



AFRICAN DEVELOPMENT BANK GROUP



BLUE ECONOMY – ÉCONOMIE BLEUE

## BLUE ECONOMY FLAGSHIP A BRIEFING NOTE FOR PARTNERSHIP

A FLAGSHIP UNDER THE FEED AFRICA STRATEGY 2016-2025

### SUMMARY

Recognizing the current state of fisheries and aquatic health, the Blue Economy concept offers countries the opportunity to reconcile natural resource use through conservation, enhance the quality of life through nutrition and food security, integrate and diversify economic activities, and foster social inclusion particularly for women and youth. Currently, inland, coastal and maritime economies represent a quarter of revenues and a major source of food and export earnings for many African countries. Fisheries is the leading agricultural export commodity contributing to 19% by volume (tonnes) in Africa, but only 6% by value, with great potential for processing, product differentiation, value addition, and local consumption.

The overall goal of the Blue Economy Flagship is to implement the *Feed Africa* strategy in fisheries and aquaculture in close partnership with other natural resource sectors and stakeholders. Thus, the Flagship has the potential to contribute to the Bank's other priority areas (High 5s) including *Integrate Africa*, *Industrialize Africa* and *Improve the Quality of Life of Africans* through the promotion of sustainable eco-tourism, improved trade and maritime security, capacity development, and technological innovation.

The Flagship revolves around three major components that are sectoral, integrative and multilevel. These include: i) reducing post-harvest loss through fish commodity value chains, access to markets, and for local consumption; ii) integrating watershed management and marine spatial planning to reconcile multiple coastal demands, protect critical habitats, and to promote the resilience of coastal populations; and iii) fostering regional governance mechanisms through partnership and program coordination, monitoring, learning and evaluation for scaling-out.

The Blue Economy Flagship expects to attract additional partnerships and co-funding to contribute to fisheries sustainability and integrated management plans through holistic approaches with outcomes that contribute to the High 5s and the Sustainable Development Goals (SDGs).

**This Briefing Note is an input for dialogue at the Blue Economy Conference in Nairobi, Kenya, 26-28 November 2018. A final version will be available as an AfDB Working Paper Series.**

## 1. INTRODUCTION

The African Development Bank (AfDB) aims to eradicate poverty and attain sustainable economic growth and social progress through a long-term transformational strategy for its Regional Member Countries. The Bank plans to achieve its development goals (2016-2025) through five priority areas “referred to as the High 5s” that target core sectors: “*Light up and Power Africa, Feed Africa, Industrialize Africa, Integrate Africa, and Improve the Quality of Life for the People of Africa*”. The Blue Economy program is one of seven flagships to implement the **Feed Africa Strategy**<sup>1</sup>. The specific goals are: (i) contribute to the end of extreme poverty by lifting millions out of extreme poverty; (ii) end hunger and malnutrition in Africa; (iii) become self sufficient and a major contributor to fish trade and aquatic resource management; and (iv) move the continent to the top of key agricultural and fisheries value chains.

Fishery resources and the aquatic environment provide tremendous benefits to Africans in their development transformation and prosperity. **Fish is the most important animal protein intake in Africa and can be as high as 75% in countries like Senegal.** About 275 million people depend on fish for food security, with intake of 10.5 kg per capita, currently half the global average. This has led to the African Leaders for Nutritional Initiative to provide political support and strengthen partnership towards nutritional well-being. Of the 13 countries with the highest per capita fish consumption, eight are landlocked and the other seven are low-income food deficient countries according to the FAO<sup>2</sup>. This is very important for low-income inland communities as fish provides essential micronutrients that is absent in other protein sources. The small-scale sector accounts for more than 60% of fisheries production (inland, wild captured and aquaculture) involving mostly rural communities and predominantly for consumption<sup>3</sup>. Moreover, the fishery sector as a whole employs more than 12 million people as full time or part time fishers and processors. Women play a dominant role in the processing, marketing, and distribution networks with implications for resilient household economies.

