ACP/84/090/17 Sustainable Economic Development and Trade Department Brussels, 31 August 2017

Item 4 of the draft agenda of the meeting of senior fisheries officials.

Background Note:

Blue economy: Unlocking the full potential of ocean-based economy

The Concepts

- SDG Target 14.7 of the U.N. Sustainable Development Goals focuses on enhancing the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through the sustainable management of fisheries, aquaculture, and tourism. SDG Target 14.7 is particularly relevant to the ACP Group which includes 27 coastal LDCs, 27 SIDSs and 9 countries which are both coastal LDCs and SIDs.
- 2. According to FAO (2017), countries that transform their marine sectors using a Blue economy approach can potentially reach not just SDG Target 14 oceans but contribute to meeting the 3 pillars of sustainable development and thus help meet SDG Target 1 (No poverty), SGD Target 2 (End hunger), SDG Target 8 (Promote inclusive and sustainable economic growth, employment and decent work for all), SDG Target 12 (Ensure sustainable consumption and production), SDG Target 13 (Take urgent action to combat climate change and its impacts) and SDG Target 17 (Means of implementation).
- 3. The "blue economy" concept seeks to promote economic growth, social inclusion, and the preservation or improvement of livelihoods while at the same time ensuring environmental sustainability of the oceans and coastal areas. At its core, it refers to the decoupling of socioeconomic development through oceans-related sectors and activities from environmental and ecosystems degradation. It draws from scientific findings that ocean resources are limited and that the health of the oceans has drastically declined due to anthropogenic activities. These changes are already being profoundly felt, affecting human well-being and societies, and the impacts are likely to be amplified in the future, especially in view of projected population growth. The concept of the "blue economy" or "blue growth" has become somewhat synonymous under the overarching objective of "greening" of the world economy which, according to the initiative launched in 2008 by United Nations Environment Programme (UNEP), is acknowledged as a tool for achieving sustainable development in particular through a switch to a circular, reduce-reuse-recycle economy. Some economic sectors depend on healthy ecosystems (fisheries, aquaculture, tourism), while some other activities are taking place at sea but do not depend on healthy oceans (shipping, mining). The challenge is to ensure a policy focus on "blue-ing" those activities.
- 4. The blue economy aims at developing economic activities considering economic development and ocean health as compatible propositions. It is generally understood to be a long-term strategy aimed at supporting sustainable economic growth through oceans-related sectors and activities. The blue economy is relevant to all countries and can be applied on various scales, from local to global. However, healthy oceans and seas can greatly contribute to inclusiveness and poverty reduction, and are essential for a more sustainable future for SIDS and coastal LDCs. Oceans and their related resources are the fundamental base upon which the economies and culture of many

SIDS and coastal LDCs are built, and they are also central to their delivery of the 2030 Agenda for Sustainable Development, including SDGs. A blue economy provides SIDS and coastal LDCs with a basis to pursue an environmentally friendly path to economic growth and development designed to enhance livelihoods, create employment opportunities, and reduce poverty.

- 5. The particular vulnerabilities and challenges of SIDS were among others recognized in the Barbados Programme of Action, the Mauritius Strategy of Implementation, the Rio+20 summary document, and the SIDS Accelerated Modalities of Action (Samoa) Pathway. In the Samoa Pathway, SIDS recognized that "sustainable fisheries and aquaculture, coastal tourism, the possible use of seabed resources and potential sources of renewable energy are among the main building blocks of a sustainable ocean-based economy in SIDS" and expressed their support for sustainable development of ocean resources.
- 6. Least developed countries are the poorest countries. Their low level of socioeconomic development is characterized by weak human and institutional capacities, low income, and a scarcity of domestic financial resources. Their largely agrarian economies are affected by a vicious cycle of low productivity and low investment. They rely on the export of a few primary commodities as the major source of export and fiscal earnings, which makes them highly vulnerable to external terms-of-trade shocks. Only a handful has been able to diversify into the manufacturing sector although with a limited range of products in labour-intensive industries
- 7. For both SIDS and coastal LDCs, the move toward a blue economy provides an opportunity to address their particular challenges in a sustainable way, United Nations Department of Economic and Social Affairs (UN DESA 2008). Because their economies rely significantly on natural resources and biodiversity in marine and coastal areas, there is a large potential for diverse ocean economies, from established industries such as fisheries or aquaculture as this is the case in most ACP States to newer areas such as renewable ocean energy.
- 8. The blue economy has diverse components, including established traditional ocean industries such as fisheries, tourism, and maritime transport, but also new and emerging activities, such as offshore fossil and renewable energy, marine aquaculture, seabed extractive activities, and marine biotechnology. A number of services provided by ocean ecosystems, and for which markets do not exist, also contribute significantly to economic and other human activity such as carbon sequestration, coastal protection and the existence of biodiversity. The Millennium Ecosystem Assessment¹ defined four types of ecosystem services including:
 - provisioning services: fisheries, building materials;

