REPUBLIC OF KENYA

Ministry of Mining, Blue Economy and Maritime
Affairs State Department for the Blue Economy and Fisheries

THE NATIONAL BLUE ECONOMY
STRATEGY 2025-2030

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FOREWORD

The National Blue Economy Strategy comes at a pivotal time when nations around the world, including Kenya, are reevaluating the sustainable use of their natural resources. Rooted in a series of significant international and regional commitments including the

Sustainable Development Goals (SDGs), Commonwealth Blue Charter 2018, the African Union's Blue Economy Strategy 2020, IGAD Regional Blue Economy Strategy and Action Plan 2021 and Kenya's Vision 2030. This Strategy represents Kenya's unwavering dedication to the sustainable management of its blue economy resources.

Since the landmark Sustainable Blue Economy Conference held in Nairobi from 26th to 28th November, 2018, where Kenya's leadership in blue economy matters was globally recognized, our commitment has only strengthened. This conference, along with United Nations Ocean Conference in Lisbon, co-hosted by Kenya and Portugal, brought to the forefront the critical importance of action-oriented strategies that place people and blue economy resources at the heart of sustainable development. These milestones highlight the international consensus on the necessity of harnessing blue economy resources in a manner that balances economic growth, environmental conservation, and social equity.

The National Blue Economy Strategy aligns with these global and regional priorities and places Kenya at the forefront of the blue economy agenda in Africa. With our vast coastline and marine; and inland water resources, Kenya is uniquely positioned to sustainably exploit these resources while ensuring that their benefits are shared equitably across all levels; advancing socio-economic development, contributing to food security, poverty alleviation and overall national prosperity.

Developed through a highly participatory and consultative process, this Strategy is the culmination of efforts involving a broad range of stakeholders. Ministries, departments, agencies, County Governments, development partners, private sector players, and blue economy resource user associations were all involved, reflecting the inclusive and collaborative spirit that this sector demands. This consultative approach ensures that the Strategy represents not only the aspirations of the National Government but also the voices of communities, industries, and stakeholders who are directly connected to the blue economy.

This Strategy provides an integrated framework for sustainable development, covering both ocean-based and inland water resources. It reflects Kenya's ambition to significantly increase investments and productive capacity in critical areas of the blue economy, such as fisheries, tourism, maritime transport, renewable energy, Aquaculture, biotechnology and bioprospecting and mineral resources. By focusing on value addition, innovation, and the development of sustainable industries, Kenya seeks to unlock the vast potential of its blue resources, contributing to economic growth, job creation, and environmental sustainability.

Moreover, the strategy underscores the importance of protecting fragile aquatic ecosystems. It acknowledges that economic prosperity must go hand-in-hand with the conservation of our natural environment. By prioritizing sustainable resource management and environmental stewardship, we can safeguard these vital resources for future generations, ensuring that they continue to provide livelihoods and ecosystem services long into the future.

As Kenya embarks on the journey outlined in this Strategy, it calls upon the local and international private sector to invest in the vast opportunities within the blue economy. From sustainable fisheries to eco-friendly tourism, from marine biotechnology to renewable ocean energy, the blue economy offers immense potential for innovation and growth. This Strategy serves as a roadmap for all stakeholders, guiding the sustainable exploration, development, and management of Kenya's blue economy.

Finally, we express our deepest gratitude to all the stakeholders who contributed to the development of this Strategy. Their dedication, expertise, and commitment to the sustainable development of Kenya's blue economy are reflected in this comprehensive document. Together, we can unlock the full potential of our blue economy while ensuring its benefits are shared equitably and its resources are managed responsibly.

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Ministry of Mining, Blue Economy
and Maritime Affairs.

H.E. HON. DR. PAUL OTUOMA, EGH
Chair Committee
Council Of Governors
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PREFACE AND ACKNOWLEDGEMENT

The Blue Economy is one of the economic frontiers to significantly contribute to the Country's economic growth and development as envisaged in the Kenya's long-term development blue-print. The development of National Blue Economy Strategy was made possible through the collective efforts, expertise, and dedication of a wide range of stakeholders whose contributions were instrumental in shaping a sustainable and inclusive vision for the country's marine, coastal, and freshwater resources. We extend our deepest appreciation to the national and county governments, including ministries, state departments, agencies, and commissions, for their leadership and policy guidance in aligning this strategy with Kenya's broader development goals, particularly Vision 2030 through the Fourth Medium Term Plan (MTP IV) as part of the revitalized Plan espoused as the Bottom-Up Economic Transformation Agenda (BETA). We sincerely thank all our stakeholders for their collaboration, passion, and dedication to this transformative agenda.