Although capture fisheries production is relatively stagnant at close to 10 million tonnes over the past decade, aquaculture and inland fish production has been increasing about 18% of total fish production. Like many other developing countries, most African countries are a net exporter in terms of value but a net importer in terms of volume (Fig 1). The level of post harvest loss is extremely high with estimates over 50% especially in the small-scale fisheries (SSF) sector. **The SSF Guidelines provides opportunity in harnessing the contributions of the Blue Economy through best management practices, markets access, increased local consumption and support through regional economic zones.** There is an opportunity for fisheries trade and regional integration through the Economic Community of West African States (ECOWAS), Common Market for Eastern and Southern Africa (COMESA) and the African Union Commission (AUC) and New Partnership for African Development (NEPAD).

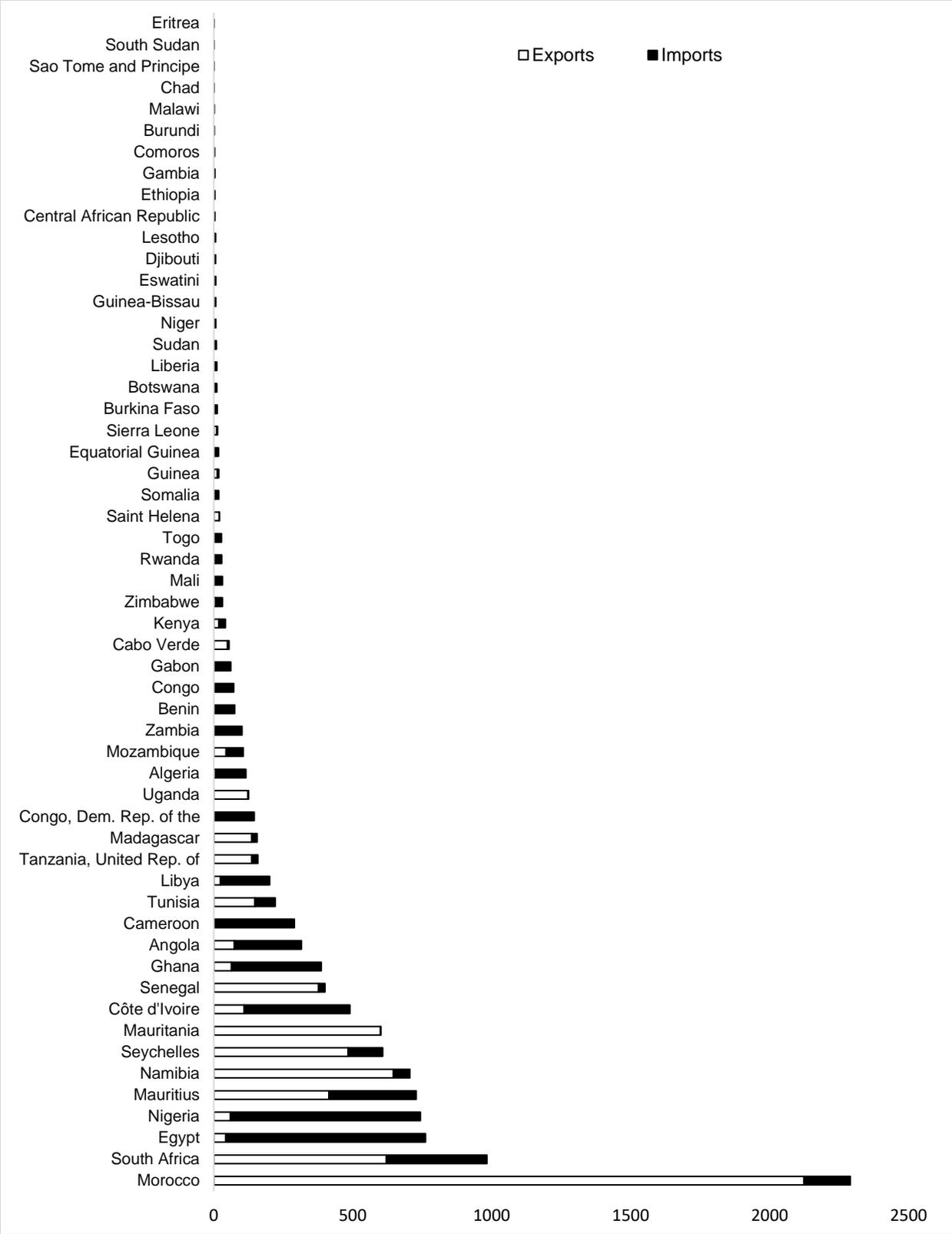
The Blue Economy Flagship aims to foster structural transformation in the African maritime and inland water resource sector during the next decade. The business model provides an opportunity to invest in various capital assets (i.e. natural, social, human, and financial) that are profitable and meets the triple bottom line (People, Planet and Profit). In Africa, 38 of the 54 States are coastal and Small Island Developing States (SIDS). The area of intervention of the program would include Regional Member Countries maritime zones and related activities in lakes, reservoirs and rivers.

