



# IGAD REGION BLUE ECONOMY

## STRATEGY AND IMPLEMENTATION PLAN



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# **IGAD Blue Economy**

# **STRATEGY AND**

# **IMPLEMENTATION PLAN**

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# ACRONYMS

<b>AEC</b>	African Economic Community
<b>AfCFTA</b>	African Continental Free Trade Area
<b>AIMS</b>	African Integrated Maritime Strategy
<b>AU</b>	African Union
<b>AU-IBAR</b>	Inter-African Bureau for Animal Resources
<b>AV</b>	Added Value
<b>BE</b>	Blue Economy
<b>BESIP</b>	Blue Economy Strategy and Implementation Plan
<b>CC</b>	Climate change
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>EAC</b>	East African Community
<b>IORA</b>	Indian Ocean Rim Association
<b>IUU</b>	Illegal, Unreported and Unregulated
<b>LME</b>	Large Marine Ecosystem
<b>MASE</b>	Maritime Security
<b>MSP</b>	Maritime Spatial Planning
<b>NDC</b>	National Determined Contribution
<b>NGO</b>	Non-Governmental Organisation
<b>PAFPF &amp; RS</b>	Pan-African Fisheries and Aquaculture Policy Framework and Reform Strategy
<b>PPP</b>	Private-Public-Partnership
<b>REC</b>	Regional Economic Community
<b>RISE</b>	Research Innovation and Staff Exchange
<b>SDG</b>	Sustainable Development Goals
<b>UNECA</b>	United Nations Economic Commission for Africa

# FOREWORD



**H.E. Workneh Gebeyehu (Ph.D.)**  
**IGAD Executive Secretary**

The Intergovernmental Authority on Development (IGAD) region has diverse socio-ecological landscapes besides a strategic edge on the Red Sea and Western Indian Ocean. The region has a huge Blue Economy potential that is generally under exploited. Traditional sectors such as fisheries, tourism, mineral extraction, and marine and river transport are showing evidence of significant development capacities while emerging sectors such as aquaculture, marine biotechnology and bioprospecting, desalinization and renewable energy are currently given low attention and require substantial investments in the near future.

It gives me great pleasure to introduce and share with you the IGAD Regional Blue Economy Strategy (2021-2025). The IGAD Blue Economy Strategy

serves as a guide to sustainably utilize the marine and inland resources and services in the region. It also serves as a tool for building community and ecosystem resilience. This Strategy also contributes to IGAD regional economic integration. It forms part of the overall framework to guide IGAD in achieving its transformation in agriculture and sustainable environment goals.

Our region is rapidly evolving and witnessing new challenges, including emerging pests and diseases, climate change, recurrent droughts, resource scarcity, economic shocks from global economic crises, security threats, irregular migration, fragility and conflicts among others. This calls for designing prioritized strategic interventions that address challenges and capture opportunities for optimal utilization of blue resources and services.

The Blue Economy Strategy adopts and embraces high values and principles like circular economy, sustainability, beneficiary participation, inclusiveness and partnership with stakeholders. The Strategy is comprehensive, all-inclusive and incorporates national, regional and continental best practices in blue growth. It is also tailored to the needs and aspirations of the IGAD region.

Indeed, the Member States, development partners and non-state actors have contributed to the formulation of this Strategy. The Blue Economy Strategy formulation process took a bottom-up approach involving elaboration of extensive consultations and baseline studies at the national level. The formulation of the Strategy was informed by the findings and recommendations of national baseline studies.

This Strategy also forms a basis for designing and implementing programmes and projects in the IGAD

region. It will be owned by the Member States and IGAD will facilitate its domestication by Member States. It holds us accountable and tracks our progress towards achieving our strategic objectives.

I am confident that the Member States and development partners will find this Strategy useful in setting and realigning their development investment priorities for the IGAD region.

Finally, I am pleased to state that IGAD is the first Regional Economic Community (REC) that has developed and adopted Blue Economy Strategy aligned to the African Union Blue Economy Strategy. I would like to thank the European Union and the Government of Sweden for their financial support, as well as the IGAD team and consultants engaged in the preparation and adoption of the strategy held on April, 2022, Addis Ababa, Ethiopia.

# ACKNOWLEDGEMENT

The IGAD Blue Economy Strategy and Implementation Plan document was drafted under the coordination of Dr. Eshete Dejen from the Environment Protection Unit, Agriculture & Environment Division of IGAD. The national Blue Economy baseline reports from all IGAD Member States and this draft IGAD Blue Economy Strategy was financially supported by the European Delegation in Djibouti, with an active participation of Khola Mohamed Ali, the Project Officer at the Delegation. However, the facilitation of the final endorsement of this strategy by all IGAD Member States was financed by the Sweden Embassy in Addis Ababa (Ethiopia).

We would like to thank Prof. Pierre Failler for drafting this strategy. We also thank James Mutimu, Regional consultant who developed the synthesized regional Blue Economy baseline report, and the national consultants who contributed to provide a review of the Blue Economy in their respective countries, namely: Abdirahim Ibrahim (Somalia), Wilson Mwanja (Uganda), Zahra Omar Ahmed (Djibouti), Naftali Ndugire (Kenya), Sarafino Aloma (South Sudan), Mesfin Tilaye (Ethiopia), Mariam El Khair (Sudan).





**IGAD  
REGION  
BLUE ECONOMY CONTEXT**

The global COVID-19 pandemic is negatively disrupting national economies of IGAD Member States. The economic impact of the pandemic is further exacerbated as other important economic sectors, such as fisheries, maritime transportation, air passenger and freight transport, shops, restaurants, and others are also experiencing a negative trend. The subsequent lack of receipts from value added taxes and income taxes will also have an impact on future IGAD Member States spending and investment. In that regard, this Blue Economy Strategy and Action Plan is an important aspect of IGAD region recovery by guiding States and stakeholder efforts to revitalise their economy in a resilient and sustainable manner while also preserving countries' natural and social heritage.

### 1.1 Recent Blue Economy Development

The concept of the Blue Economy (BE) is a new approach that incorporates the sustainable economic exploitation of the resources of the oceans, lakes, rivers and other water bodies, and the conservation of aquatic ecosystems (UNECA, 2016; AU, 2019)<sup>1</sup>. It thus suggests a new way of considering the economic valuation of aquatic and marine ecosystems and the creation of jobs, by referring particularly to the circular economy principles<sup>2</sup> (see definition of BE in the box below). This concept constitutes a new basis for the use and conservation of natural resources and habitats. In this regard, the BE fits in with the logic of the United Nations' 2030 Agenda and embraces all the sustainable development goals (SDG) given its inclusive nature.

The BE is also part of African policies and initiatives such as the 2063 Agenda of the African Union (AU), the 2050 Africa's Integrated Maritime Strategy (2050

#### Box 1: Definition of the IGAD Blue Economy adapted from UNECA (2016) and AU (2019)

In the IGAD context, the Blue Economy (BE) encompasses both marine and freshwater environments. It thus relates to the sustainable use and the conservation of oceans and seas, coastlines and banks, lakes, rivers and groundwater. The Blue Economy is then a set of human activities that, on the one hand, organise in an integrated, fair and circular manner the production, distribution, trade and consumption of goods and services resulting from both the exploitation of aquatic resources<sup>3</sup> and from the use of supports that constitute aquatic environments<sup>4</sup>, and, on the other hand, contribute to improve the health status of aquatic ecosystems by implementing protective and restorative measures. As a result, the BE revolves around the valorisation of both economics sectors and ecological components.

AIM Strategy), the 2014 Pan-African Fisheries and Aquaculture Policy Framework and Reform Strategy (PAFPF & RS), the Africa Blue Economy Strategy (<https://www.au-ibar.org/strategy-documents>), and the 2016 African Charter on Maritime Security, Safety and Development in Africa (the Lomé Charter). The African Blue Economy Strategy was endorsed in October 2019 by African Union Specialized Technical Committee on Agriculture, Rural Development, Water and Environment and adopted by the heads of States in early February 2020.

1 United Nations Economic Commission for Africa (UNECA). African Union (AU).

2 The circular economy is neither the waste economy nor the recycling economy. It brings together a set of practices, prioritized according to their impact, aiming at optimizing the use of materials and energies. See <https://www.ellenmacarthurfoundation.org/circulareconomy/concept>

3 For instance, fisheries, mining and petroleum, biotechnologies and alternative energies.

4 For instance, maritime transport and coastal tourism.

On the scale of the Horn of Africa region, the BE has been, for some countries, on political agendas since 2013<sup>5</sup>. In March 2015, the United Nations Economic Commission for Africa (UNECA) organised a meeting of the 19<sup>th</sup> intergovernmental committee of BE experts in East Africa with the following publication of the BE review for the region and the practical guide to the implementation of BE policies<sup>6</sup>. Following the first global conference on BE held in November 2018 in Kenya<sup>7</sup>, countries and regions embarked on the development of specific BE strategies. In the Indian Ocean, a review of the Blue Economy in the member states of the Convention for the Protection, Management and Development of the Marine and Coastal Environment of East Africa (known as the Nairobi Convention) has just been carried out<sup>8</sup>, and it is considered developing a specific strategy for ocean governance<sup>9</sup> for the entire western region of the Indian Ocean. These initiatives were presented during the workshop organised by the Nairobi Convention in South Africa in April 2019<sup>10</sup> that brought together regional economic communities and intergovernmental organisations from the Indian Ocean region.

More recently, the UNECA 23<sup>rd</sup> Conference of the Intergovernmental Committee of Senior Officials and Experts for Eastern Africa entitled "Leveraging New Opportunities for Regional Integration in Eastern Africa"<sup>11</sup> was orientated toward the creation of synergies among the sectors and countries in the Horn of Africa and particularly in the BE area.

Outcomes of the Conference, pertinent for the BE IGAD development are among others: clean energy for all in Africa is required and need sustainable long-term financing; tourism should be a priority sector for East African transformation; East Africa needs a better quality of economic growth to tackle the job challenge; East Africa needs more inclusive growth to achieve the SDGs; and benefits of regional integration were reaffirmed.

At the continental level, the African Union Inter-African Bureau for Animal Resources (AU-IBAR) led the development of the Africa Blue Economy Strategy. An expert consultation workshop was held in August 2019 on the formulation of Africa Blue Economy Strategy. The experts identified five thematic areas that are considered as key vectors for the Africa Blue Economy development:

- Governance, institutions and social actions
- Fisheries, aquaculture and ecosystems conservation
- Shipping, transportation and trade
- Sustainable energy, extractive minerals, gas, innovative industries
- Environmental sustainability, climate change, coastal infrastructure and tourism

During the 33<sup>rd</sup> African Union Summit in Ababa Ababa, Ethiopia, the Africa Blue Economy Strategy was launched at a High-level Side Event at the Sheraton Hotel in Addis Ababa on 8<sup>th</sup> February 2020.

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5 With an important session of the annual conference of the Indian Ocean Rim Association (IORA), to which Kenya and Somalia are members, held in Mauritius and devoted to "considering the potential of the Blue Economy" of all Indian Ocean maritime countries. Since then, the IORA's interest has continued to grow: it has set up a specific BE working group while formulating the declarations of Mauritius in September 2015 and of Jakarta in May 2017 in order to specify the terms of the BE implementation in the countries of the Indian Ocean basin.

6 See <https://www.uneca.org/publications/blue-economy-and> <https://www.uneca.org/publications/africas-blue-economy-policyhandbook>

7 See <http://www.blueeconomyconference.go.ke/>

8 In the framework of the African Ministerial Conference on the Environment (document not available).

9 In the framework of the same conference. See <https://www.nairobiconvention.org/Meeting%20Documents/September%202019/Regional%20Ocean%20Governance/WIO%20Ocean%20Governance%20November%202019%20-%20Outcome%20Doc%20Revised%20after%2004-05%20September%202019-Seychelles.pdf>

10 See <https://www.unenvironment.org/nairobiconvention/events/workshop/partnership-meeting-regional-economic-communities-and-commissions-western-indian>

11 See: <https://www.uneca.org/ea-icsoe23>

Africa's Blue Economy can be a major contributor to the continental transformation, sustainable economic progress, and social development. Launched under the theme "Developing a Sustainable Blue Economy; Increasing Momentum for Africa's Blue Growth", the Africa Blue Economy Strategy's vision is an inclusive and sustainable Blue Economy that significantly contributes to Africa's transformation and growth. The objective of the Africa Blue Economy Strategy is to guide the development of an inclusive and sustainable Blue Economy that becomes a significant contributor to continental transformation and growth, through advancing knowledge on marine and aquatic biotechnology, environmental sustainability, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport, the management of fishing activities on these aquatic spaces, and the exploitation and beneficiation of deep sea minerals and other resources.

The strategy reinforces the commitments of African countries to work towards the SDGs, particularly SDG 14 "Life Below Water", the vision of AU Agenda 2063 and to accelerate implementation of AU policies and instruments such as the AU 2050 Africa Integrated Maritime Strategy, the AU-Lomé Charter on Maritime Security, Safety and Development, and the Revised African Maritime Transport Charter.

## 1.2 IGAD Blue Economy Context

With the current BE strategy and Implementation Plan (BESIP), the Intergovernmental Authority on Development (IGAD), which brings together the States that share the northwest region of Africa (Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Uganda) is currently building on the work carried out for several years in the framework of programmes

related to fisheries and aquaculture<sup>12</sup>, environmental and natural resources strategy<sup>13</sup>, coastal and marine biodiversity, environmental pollution<sup>14</sup>, maritime security, etc.