Special recognition goes to the coastal and lake regions communities whose invaluable traditional knowledge, lived experiences, and resilience helped ensure that the strategy remains grounded in the realities of those most dependent on these ecosystems.

We are also profoundly grateful to our development partners for their financial and technical support, which enabled the integration of global best practices into locally relevant solutions. Regional and international organizations played a key role in fostering transboundary cooperation, while national associations and community-based organizations amplified the voices of fisher folk, women, youth, and marginalized groups, ensuring that the strategy promotes equity and inclusive growth. The private sector provided critical insights on investment, innovation, and value chain development, helping to unlock economic opportunities, while various programmes and projects shared practical field experiences that enriched the strategy's applicability.

We recognize each and every institution and expert contribution toward the realization of this major milestone. Academic and research institutions contributed rigorous analysis and evidence-based recommendations, strengthening the strategy's scientific foundation, while individual experts and consultants offered invaluable research and thought leadership to refine actionable frameworks. This strategy stands as a testament to the shared commitment of all stakeholders toward a prosperous, resilient, and sustainable Blue Economy that safeguards aquatic ecosystems while uplifting the communities that depend on them.

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EXECUTIVE SUMMARY

Kenya's National Blue Economy Strategy is a forward-looking framework designed to harness the country's vast marine and aquatic resources to drive sustainable economic growth, create employment, and enhance social inclusion while ensuring environmental sustainability. Aligned with Kenya's Vision 2030 and the Kenya Kwanza Plan (2022-2027), the Strategy seeks to diversify the economy by optimizing the sustainable use of coastal, marine, and inland water resources. This approach contributes to national development goals and aligns with global commitments, including the Sustainable Development Goals (SDGs), the African Union's Agenda 2063, the African Union Blue Economy Strategy and the African Integrated Maritime Strategy (AIMS).

The Strategy envisions a thriving Blue Economy that balances economic growth, social equity, and environmental conservation through strengthening Governance and Institutional Frameworks while driving Innovation and Capacity Building.

The Strategy is organized around nine thematic areas, each with specific goals, objectives, and strategic interventions: Sustainable Fisheries, Aquaculture, and Aquatic Ecosystems; Maritime Transport and Trade; Renewable Energy and Extractive Mineral Resources; Sustainable and Facilitative Blue Economy Tourism, Human Resource Capacity Development; Governance in the Blue Economy; Financing for Sustainable Blue Economy Development; Capacity Building and Innovation; Social Equity and Environmental Sustainability by addressing specific challenges and leveraging opportunities within each thematic area, the strategy ensures that Kenya can fully capitalize on its inland water bodies, marine, and aquatic resources. The integrated approach balances economic growth, environmental sustainability, and social equity, positioning Kenya as a leader in the global Blue Economy while contributing to the well-being of its people and the health of its environment.

The strategy outlines five strategic directions including; sustainable utilization to foster sustainable use of natural resources, eco-socio safeguards to preserve and protect ecosystem and communities, skill smart workforce to equip the blue economy human resource with innovative skills and technology, shared prosperity for an inclusive economic development and collective stewardship to streamline governance financing and partnership. To achieve this, a robust framework has been established to track implementation of this Strategy.

DEFINITION OF TERMS

Aquaculture: The cultivation and farming of aquatic organisms like fish, mollusks, crustaceans, and plants, either from eggs or by rearing wild or legally imported species..

Blue Economy: The sustainable use and development of aquatic resources, including oceans, seas, coasts, lakes, rivers, and underground waters.

Blue Economy Sectors: Sectors including fisheries, aquaculture, tourism, transport, shipbuilding, energy, bioprospecting, and underwater mining, alongside social and environmental sustainability.

Beach Management Unit: An organization of fishers, traders, and others reliant on fisheries for their livelihoods.

Capacity Building: Developing skills, abilities, and resources to achieve blue economy goals while reducing reliance on external help.

County Government: The government established under Article 176 of the Constitution.

Exclusive Economic Zone: Sea areas extending 200 nautical miles from the baselines, beyond and adjacent to territorial waters.

Fisheries: Activities or enterprises focused on catching, processing, or managing fish stocks, based on geographic, scientific, or economic characteristics.

Fishing: Engaging in activities to locate or catch fish.

Hydrography: The science of measuring and describing the physical features of water bodies, primarily for navigation safety and supporting marine activities.

Kenyan Waters: Territorial waters extending 12 nautical miles seaward from Kenya's coastline.

Sustainable Tourism: Territorial waters extending 12 nautical miles seaward from Kenya's coastline.