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<sup>1</sup> AfDB. 2016. Feed Africa: Strategy for Agricultural Transformation in Africa 2016-2025. AfDB, Abidjan.

<sup>2</sup> FAO. 2018. The State of the World Fisheries and Aquaculture 2018 – Meeting the SGDs. FAO, Rome.

<sup>3</sup> AUC-NEPAD. 2016. Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa. AUC, Addis Abba



**Fig 1:** African trade of fish and fish products in US \$ million for 2016 (data: FAO)

**Major rivers and lakes including the Nile, Congo, Niger, Volta, Zambezi and the Great Lakes starting with Lake Victoria, Tanganyika, Malawi, Chad, Albert, to name a few, all offering significant contribution to achieving *Feed Africa*.**

In this Briefing Note, six items are highlighted: i) opportunities and challenges with the Blue Economy Flagship; ii) operational and strategic framework; iii) program of activities; iv) partnerships; v) sustainability and financing; and vi) outcomes and impacts.

## 2. BLUE ECONOMY: OPPORTUNITIES AND CHALLENGES

The blue economy concept emerged from the Rio +20 deliberations (*The Future We Want*) and focuses on the sustainable utilization of aquatic and marine resources around all three pillars of sustainability. It refers to the multiple economic activities and ecosystem goods and benefits obtained and utilised in a sustainable and equitable way. The concept recognises the many contributions from inland aquatic and ocean resources and their potential but also acknowledges human and natural impact on the environment as well as climate change hazards.

Africa's fishery resources span many large marine ecosystems and comprises of multiple stocks from the Canary, Gulf of Guinea, Benguela, Agulhas, Somali and enclosed seas namely the Red Sea and the Mediterranean. Despite the large volume of fish produced, **the continent has shown limited performance and competitiveness in the processing and value addition of its fishery resources for both local consumption and exports<sup>4,5</sup>**. It is estimated that a quarter of marine capture fisheries are done by non African states through distant water fleets that leaves little room for local value addition. To date, few countries such as Morocco, South Africa, Namibia, Mauritania, Seychelles and Senegal play a dominant role in competitive export markets (Fig 1). Knowing that fish is one of the most traded global food commodities, amounting to \$140 billion annually, there are tremendous opportunities in sustainable harvesting and value addition towards key African commercial species for household consumption and export markets. These include small and large pelagics (such as sardines, herring, horse mackerel, barracuda, tuna) demersal fisheries (e.g., hake, turbot, sea breams, sole), shellfisheries (shrimps, mussels, oysters, etc.), and cephalopods (squids and octopus). Inland fisheries and aquaculture present many opportunities for nutritional security especially for species like Tilapia and carp, livelihood opportunities for youth and women, and as export commodities. **Fisheries is the leading agricultural export commodity on the African continent contributing about 19% volume (tonnes) but only 6% by value.** Recent estimates indicate that value addition in the fisheries sector is about \$24 billion, about 1.26% of the GDP<sup>6</sup>, with export earnings as high as 10% in Sierra Leone and 24% in Seychelles. There are now new business ventures and opportunities in seaweed industry in countries like Tanzania as well as mariculture activities with Abalone in South Africa.