Furthermore, the BE serves as a catalyst by establishing a new inclusive dynamism articulated around the 17 Sustainable Development Goals<sup>15</sup>. In a way and to some extent, it prompts a collective positioning and allows to increase the speed of realisation of the interventions, the means deployed being incommensurate with those allocated to mono-specific actions.

All IGAD Member States are yet to start the process of developing their national Blue Economy strategies and implementation plans. Overall, none of them, except Kenya, has started national consultations, preceding the development of a BE policy and/or strategy. Thus, the process of implementing BE remains broadly nascent apart from the actions and initiatives carried out in a sectoral framework (fisheries, ports, tourism, etc.). Only Kenya has an administrative entity specifically dedicated to BE in the Ministry of Agriculture, Livestock, Fisheries & Cooperatives.

For the policy and strategy documents drawn up, the BE is designed from a sectoral perspective with little to no room for initiatives bringing together several sectors. As a result, the current approach for most IGAD Member States remains compartmentalised with little inter-sectoral consultation and articulation between the needs of the different sectors and education and research (particularly in the fields of oil and gas exploitation, and biotechnology). The concept of integration specific to BE is, therefore, not taken into account. As such, what is presented resembles more to a standard policy for the development of the various sectors of the economy linked to the

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12 IGAD Fishery and Aquaculture strategy completed in 2016.

13 See: [https://igad.int/attachments/159\\_IGAD\\_ENR\\_Strategy.pdf](https://igad.int/attachments/159_IGAD_ENR_Strategy.pdf)

14 Regional Strategy completed in 2016.

15 For a detailed presentation of the links between BE and SDGs, see Africa's Blue Economy: A policy handbook, UNECA (2016).

aquatic environment than to the implementation of an innovative policy based on unifying initiatives able to improve human well-being and the conservations of marine and aquatic ecosystems. The paradigm shift that underpins the implementation of BE has, therefore, not yet taken shape in the IGAD Member States.

The issue of environmental conservation is also not taken into account. It remains a noteworthy component in most of the strategies but without being actively integrated into the implementation of policies related to climate change (CC). In other words, the environment is only considered through the prism of protection while it will play an increasingly preponderant role in the mitigation<sup>16</sup> and adaptation<sup>17</sup> to climate change effects through the range of ecosystem services<sup>18</sup> it provides. For instance, the blue carbon from carbon dioxide sequestration by mangroves, seagrass beds, mudflats and other coastal ecosystems must be taken into account in the National Determined Contributions (NDC)<sup>19</sup> and, as such, must appear as an element to value in any BE policy. In this regard, specific accounting for Blue Carbon and other ecosystem services<sup>20</sup> should be set

up in order to monitor and measure the evolution of the contribution of coastal ecosystems to carbon sequestration.

In the same way, nature-based solutions<sup>21</sup> have to be put forward in national BE documents. Ecosystems restoration (along with maintaining their health status) is, in fact, one of the main environmental issues of Horn of Africa States to contribute to the well-being of populations and to cope with future climate change-related events; the treatment of pollutions from the land and the sea (in particular chemicals, and micro and macro plastics) being the other major issue.

More practically, regardless of the level of progress in the formulation and implementation of BE, all countries face the same need for knowledge, capacity and know-how in the structuration of BE. The classic sectoral approach followed by the countries has undoubtedly led to underestimate the role of strategic coordination for the implementation of BE and to mark it with recurrent structuring, organisational, concordance and planning difficulties. Such a coordination process aims indeed at ensuring coherence of all BE actions<sup>22</sup>, annihilating conflicts<sup>23</sup>

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

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

18 See <https://lipbes.net/>

19 See <https://unfccc.int/fr/news/registre-interiminaire-ndc>

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

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

22 In particular, with regard to the SDGs. In other words, the development (or maintenance) of one activity should not be at the expense of another one that has a greater overall contribution to the achievements of the SDGs. The compatibility of the actions between them is central to the implementation of BE.

23 Conflicts related to the occupation of the same spaces for different activities (seaside hotels and aquaculture farms on the same body of water, port extension and ecosystem services provided by the mangroves, etc.).

and, as much as possible, inducing synergies and generating positive externalities<sup>24</sup>.

The same phenomenon is reproduced at the regional level as there are only a few large regional initiatives, apart from those related to maritime safety, such as the one on IGAD Drought Disaster Resilience and Sustainability Initiative, partly link to the regional water management. The inter-relations between countries are also tenuous: countries seem to be more oriented towards economic partnership (such as between landlocked countries and coastal ones) than towards collaboration on environment, climate change, education and research issues, for instance.

### 1.3 Overview of the Blue Economy Sectors in the IGAD Region

IGAD countries have a great Blue Economy potential that is generally under-used. Traditional sectors such as fisheries, tourism, mineral extraction and marine and river transport are showing evidence of significant development capacities while emerging sectors such as aquaculture, marine biotechnology and bioprospecting, desalination and renewable energy are currently lacking attention and request substantial investments in the near future. In a more detailed way:

**Fisheries:** according to the fisheries sector reports from IGAD countries, this represents about one million tonnes of fish annually, with about  $\frac{3}{4}$  originating from lakes and rivers, mainly Lake Victoria and the White Nile River. The total annual fisheries potential in the IGAD region is more than three million tonnes. The Value added<sup>25</sup> generated by the inland and marine

fisheries activities can be estimated to about USD 600 million. According to FAO, about 500 000 direct jobs are linked to fisheries capture activities.

**Blue Tourism:** coastal, river and lake tourism is extending in the region due to the relative political stability of recent years. The full potential is not being achieved as it is estimated that current revenues can be multiplied threefold to reach USD 24 billion per year for a value added of about USD 8 billion. Ecotourism and other forms of environmentally friendly tourism activities are getting increasingly more attention.

**Mineral Extraction Industries:** Seabed and lakebed mining is currently underdeveloped in IGAD countries. With the exception of oil extraction in Uganda, it relies mainly on sand removal. No economic data is currently available to assess the value added of this sector<sup>26</sup>. The potential seems to be consistent but due to the lack of seismic and geomorphological surveys the potential remains unknown.

**Marine, River and Lake Transport, Ports and Related Services such as shipping and Shipbuilding** are currently developing quickly with massive infrastructures planned and under construction in coastal countries, such as the Lamu Port in Kenya. Trade with Asian countries constitutes the major driving force both for export and import of raw material and manufactured products. Shipbuilding remains focused on artisanal fishing boats and small size passenger ferries and boats. Data are currently lacking to provide an estimate of the value added of this Blue Economy sector. River transport in South Sudan and Sudan is one of the key sectors.

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24 Negative externalities result from the effects of one activity towards another such as visual and organic pollution, as well as the risk of the presence of sharks generated by mariculture towards coastal tourism, or the development of touristic activities that generate pollution and nuisance towards protected areas with high biodiversity, without any compensation for the damages caused. On the contrary, positive externalities are the fact of providing to others a utility or an advantage free of charge, i.e. without monetary compensation. It is particularly the case for the protection and regeneration of the coastal environment that benefits fisheries as fish, crustaceans and mollusks benefit themselves from spawning and nursery areas before adding to the fish stock exploitable by fisheries.

25 The value added correspond to the revenue of activities less intermediate consumption.

26 Except for Uganda with revenues of USD 8 billion from oil.

**Aquaculture** production was about 140 000 tonnes in 2019 compared to less than 1 000 tonnes in 1999. The growth continues to occur where the fish farms do not face harmful environmental pollution due to industrial, agricultural and human activities. The main species produced are the Nile tilapia and the Catfish. The value added generated by the aquaculture sector can be estimated to USD 50 million.

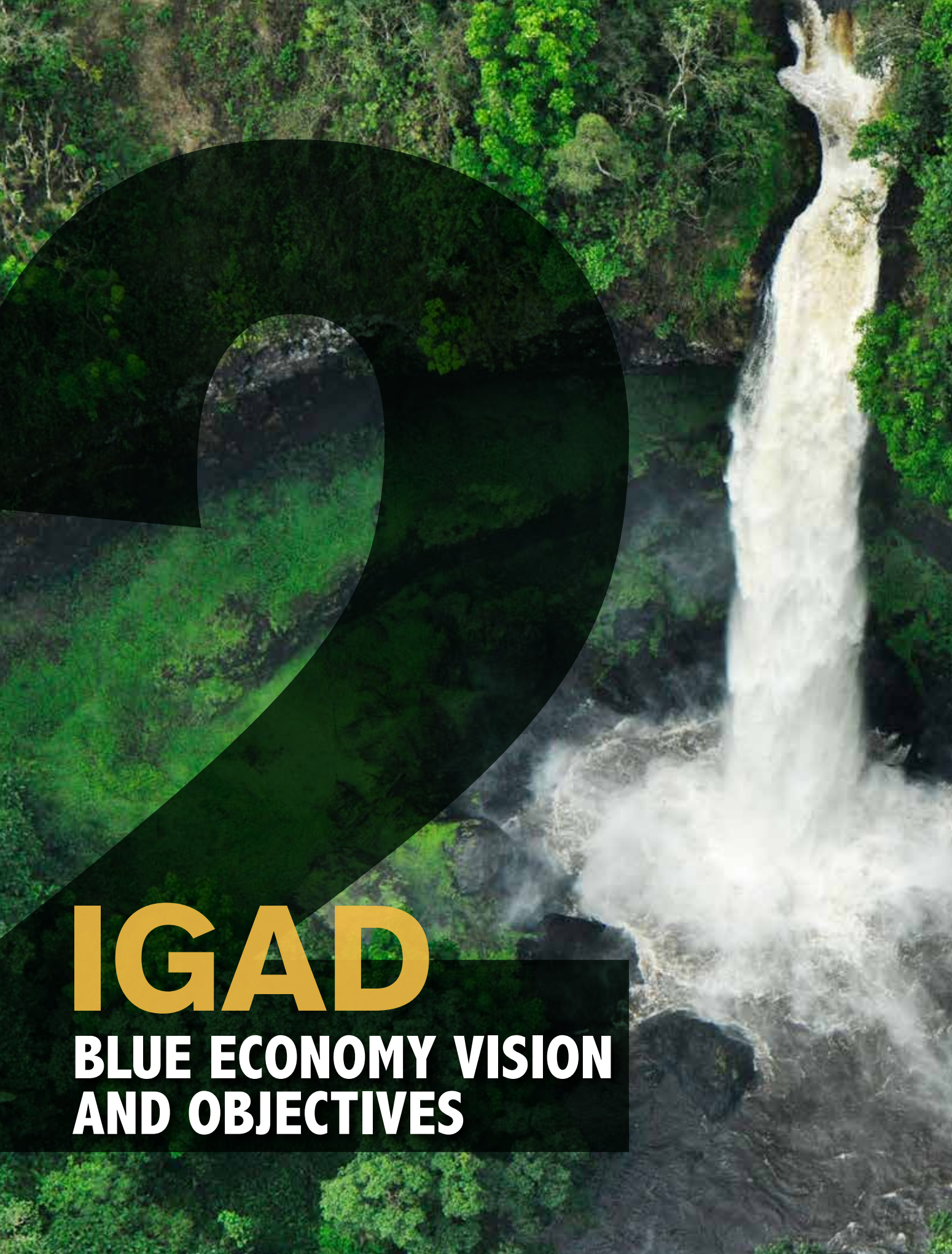
**Renewable blue energy** is mainly generated from hydro-power plants in Ethiopia and Uganda. The potential is still untapped as it is estimated that less than 10% of it is used. Off-shore wind turbines, floating solar panels, waves, and geothermal energy have not yet received specific attention.

**Desalination:** the production of fresh water from salt water is under development in each of the coastal countries as the ground water reserves are not enough to supply a growing demand from agriculture, industry and population.

**Marine Biotechnology and Bio prospecting:** Apart from Kenya that is developing its biotechnologies, other countries have not yet invested in these promising sectors. The current annual value added generated by the Kenyan sectors is about USD 800 000 million.

**Conservation and protection of blue ecosystems:** Current efforts are mainly directed to the conservation of terrestrial biodiversity in national parks as it generates an important flow of foreign currency through tourism. With only 19 Marine Protected Areas, compared to the 126 Terrestrial Protected Areas covering 30% of the IGAD country territory, the aquatic habitat is below what is needed.

As seen above, there is a lack of data to determine a full economic overview of the economic importance of the Blue Economy in the IGAD countries. Nevertheless, the Blue Economy potential is important for both traditional and emerging sectors.



**IGAD**

**BLUE ECONOMY VISION  
AND OBJECTIVES**



## 2.1 Vision

The IGAD Vision for the Blue Economy is an inclusive and sustainable Blue Economy that significantly contributes to the Horn of Africa's transformation.