Value Chain: The full range of activities creating and delivering value to consumers along the supply chain.

Youth: Individuals aged 18 to 35 years in the Republic.

Wildlife: Indigenous or introduced wild animals, plants, or microorganisms within their ecosystems in Kenya.

Marine: Relating to the sea, specifically the ocean and its ecosystems.

Aquatic: Relating to water, encompassing both freshwater and saltwater environments.

ACRONYMS

AfCFTA	African Continental Free Trade Area
AI	Article Intelligence
AIS	Automatic Identification System
AIMS	African Integrated Marine Strategy
AU	African Union
BETA	Bottom-up Economic Transformation Agenda
BGI	Blue Growth Initiative
BMUs	Beach Management Units
CECM	County Executive Committee Member
CBFM	Community-Based Fisheries Management
COMESA	Common Market for Eastern and Southern Africa
COVID-19	Coronavirus Disease of 2019
CSA	Climate Smart Agriculture
EAC	East African Community
ECA	Economic Commission for Africa
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EMCA	Environment Management and Coordination Act No. 8 of 1999
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GoK	Government of Kenya
HACCP	Hazard Analysis Critical Control Points
IAMU	International Association of Maritime Universities
ICZM	Integrated Coastal Zone Management
IGAD	Inter-Governmental Authority on Development
IMO	International Maritime Organization
IOT	Internet of Things
IORA	Indian Ocean Rim Association
IUU	Illegal, Unreported and Unregulated Fishing
KFS	The Kenya Fisheries Policy, 2023
LAPSSET	Lamu Port South- Sudan, Ethiopia Transport
LMMA	Locally Managed Marine Area
MARPOL	Convention for Prevention of Marine Pollution
MCS	Monitoring, Control and Surveillance
MDA	Maritime Domain Awareness

ACRONYMS

MDAs	Ministries, Departments and Agencies
MET	Maritime Education and Training
M&E	Monitoring and Evaluation
MPAs	Marine Protected Areas
MSME	Micro Small and Medium Enterprises
MSP	Marine Spatial Planning
MSS	Maritime Safety and Security
MT	Metric Tonnes
MTP IV	Medium Term Plan IV
NGOs	Non-Governmental Organizations
NLC	National Land Commission
NMK	National Museums of Kenya
PFRS	The Policy Framework and Reform Strategy for Fisheries and Aquaculture in Africa
PPP	Public-Private-Partnership
PLWD	Persons Living With Disabilities
PSMA	Port State Measures Agreement
RMRCC	Regional Maritime Rescue Coordination Centre
SBEC	Sustainable Blue Economy Conference 2018
SDBEF	State Department for the Blue Economy and Fisheries
SDGs	Sustainable Development Goals 2030
SGR	Standard Gauge Railway
SOLAS	International Convention for the Safety of Life at Sea
STI	Science, Technology and Innovation
TVET	Technical Vocational Education and Training
UNCLOS	United Nations Convention on the Law of the Sea
UNEPFI	United Nations Environment Programme Finance Initiative
WWF	World Wide Fund for Nature

PART ONE

INTRODUCTION AND SITUATION ANALYSIS

INTRODUCTION **AND BACKGROUND**

The Blue Economy encompasses all activities derived from marine and aquatic ecosystems, including oceans, coasts, seas, rivers, lakes, groundwater, and their associated resources. It represents a smart approach to harnessing these resources for sustainable economic development. However, scientific research shows that these resources are limited, and human activities have significantly degraded their health and quality. The impact on human well-being and societies is profound and expected to intensify with population growth.

The Focus of the Blue Economy Strategy

National Blue Economy Strategy aims to balance economic growth, social inclusion, and environmental sustainability. It seeks to promote livelihoods and social equity while safeguarding our oceans, lakes, and rivers from degradation. This concept extends beyond oceans to include all water bodies, with key sectors like fisheries, aquaculture, tourism, transport, ports, energy, and mining playing crucial roles. The following are resources that the strategy will focus on:

Consumptive Blue Economy Resources

These involve extracting or using up marine/ inland water resources, often resulting in depletion or alteration of the ecosystem. Examples include fishing and aquaculture – harvesting fish, shellfish, seaweed, etc.; mining of seabed minerals – such as cobalt, manganese, and rare earth elements; oil and Gas Exploration, Salt Extraction, Marine Biotechnology – harvesting marine organisms for pharmaceuticals or cosmetics, etc.

