaps.** There are few strategies available to increase research awareness, promote collaboration or provide guidance and incentives for research on the blue or ocean economy. Information available on the economics of fishing and aquaculture, which is essential for the

⁶¹ SciDev.Net, “Africa’s hydropower future”. Available at www.scidev.net/global/energy/data-visualisation/africa-hydropower-future-interactive.html.

⁶² African Development Bank Group, “African Water Facility has raised €1.4 billion and funded 117 projects in 52 African countries”, News and Events, 17 December 2018. Available at www.afdb.org/en/news-and-events/african-water-facility-has-raised-eur1-4-billion-and-funded-117-projects-in-52-african-countries-18874.

⁶³ John W. Kindt, “Ocean thermal energy conversion”, *Georgia Journal of International and Comparative Law*, vol. 14, No. 1 (1984).

estimation of added value, is very limited in most countries. Very few data are available on post-harvest management, and the possible underestimation of its value could be a corollary.⁶⁴ Small-scale fisheries (artisanal, subsistence and recreational fisheries) receive little attention from policymakers, which is reflected in the almost complete absence from the catch data submitted by member countries of the Food and Agriculture Organization of the United Nations. The competition between large, industrial and small-scale fisheries in the face of growing resource scarcity has led, in most parts of the world, to increased marginalization of small-scale fisheries.⁶⁵

5. Exclusive economic zones

64. Exclusive economic zones are tools to drive the blue or ocean economy. There has been a move towards the creation of more or extended sea territories, such as the extension of exclusive economic zones and continental shelves. In addition, recent discoveries of hydrocarbons have accelerated a rush to exclusive economic zones. Nevertheless, most countries have not yet defined the boundaries of their exclusive economic zones. Even those that have defined them or have some semblance of activities relating to exclusive economic zones lack the capacity to undertake gainful economic activities or protect their exclusive economic zones. It has been reported that 78 per cent of industrial fishing in the waters of lower-income countries is carried out by vessels registered in higher-income nations.⁶⁶

6. Decision-making stakeholders in a blue or ocean economy: coastal communities

65. The blue or ocean economy is concerned with increasing food production from the sea, but there is little evidence of consideration being given to whether that production will benefit those with the most pressing food and nutritional needs. While

In 2017, the enforcement of the ban of trawling in Sierra Leonean waters to give fish stocks a chance to recover, allowing only artisanal fishers to work, did not help much. The enforcement was complicated by the fact that Sierra Leone has only one operational patrol vessel. Reports continued of foreign vessels fishing without a licence, fishing in protected areas, using banned fishing gear that is destructive to the fisheries sector, catching beyond limits or catching protected species. Even licensed vessels did not regularly report catches as required. (International Security Studies, 2019)

the number of small-scale vessels and fishers exceeds those in the large-scale industry, they continue to be marginalized and their contribution to the economy remains unrealized.

66. Despite numerous natural resources, international trade in coastal and marine resources has so far not served as an effective tool for the achievement of rapid and sustainable economic growth and development for coastal communities.⁶⁷ Coastal and marine tourism within Indian Ocean Rim Association structures and programmes excludes local communities.⁶⁸ The strength of small-scale fisheries lies in their ability to persist in many of those contexts and to continue to generate and distribute food and income where formal markets and global supply chains function poorly.

VIII. What Africa needs to do to advance the blue or ocean economy

67. Strong blue economy policies depend on a sound understanding of the continent's oceans, the way in which they react to the cumulative impact of human activity and how their resources can be used wisely. African countries need to strengthen their investment in the blue or ocean economy and implement policies to attract investors. These frameworks will promote the strengthening of existing infrastructure and capacity to ensure the achievement of various priorities, including maritime security and coastal protection.

⁶⁴ De Graaf and Garibaldi, "The value of African fisheries" (see footnote 18 above).

⁶⁵ Daniel Pauly, "Major trends in small-scale marine fisheries, with emphasis on developing countries, and some implications for the social sciences", *Maritime Studies (MAST)*, vol. 4, No. 2, pp. 7–22.

⁶⁶ Douglas J. McCauley, and others, "Wealthy countries dominate industrial fishing", *Science Advances*, vol. 4, No. 8 (August 2018).

⁶⁷ Amadou Tall, "Fish trade in Africa: an update", GLOBEFISH - Information and Analysis on World Fish Trade. Available at www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/338418/.

⁶⁸ Christian Rogerson, and others, *Coastal Tourism and Economic Inclusion in Indian Ocean Rim Association States*, Discussion Paper (2018). Available at https://saiia.org.za/wp-content/uploads/2018/10/GA_Th3_DP-Rogerson-Benkenstein-Mwongera_20181008.pdf.

68. The second imperative is to establish partnerships, including innovative financing models, ideally driven by the private sector, with a view to fostering and strengthening the optimum environment for investment. Strengthening and capturing opportunities in existing frameworks for ocean governance is vital for the achievement of the blue or ocean economy.

IX. Key questions

- (a) What does Africa need to do to advance the blue or ocean economy?
 - (b) Can the existing frameworks and policies currently in place in Africa promote a sustainably managed blue or ocean economy?
 - (c) How do we build on the outcomes of the 2018 Sustainable Blue Economy Conference in order to advance Africa's socioeconomic transformation from its oceans?
 - (d) How can African Governments ensure that ocean governance and the blue or ocean economy are translated into action?
 - (e) Does Africa need to develop a flagship programme for the blue economy that will consolidate infrastructure developments on the continent?
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