## 2.2 Objectives

The IGAD Blue Economy Strategy and Implementation Plan intends to structure the Blue Economy implementation at both national and regional levels while increasing cooperation and regional integration, and strengthening support to the member states to effectively translate policies into concrete actions. It will also contribute to the effective implementation of the Africa Blue Economy Strategy (and its upcoming Action Plan). More specifically, the IGAD Blue Economy Strategy aims to:

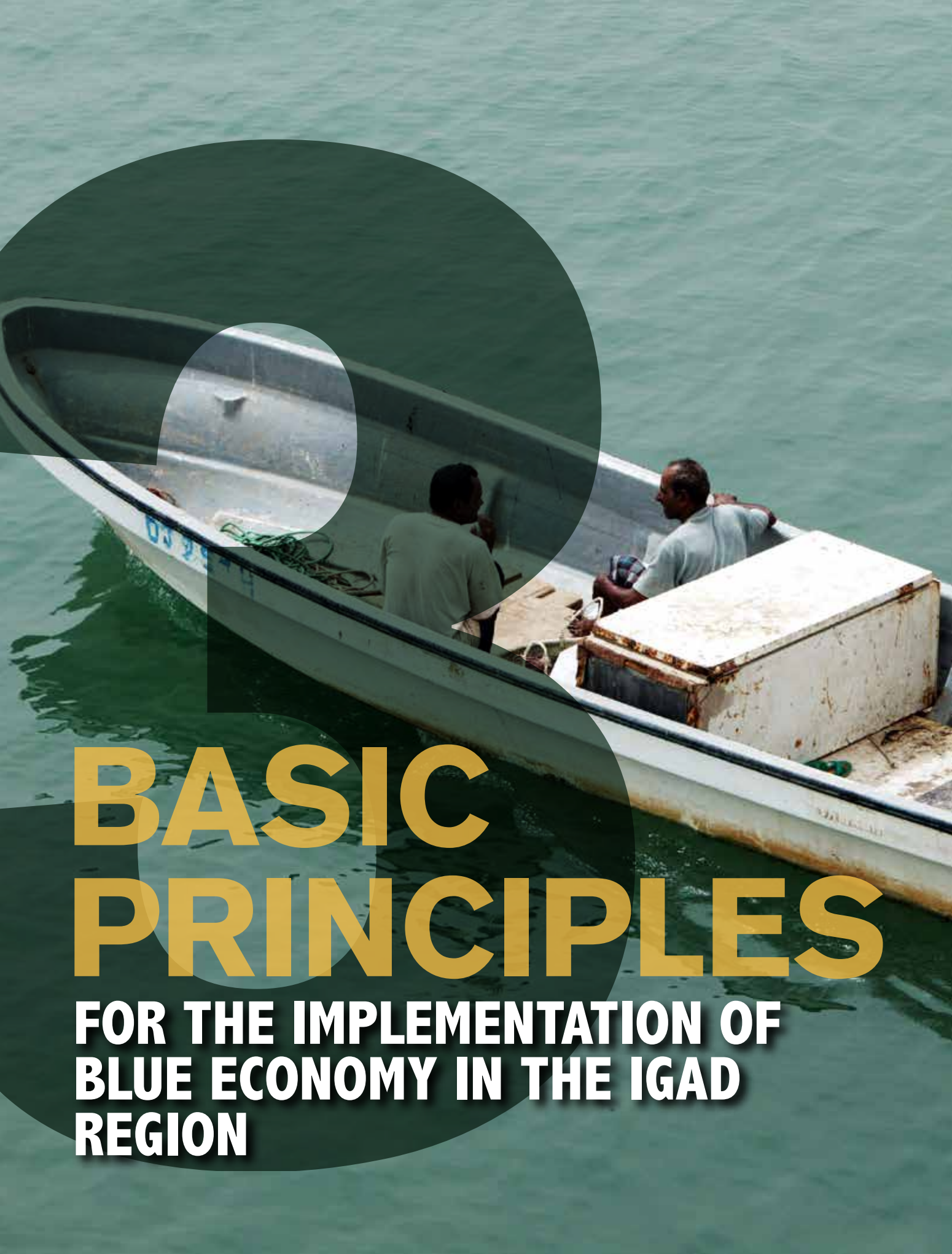
- improve the implementation of the BE in all IGAD members States;

- contribute to the implementation of the Africa Blue Economy Strategy
- develop strong unifying regional BE initiatives;
- increase cooperation and regional integration by using the BE as a catalyst in order to stimulate a converging dynamic of interests and efforts.

The strategy and the Implementation plan are thus articulated around four axes of intervention. The first one is to structure the implementation of the BE at national level; the second one to instigate pilot projects for reinforcing traditional sectors and pilot initiatives for developing emerging sectors; the third and the fourth are to design and develop unifying regional initiatives, and to implement key regional cooperation and integration actions. In that regard, the former two axes are not articulated around the development of sectors<sup>27</sup> as such, but rather aim to infuse a new cross-sectorial dynamic that is vital for the development of the BE by ensuring an overall cohesion and synergies between stakeholders.

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27 Such as in the African Union BE strategy.



# **BASIC PRINCIPLES**

**FOR THE IMPLEMENTATION OF  
BLUE ECONOMY IN THE IGAD  
REGION**

Three main principles that underpin the implementation of Blue Economy are: the circular economy; good governance and environmental and social sustainability.

**Circular economy** – The adoption of a circular production and consumption model is linked to Blue Economy<sup>28</sup>. This principle consists in sharing, reusing, repairing, renovating and recycling existing products and materials as long as possible in order to retain their value. This requires rethinking not only the use and recycling of the products but also designing them with attention to integrate the potential future uses of their components (taking into account the dismantling phase). Thus, substantive work must be done in all the sectors in Blue Economy to apply the principle of circular economy to all production sectors (it must also be inter-sectoral to allow wide possibilities in terms of recycling).

**Good governance** – It is divided into 11 subprinciples which aims to help countries and the IGAD to improve their blue governance<sup>29</sup>: Fair Representation and Participation; Responsiveness; Effectiveness and Efficiency; Openness and Transparency; Ethical Behaviour; Skills and Abilities; Innovation and Openness to Change; Long-Term Orientation; Sound Financial Management; Cultural Diversity and Social Cohesion; Accountability. An effective political and regulatory framework is also necessary to guarantee investments in sustainable exploration of the sea and lakes, as well as a solid policy for innovation, technology transfer and adaptation aimed at encouraging innovations. This should be implemented in order to strengthen institutional capacities in key national and regional agencies and organizations (IGAD and institutional partners). This also requires a strong collaboration

between key entities/structures and a consensus on defining common initiatives. Finally, this implies to strengthen human capacity and to provide technical support in the face of inequalities between countries in the region. The issue of Governance is cross-cutting and should be at the centre of Blue Economy development. This calls for establishing regional and national blue governance mechanisms in the IGAD region that integrate all the critical vectors of Blue Economy in the IGAD region.

**Environmental and social sustainability** – Climate change and climate variability are already impacting aquatic systems and overall food production in the Region. IGAD member States must therefore strengthen the resilience of blue ecosystems and the reduction of communities' vulnerability in the face of climate change within the framework of Blue Economy in order to guarantee food security and livelihood. Furthermore, mining, oil, gas and energy production in deep water should be developed following the strict precautionary<sup>30</sup> and compensation<sup>31</sup> principles (avoid, reduce, compensate) and following civil society approval, since healthy ecosystems are of vital importance for the survival of living aquatic resources (both inland and oceanic ones). Thus, collective reflection and decision should take place before to allow deep water resources exploitation.

In addition, countries must adhere to national, regional and international pollution control standards and practices, including those relating to chemicals and plastics<sup>32</sup>. Socially, many coastal and lacustrine poor communities in the Horn of Africa region lack education and entrepreneurial capacity. They only have few property rights over their livelihood, and they are often excluded from the decision-making

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

29 See <https://www.coe.int/fr/web/good-governance/12-principles-and-elope>

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

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

32 See IGAD Environmental Strategy on Environmental Pollution.

process. IGAD Member States must therefore address efforts to implement Blue Economy in order to fight poverty, strengthen capacity for climate resilience and environmental sustainability and to include these communities in the process of developing

Blue Economy (see 1<sup>st</sup> principle of good governance). Coastal and Riparian communities would thus have better access to economic sector, which would positively influence their well-being.



**IGAD**

**BLUE ECONOMY IMPLEMENTATION  
CHALLENGES**

The IGAD region is facing strategic and technical challenges in the implementation of Blue Economy. These challenges are transversal to all sectors and components of Blue Economy, and they include:

**Insufficient structuring of the implementation of Blue Economy** – Despite the progress made to date by IGAD Member States in the developing their Blue Economy, significant problems remain in the institutional organization. Consequently, this limits their ability to effectively formulate and implement blue growth policies as well as policies to protect the environment and improve ecosystem health by applying the concept of Blue Economy. There is a growing confusion about the role of the state because of a lack of strong signals of commitment, particularly with regard to emerging activities.

**Lack of knowledge of blue potential** – Although significant research is currently carried out in the oil and gas sector, the potential of blue energy and mineral resources remains unknown. However, knowing the potential of sustainable blue energy and its monetary value is necessary to stimulate investments, such as the use of deep water for air conditioning or the use of thermal energy. There are also many new and emerging territories where lack of information has inhibited development initiatives, for example in the knowledge of marine and lake species, seabed and lake mapping, bio-prospecting and biotechnology. Thus, research and development to stimulate informed development of innovative industries should be encouraged for blue growth.

**Absence of accounting for Blue Economy activities and components** – Accounting for Blue Economy activities and components isn't completed in a unified manner in the countries of the region. Currently, data is collected from different sources

to provide a comprehensive view of Blue Economy contribution to creating added value<sup>33</sup> and creating jobs. An appropriate system of national accountings would ease recording annual changes in economic sectors. In the same way, ecological components of Blue Economy aren't accounted for despite the ecosystem services that coastal areas provide. However, with the implementation of nationally determined contributions, green and blue accounting should emerge and become the cornerstone for assessing specific actions related to climate change.

**Too little value-addition** – IGAD Member States export many raw material (fish, minerals, oils, etc.) and very little processed products. These products could benefit from processing and thus generate value-addition locally. Member States thus deprive themselves of a process that generates additional jobs, profits and foreign currency. Furthermore, technology transfer that would allow countries in the region to meet international requirements for processing, packaging and marketing remains incomplete. Service activities, such as tourism, suffer from the same deficit in creating added value: players only perceive short-term rents without developing innovative and environmentally neutral products. The blue ecotourism proposals in the current coastal tourism sector therefore remain very weak although it can generate many jobs and a high added value<sup>34</sup>.

**Nutritional deficit** – Food exports often occur at the expense of the nutritional needs of the local population. Most of the IGAD Member States have a deficit in fish production and are highly dependent on imports to supply the domestic market. A substantial part of the production is exported without considering the need to cover the nutritional needs of the populations and more particularly of the most deprived. This is particularly the case for the least

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33 The added value corresponds to the differences between the income generated by the sale of a product or service and the cost of intermediate consumption (raw materials, energy, etc.) necessary for its production. The sum of the added values of all sectors of the economy corresponds to GDP.

34 Intermediate consumption is very limited due to ecological transport and local products.

developed countries, while these countries are facing increasing health problems<sup>35</sup> linked to unhealthy eating. They are also facing an increasing global demand for seafood, particularly from Asia where population growth is combined with an increase of a middle class that has better purchasing power<sup>36</sup> than IGAD populations. The nutritional deficit should therefore increase in the future if measures are not taken.

**The absence of integrated and prospective approach to marine and inland ecosystems and spatio-temporal management tools** – IGAD member states have not yet institutionalized the large marine ecosystem approach (LMEs of the Red Sea and the Somali coastal Current) and the watershed approach (Nile Basin) for sustainable governance of these ecosystems (using the prescribed modular approaches). However, these approaches help to understand the evolution of coastal and marine

ecosystems using a set of ecological indicators, including biological productivity (particularly plankton abundance for fish biomass), habitat degradation and pollution (plastic and chemical among others), ecosystem health etc.

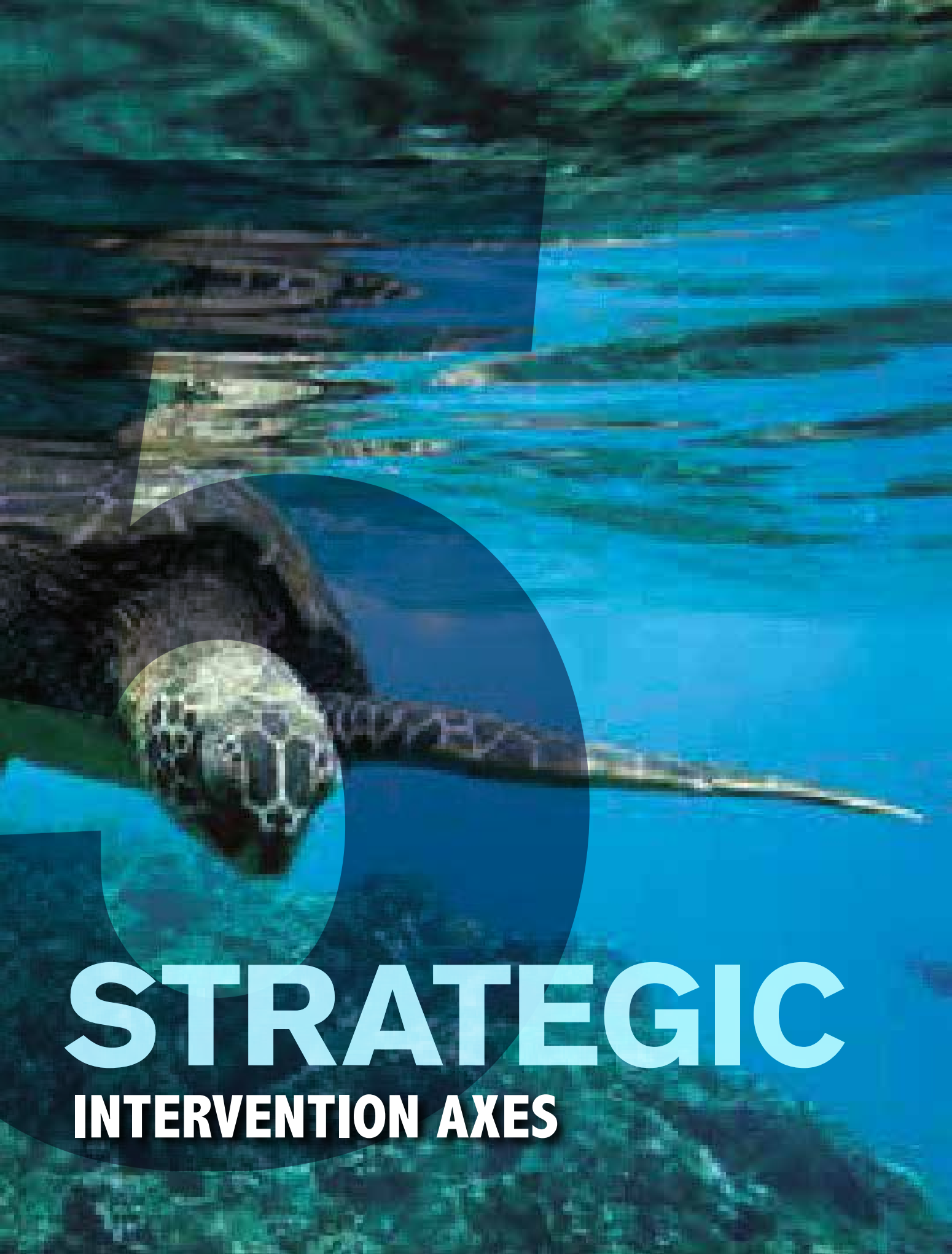
Consequently, the actual resource and ecosystem management is less efficient. Maritime spatial planning is also lacking in several countries although it constitutes a public process aiming to achieve the objectives specified in the framework for the implementation of Blue Economy by analysing and distributing spatio-temporal data on socio-economic uses<sup>37</sup> and environmental conservation zones. While some countries such as Kenya have launched a Maritime Spatial Planning (MSP) process over the years, this has been designed as a spatial planning tool rather than an analytical and functional tool aimed to develop Blue Economy.