Amongst the many challenges are poor institutional capacity to monitor and evaluate fish stocks and competitive seafood value chains, meagre infrastructure and technical expertise on post-harvest loss, illegal unregulated and unreported (IUU) fishing, and other governance challenges with overfishing and trickle down benefits. **Overfishing and IUU is also depriving many coastal states with the needed seafood protein and loss of earnings about 2.5 billion in West Africa alone.** Furthermore, increasing demand for seafood and overexploitation of fish stocks beyond their sustainable levels pose a greater challenge to global seafood security and trade<sup>7</sup>. Although

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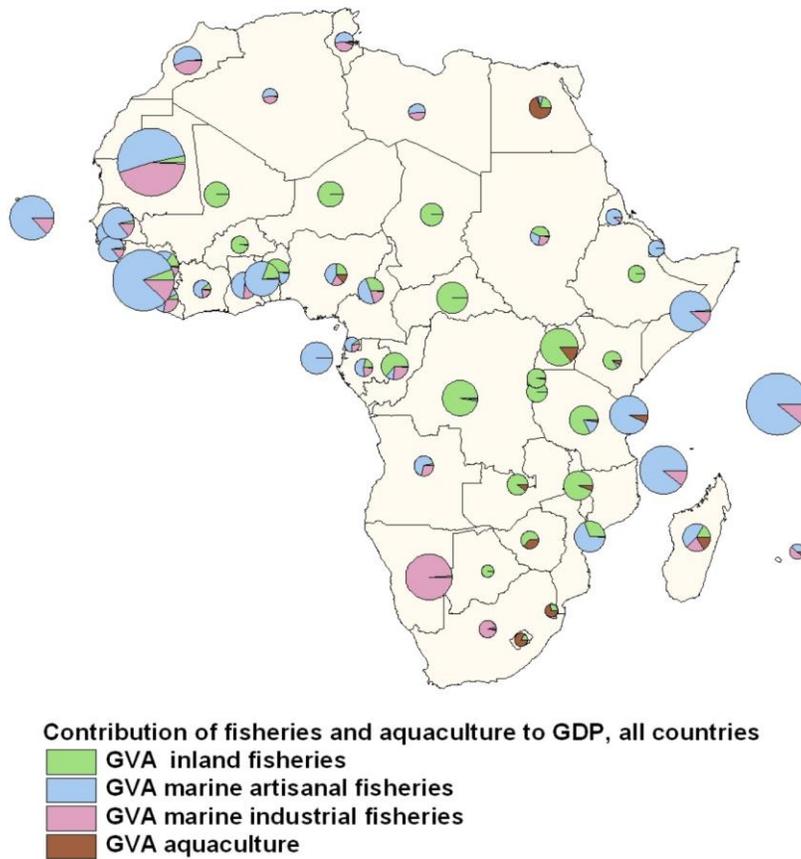
<sup>4</sup> Alder, J. & UR Sumaila. 2004. Western Africa: A fish basket of Europe past and present. *Environ. & Development*, 13(2): 156 – 178.

<sup>5</sup> Kaczynski, VM. & DL Fluharty. 2002. European policies in West Africa: Who benefits from fisheries agreements? *Marine Policy*, 26(2):75-93

<sup>6</sup> De Graaf, G. and Garibaldi, L. 2014. The value of African fisheries. FAO Fisheries and Aquaculture Circular. No. 1093.