Non-Consumptive Blue Economy Resources

These are utilized without removing or depleting the resource, often focusing on sustainable use or enjoyment. Marine Tourism & Ecotourism, Renewable Ocean Energy – tidal, wave, and offshore wind energy, marine Transport & Ports, Carbon Sequestration in Mangroves/Seagrass – leveraging marine ecosystems to absorb CO marine Research and Education among others.

1.1 Global and Regional Perspectives

Globally, the Blue Economy, as defined by leading global institutions, converges on a common theme: the sustainable use and management of ocean and aquatic resources for economic growth and environmental stewardship. The United Nations emphasizes the integration of various economic sectors and policies to ensure that ocean resource use remains sustainable, highlighting the need for effective management of fisheries, ecosystem health, and pollution. Similarly, the World Bank views the Blue Economy as a driver of sustainable economic development, focusing on enhancing livelihoods, job creation, and maintaining ocean ecosystem health, positioning it as an integral part of the broader Green Economy. The European Commission broadens this perspective by encompassing all economic activities related to oceans, seas, and coasts, stressing the interconnection between established and emerging sectors.

1.2 Africa's Blue Economy Perspective

Africa's approach to the Blue Economy is grounded in the recognition of its potential to drive sustainable development, economic growth, and social inclusion across the continent. The African Union (AU) has embedded the Blue Economy into its Agenda 2063, highlighting it as a key component for continental transformation. This vision is articulated through the 2050 Africa's Integrated Maritime Strategy (AIMS), which frames the Blue Economy as the «new frontier of African Renaissance» and positions it as a crucial contributor to socioeconomic transformation and growth. The strategy emphasizes the advancement of marine biotechnology, the development of a robust shipping industry, and the sustainable exploitation of marine resources such as deep-sea minerals and inland freshwater bodies.

Africa's 39 out of 54 countries have access to 26,000 nautical miles of coastline and 13 million square kilometers of exclusive economic zones, offering immense opportunities for the continent. The Blue Economy in some Eastern African countries already contributes significantly to national revenues, accounting for up to 27% of total revenues and 33% of export revenues. These figures underscore the sector's potential to drive economic growth, particularly through industries like fisheries, aquaculture, tourism, and renewable energy.

Regionally, organizations like IGAD are implementing Blue Economy strategies to catalyze structural transformation and inclusive growth. These efforts are supported by transboundary initiatives such as the Nile Basin Initiative and the Lake Victoria Fisheries Organization, which aim to manage shared resources sustainably.

Looking forward, Africa's Blue Economy holds significant promise for addressing long-term challenges related to globalization, climate change, and resource pressures. Continued efforts to implement national and regional strategies, supported by international collaboration and investment, will be crucial in realizing the full potential of the Blue Economy as a driver of sustainable development across the continent.

1.3 Kenya's Strategic Roadmap for the Blue Economy

Kenya's strategic approach to the Blue Economy is deeply aligned with its long-term development goals, notably Vision 2030, and is a critical component of the Kenya Kwanza Government's Bottom-up Economic Transformation Agenda (BETA). The renewed focus on the Blue Economy, which was significantly highlighted in the 2016 report «Rediscovering the Road to Prosperity» and further emphasized during the 2018 Sustainable Blue Economy Conference, underpins Kenya's ambition to leverage its vast aquatic resources for economic growth, social inclusion, and environmental sustainability.

1.3.1 Strategic Perspectives

- **Sectoral Integration and Coordination:** The Blue Economy in Kenya encompasses a wide range of sectors, including fisheries and aquaculture, maritime transport, maritime education and research, tourism, sea-mineral extraction, sustainable shipping, renewable energy, and biotechnology. Managing and developing these diverse sectors requires collaboration across various levels of government (national and county), the private sector, development partners, and civil society.

The establishment of the State Department for the Blue Economy and Fisheries, as mandated by Executive Order No. 1/2025, is a pivotal step toward coordinating the development of a national strategy and policy for the Blue Economy.