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35 Overweight and obesity, and cardiovascular disease.

36 In China, the middle class today represents more than 500 million people.

37 Recreational among others.



# STRATEGIC

## INTERVENTION AXES



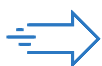
In accordance with the objectives outlined above, the IGAD Blue Economy Strategy has four axes of intervention:



**Axis 1:** Structuring of the BE in IGAD member States



**Axis 2:** Reinforcing traditional sectors and developing emerging sectors



**Axis 3:** Implementation of regional initiatives



**Axis 4:** Strengthening of regional cooperation and integration

Axes 1 and 2 are dedicated to national BE implementation while Axes 3 and 4 are specific to regional activities. In that regard, they complement each other and are fully in line with the Africa Blue Economy strategy (see the alignment in the table below).

Each Axis is presented in detail below, by incorporating the basic principles of the BE and the challenges mentioned above. The implementing scheme and organisation of the three axes is then presented.

## Axis 1: Structuring of the BE in IGAD Member States

Axis 1 is related to the structuring of the Blue Economy in IGAD Member States. It is centred around 5 pillars which are the definition of the BE's field of application, knowledge of the potential and the constraints, coordination as a fundamental structuring element for the implementation of the BE, expertise and tools required, communication (visibility, awareness and dissemination) and funding. This axis is in line with the Africa Blue Economy Strategy "Blue Governance and Institutional Change" Area of intervention. More specifically, it is about:

Africa Blue Economy Strategy	IGAD Blue Economy Strategy
Governance, Institutions and social actions	Axis 1 for national implementation of BE
Fisheries, aquaculture and ecosystems conservation	Axis 2 for national implementation and traditional and emerging sector development Axis 3 for Ecosystem conservation Axis 4 for Research and Education at regional level
Shipping, transportation and trade	Axis 2 for national implementation Axis 4 for Research and Education at regional level
Sustainable energy, extractive minerals, gas, innovative industries	Axis for national implementation Axis for Exploration of blue energy at regional level Axis 4 for Research and Education at regional level
Environmental sustainability, climate change, coastal infrastructure and tourism	Axis 3 for Environmental sustainability and Climate change Axis 2 for coastal infrastructures (incl. Tourism) Axis 4 for Tourism at regional level

## 1. Definition of the BE's field of application

— In order to remove the ambiguity which weighs on the concept of the BE, stakeholders of each country in the region must first agree on a single definition of the BE that is understood by all and comprehensible to the society as a whole. It can be developed based on the definition provided in the Box 1 in the Section 1.1 above inspired from the UNECA definition and the definition agreed by member States during the June 2019 validation workshop for the BE assessment manual: "Blue Economy covers water resources, aquatic and marine spaces, including oceans, seas, coasts, lakes, rivers and underground waters; Blue Economy sectors include productive sectors such as fisheries, aquaculture, tourism, transport, shipbuilding/repair, energy, bioprospection and biotechnologies, underwater mining and other emerging activities; Blue Economy also encompasses a sustainability component and includes social and environmental dimensions".

They must then define the BE's field of application. First of all, this consists of intervening on the present situation in order to settle the current problems and to further enhance societal benefits resulting from the use of natural resources, and, secondly, to develop innovative solutions for new forms of sustainable exploitation of natural blue capital. In addition to the paradigm shift presented earlier (inclusiveness, equity and circular economy), the definition of the scope of the BE must therefore be done taking into account the fact that the objective of actions affecting the economy and the environment to implement are:

— **To resolve recurring and one-off problems** whether it be over-fishing, marine and land-based pollution, etc. It is imperative to solve the problems that, for many of them, remain at hand. Environmental degradation must therefore end.

— **To improve on the existing scenarios**, particularly by contributing to the increase in value-addition created. Whether it be the fisheries sector where processing (apart from tuna production) is often not advanced or in the area of port operations where the operating methods are not optimized leading to low transshipment rates. Improving the health of coastal and marine aquatic environments so that they can deliver ecosystem services sustainably in the best possible way (carbon sequestration, production of fishery biomass, protection against coastal erosion, and water treatment, to cite the major ones).

— **To innovate and develop new ways to value blue potential**, whether it be through biotechnology or blue energy. The application of nature-based solutions also makes it possible to introduce new ecological functions that are precious for improving human well-being, especially in coastal urban areas. The application of innovative industries in all sectors of Blue Economy in general and sustainable blue energy and ocean mining in particular could substantially expedite the creation of prosperous IGAD countries based on advanced technologies

The definition of the field of application is punctuated by the establishment of priorities in order to best define the actions to be undertaken for each of the 3 goals mentioned above (solve, improve and innovate). Also, it must benefit from the results of the work to be carried on the knowledge of the potential and the constraints.

## 2. Knowledge of blue potential and constraints

The potential of blue capital for biotechnology and energy is the first area for which an inventory must be made in the marine, coastal and inland environments based on what is done in the region and elsewhere. Research and development should be encouraged to

harness the potential of innovative industries. The inventory can be combined with research carried out in partnership with experienced research clusters. The blue potential must also be assessed in the more traditional sectors such as, for example, that of fisheries production, where the use of by-products (skin, glue, bones, viscera, etc.) can be done by the food or pharmaceutical industry.

Finally, it must be applied to the ecosystem services generated by coastal, marine, lake and aquatic environments in general because of their importance for human well-being, their function of mitigation and adaptation to the effects of climate change, and their inclusion in the countries National Determined Contribution (NDC). Knowledge of the constraints goes hand in hand with the one of blue potential. They are linked to the environmental aspects (damaging effects for species and aquatic environments), technical<sup>38</sup> (absence of appropriate technology), societal (choice to exploit or not certain resources), legal (absence of regulatory framework or prohibition to exploit<sup>39</sup>) and financial (too low return on investment) which constrains the exploitation of aquatic and marine resources. In this regard, the technical possibilities must be known and well informed in terms of environmental consequences in order to select the most environmentally neutral, or even postpone the exploitation of the potential in the absence of appropriate technologies. The deleterious effects of the development of one activity on another activity must also be documented, such as the effects of underwater mining on fishing activities due to the disturbance of the benthic environment.

**3. Coordination** — By ensuring joint efforts to implement the BE, coordination allows to move forward and make the BE a coherent collective

initiative which transcends sectoral divisions. The creation of a coordination unit is a prerequisite for the implementation of the BE. This must be at a sufficient level (supra-ministerial) to have the leverage necessary to ensure the participation of all sectoral ministries.

The role of coordination is multiple; it aims to:

**Ensure inclusiveness:** The implementation of the BE is a collective project where all stakeholders must be involved at all stages (definition of areas of intervention, formulation, implementation and evaluation), especially the most vulnerable populations whose voice is sparsely audible.

**Organize dialogue and the development of collective actions:** Beyond understanding the BE<sup>40</sup>, stakeholders often have different points of view, it is therefore appropriate to organize regular meetings in order to converge opinions and specify the primary fields of intervention. This work uses MSP as much as possible, which constitutes a tool for common dialogue and allows to better classify problems, their importance and the means to solve them. It thus contributes to play down each other's fears and related tensions. It therefore makes it possible to propose and define actions that are well perceived and understood by all, consistent with the principles of good governance and others stated above. The work also consists in defining a roadmap and specifying the stages of implementation (see Methods of implementation section).

**Reinforce the Public-Private partnership:** The establishment of such partnerships increases the intervention capacity tenfold, in particular in the fields requiring very specific inputs and skills such as the production of energy from marine origin, biotechnologies, aquaculture, etc. It also helps to spread the risks and, more importantly, to ensure the

38 Bearing in mind that the technical aspects are very often closely linked to the environmental aspects: such as particular way of fishing, mining etc., and the environmental impacts of the use of a particular technology.

39 In particular, for the species included in the CITES list.

40 Who was the subject, upstream of the definition of the field of application of the BE, of a definition understood by everyone.

sustainability of the action once the full-scale test phases are successful.

**Possess the expertise and tools:** The expertise required for the implementation of the BE must be clearly identified so that measures can be taken to ensure its availability in due time (see Actions of integration and regional cooperation Section, below). Alongside regulatory tools, MSP<sup>41</sup> and economic (value added and jobs) and environmental (blue carbon and other ecosystem services) accounting are the two most useful technical tools for implementing the BE. The formulation of legislative and regulatory instruments is a task that the coordinating unit must fulfil from the start, in order to have the institutional levers which specify the framework and the methods of application of the BE<sup>42</sup>. As such, MSP helps to find a balance between the imperatives of sustainable use and conservation, mitigate conflicts and create synergies between users, especially during the framing phase of the BE. In terms of accounting, an appropriate national system called the blue satellite account should be put in place to record in a centralized manner the periodic and annual changes in economic sectors<sup>43</sup>.

**Periodically evaluate the progress made:** The coordination unit must have skills in monitoring and evaluation of projects / programs in order to monitor the progress made in detail, diagnose problems and propose satisfactory solutions. Each coordination

meeting must be the subject of an analysis of the progress recorded in order to agree on the changes to be made.

**4. Communication: awareness, dissemination and visibility –** Communication activities should start with important awareness-raising work with stakeholders and civil society as a whole. It will help create a favourable context for the implementation of the BE in each country. As a continuation of the awareness-raising activity, efforts should focus on the dissemination of the results obtained and the visibility of the achievements by highlighting the innovative nature of the BE and the collective approach deployed. Communication must use clearly identified media tools according to the target groups

**5. Financing –** the financing of the implementation of the BE must be apprehended from the early stage. There are many financial solutions available, be it equity financing, the use of soft loans<sup>44</sup>, bond issuance<sup>45</sup>, exchange or cancellation of debt for blue investments<sup>46</sup>, international aid in the form of donations<sup>47</sup> for the implementation of national and regional initiatives, etc. Each financial instrument must be carefully studied to ensure that it best meets the needs. States must stimulate a dynamic capable of attracting investors by giving, in particular, clear signals of long-term institutional investment<sup>48</sup>.

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41 The MSP is a public process of spatial and temporal analysis and distribution of economic and social uses (notably recreational), and conservation areas in order to achieve the objectives specified within the framework of a political process. Focused on the ecosystem and area management, it aims to be integrated, adaptive, strategic and participatory. See: <http://mspfr.IGAD-unesco.org/a-propos/laplanification-spatiale-marine/>

42 The regulatory framework must also specify the use of the MSP and blue accounting for the implementation of the BE.

43 The same is true with the ecological components of the BE that are not subject to accounting despite the ecosystem services that the coastal and marine environments provide. With the implementation of the determined national contributions, green and blue accounting (limited to the services rendered by coastal ecosystems such as mangroves and meadows) should however emerge shortly and become the cornerstone for the evaluation of actions specific to climate change.

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

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

46 Also implemented by the Seychelles.

47 Particularly within the framework of the cooperation of countries and IGAD with the EU and the use of the European Development Fund.