<sup>7</sup> Smith, M. et al. 2010. Sustainability and global seafoods. *Science*, 327: 784-786

market incentives such as traceability and chain of custody rules are playing a greater contribution for governing seafood supply chains, African countries are not fully involved in the traceability process owing to meagre institutional and technical resources. There is a need to transition to more sustainable approaches for aquatic resources governance and to provide opportunities for African small and medium enterprises (SME) to partake in seafood trade regionally and internationally. **The informal nature of the small-scale fisheries sector make them marginalised in terms of their contribution to economic development.** Developing a transformative system through capacity building into semi-formal or formal enterprises such as SMEs propel them to financial accounting services, lines of credit, and taxation that is inclusive of social benefits such as insurance schemes.



**Fig 2:** Relative contribution of fisheries to GDP (source: de Graaf & Garibaldi 2014)<sup>8</sup>

In addition, multiple drivers of change, including climatic and human development needs do interact and affect aquatic and marine resource systems and various ecosystem goods and services<sup>9</sup>. Ecosystem services are the benefits from nature derived directly or indirectly through food access, raw material supply, carbon sequestration, nutrient recycling, climate buffer, cultural amenities, to name a few. **Climate change will affect various marine ecosystem services including loss in species abundance, changes in fish migration patterns<sup>10</sup>, coastal flooding and destruction of property and loss of lives through sea level rise.** This is a bigger concern

<sup>8</sup> De Graaf, G. and Garibaldi, L. 2014. The value of African fisheries. FAO Fisheries and Aquaculture Circular. No. 1093.

<sup>9</sup> Khan, A.S. & Cundill, G. 2018. Toward an integrated understanding of stressors and responses. *Ambio*. Doi.org/10.1007/s13280-018-1120-1

<sup>10</sup> Lam et al. 2002. Climate change impacts on fisheries in West Africa: implications for economic, food and nutritional security. *African Journal of Marine Science* 2012, 34(1): 103–11

for SIDS who are remote, susceptible to natural disasters, and with limited adaptive capacity. Increasing urbanization and population growth along coastal regions also pose concerns for planners and managers as issues around plastic pollution, water security, habitat degradation especially mangrove ecosystems and fish habitats and the quality of life of coastal residents. The various African oceans (North Atlantic, South Atlantic and Indian Oceans) and seas (Arabian and Mediterranean Seas) constitute a major sink for anthropogenic emissions, absorbing carbon dioxide emitted through burning of fossil fuels. **Ecosystems such as mangroves, seagrasses, and inland waters are among the most efficient in sequestering carbon dioxide in the form of ‘blue carbon’ sinks**, which is five times the volume of carbon absorbed by tropical forests. Moreover, these ecosystems are critical in supporting coastal water quality, healthy fisheries, and coastal protection against flooding. Integrated management (watersheds and deltas) present unique tools in this context to address upstream and downstream linkages in terms of ecosystem service trade-offs and synergies<sup>11</sup>.

In addition to the contribution to *Feed Africa*, the Blue Economy also has tremendous potential to contribute to the other High 5s especially *Integrate Africa*, *Power Africa* and *Improve the Quality of Life of Africans*. Africa can profit from the global market for marine biotechnology, with increased investments in maritime research to develop new products, pharmaceuticals, and renewable energy (solar, tidal, wind and hydro) that could contribute to current energy demand.

In acknowledging these opportunities and challenges, the Flagship aims to implement the *Feed Africa* Strategy in economic sectors across inland, coastal and marine ecosystems. **Specifically, the flagship aims to achieve two major milestones: i) aquatic food and fish self-sufficiency in Africa, and ii) integrate inland and coastal resource management for climate resilient economic development.**

### 3. OPERATIONAL AND STRATEGIC FRAMEWORK

The programme will work across the spectrum of inland, coastal, and marine resources-related industries with focus on fisheries and integrated management through a set of guiding principles (Fig 3). It is formulated around **three major components that is sectoral, integrative and multi-level**. These are: i) increasing fish production and reducing on post-harvest loss through commodity value chains, access to markets, and local consumption; ii) integrating watershed management and marine spatial planning to reconcile multiple coastal demands, protect critical habitats, and to promote the resilience of coastal populations; and iii) fostering regional governance mechanisms through partnership and program coordination<sup>12</sup>, monitoring, learning and evaluation for scaling-out and replication.