- **Alignment with National Development Goals**: The strategy is deeply intertwined with Kenya's Vision 2030, which aims to transform Kenya into an upper-middle-income country by 2030. The Blue Economy is viewed as a key driver of this transformation, with the potential to contribute significantly to GDP growth, job creation, and poverty eradication. By diversifying the economy beyond land-based activities, Kenya aims to achieve the Sustainable Development Goals (SDGs) and promote inclusive growth, particularly targeting those at the bottom of the economic pyramid through the BETA plan.
- **Sectoral Opportunities and Challenges**
  - **Fisheries and Aquaculture:** Kenya's fisheries and aquaculture sector, though currently contributing 0.7% to GDP (Economic Survey,2025), has significant untapped potential. With an estimated production potential of 450,000 metric tons (MT) in aquaculture by 2030, there is a pressing need for increased public-private partnerships to boost investment and capacity in this sector.
  - **Maritime Transport and Services:** The strategic location of Kenya's coastline along major global maritime routes offers substantial opportunities for growth in maritime transport and services. The Port of Mombasa, the Lamu Port as part of the LAPSSET Corridor, and the inland port of Kisumu are central to regional trade, serving over 300 million people. A coherent and comprehensive strategy is needed to maximize the potential of these assets.
  - **Desalination and Sea Mineral Extraction:** With Kenya facing perennial freshwater shortages, particularly in coastal regions, desalination technology is critical. Moreover, the potential for sea-mineral extraction, including valuable minerals like sodium, magnesium, and rare earth elements, presents significant economic opportunities.
  - **Maritime Safety and Security:** Ensuring safety and security within Kenya's maritime domain is essential for fostering a conducive environment for Blue Economy activities. Kenya's commitment to maritime safety is demonstrated through its ratification of international instruments and the establishment of the Regional Maritime Rescue Coordination Centre (RMRCC).
  - **Tourism and Wildlife Conservation:** The Blue Economy strategy also aims to enhance marine and inland tourism and wildlife conservation, recognizing the economic value of cultural and natural heritage. This includes promoting the sustainable exploitation of marine resources, increasing marine contributions to GDP, and developing marine-themed tourism experiences.

- **Innovation and Sustainability:** The Blue Economy strategy emphasizes the importance of innovation and sustainability across all sectors. This includes the promotion of renewable energy sources such as offshore wind and tidal energy and the advancement of biotechnology and bio-prospecting. These innovations are key to driving sustainable growth and ensuring that economic activities within the Blue Economy do not compromise environmental integrity.
- **Addressing Challenges:** The strategy acknowledgesseveralchallenges,including inadequate policies, low investment, limited capacity, and environmental threats like climate change and pollution. Addressing these challenges requires a multi-faceted approach involving policy reform, increased investment, capacity building, and international cooperation.

  The government's efforts to develop a comprehensive Spatial Plans and Integrated Coastal Zone Management Policies, with support from partners like WWF and the EU, are critical steps in this direction.

1.4 Methodological Approach

The Strategy was developed through consultative meetings, references to multilateral commitments and aligned with the Constitution of Kenya and other relevant statutes. It was developed through a rigorous multi-stakeholder consultative process, laced with technical input integration and has been subjected to the necessary steps in public participation, including presentation to the Inter-Ministerial Committee on Blue Economy, the Sector Working Group on Policy, Legislation and Standards, County Executive Committee Members (CECMs) Caucus and national stakeholders' validation.

SITUATION **ANALYSIS**

2.1 Overview

National Blue Economy Strategy is an ambitious and multifaceted initiative that integrates the sustainable and strategic utilization of aquatic resources, such as oceans, lakes, rivers, and other blue spaces, into the country's economic, social, and environmental development plans. This approach is part of a broader global and regional framework, including the African Union's Agenda 2063 and the United Nations' Sustainable Development Goals (SDGs), which emphasize the importance of sustainable resource management and environmental conservation. Despite its strategic location as a gateway to Eastern and Central Africa, Kenya's Blue Economy potential remains largely untapped, presenting both significant opportunities and challenges across various sectors.

2.1.1 Fisheries and Aquaculture

Current Status:

- The fisheries and aquaculture sector is a vital part of Kenya's economy, contributing approximately 0.7% to the GDP (Economic Survey, 2025) and supporting over 4 million people along the value chain. The national annual fish production is currently 163,605 metric tons, with a value of about Kshs. 30.4 billion.

Challenges and Opportunities:

- Despite the sector's importance, there is significant room for growth, particularly in expanding investments in aquaculture and modernizing fishing practices. Enhancing local capacities in boat building, providing cold chain support, and increasing access to modern fishing equipment like fiberglass boats are critical to unlocking the sector's full potential. Public-private partnerships will be essential in driving these developments, particularly in underexplored areas such as seaweed and shellfish farming.

2.1.2 Shipping and Maritime

Current Status:

- The maritime transport sector is crucial to Kenya's economy, with 90% of international trade being seaborne, valued at over US$3 billion annually. Kenya's strategic ports in Mombasa and Lamu serve as vital gateways to the Eastern and Central Africa region, supporting a population of over 300 million.