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

## **Axis 2: Reinforcing Traditional Sectors and Developing Emerging Sectors**

Axis 2 will contribute to the implementation of the sectorial priorities in line with the Africa Blue Economy Strategy (aquatic resources, transport, minerals, energy and tourism). Traditional sectors should be harnessed to capture the full potential offered in each country. Emerging sectors should also receive specific attention in order to create conditions for their emergence. As the potential of each sector would have been already assessed in the Axis 1, the efforts will be directed to the implementation of a series of pilot projects dedicated to improving the current status of traditional sectors and pilot initiatives to develop capacities in the emerging ones. More precisely:

**Fisheries** sector, pilot projects should be carried on to:

- Develop small-scale fisheries whilst minimising the negative impacts on environment (environmental neutral gears and practices)
- Combat, deter and reduce illegal, unreported and unregulated (IUU) fishing in the IGAD region
- Promote conservation and sustainable management of aquatic resources by better informing and involving fishermen in decision making processes
- Promote an inclusive blue value chain with a strong focus on quality improvement and achieving a responsible and equitable fish trade and marketing
- Ensure security on board of fishing embarkations and overall create safe working conditions and security
- Strengthen resilience and reduce vulnerability to climate change

**Mineral extraction industries**, pilot projects should be dedicated to:

- Mapping the seabed and lakebeds
- Increasing blue energy penetration in the energy mix
- Reforming unsustainable financial structure and creating conducive energy finance instruments
- Increasing deep-seabed and seawater mining production for meeting demand and economic prosperity
- Developing policy frameworks to accelerate the transfer and application of Blue Economy technologies
- Creating conducive regulatory frameworks for exploration of deep seawater
- Developing environmental impact assessment guidelines
- Promoting sustainable and environmentally friendly deep-seawater exploration
- Promoting the application of innovative industries
- Creating innovative industry databases and support tools

**Marine, River and Lake Transport, Ports and Related Services**, pilot projects should focus on:

- Controlling sea freight rates and other transport costs
- Creating and developing transport corridors
- Promoting good governance of the sector
- Developing cabotage transport
- Ensuring security and safety in the maritime and lake areas

**Aquaculture**, pilot initiatives should be carried on to:

- Attract and promote private-public-partnership (PPP) investment for aquaculture in order to realise the full potential of fish farming
- Engage in the production of endemic species
- Develop hydroponic aquaculture systems
- Accelerate the development of aquaculture fish processing capacities
- Empower women and youth in aquaculture

**Desalination**, pilot initiatives in coastal countries should be carried on to:

- Promote private-public-partnership (PPP) for the development of reverse osmosis desalination
- Develop integrated desalination-salt production systems
- Foster small unit implement in remote coastal areas

**Marine Biotechnology and Bioprospecting**, pilot initiatives in coastal countries should be carried on to:

- Develop policy framework to accelerate the transfer and application of blue biotechnologies
- Promote the application of innovative industries
- Create innovative industry databases and support tools
- Ensure the establishment of PPP to run bioprospecting surveys and missions

### **Axis 3: Implementing Regional Initiatives**

The regional initiatives aim to unite the efforts of stakeholders around four key ideas which alone represent and symbolize the commitment of the IGAD and the Member States to sustainable development. They are a continuation of the actions undertaken by the IGAD in the fields of the environment and more

particularly plastic pollution, the maintenance of biodiversity, the circular economy, human health and alternative energies. They are called:

- Pollution and plastic-free coasts, rivers and lakes
- Neutral Carbon Balance
- Ecological health and human well-being
- Exploration of blue energies

In addition, they also extend the efforts made by IGAD in the BE area in recent years, notably through its cooperation with the Inter-African Bureau of Animal Resources of the African Union (AU-IBAR) for the formulation of an African Strategy for the Blue Economy. In that regard, the four regional initiatives correspond to the trans-sectorial areas of intervention of the AU BE Strategy. The first three first initiatives correspond to the AU Area of Intervention entitled "Blue Carbon & other Ecosystem Services and Resilience" while the last one is in line with the "Energy" AU Area of intervention.

The four initiatives all work to put the environment back at the centre of the BE development model. They are cross-sectoral in nature and require substantial collective investment. They therefore do not cover the mono-specific fields of fishing and maritime surveillance which have already been the subject of continuous support programs for many years. More specifically, these initiatives are:

- 1. Pollution and plastic-free coasts, rivers and lakes** – This initiative is deployed at the watershed scale and more broadly at that of LMEs of the Red Sea and the Somali Current. It aims to eradicate chemical and plastic pollution from freshwater areas and coastal areas. It constitutes an extension to the current efforts made by countries to reduce waste pollution. It brings together, not only the actors who operate on the banks of freshwater, along the coast or at sea, but also those who compete upstream, directly

(various users: citizens, farmers, industrialists, etc.) and indirectly (producers and distributors) to generate any form of pollution that is eventually found along the banks, coasts and in the sea. The initiative is therefore, de facto, part of the logic of the circular economy which consists of generating a change of attitude towards pollution in all its forms. After taking an inventory of chemical and plastic pollution from the source to the lake or at the coast and at sea, and the main outlets, a collective reflection associating, alongside the IGAD, all countries, regional (ports, tourism, research, etc.) and supra-regional (AU, REC, Nairobi Convention, UNECA, UN-Environment, etc.) bodies and associations will be conducted in order to define specific priorities and actions to be taken. These should aim, among other things, at reducing the production and use of plastic in the IGAD countries, changing habits related to the domestic use of plastic, handling of current pollution and in particular that of micro plastics, improvement of the countries' recycling capacities and the related financial model, setting up of a Horn of Africa Region compensation mechanism between the countries issuing plastic and the receiving countries.

**2. Neutral Carbon Balance** — The initiative is part of the current movement to reduce carbon dioxide emissions. It is based on the concept<sup>49</sup> of neutral carbon which consists in obtaining a neutral carbon balance (equal quantities of carbon absorbed than the ones emitted on the scale of a region, a country, a city, a company). This means reducing emissions as much as possible while increasing the absorption capacity of natural environments, in this case mangroves,

seagrass beds and mudflats for blue ecosystems. The work therefore takes place on two fronts that are the carbon dioxide emitters (companies and individuals) and the natural environments that absorbs it. Synergies between sectors in different countries will be encouraged, in particular by the IGAD, in order to gain efficiency in the implementation of sectoral actions. The prerequisite for launching this initiative is the creation of a tool to measure the blue carbon<sup>50</sup> absorbed by lake, coastal and marine ecosystems. It is thanks to it that variations in natural sequestration will be recorded.

The work is horizontal in nature since all economic sectors (energy, industry, services, trade) and civil society will be involved. It also brings together the stakeholders in the countries' NDCs, which have, for the moment, endeavoured to develop technical and regulatory solutions to limit emissions and, to a lesser extent, to design natural solutions (limited for the moment to forest sequestration potential). Beyond contributing to the process of mitigating the effects of climate change, such an initiative has the merit of revaluing blue ecosystems<sup>51</sup> and therefore giving them the attention they deserve in terms of protection. For each sector of the Blue Economy, this will consist in defining specifications including alternative solutions to continue producing goods and services while minimizing the carbon footprint as much as possible.

As an illustration, for fishing, this will mean the development of local fishing<sup>52</sup> with the necessary rehabilitation of coastal or lake fish stocks. For river and sea transport, this will consist of using

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49 Inspired by the principle of carbon neutrality which 77 countries joined in September 2019. They join 10 regions, 102 cities and 93 companies to achieve a zero carbon footprint. See: <https://sdg.iisd.org/news/77-countries-100-cities-commit-to-net-zero-carbonemissions-by-2050-at-climate-summit/>

50 CO2 emissions are already accounted for as part of the CND's progress measurement.

51 The role of which is often reduced to the provision of services for human consumption.

52 In order to limit emissions as much as possible.

alternative energy sources such as solar and wind in addition to the current propulsion systems<sup>53</sup> now powered by fuels generating less carbon dioxide. The economic sectors will also be invited to invest in the restoration of the natural environment which supports their activity (sea and lake bottoms and mangroves for fishing, beaches and seagrass beds for tourism, etc.), which contributes to sequester more carbon. The link between industry and the environment must be made in such a way as to generate increasing economic responsibility with regard to coastal and marine ecosystems.

### **3. Ecological health and human well-being –**

The initiative aims to improve human wellbeing by restoring and maintaining the state of health of blue ecosystems. The urban and coastal / lake population is growing in the countries of the region and will continue to grow in the years to come. The anchorage on the maritime and lacustrine domain generates a decrease in the capacity of ecosystems to provide services such as flood protection (increasingly frequent), coastline protection, wastewater treatment, etc. Beyond the abovementioned regulatory services, blue ecosystems contribute to the improvement of human wellbeing through the cultural services they provide which are associated with recreational and spiritual activities.

Blue ecosystems therefore participate in the mental health of populations and more particularly in urban areas where the link with nature is tenuous. Nature-based solutions for restoring or recreating coastal ecosystems should be considered. In addition to these ecological recovery activities, several initiatives to integrate blue ecosystems into the urban landscape can be launched to help revitalize the human-nature relationship.

The restoration of urban beaches which are often neglected because they are unsanitary, the creation of urban aquatic and educational underwater courses, etc. are going to bring blue into cities. The work carried out in the discovery of the blue world by NGOs in Kenya with schools must therefore be extended in order to share with the greatest number the benefits of healthy blue ecosystems.

The regional scope of the initiative makes it possible to develop synergies between countries and cities and to gain efficiency in the implementation of actions.

### **4. Exploration of blue energies –**

The initiative consists in implementing a real strategy for exploring blue energies on a regional scale. Just as the energy production potential of solar and wind energy is substantial but underutilized, that of the marine domain is unknown and suffers from a lack of suitable technology. The willingness of States to implement projects, whether from floating wind power, technologies using swell and waves, tides, current or thermal, clearly show that the potential exists but that for the moment the development technology is still in its infancy.

This does not prevent the Horn of Africa region from being ready to use technologies as soon as they prove to be functional and as much as possible to participate in their development. Public-private partnerships must be developed in this direction, as well as links with other African countries and countries in northern Europe which aim for high renewable energy production. States must also develop their capacity to attract investment in these emerging areas and mobilize the funds necessary for exploratory work.

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53 This is in line with the current IMO strategy to reduce greenhouse gas emissions from ships.



## Axis 4: Strengthening Regional Cooperation and Integration

In the Blue Economy area, there are several cooperation actions currently underway in the IGAD region. They relate mainly to maritime surveillance with the EU-funded Maritime Security (MASE) program. The networking of countries through the regional maritime security mechanism is at the heart of the maritime security architecture created by the IGAD. The IGAD also maintains close links with the AU and the other RECs, such as Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC), in particular through some of its member states.

The RECs, regional groupings of African states, constitute the pillars of the AU for the implementation of continental policies. This includes facilitating regional economic integration among the members of each of the regions and, more generally, within the African Economic Community (ECA). The African Continental Free Trade Area (AfCFTA), launched in 2019, with the objective of eventually integrating all 55 States of the African Union into a single free trade area will strengthen the ECA and the RECs. This should help facilitate intra-IGAD trade and to and from member states with other African states.

In terms of the Blue Economy, the RECs will also constitute the pillars of the implementation of the AU's BE Strategy. This will indeed provide the necessary guidance and serve as a point of reference for AU member states and RECs and regional organizations in order to ensure the development of a coherent Blue Economy at national and regional levels. The strategies that will probably be developed in the near future by COMESA and EAC will clarify the directions contained in the continental strategy. The IGAD's strategy is part of this scheme by tightening the geographic network

and specifying the interventions at the scale of the Horn of Africa region.

The key actions for strengthening regional cooperation and integration concern research and joint training, boosting intra-regional trade by sea, drafting a regional blue tourism charter. Each of these actions responds to a specific need identified above:

Research and training must be organized on a regional scale to meet the challenge of lack of knowledge and expertise in the fields of the BE (both scientific, technological and practical).

The development of intra-regional trade is part of the regional integration scheme advocated by the IGAD and in the broader context of the African continental free trade area<sup>54</sup> which should help boost regional trade.

The development of a blue tourism charter in line with a sustainable tourism objective.

These three regional integration actions correspond, respectively, to the Africa Blue Economy Strategy's Area of intervention entitled "Blue Governance and Institutional change", "Shipping, Ports and Trade" and "Energy and innovative industries".

More specifically, the three actions aimed at strengthening regional cooperation and integration will consist of:

**Research and joint training** – This consists of first articulating the research and the training (education and capacity building) with the implementation of the BE in order to have the necessary expertise at the regional level. The identification of research and training needs is done following the definition of the field of application and must be periodically reviewed as the BE actions<sup>55</sup> are implemented. A rapprochement work between universities and research institutes must be undertaken both at the country and regional

54 See: [https://au.int/sites/default/files/treaties/36437-treaty-consolidated\\_text\\_on\\_cfta - en.pdf](https://au.int/sites/default/files/treaties/36437-treaty-consolidated_text_on_cfta - en.pdf)

55 Occasional capacity building actions will also have to take place in order to fill the knowledge and expertise gaps that do not require enrolment in a long-term training program.

levels in order to maximize the use of available human and technical resources and minimize duplication as much as possible in training programs than in research programs. This will cover the areas of research and education identified for the assessment of blue potential and environmental challenges, in particular pollution. Moreover, additional training programs should be developed to encourage inter-regional mobility of students<sup>56</sup>.

The development of partnerships with institutions outside the region must also be encouraged in order to benefit from external skills and knowledge at low cost and the ability to train national specialists. The European Erasmus+ and Marie-Curie programs of the RISE<sup>57</sup> type are to be mobilized to facilitate training and exchanges of researchers, particularly in the marine field where better knowledge of the marine and aquatic environments in general is required. The impact<sup>58</sup> of such exchange-based training programs is considerable, both for students who substantially increase their skills, especially their cross-functional knowledge and skills abroad, and for institutions which benefit from skills that are trained at low cost

**Development of intra-regional trade by sea and rivers** – The development of the BE in the region is irredeemably dependent on the introduction of an efficient and affordable maritime and river transport network. State strategies must therefore come together and ensure that maritime and river transport becomes a continuous link between the countries. The current competition between the countries for the monopolization of maritime traffic from and to the outside is currently stimulating the port development of each coastal country. This dynamism must be used to develop complementarity between the countries in

terms of maritime and river logistics. This will allow better management of maritime and river traffic between the countries and the rest of the world, which will be in a significant increase for the years to come. Both international and regional flows should be thought of in a logic of interconnected bursting ports and proximity ports.