¹ <u>www.millenniumassessment.org/</u> (consulted 4th July 2017)

- supporting services: life-cycle maintenance for both fauna and local, element and nutrient cycling;
- regulating services: carbon sequestration and storage, erosion prevention, wastewater treatment, moderation of extreme events;
- cultural services: tourism, recreational, aesthetic, and spiritual benefits.
- 9. The main components of the Blue Economy are summarised in the following table.

Table 1: types of activities and related economic sectors falling under the scope of the Blue economy

Type of activities	Related economic sectors
Harvesting and trade of marine living resources	Fisheries
	Aquaculture
	Ancillary activities (e.g. sale of goods and services to fishing fleets and fish farms, processing of fisheries products
	Trade of seafood products
	Marine biotechnology
Extraction and use of marine non-living	Seabed mining
resources	Oil and gas
	Seawater desalination
Use of renewable natural forces (wind, wave, tidal energy)	Generation of (off-shore) renewable energy
Commerce and trade	Shipping and shipbuilding
	Maritime transport
	Ports and related services
	Coastal development
	Tourism and recreation
Indirect contribution to economic activities and environments	Carbon sequestration
	Habitat protection
	Biodiversity protection
Sources adapted from World Depts and UN DECA (2017)	

Source: adapted from World Bank and UN DESA (2017)

Implementing Blue economy concepts

- 10. An important dimension of the blue economy involves how established ocean industries can evolve to more environmentally responsible practices. An example of this comes from the fisheries sector. The Blue Growth Initiative of the Food and Agriculture Organization of the United Nations (FAO) assist countries in developing and implementing blue economy and growth agendas by:
 - Eliminating harmful fishing practices and overfishing and instead incentivizing approaches that promote growth, improve conservation, build sustainable fisheries, and end illegal, unreported, and unregulated (IUU) fishing.

- Ensuring tailor-made measures that foster cooperation between countries.
- Acting as a catalyst for policy development, investment, and innovation in support of food security, poverty reduction, and the sustainable management of aquatic resources (FAO 2017).
- 11. The work of FAO is anchored in the principles of its Code of Conduct for Responsible Fisheries, itself based on UNCLOS and its implementing arrangements. In coherence with other SGDs, only fisheries that are well governed and well managed can make a long-term contribution to the blue economy.
- 12. With established industries such as fisheries leading the way toward tackling the transition to a blue economy, the challenge lies in forming an integrated view of all economic activities. As enumerated by the UN Economic Commission for Africa (UN ECA, 2014), developments of ocean-based economic activities may have unexpected detrimental impacts on other activities if not properly managed. For example:
 - Infrastructure developments can carry environmental impacts such as air and water pollution, dredging, loss of wildlife habitat, aquatic nuisance species, restraining public access to coastal resources, and land conflict use issues. This could therefore impact biodiversity and as a result impact the fisheries and tourism sector.
 - Tourism sector development will lead to a higher demand on energy which is already consuming a lot of foreign exchange earned by coastal LCSs and SIDS. Tourism development should therefore go in parallel with renewable energy development.
 - Aquaculture can create conflicts over competing land use in coastal areas. In most countries, there is already significant amount of coastal pressure and for some aquaculture development projects placement in land, if possible, it could therefore be a preferred option.
 - Oil drilling and extraction can have far reaching environmental consequences and thus potentially impact fisheries. Oil and gas exploration and production should therefore carefully take environmental concerns into consideration.
 - Tidal energy production has many environmental impacts of which the consequences for biodiversity and marine life are still unknown. Until scientific evidence exists developing other renewable energy options is therefore perhaps more sustainable.
 - Aquaculture can create environmental impacts in mangrove areas detrimental to fish nurseries and carbon sequestration.
- 13. According to the Economic Intelligence Unit (2015) report, the transition from an ocean "non-blue" economy to a blue economy is a complex and long-term commitment involving all stakeholders:

- A sustainable ocean economy offers a path for considering economic development and ocean conservation as compatible positions. It does not have to be a choice between growth and sustainability. Properly planned and managed ocean spaces should mobilise public- and private- sectors and generate returns and ecosystem benefits. The advantages of such an approach mean that a diversity of activities, from traditional ocean sectors to new businesses in a coordinated way, within a comprehensive framework of ecosystem management.
- Reform of institutions governing the ocean economy is required to keep pace with accelerating economic activity. Historically, economic activity within EEZs has been managed on a sectoral basis, with only limited co-ordination between ministries, regulatory bodies and industry. Governing a sustainable ocean economy will be far more complex. Ecosystem-based management and its most important implementing tool, marine spatial planning (MSP, see below), requires a set of integrated governance and supporting conditions to be present. These include good laws and regulations aligned with international conventions (UNCLOS and its implementing arrangements in particular), strong institutions and inter-ministerial co-operation often across international boundaries requiring high levels of international cooperation, transparent and inclusive decision-making processes involving all public and private stakeholders, evidence-based support, and credible arbitration mechanisms. For most developed or developing economies, this is a considerable challenge.
- Better economic data and science are required. Current approaches to valuing the ocean economy hardly take into account the value of non-market goods and services: ecosystem benefits such as the protection to coasts offered by coral reefs, or carbon sequestration. Despite improvements in accounting methods and techniques for valuing this natural capital, there remains gaps in the data and information required to monetise ecosystem benefits accurately, and at the level where the information can be used to better inform policy and investment decisions. In some contexts, relevant information may be available but not sufficiently included in States approaches.
- Innovative financing will be needed to direct investments into those economic activities that can enhance ocean health. Many public and private economic activities that could serve to restore ocean health will incur higher costs and delay returns on investments. This suggests the need for innovative financing mechanisms, more capital than is currently being deployed, and for a greater degree of collaboration between the public and private sectors. There is potential for bolstering the development of those "emerging" and "new" industries focused on restoring ocean health

Maritime Spatial Planning: a key tool to move forward

14. Marine spatial planning (MSP) is a process that brings together multiple users of the ocean - including energy, industry, government, conservation and recreation - to make informed and coordinated decisions about how to use marine resources sustainably. MSP generally uses maps to create a more comprehensive picture of a marine area, identifying where and how an ocean area is being used and what natural resources and habitat exist. It is similar to land-use planning, but for marine waters.

- 15. MSP is not an end in itself, but a practical way to create and establish a more rational use of marine space and the interactions among its uses, to balance demands for development with the need to protect the environment, and to deliver social and economic outcomes in an open and planned way.
- 16. According to United Nations Educational, Scientific and Cultural Organization (UNESCO)², effective marine spatial planning has three essential attributes:
 - Multi-objective. Marine spatial planning should balance ecological, social, economic, and governance objectives, but the overriding objective should be increased sustainability.
 - Spatially focused. The ocean area to be managed must be clearly defined, ideally at the ecosystem level certainly being large enough to incorporate relevant ecosystem processes.
 - Integrated. The planning process should address the interrelationships and interdependence of each component within the defined management area, including natural processes, activities, and authorities.
- 17. According to UNESCO³, some ACP States from the three regions are already using MSP to encourage compatible uses, reduce use conflicts, and balance sustainable use and marine conservation in discrete specific marine areas (e.g. Mauritania) or over the whole EEZ (e.g. Seychelles).

ACP countries selected Blue economy experiences

- 18. The Blue economy concept is a new paradigm. However, some ACP States have taken steps to develop the inclusion of Blue economy concepts in their policies and actions. The following paragraphs show some notable examples.
 - Mauritius Ocean Economy (2015)⁴: promotion of the integrated development of ocean bases economic activities which include ports and shipping, fisheries, seafood, smart marine aquaculture, coastal and marine tourism, aqua farming, ocean renewable energies, seabed mining and minerals extraction. Spatial planning is an important component of the roadmap to ensure that the so important tourism sector is not affected by ocean-based industrial developments and that economic development does not increase pressure on the coastline which has lost 11% of its length since the 1960's due to erosion. Enabling factors include improved business climate and dialogue with foreign investors through a dedicated platform (Mauritius Board of Investment).
 - Seychelles National Blue Economy Roadmap (2016): development of a number of existing sectors and to increase the proportion of Gross Domestic Product (GDP)

² <u>http://msp.ioc-unesco.org/</u> (consulted 4th July 2017)

³ See map available on the website mentioned above

⁴ <u>http://www.investmauritius.com/investment-opportunities/ocean-economy.aspx</u> (consulted 22nd June 2017)

derived from marine sectors, creation of high value jobs, ensuring food security through effective and sustainable utilization of marine resources, managing and protecting the marine environment. Concerning financing, the Government used an innovative approach and reached a landmark agreement with its Paris Club creditors that resulted in a EUR 20 million debt-for-adaptation swap. For example, the debt swap has enabled the Government to redirect a portion of its current debt payments to fund nature-based solutions to climate change.