Challenges and Opportunities:

- The shipping and maritime sector faces several challenges, including the lack of a national merchant fleet, limited shipbuilding capacity, and significant capital investment requirements. The ongoing development of the LAPSSET Corridor and the refurbishment of Kisumu Port are positive steps, but more comprehensive strategies are needed to attract investment, enhance maritime education and training, and develop the necessary infrastructure. Additionally, there is potential to explore eco-friendly ship conversions and expand the fishing fleet to fully utilize Kenya's Exclusive Economic Zone (EEZ).

2.1.3 Desalination, Sea-Mineral Extraction, Oil and Gas Exploration

Current Status:

- Kenya's coastal regions face significant freshwater shortages, which can be mitigated through desalination projects. The country's offshore blocks in the Lamu basin also hold substantial potential for oil and gas exploration, positioning Kenya as a future leader in East African energy production.

Challenges and Opportunities:

- Desalination and sea-mineral extraction are capital-intensive and environmentally challenging, yet advancements in technology could make these ventures more sustainable. Similarly, the exploration and extraction of marine minerals, including valuable elements like manganese and cobalt, present economic opportunities but require careful management to avoid ecological damage. Continued investment in offshore oil and gas exploration could significantly boost Kenya's economy, but this must be balanced with environmental concerns and the need for sustainable practices.

2.1.4 Renewable Blue Energy

Current Status:

- Kenya has vast untapped potential in renewable blue energy, including offshore wind, wave power, and ocean thermal energy. These resources could play a significant role in reducing the country's carbon footprint and contributing to sustainable economic growth.

Challenges and Opportunities:

- Despite the potential, Kenya has yet to fully exploit its marine renewable energy resources. Regulatory reforms, financial incentives, specialized research, and the development of local supply chains are necessary to harness these opportunities. Investing in these areas will not only contribute to Kenya's energy security but also position the country as a leader in blue energy innovations, particularly in mitigating climate change impacts.

2.1.5 Conservation and Protection of Blue Ecosystems

Current Status:

- Kenya's rich aquatic biodiversity, including marine and freshwater species, plays a crucial role in the country's economy, particularly in fisheries and tourism. However, these ecosystems are under threat from pollution, habitat loss, and climate change.

Challenges and Opportunities:

- There is an urgent need for comprehensive ecosystem restoration and sustainable management practices. The government's commitment to establishing marine protected areas (MPAs) and exploring alternative financing mechanisms, such as blue carbon credits and blue bonds, is vital for preserving these ecosystems. Expanding seaweed mariculture and protecting mangrove forests are also critical components of this conservation strategy, which will help enhance biodiversity while supporting local economies.

2.1.6 Youth in the Blue Economy

Current Status

Youth engagement is essential for the future of Kenya's Blue Economy. The National Youth Development Policy aims to address youth unemployment by expanding opportunities in Eco-entrepreneurship, green jobs, and blue economy sectors.