Thus, inter and intra country cabotage must be developed in the continuity of the existing international network. For instance, the major maritime transport companies are in the process of planning and defining regional secondary routes from Kenya to Djibouti. States must therefore commit to a facilitation of transshipment conditions (priority to regional traffic), and a customs clearance of products as well as payment mechanisms. Regional trade should be further boosted and generate significant effects on national economies. The development of the emerging ocean liner cruise industry must also be done in this spirit of inter-country complementarity. It should, to the extent that shore calls are well organized, benefit country economies<sup>59</sup>.

#### **Design of a regional blue tourism charter –**

The development of tourism must continue to be supervised in order to achieve a form of tourism whose implementation is respectful of the environment and contributes to the well-being of local populations. In this regard, a Charter should be developed in order to stand out from other tourist destinations. A blue tourism<sup>60</sup> charter would have the merit of providing a distinctive signature that is much appreciated by a growing segment of the world's population in search of harmonious tourism. It must comply with the SDGs. The design work can be based on the master plan recently developed by other countries in

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56 Such as the progress of the higher education course in at least two countries.

57 *Research, Innovation and Staff Exchange*. See: [https://ec.europa.eu/info/h2020-msca-rise-2019\\_en](https://ec.europa.eu/info/h2020-msca-rise-2019_en).

58 See: [https://ec.europa.eu/programmes/erasmus-plus/resources/documents/erasmus-impact-study\\_en](https://ec.europa.eu/programmes/erasmus-plus/resources/documents/erasmus-impact-study_en).

59 With, as an indication, an average expenditure of around 100 US dollars per person per stopover in the Caribbean countries.

60 For a recent review of the Blue Tourism, see: [https://www.iddri.org/sites/default/files/PDF/Publications/Hors%20catalogue%20Id-dri/20190620\\_BLUE%20TOURISM%20STUDY\\_EN.pdf](https://www.iddri.org/sites/default/files/PDF/Publications/Hors%20catalogue%20Id-dri/20190620_BLUE%20TOURISM%20STUDY_EN.pdf).

Africa such as the Seychelles<sup>61</sup> (sustainable tourism label) and the Comoros charter<sup>62</sup> in tourism matters with the promotion of ecotourism, consideration of the carrying capacity of the environment, limiting arrivals, etc.

The charter will apply to tourism products as a whole, to cruise, tourist, domestic and intra-regional tourism. It should be developed with the World Tourism Organization and United Nations Educational, Scientific and Cultural Organization (UNESCO) since many sites are classified as World Heritage Sites. It will also integrate the principles of the circular economy, positive carbon and ecosystem health and human well-being. Building on such principles, it will be an effective way to combat the effects of mass

tourism, over-consumption of resources and poverty. The economic added value to be achieved and the reduction of environmental and societal damage will therefore be substantial.

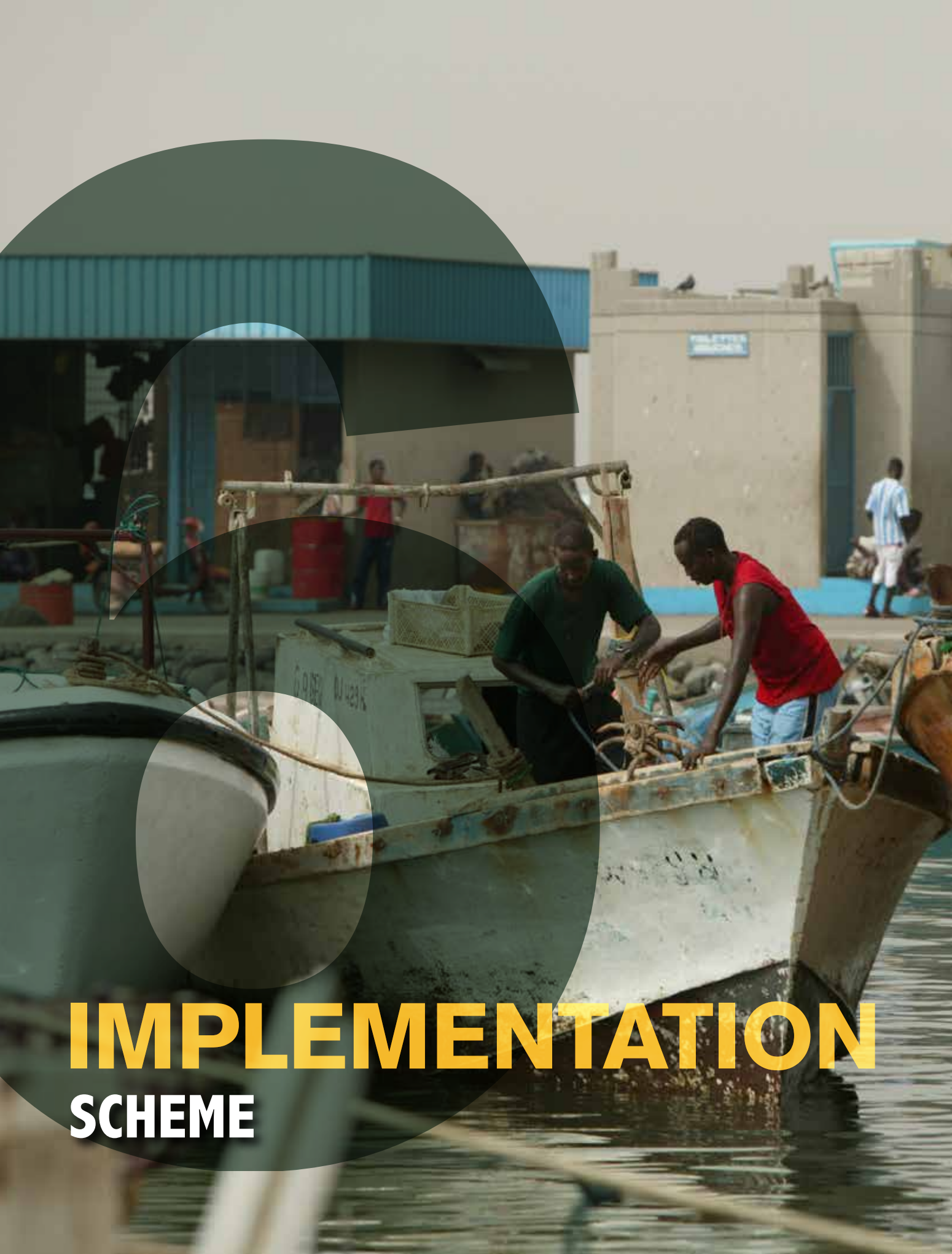
The number of jobs generated in this sector of the Blue Economy should increase considerably<sup>63</sup>. In this regard, links with the International Labour Organization (ILO) need to be strengthened in order to create a sustainable working future and a correct transition to the Blue Economy in Horn of Africa countries. The creation of decent jobs, youth employment, fair labour migration and the transition from the informal to the formal economy will need special attention.

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61 See <http://tourism.gov.sc/tourism-master-plan/>.

62 Under completion.

63 About 1 job created per average expenditure of 4000 US dollars.



# IMPLEMENTATION SCHEME

The implementation of the BESIP requires a specific organization that the IGAD must take care to set up. This will consist first of all in defining the steering and monitoring bodies, in particular:

a steering committee comprising a representative of the IGAD and of each country whose experience is broad enough to provide expertise that covers several areas of the BE. The task of the steering committee will be to represent the interests of the Member States, to ensure overall consistency, in particular between geographic scales (national and regional) and to ensure the smooth running of the implementation of the BE in countries (Axis 1) and of regional initiatives and actions (Axis 2 and 3). It meets once or twice a year.

a technical monitoring and evaluation committee made up of regional and international experts comprising of researchers, civil society, academia and business community will be established. The purpose of this committee is to monitor the implementation of regional initiatives and actions and provide strategic guidance on the improvements to be undertaken.

For the operationalization, a technical team, based at the IGAD Secretariat, will provide support for the national implementation of the BE and initiatives and actions to strengthen cooperation and regional integration. Composed of experts specifically recruited for these tasks and a person for the secretariat, the technical team will be responsible, on one hand of facilitating the development/ implementation of national activities (Axis 1 and Axis 2), and, on the other hand, of ensuring the operationalization of regional initiatives and actions (Axis 3 and 4).

This technical team will also have the mandate to:

- design financial arrangements for the mobilization of funds intended for regional initiatives and actions: both the usual technical

and financial partners will be approached in order to specify the financial vectors to be used and the foundations<sup>64</sup> and international NGOs<sup>65</sup> which finance specific actions for the Blue Economy;

- assist Member States to develop financial schemes relating to the implementation of national BE activities, participate in approaches to financial partners and ensure a coherent overall approach between the national and regional level;
- mobilize national, regional and international skills (companies, design offices), ensure coordination (project management) of operations and ensure monitoring / evaluation of actions undertaken;
- design detailed documents for each regional initiative and action in order to manage them correctly: these documents must contain a simplified logical table, the steering system, the programming of the initiative or action and the budget;
- define the content and method specific to societal mobilization activities, capacity building, and mobilization of stakeholders responsible for their implementation and monitoring.

Member States have a particularly important role to play, obviously in the implementation of the BE on their territory, but also for the implementation of regional initiatives and actions which the IGAD will contribute to successfully complete. They are therefore expected to have a continuous national and regional commitment.

The procedures for implementing the process of structuring the BE in the countries of the region are distinct from those necessary for carrying out regional initiatives and integration and regional coordination actions. However, they follow a similar sequence of steps (see Table below). In addition, the national structuring of the BE and the implementation

64 Like, for example, the Ellen Mac Arthur Foundation, working for the circular economy.

65 The Nature Conservancy (TNC), World Wide Fund (WWF), Blue Venture, l'Union mondiale pour la nature (IUCN), etc.

of regional initiatives and actions requires a strong articulation so that the complementarities and

synergies between the levels of intervention are effective.

**Table 2: Implementation scheme**

Stage	National Level (Axis 1 and Axis 2)	Regional Level (Axis 3 and 4)
<b>Preliminary stage</b>	The structuring of the BE at the country level begins with a strong signal from the government as to the direction to follow and the coordination mechanism to set up to organize the development of the BE	Member States must express their willingness to implement initiatives and actions to strengthen cooperation and regional integration. In this regard, close collaboration with other regional bodies must be implemented.
<b>Step 1:</b> identify and organize the stakeholders and define the portage of the national BE, regional initiatives or actions	The implementation of the BE should be punctuated by as many general and specific coordination meetings as necessary with the participation of the parties concerned. The coordination unit, already identified in each Member State, ensures its organization as well as the monitoring and evaluation of the process and the achievements under way.	Each initiative or action calls on different actors, who should be identified and then organized into a regional working group. The national coordination units will be in charge of identification while it will be up to the regional working group to organize the tasks and the operating mode particularly with an identification of the structure / regional coordination unit which will carry the initiative or action and national focal points. The IGAD, because of its experience in setting up large regional programs, will bring its expertise and know-how for the formulation of the portage. It will also ensure coordination between initiatives and actions and projects in progress (or in preparation for IGAD).

Stage	National Level (Axis 1 and Axis 2)	Regional Level (Axis 3 and 4)
<p><b>Step 2:</b> define the specific objectives, draw up specifications and seek funding</p>	<p>The drafting of a specification (or similar document) will specify the actions, stages, timetables and responsibilities allowing the BE to progress correctly. This editorial work will be done collectively<sup>66</sup> so that all stakeholders take ownership of the specification and have, in addition, an overall knowledge of its content and how it will be implemented.</p> <p>The principle of subsidiarity<sup>67</sup> must be applied as much as possible in order to fully involve the stakeholders at the most appropriate decision-making and active level (economic sectors, local authorities, associations, civil society, etc.).</p> <p>The funding methods will have to be defined according to the tasks to be carried out. Several methods can be discussed with potential funders.</p>	<p>The overall objective of each initiative and action must be well understood by the stakeholders making up the group associated with the initiative or action in order to be able to define a set of specific objectives to which activities, results and performance indicators will be attached. The declination of the initiative or action into activities must be done to take into account all the parameters, including the constraints related to their feasibility and if necessary, set up complementary activities.</p> <p>The concern for the articulation of activities between the national and the regional must be constantly in mind in order to ensure a strong anchoring at both levels. The IGAD will bring its knowledge and ensure the link between the levels of decisions and actions. The drafting of a specification, where the implementation of the activities is marked out in terms of responsibilities as well as timetable and sequence, punctuates this step. The work is organized by the chosen portage unit.</p> <p>Funding options and mechanisms may be discussed with technical development partners and other partners such as foundations and international NGOs.</p>