The Bank engages with its Regional Member Countries (RMCs) **through several programming instruments and financing windows, specifically through Country Strategy Papers (CSPs), and Regional Integration Strategy Papers (RISPs)**. The Bank’s financing instruments in 2016 included loans (\$9.44 billion), grants (\$0.51 billion), equity participation (\$0.28 billion), guarantees (\$0.36 billion) and special funds (\$0.21 billion)<sup>13</sup>.

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<sup>11</sup> Khan et al. 2018. An integrated social-ecological assessment of ecosystem service benefits in the Kagera River Basin in Eastern Africa. *Regional Environmental Change*, DOI: 10.1007/s10113-018-1356-0.

<sup>12</sup> Khan A.S. & Mikkola, H. 2002. Sustainable Ocean Development: An Initiative for the Management and Protection of the Marine and Coastal Resources of ECOWAS sub-region. UNIGAM, Banjul.

<sup>13</sup> AfDB. 2017. The African Development Bank Group at the Centre of Africa’s Transformation. 8<sup>th</sup> Edition May 2017. AfDB, Abidjan.



**Fig 3:** Analytical and operational framework for the Blue Economy Flagship

The Banks credit policy allows for dedicated financial windows for various categories of countries including the African Development Fund (ADF) for **Low-income developing countries (public sector concessional financing)** and African Development Bank Funds (AfDB) for **Medium-income countries (MIC) for private sector and non-concessional public sector lending**, and Blended funds (Fig 4).

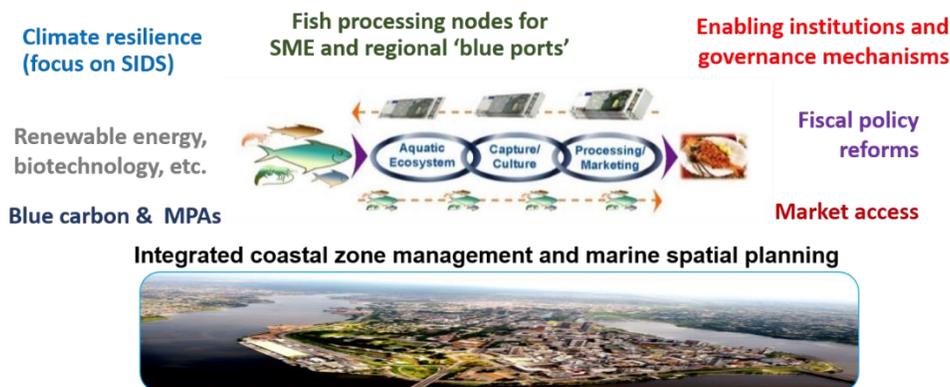


**Fig 4:** Financing instruments and eligibilities for the various funding programs (source: AfDB)

Other financing instruments include guarantees, grants, equity participation and special funds that could catalyse new investment in research and capacity development in multiple domains and regional scale of operations.