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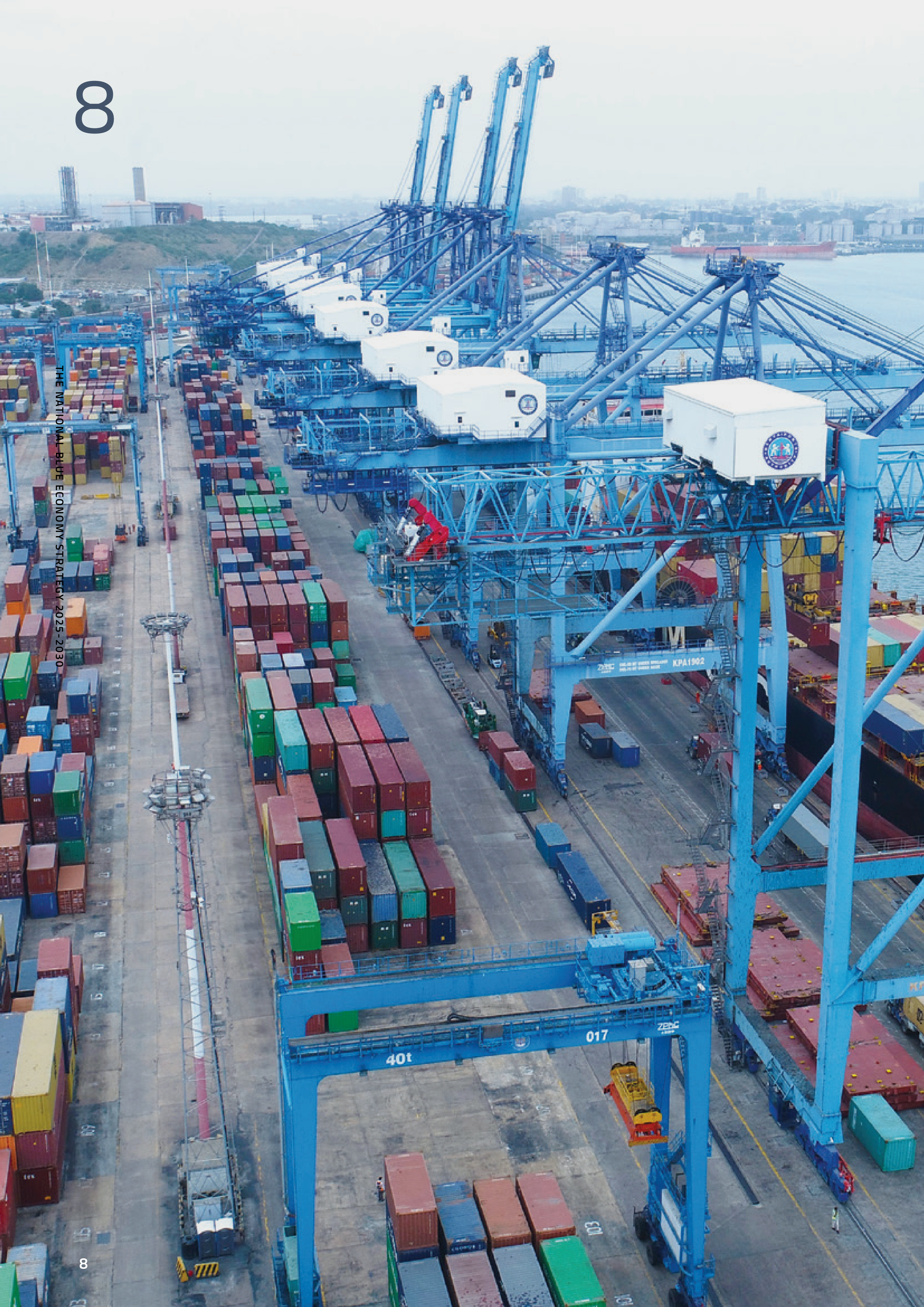


Challenges and Opportunities

Providing youth with specific training, modern equipment, and start-up funding will be crucial in harnessing their potential. Engaging youth in environmental conservation, disaster management, and sustainable resource utilization will not only create jobs but also foster a new generation of environmentally conscious entrepreneurs.

2.1.7 Surveying and Mapping

Current Status:

Accurate surveying and mapping are essential for safe navigation, coastal management, and marine resource exploitation. Kenya is committed to updating nautical charts and conducting hydrographic surveys to support its Blue Economy.

Challenges and Opportunities:

Investing in modern survey technologies and ensuring compliance with international conventions like UNCLOS and SOLAS will enhance Kenya's maritime safety and resource management. These efforts will also support the sustainable development of Kenya's maritime zones and contribute to the broader goals of the Blue Economy strategy.

2.1.8 Blue Data

Current Status

Reliable data on the Blue Economy is crucial for informed decision-making and sustainable resource management. Currently, data is scattered across various institutions, making it difficult to develop a comprehensive national ocean account.

Challenges and Opportunities

There is a need to centralize and standardize Blue Economy data to improve its accessibility and usability. Developing a national ocean account will facilitate better policy-making, investment decisions, and international collaboration, ultimately enhancing the effectiveness of National Blue Economy Strategy.

2.1.9 Aquatic Tourism

Current Status

Aquatic tourism is a significant contributor to Kenya's economy, with inland water and coastal tourism accounting for 65% of the Blue Economy's contribution. The sector offers immense potential for growth, particularly in areas like dolphin and whale watching, sport fishing, and marine-themed attractions.

Challenges and Opportunities

Expanding aquatic tourism must be done sustainably to protect Kenya's marine and inland water ecosystems. There is potential to develop new tourism experiences, such as maritime museums and aquariums, while also promoting sustainable fishing practices and enhancing coastal conservation efforts.

2.1.10 Blue Economy Science, Research, Technology, and Innovation

Current Status:

Research and innovation are key to unlocking the potential of Kenya's Blue Economy. Focus areas include marine biotechnology, renewable energy, and maritime spatial planning.

Challenges and Opportunities

Building robust research infrastructure and fostering partnerships will be critical in advancing Kenya's scientific and technological capabilities in the Blue Economy. Investing in education and training, particularly in technical and vocational education, will ensure that Kenya has the skilled workforce needed to drive innovation and growth in this sector.

2.1.11 Marketing of Fish and Fishery Products

Current Status

The fisheries industry is a significant source of income and employment. However, the market share of Kenya's fish exports is minimal, contributing only 0.005% to global markets.