66 By possibly having recourse to factual and concrete assistance for the formulation of the specifications.

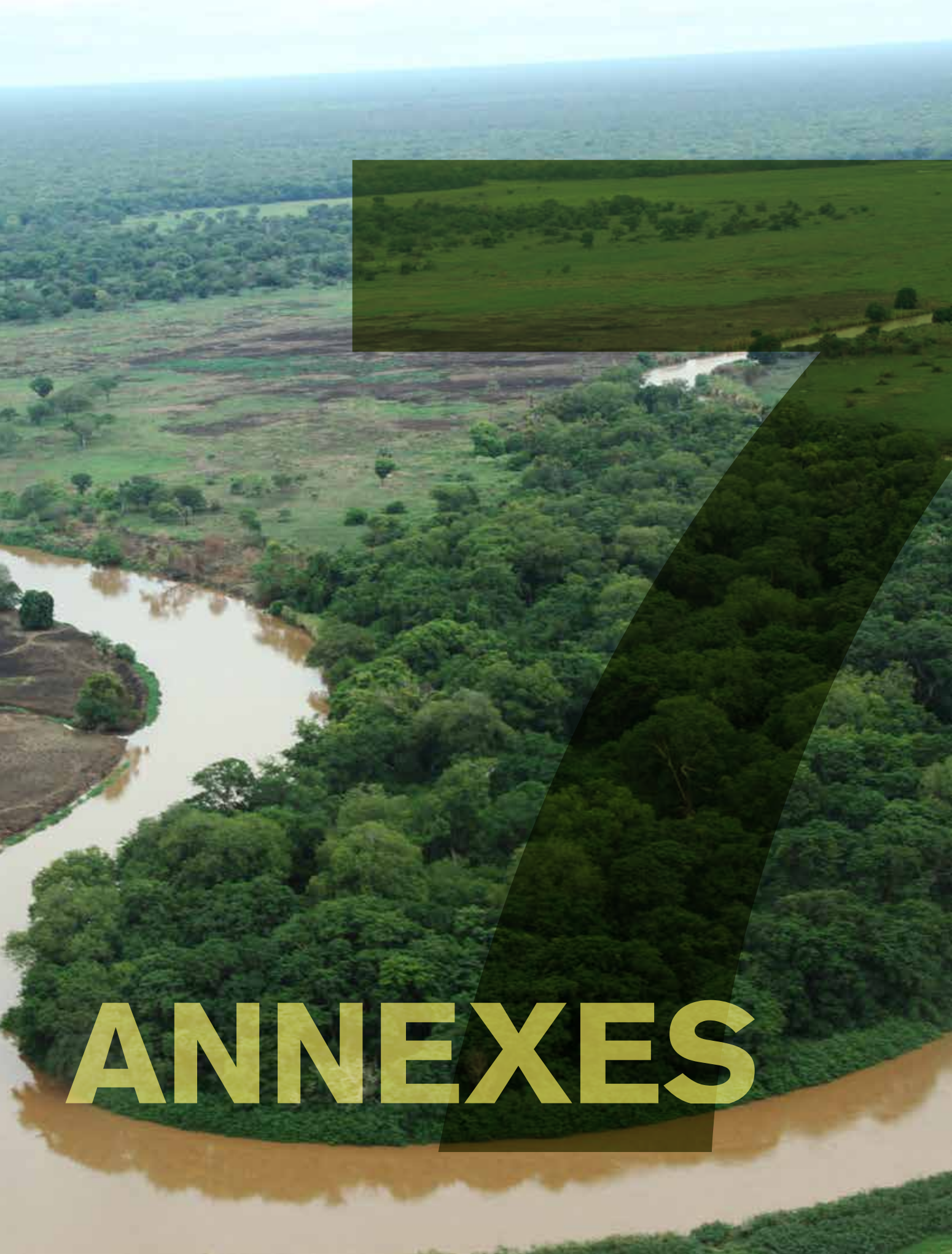
67 It aims to bring the exercise of powers as close as possible to citizens, in accordance with the principle of proximity and the most appropriate decision-making scale. See <https://www.europarl.europa.eu/factsheets/fr/sheet/7/le-principe-de-subsidiarite>

Stage	National Level (Axis 1 and Axis 2)	Regional Level (Axis 3 and 4)
<p><b>Step 3:</b> implement the national BE, the regional initiative or action and ensure their monitoring and evaluation</p>	<p>A baseline situation must be done in detail to qualify and quantify the contribution of blue services (blue carbon and other services) and the production sectors of goods and services to the Blue Economy (in close collaboration with national statistical services).</p> <p>The operationalization of activities must be given to service providers according to a rigorous selection. Monitoring will be carried out by the BE coordination unit.</p> <p>The implementation of the initiative or action, whilst following standard operating procedures, must ensure consistency between the national and regional scales.</p>	<p>Prior to the implementation of any initiative and action, the coordination unit must establish a baseline status and ensure that it has access to information relating to the indicators identified. The quality of monitoring and evaluation depends on it.</p>

The implementation of national structuring activities (Axis 1 and Axis 2) as well as regional initiatives

(Axis 3) and cooperation actions (Axis 4) thus requires the active participation of all stakeholders.





# ANNEXES

# Annex 1:

## Detailed Presentation of Each of the Areas of Intervention

Axis	Objective	Actions planned
<b>Axis 1:</b> Structuring IGAD Member States' Blue Economy	To organize the development and the implementation of Blue Economy in IGAD Member States.	1.1 Defining Blue Economy scope of application 1.2 Knowledge about blue potential and challenges 1.3 Coordination 1.4 Communication 1.5 Resource mobilisation and funding
<b>Axis 2:</b> Reinforcing traditional sectors and developing emerging ones	To improve the status of current BE sectors and create conditions for the emerging ones	2.1 Develop series of pilot projects to enhance the value of traditional sectors 2.2 Develop series of pilot initiatives to develop emerging sectors
<b>Axis 3:</b> Implementing regional initiatives	To implement the identified IGAD unifying regional initiatives	3.1 Coasts and Ocean without pollution and plastics 3.2 Positive carbon balance 3.3 Ecological health and human well-being 3.4 Blue Energy exploration
<b>Axis 4:</b> Strengthening regional coordination and integration	To strengthen coordination and regional integration by implementing three key actions: <ul style="list-style-type: none"> <li>• joint organization of research and training,</li> <li>• development of intra-regional trade by sea and;</li> <li>• design of a regional blue tourism charter.</li> </ul>	4.1 Research and Joint formation 4.2 Development of intra-regional trade by sea and river 4.3 Design of a regional blue tourism charter

## Annex 2:

### Axis 1: Structuring BE in the IGAD Member States

The objective for the Axis 1 is to organize the development and the implementation of Blue Economy in the IGAD Member States.

Action	Activity	Outputs	Indicator	Coordination/ Partners
1.1 Defining Blue Economy scope of application	1.1.1 Design a single definition of Blue Economy from the regional definition (proposed in this report)	Each Member State has a definition of Blue Economy inspired by (or compatible with) the regional definition	Definition of Blue Economy is available in an official document	Coordination (C): National coordination unit Partners (P): All stakeholders
	1.1.2 Identify Blue Economy sectors that require intervention in each of the socio-economic sectors (solving actual problems, improving the existing, innovation and development)	State of reference of each of the socio-economic sectors in the Blue Economy	Report is available	
	1.1.3 Identify components on which intervention is needed in order to restore and value blue potential	Baseline study about the state of coastal and marine ecosystems (considering their state of health) and the ecosystem services generated	Report is available	
	1.1.4 Definition of socio-economic (circular economy) and environmental (restoration and enhancement of coastal ecosystems) priorities	Documented prioritization for both the economy and the environment	National consultation workshops held and national report available	

Action	Activity	Outputs	Indicator	Coordination/ Partners
1.2 Knowledge about blue potential and challenges	1.2.1 Inventory of socio-economic potential based on current knowledge and identification of constraints for the sustainable exploitation of blue capital	Socio-economic potential of blue resources and traditional and emerging sectors assessed, constraints identified and classified according to their nature (environmental, technological, financial, legal, etc.)	Report of economic inventory is available	Coordination (C): National coordination unit P: Ministries of Economy and Environment P: Research Institutes and regional Universities in partnership with international specialized institutions
	1.2.2 Inventory of environmental potential, in particular for the contribution to NDC, and Identification of constraints for the inclusion of ecosystem services in NDC and in particular blue carbon	Ecological potential assessed, particularly services relating to climate change mitigation and adaptation, identified constraints (availability of expertise, NDC framework, etc.)	Report of economic inventory is available	
1.3 Coordination	1.3.1 Inclusive participation (possibility of having a large implementation committee and a small committee to facilitate the holding of meetings)	Blue Economy Implementation Committee including all stakeholders in place.	Inventory of all stakeholders and official document presenting the composition of the Implementation Committee	Coordination (C): national coordination unit  P: Stakeholders P: Private Sector P: Research Institutes and regional Universities (international partnerships to be scheduled) P: IGAD P: Technical partners for development

Action	Activity	Outputs	Indicator	Coordination/ Partners
1.3 Coordination, cont.	1.3.2 Organization of dialogue between stakeholders, with IGAD and the other countries, and with technical development partners	Effective organizational timetable and methods (between stakeholders and with external partners)	Calendar of meetings and method of operation available in an official document	P: National office of statistics P: Ministry of environment
	1.3.3 Development of collective transversal initiatives and actions	Carrying out of transversal initiatives and actions in the economic and environmental field	Monitoring reports with performance indicators are available	
	1.3.4 Strengthening of the public-private partnership (PPP)	Effective PPP agreements for the implementation of transversal initiatives and actions	PPP Agreements are signed	
	1.3.5 Improvement of expertise and development of Blue Economy tools: Maritime spatial planning (MSP); Added Value creation(AV) and employment accounting for Blue Economy and ecosystem services (blue natural capital accounting)	MSP is effective and integrated into the decision-making process Effective satellite accounting (separated from national accounting) for measuring added value Blue Economy-related jobs Specific accounting for measuring blue carbon and other ecosystem services of operational importance under the NDC	MSP is implemented Blue Economy satellite accountings involved in national accountings Blue accounting implemented	
	1.3.6 Periodic monitoring and evaluation of progress made	Monitoring of progress made in implementation of Blue Economy. Diagnosis of difficulties and proposals for improving the performance of transversal initiatives and actions	Report on monitoring and evaluation are available	

Action	Activity	Outputs	Indicator	Coordination/ Partners
1.4 Commu- nication	1.4.1 Awareness to the pop- ulation and stakeholders about the importance of Blue Economy. Awareness actions jointly with those proposed in the context of the circular economy and the enhancement of coast- al ecosystems	Population with sufficient knowledge on Blue Economy to induce more responsible behaviour and citizen actions Economic stakeholders including Blue Economy and putting into practice the philosophy of Blue Econo- my, in particular for circular economy and environmental enhancement Attracting the youngs through actions in schools and the use of social net- works by young people for young people	Result of an annual survey on the level of knowledge on Blue Economy (population and children in schools) and on the integration of the principles of Blue Economy in activities and work plans (eco- nomic actors)	C: National coor- dination unit P: communica- tion society
	1.4.2 Dissemination by effective use of differ- ent media to publicize achievements in Blue Economy	Population and all stake- holders concerned with the progress made in implement- ing Blue Economy	Communication tools are avail- able	
	1.4.3 Visibility	Blue Economy achieve- ments widely promoted and disseminated on social networks and media Set of Blue Economy-specif- ic media events affecting a large number of people	Website and electronic medias are operational und updated on a regular basis Reports on events are avail- able	

Action	Activity	Outputs	Indicator	Coordination/ Partners
1.5 Re- source mobilisa- tion and funding	1.5.1 Clear orientations from government	Clear indications of the State's commitment, especially in financial topics (including international institutions)	National budgetary allocations to Blue Economy programs	C: National coordination unit with close collaboration with governments (particularly Ministry of Finance) P: Ministry of Finance and national and international financial operators
	1.5.2 Choice of financial tools	Selection of the best financial tools based on needs, opportunities linked to the national and international context	Confidential strategic document of choice of financial tools for the implementation of Blue Economy	
	1.5.3 Financial implementation	Effective financial organization for the use and monitoring of Blue Economy funds	Annual activity report of the financial institution in charge of managing Blue Economy funds	

## Axis 2: Reinforcing the traditional BE sectors and developing the emerging ones

The objective for the Axis 2 is to improve the status of current BE sectors and create conditions for the emerging ones

Action	Activity	Outputs	Indicator	Coordination/ Partners
2.1 Develop series of pilot projects to enhance the value of traditional sectors	2.1.1 Identify a set of key interventions that will enhance the development of traditional BE sectors	Key set of interventions clearly identified following stakeholder workshops with each sector	Report on key set of interventions available	Coordination (C): National coordination unit Partners (P): All stakeholders
	2.1.2 Set-up concept notes for pilot projects for each of the traditional sectors. Approach of technical and funding cooperation agency for supporting pilot projects.	Concept notes for pilot projects presented to the cooperation agencies	Concept notes and minutes of meetings with cooperation agencies.	
	2.1.3 Develop detailed project presentation after securing funding	Detailed presentation of each pilot project done with feasibility study	Detailed project presentations	
	2.1.4 Implementation, monitoring and evaluation	Pilot project implemented	Pilot project reports available	
2.2 Develop series of pilot initiatives to develop emerging sectors	2.2.1 Identify a set of key interventions that will contribute to the development of emerging BE sectors	Key set of interventions clearly identified following stakeholder workshops with each sector	Report on key set of interventions available	Coordination (C): National coordination unit P: All stakeholders
	2.2.2 Set-up concept notes for pilot initiatives for each of the emerging sectors selected. Approach of technical and funding cooperation agency for supporting pilot projects.	Concept notes for pilot initiatives presented to the cooperation agencies	Concept notes and minutes of meetings with cooperation agencies.	
	2.2.3 Develop detailed initiative presentation after securing funding	Detailed presentation of each pilot initiative done	Detailed initiative presentations	
	2.2.4 Implementation, monitoring and evaluation	Pilot initiative implemented	Pilot initiative reports available	



## Axis 3: Implementing regional initiatives

The objective for the component 2 is to implement four unifying regional initiatives (Coasts and ocean without pollution and plastic, Positive Carbon Balance, Ecological health and human well-being, Exploration of blue energies)

Initiative	Activity	Outputs	Indicator	Coordination/ Partners
3.1 Coasts and Ocean without pollution and plastics	3.1.1 Structuring of the working group, definition of a coordination unit and operating modes (capitalization with the current IGAD initiative and the upcoming ones)	Working group is put in place	Working group meeting reports are available	C: Initiative's regional coordination unit P: Stakeholders, research institutes and universities (international partnerships) P: Business owners (both production and distribution), civil society P: IGAD Countries and regional political institutions
	3.1.2 Characterization of the chemical and plastic pollution in the watersheds and in the LME of the Red Sea and the Somali Current (hydrocarbons, chemical, plastic, biological) and Identification of polluting sources (land and sea) and outfalls (especially ballast water).	Pollution is characterized and sources are identified	Experts reports are available	
	3.1.3 Collective reflection for the formulation of detailed proposals for the reduction of pollution (by applying the principle of the circular economy) and by developing collective action plans.	Proposals are made for the countries (recycling, alternatives to plastic, changes in behaviour, etc.) and for the Horn of Africa region the establishment of a political and technical dialogue at a scale of the Red Sea and Indian Ocean Basins (especially legal) with the countries bordering the Red Sea and the Indian Ocean for the formulation of compensation procedures	National proposals are available, regional political, legal and technical proposals are available for the establishment of a mechanism of compensation for damages suffered by IGAD member states.	