- Cabo Verde (2015) became a pilot country for implementing the FAO Blue Growth Initiative. The government adopted the Blue Growth Charter supported by a Blue Growth Intelligence Unit, which serves as a framework for all policies and investments related to the development of a sustainable ocean economy, ensuring that appropriate policies are in place, engaging appropriate institutions along with capacity development and incentives financial and technical innovations.
- Kenya (2015) is implementing two coastal projects in collaboration with FAO. The objectives of these initiatives are to: i) increase knowledge of water basin to coral reef ecosystem services supporting food, nutrition and livelihood security; (ii) identify the drivers of ecosystem services deterioration as well as the management options to improve them; and (iii) foster investment in coastal sustainable mariculture and promote its development under the ecosystem approach to aquaculture (EAA) by considering integration with other users of the coastal zones, such as tourism, fisheries and agriculture
- Grenada (2015) initiated a national 'masterplan' for blue growth. It identifies opportunities for blue growth development in areas such as fisheries and aquaculture, blue biotechnology, renewable energy, research and innovation. Worthy of note, the masterplan proposes a 'Blue Innovation Institute' as a key component of its strategy. The institute will aim to be a centre of excellence and a think tank on blue economy, as well as seek to develop innovative 'blue' financing instruments such as debt-for-nature swaps, blue bonds, blue insurance and blue impact investment schemes.
- Blue economy projects can also be implemented at local levels with support of the local coastal communities. FAO (2017) raises the example of coastal fishing communities in Côte d'Ivoire where women from the processing sector are moving away from open smoking ovens that burn large amounts of mangrove wood to more efficient closed ovens that either use less wood or alternative energy sources. In Senegal, empowerment of fishing communities to co-manage coastal fisheries underpinned adoption of improved conservation measures for protecting juvenile fish or shellfish, or banning harmful fishing techniques. Other example includes development of aquaponic⁵ aquaculture in Barbados.

⁵ Aquaponics is a combination of aquaculture (fish farming) and aquaponics (soil less farming), in which nutrient rich outflow from fish tanks is used to fertilise hydroponic crop production, and then recirculated.

19. Key conclusions for the consideration by ACP Fisheries Ministers

- Concerned ACP States should consider the value of moving toward blue economy to address their particular challenges in a sustainable way, in particular SIDs which have little alternative options.
- Concerned ACP States should therefore consider incorporating the Blue economy concepts in development roadmaps, taking into due consideration information and capacity building needs. However, the Blue economy is a new paradigm only just beginning to be considered in development policies of concerned ACP States (i.e. SIDSs, LDCs). In this respect, the ACP Secretariat could support its Member States effort in preparing a Blue Economy Strategic Plan of Action completing / supplementing the existing Fisheries and Aquaculture Strategic Plan of Action.
- Depending on the context, Blue economy may concern different authorities within a State. Concerned ACP States should ensure coordination of effort through establishment of relevant cross-sectoral platforms for dialogue between these different authorities and other stakeholders.
- A first step is to consider how existing economic activities (e.g. fisheries, aquaculture, tourism) may be "blue-ed". Concerning the fisheries and aquaculture sectors, the FAO Blue economy initiative provides guidance and assistance that concerned ACP States may choose to follow.
- When considering supporting the development of other sectors of the Blue economy, concerned ACP States should develop detailed science-based costbenefit studies to support decision-making, taking full account of the non-financial costs. Concerned ACP States should also implement Maritime Spatial Planning in accordance with the guidelines provided by the Intergovernmental Oceanographic Commission of the UNESCO.
- Development of Blue economy initiatives should consider resilience to climate change, in particular to coastal erosion.
- As exemplified by some countries, innovative financing mechanisms can be mobilised to support the development of the Blue economy including debt swaps or Blue bonds.

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