#### 4. PROGRAMMES OF ACTIVITIES

There are several entry points for designing programming instruments, recognizing various countries priorities and needs. This could be at any point along the fish chain from stock assessment and fisheries management plans to harvesting activities, processing, value addition and market access<sup>14</sup> as reflected in specific CSPs. In addition to sector approach, there are opportunities to explore integrated management across sectors and borders. These could comprise of transboundary watershed management, biodiversity beyond national jurisdictions and UN Convention on the Law of the Seas, recreational fisheries and eco-tourism, resilient coastal infrastructure and disaster risk reduction, risks and insurance schemes, offshore renewable energy, ecosystem-based adaptation, multi-user zoning and marine spatial plans, to name a few (Fig 5). To date, the Bank has supported African states through MIC Grant resources (\$5 million in 2016) to assist in the formulation of their national strategic framework for transition to Blue Economy and to undertake feasibility studies and pilots. Some of the first group of countries to receive Blue Economy support include Cabo Verde, Morocco, Côte D’Ivoire, Madagascar, Guinea, and Nigeria (see Table 1). The Bank aims to continue to mobilize more MIC Grants and project preparation funds (PPF) to develop its Blue Economy portfolio in strategic RMCs by supporting the preparation of innovative programs across multiple resource sectors and entry points as shown in Fig 5. This is in addition to previous lending programs to both private and public sectors for vibrant fisheries enterprises.



**Fig 5:** Multiple entry points for Blue Economy investment programming and pilots

From a regional standpoint (and for RISPs), there are a number of nexus programs that look at the intersection of post harvest loss, value chains and food/nutritional security; regional integration and trade corridors, watershed and coastal management, the ecosystems approach to fisheries, climate resilience and disaster risk management, and regional institutional capacity. Projects could include, for example, aquaculture value chain and regional blue economy operations within COMESA, private sector support to market access and seafood certification for exports in ECOWAS (for crustaceans and large pelagics), and supporting climate resilient economies in SIDS and Madagascar. Attention is also paid to the notion of Blue Justice and Human Rights Principles

<sup>14</sup> Khan, A.S., Charles, T., and D. Armitage. 2016. Place-based or sector-based adaptation? A Case study of municipal and fishery policy integration. *Climate Policy*. 18(1): 14-23.

to food, as well as recognizing due diligence around conflicts and fragile regions, compensation schemes using the Banks’s Integrated Safeguard Systems.

**Table 1:** Planned activities and some sample pilot and pipeline projects

Country	Project topic	Cost (millions UA)			Other funding Sources (Grants, loans)		Status
		Total	ADB	ADF	MIC/PPF	Other donors / co-financing	
Cabo Verde	Wave driven desalination systems	41.3	10		1.0 (approved)	30 (GCF)	Started in 2018
Gabon	Green Gabon Initiative	40.0	40		1.2 (approved)		Started in 2018
Morocco	Blue Belt Initiative	136.2	75		1.2 (TBC)	60 (GCF/FAO/WB)	Pending
Kenya	Blue economy investment plans	106.0		70		36 (IFAD)	Pending
Guinea Equatoriale	Integrated coastal zone planning	121.2	50		1.2 (approved)	70 (GCF)	Started in 2018
Madagascar	Sustainable 'green' aquaculture	56.0		18		38 (GEF/WB/GCF/FAO)	Pending
Mauritius	Coastal protection and biotechnology	54.6	21.5		1.2 (TBC)	31.9 (GCF/WB/GEF)	Pending
Seychelles	Blue bond for the fisheries sector	35.1	14.3		0.8 (TBC)	20 (GEF/WB)	To start in 2019
Malawi	Fisheries & aquaculture management	30.0	30.0			20 (USAID/WorldFish)	To start in 2019
Côte D'Ivoire	Blue economy plans & fisheries development	101.0		28.5	1.0 (underway)	71.5 (GCF/WB)	Started in 2018
Nigeria	Fisheries production and aquaculture	115.4	85.7		1.2	28.5 (GCF/KOAFEC)	Pending