Initiative	Activity	Outputs	Indicator	Coordination/ Partners
3.1 Coasts and Ocean without pollution and plastics, cont.	3.1.4 Detailed elaboration of proposals in the form of projects for the States and dialogue at IGAD scale.	Limited series of national project documents (and regional in the case of joint activities) and Red Sea and Indian Ocean basin-wide guidelines.	Project and dialogue documents are available	
	3.1.5 Implementation of projects at national and regional scales and dialogues at the Horn of Africa scale.	Projects progress reports and dialogues convened	Policy papers produced	
	3.1.6 Monitoring and evaluation of each project and political dialogue and setting up (as far as possible) a regional observatory to detect pollution from the source	Periodic monitoring of projects and dialogue and mid-term and final evaluation of projects and political dialogue are implemented	Reports on monitoring and evaluation are available	
3.2 Positive carbon balance	2.2.1 Structuring of the working group, definition of a coordination unit and operating modes around the implementation of the NDC	Working group is put in place	Meeting minutes are available	C: Initiative's regional coordination unit P: Stakeholders, research institutes and universities (international partnerships) P: Business owners (both production and distribution), civil society P: Technical and financial partners
	3.2.2 Assessment of carbon sequestered (by type of ecosystem considering their state of health) and emitted (using NDC data). Use of the accountings developed for this purpose by the countries and specific MSP tools (surface areas and health status of ecosystems). Assessment of other services of importance to the NDC (coastal protection in particular)	Quantified assessment of the carbon footprint (storage and CO2 emissions) and ecosystem services of importance to NDC are done	Evaluations are available	
	3.2.3 Integration of Blue Carbon and other ecosystem services into NDC	NDC 2025-2030 is taking into account coastal, river and lake ecosystem contribution	NDC documents are available	

Initiative	Activity	Outputs	Indicator	Coordination/ Partners
3.2 Positive carbon balance, cont.	3.2.4 Collective reflection and proposal of practical measures for the reduction of carbon emissions and the increase of sequestration capacity. A round table is organized with technical and financial partners to define the most appropriate funding methods	A limited number of practical measures (in the form of a concept note) are proposed and subject to a funding request	Document about the presentation of the measures is available	
	3.2.5 Detailed development of measures in the form of projects for the restoration of damaged ecosystems, the protection of those at risk and the expansion of coastal ecosystems (by overall increasing the capacity of ecosystems to sequester carbon and provide ecosystem services)	A limited set of regional projects relating to the restoration, protection and expansion of coastal ecosystems is subject to validation and funding	Project documents are available	
	3.2.6 Implementation of restoration, protection and expansion projects for coastal ecosystems aimed at a positive carbon balance and monitoring-evaluation of these projects	Projects are implemented in a concerted manner aiming at a positive carbon footprint and application of the classic rules of monitoring and evaluation is done	Projects are achieved and the monitoring is done	
3.3 Ecological health and human well-being	3.3.1 Structuring of the working group, definition of a coordination unit and operating modes (two representatives per country with ecological, scientific and medical skills in place during the whole the project in order to ensure the continuity of the program)	Working group is put in place with regular meetings (use of video conference to limit travel as much as possible)	Meeting minutes are available	C: Initiative's regional coordination unit P: Stakeholders, including environmental and health authorities P: Civil society P: Hospitals and medical associations

Initiative	Activity	Outputs	Indicator	Coordination/ Partners
3.3 Ecological health and human well-being, cont.	3.3.2 Assessment of the state of health of ecosystems in the borders of urban centres after carefully defined a common working method adopted by the Member States and Assessment of the importance of blue ecosystems for mental health and well-being of urban populations	Assessment report on the importance of blue ecosystems for the health of urban populations are carried out	Evaluation reports are available	P: Research Institutes and Universities (health, psychology, etc.)
	3.3.3 Collective reflection and proposals for measures to restore blue peri-urban ecosystems and develop blue-grey cohabitation projects (city)	Project proposals (concept note) are submitted to technical and financial partners	Reports on the presentation of the project are available	
	3.3.4 Detailed development of projects relating to the improvement of the health of blue ecosystems, the urban population / nature relationship and particularly the awakening to coastal nature	Restricted set of projects are developed and validated for funding	Reports on the presentation of the validated projects are available	
	3.3.5 Implementation of successful proposals and periodic monitoring and evaluation of progress	Set of projects are carried out and monitoring-evaluation is carried out according to international standards	Monitoring reports are available	

Initiative	Activity	Outputs	Indicator	Coordination/ Partners
3.4 Blue Energy exploration	3.4.1 Structuring of a Blue Energy steering committee (ensuring coordination and relying on technical advice from an enlarged working group) and definition of operating methods.	Steering committee and expanded working group are operational	Meeting minutes are available	C: Initiative's regional coordination unit P: Representatives of the competent ministries who designate their team; local authorities (in charge of economic development / energy); scientists; qualified technicians; representatives of the economic world (companies, donors, etc.)
	3.4.2 Identification potential types of blue energy and the places of installation for infrastructure at sea and on land; measurement of impacts and conflicts.	Identification of blue energies and potential impacts is done	Reports are available	
	3.4.3 Definition of needs / indicators / objectives to be achieved according to the national and regional policies of the countries (quantity produced, storage, network coverage, energy autonomy to be achieved, cost price, etc.)	Member States' energy forecast and conditions for meeting future demand are done	Reports are available	
	3.4.4 Collective reflection for the selection of the fields of blue energy to explore and development of pilot projects based on the sharing of information and technologies / expertise in order to ensure the use of the right technology according to the conditions local. Development of international partnerships specific to each area.	Restricted selection of pilot projects in terms of exploring the real potential of blue energy is carried out, discussion / submission to technical and financial partners and setting up of international partnership	Reports on selection and partnerships agreements are available	
	3.4.5 Implementation of the exploratory phase with public awareness (communication, education, training); monitoring and evaluation.	Number of sites where the potential of the Blue Economy has been explored	Monitoring reports are available	

## Axis 4: Strengthening regional coordination and integration

The objective for the component 3 is to strengthen coordination and regional integration by implementing three key actions: the joint organization of research and training, the development of intra-regional trade by sea and the design of a regional blue tourism charter.

Action	Activity	Outputs	Indicator	Coordination/ Partners
4.1 Research and Joint formation	4.1.1 Structuring of the working group (designation of countries representatives), definition of a restricted coordination unit, definition of operational method	Operational working group and functional coordination unit	Meeting minutes are available	C: Regional coordination unit P: Research institutes and Universities in the region, with partnerships with international institutions;
	4.1.2 Inventory of existing research and identification of research needs (inventories of expertise, institutions, existing courses, exchanges that are being made, current and future projects, existing partnerships, etc.)	Complete and detailed inventory	Reports are available	
	4.1.3 Identification of training needs, review of existing courses (training of researchers, technicians, education experts to support communities, young people and civil society, etc.), and understanding of the educational needs linked to the future professions (biotechnology, blue ecotourism, etc.)	Needs clearly identified by training and education sectors and categories	Presentation report on educational needs is available	
	4.1.4 Definition of possibilities for collaboration in research and development of centres of excellence (plastic pollution, zoning and cartography, ocean acidification, depredations, CO2 sequestration and nature-based solutions, contamination, land-based pollution, etc.)	Proposal for regional scientific collaboration	Proposal Report is available	
	4.1.5 Definition of possibilities for unifying teaching programs and developing joint programs specific to new technologies (for example: renewable energies, waste recovery technology, etc.)	Areas of educational collaboration clearly identified	Report is available	
	3.1.6 Establishment of joint research activities at the regional scale with conferences, publications, etc. and monitoring and evaluation	Joint program carried out	Program results and monitoring and evaluation reports are available	

Action	Activity	Outputs	Indicator	Coordination/ Partners
4.1 Research and Joint formation, cont.	4.1.7 Implementation of a limited number of joint training / education programs in the fields of Blue Economy (secondary school diplomas, academics, maritime school, short courses, etc.) and monitoring and evaluation	Training provided in previously defined areas	Number of people trained, monitoring and evaluation reports are available	
4.2 Development of intra-regional trade by sea and rivers	4.2.1 Adoption of a regional framework for the competitiveness of maritime transport based on the implementation of a certain number of activities: – Study on the actual situation and future development of regional trade including the region of Central, Southern and Eastern Africa. – Analysis and monitoring of the logistics performance index – Proposal for a regional maritime transport framework – Establishment of a regional system for monitoring the competitiveness of maritime and river transport.	Regional framework for the competitiveness of maritime and river transport in place	Documents and studies relating to the competitiveness framework are available	
	4.2.2 Improvement of the governance of maritime and river transport at the national level: – Revision / formulation of the national framework for maritime and river transport and investment according to the previously stated objectives and within AfCFTA framework. – Design of an integrated strategy for the supply chain and the connectivity. – Development and implementation of plans to improve national competitiveness. – Development and implementation of the strategy for the promotion of investment. Development of public-private partnership for capacity development and for the improvement of maritime infrastructure, infrastructure for monitoring and management, etc.	Improvement of national governance of maritime and river transport	Activities and Monitoring-evaluation reports are available	C: Regional coordination unit P: maritime and river basin transport stakeholders

Action	Activity	Outputs	Indicator	Coordination/ Partners
4.2 Development of intra-regional trade by sea and rivers, cont.	4.2.3 Strengthening member states' institutional capacity to improve maritime connectivity and the efficiency of ports. Human resource capacity development throughout the maritime transport supply chain. Research and Development (R&D) and innovation, particularly in terms of reducing the energy, environmental footprint, etc.	Strengthened institutional and human capacities	Activities and Monitoring-evaluation reports are available	
4.3 Design of a regional blue tourism charter	4.3.1 Structuring of the working group, of the coordination unit and definition of the operating methods by association all the actors of tourism and the local communities (Association of hoteliers, Association of air carriers, Tourist offices, Local authorities, etc.)	Working group and functional coordination unit	Meeting minutes are available	
	<ul style="list-style-type: none"> <li>– Census of existing charters and good practices in tourism (green, ecotourism, nature tourism, etc.) and identification of the difficulties for their implementation in terms of: <ul style="list-style-type: none"> <li>– Communication and marketing.</li> <li>– Collaboration with the touristic association.</li> <li>– Obtaining visas.</li> </ul> </li> </ul>	Survey of charters and good practices	Report on the inventory of charters and good practices available	C: Regional coordination unit P: tourism sector and tour operators, airplane companies and all the actors that are active in the operation of the tourism sector in the region
	4.3.2 Analysis of tourists flows between the countries and analysis of the positioning of tourism in the countries with regard to the SDGs and the principles of Blue Economy (circular economy, social equity, etc.), considering in particular: <ul style="list-style-type: none"> <li>– direct involvement of tourism stakeholders in the conservation / preservation of ecosystems.</li> <li>– perception of populations and tourism stakeholders.</li> <li>– absorption capacity of tourists according to the carrying capacity of the environment and the capacity of social acceptance</li> <li>– Collective reflection and identification of the areas of intervention for the charter, with particular attention to:</li> <li>– Current good practices linked to touristic activities (conservation tourism, eco-tourism, awareness-raising activities for the protection of natural environments, etc).</li> </ul>	Analysis of inter-country tourists flows and positioning of tourism in the Member States finalized	Document relating to tourists flows and the positioning of tourism is available	



Action	Activity	Outputs	Indicator	Coordination/ Partners
4.3 Design of a regional blue tourism charter, cont.	<ul style="list-style-type: none"> <li>- The opportunities offered by the development of African tourism, tourism of the millennial generation, sensitive to environmental aspects.</li> <li>- Ownership of the charter by operators (bottom-up approach) and approval by decision-makers.</li> <li>- Communication and visibility.</li> </ul>	Precise intervention axis identified	Document relating to the presentation of axis is available	
	4.3.3 Redaction and signing of the IGAD Blue Tourism Charter	Regional charter for blue tourism is signed	Signed document is available	
	4.3.4 Consultation with technical and financial partners to fund the implementation of the charter (for example: INTERREG and FED financing). Implementation of the charter and monitoring and evaluation.	Financing agreements are obtained and the regional blue tourism charter is implemented	Charter is implemented, activities and monitoring-evaluation reports are available	





Introducing the IGAD Regional Blue Economy Strategy (2021-2025): A comprehensive and all-inclusive guide to sustainably utilize marine and inland resources and services in the region, build community and ecosystem resilience, and contribute to IGAD regional economic integration. The Strategy embraces high values and principles such as circular economy, sustainability, beneficiary participation, inclusiveness, and partnership with stakeholders. It is tailored to the needs and aspirations of the IGAD region and incorporates regional and continental best practices in blue growth.

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