## 5. PARTNERSHIPS

To deliver Feed Africa, the Bank has taken a leading role in designing and orchestrating transformational programs and intends **to increase its investments in agriculture and fisheries from a historical \$612m per year over the 2011 -2014 period to \$ 1.0 billion per annum.** Access to finance has been identified as one of the biggest challenge in doing business in Africa. Knowing this, the Bank takes pride in catalyzing other resources required for implementing the strategy. One of the most innovative financing mechanisms has been partnerships with other multilaterals with similar goals and strategic plans on the blue economy. In 2016, at the African Ministerial conference on Ocean Economies and Climate Change held in Mauritius, the AfDB, the World Bank and FAO proposed a package consisting of technical and financial assistance in support of ocean economies and the resilience of oceans and coastal areas to climate change, including through NDC implementation. The partnership program “**African Package for Climate-Resilient Ocean Economies**” has a tentative cost of 3.5 billion USD, from which the Bank will contribute \$665.4 million for the period 2017-2020. This will supplement other funding through the Green Climate Fund (GCF) and the Global Environment Facility (GEF) and other partners. There are also other co-financing opportunities through partnership with non-RMC through technical cooperation and capacity building initiatives through **various Trust Funds.** Some examples include the Nigerian Trust Fund, Swedish Technical Cooperation Agreement,

Korea-Africa Technical cooperation funds, DFID Technical Cooperation Framework Arrangement, Canada Technical Cooperation Arrangement Funds, and the Chinese Trust Funds.

## 6. SUSTAINABILITY AND FINANCING

Long-term sustainability is a key in meeting the expected outcomes for *Feed Africa* and for longer-term impact at scale. Providing the enabling condition and institutional framework for local ownership and sustained funding are key to implement and attain the Feed Africa Strategy. Central to this sustained funding, which can be multi-tiered and in parallel to donor contributions and private sector financing, are innovative windows of opportunities to explore:

- Supporting local council taxes and budget allocations to fishing activities for maintenance of community assets. These could be levies on fishing exports to be used for marine protected areas and spatial planning such as in Montego Bay in Jamaica.
- Boosting cooperatives and fisher associations involved with micro-credits and micro-finance operations such as rotating savings and credit funds. This could be through self-organized groups or through ministries or departments (e.g. Uganda and Mauritius).
- Developing national trust funds for conservation related programs and social schemes for coastal and fisheries livelihoods (as evident in Bangladesh, Mauritius, and Belize).
- Promoting regional funds such as through the Nauru sub-regional fisheries agreement for the Pacific Island States, the EU Maritime Fisheries Fund, and Diaspora Bonds.

## 7. OUTCOMES AND IMPACTS

The main outcomes of the Blue Economy flagship are **to increase per capita annual consumption from 10 to 20 kg (in line with the international level), attain food and nutritional security for over 200 million Africans, and provide income for over 15 million over the next 10 years.** The value added benefits of \$24 billion in 2012 is expected to significantly increase to \$72 billion through increased exports by 2025. The program will also triple intra-regional fish trade (Malabo Declaration) with half of the processing plants using clean energy and eco-certified seafood products with HACCP and ISO 2000 standards. Also, 50% of the processing activities of the fish chain that operates as informal micro and small business, primarily owned by women and youth, will be transformed to medium size enterprises. This has the potential for employing 5-10 million extra people (in commodity trade and marketing, SMEs for aquaculture, pre and post-harvest service providers). Finally, with good governance, up to \$1.3 billion could be gained annually from reduced IUU fishing, fisheries mis-management, and post-harvest loss. **These outcomes are also consistent with the SDG 14 targets specifically on market access (SDG 14b), sustainability of marine and coastal ecosystems (14.2), and an increase in the benefits to SIDS & Least Developed Countries from sustainable marine resource use (14.4).**

The Blue Economy Flagship expects to attract additional partnerships and co-funding to contribute to fisheries sustainability and integrated management plans through integrative and multi-scale approaches. Partners include both multilateral and bilateral agencies namely the World Bank, FAO, AGRA, IFAD, WorldFish, USAID, DFID, AFD, JICA, to name a few. The development outcomes will contribute to the High 5s, and multiple SDGs, and other commitments such as the AUC's Comprehensive Africa Agriculture Development Program.

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