Challenges and Opportunities

Enhancing the traceability of fish products, developing new aquaculture markets, and launching a «Brand Kenya» campaign could significantly increase the market share and revenue from fish exports. Addressing challenges related to fish safety, supply deficits, and market access will be critical to achieving this goal.

2.1.12 Infrastructure

Current Status:

Kenya's lack of fish port facilities and cold chains has limited its ability to fully exploit its Exclusive Economic Zone (EEZ).

Challenges and Opportunities:

Developing fish ports in Lamu, Liwatoni-Mombasa, and Shimoni, and linking near-shore fisheries to offshore commercial fisheries will boost employment and revenue, transforming Kenya into a transshipment hub. Investing in infrastructure will also support the growth of related industries, such as fish processing and canning, further enhancing the economic benefits of the Blue Economy.

2.3. Policy, Legal and Institutional Framework

2.3.1 Global Context

A) Sustainable Development Agenda 2030

In 2015, the United Nations adopted the Sustainable Development Goals (SDGs), which include specific targets relevant to the Blue Economy. Key goals include:

- **SDG 1**
  Eradicating poverty.
- **SDG 2**
  Ensuring food security through sustainable agriculture and fisheries.
- **SDG 7**
  Promoting sustainable energy access.
- **SDG 8**
  Fostering sustainable economic growth and decent work.
- **SDG 13**
  Addressing climate change.
- **SDG 14**
  Conserving oceans and marine resources. These goals require integrated strategies that consider the interlinkages between economic growth, environmental protection, and social inclusion.

B) Sustainable Blue Economy Conference (SBEC) 2018

The 2018 Global Sustainable Blue Economy Conference in Nairobi culminated in the Nairobi Statement of Intent, which emphasized the need for global cooperation in the Blue Economy. Key outcomes included commitments to promote sustainable partnerships, mobilize public and private financing, enhance access to technology and innovation, and strengthen governance mechanisms.

The conference also highlighted the importance of gender equality and the role of youth in the Blue Economy, leading to 191 voluntary commitments worth approximately US$172.2 billion across various sectors.

C) The Commonwealth Blue Charter

The Commonwealth Blue Charter, implemented through Action Groups led by 'Champion» countries, focuses on improving the stewardship of marine resources. It advocates for an integrated approach to building the Blue Economy, recognizing the value of traditionally overlooked sectors like artisanal fishing and emphasizing the inclusion of women and young people.

D) Illegal, Unreported, and Unregulated (IUU) Fishing

Globally, IUU fishing is a significant issue, accounting for up to 50% of the catch in some regions and costing Kenya about KSh. 90 billion annually. This illegal activity undermines fishery sustainability, depletes fish stocks, and threatens food security. Kenya has joined global efforts to combat IUU fishing by ratifying the FAO Port State Measures Agreement (PSMA) of 2009, aimed at preventing and eliminating IUU fishing.

E) United Nations Decade of Ocean Science for Sustainable Development (2021-2030)

This initiative, supported by Kenya, aims to generate the knowledge necessary for achieving a healthy and sustainable ocean. The decade focuses on promoting ocean science to support SDG 14 and enhance ocean governance, safety, and resilience.

2.3.2 Continental Level Context

A) African Blue Economy Strategy (ABES)

The ABES, developed in alignment with the 2018 Nairobi Sustainable Blue Economy Conference, focuses on five thematic areas critical to the Blue Economy in Africa:

1. Fisheries, aquaculture, and conservation.
2. Tourism in inland water bodies.
3. Shipping, transport, trade, and maritime security.
4. Coastal tourism, climate resilience, and infrastructure.
5. Sustainable energy and mineral resources.
6. Governance, employment, and innovative financing. These thematic areas aim to promote sustainable growth, address climate change, and enhance maritime safety and security while fostering regional cooperation and maximizing the economic benefits of Africa's Blue Economy.

B) Africa's Integrated Maritime Strategy 2050 (AIMS 2050)

AIMS 2050 seeks to harness Africa's Ocean resources to drive economic growth, wealth creation, and sustainable development. The strategy emphasizes the importance of maritime security, environmental sustainability, and economic diversification, aligning with the broader objectives of the African Union's Agenda 2063.

C) African Union Agenda 2063

Agenda 2063 is a strategic framework for the socio-economic transformation of Africa, aiming to achieve a peaceful, integrated, and prosperous continent. It envisions harnessing Africa's natural resources, including its oceans and seas, to drive inclusive growth and sustainable development, positioning Africa as a global player in the Blue Economy.

D) Economic Commission for Africa (ECA)

The ECA has urged African states to integrate the Blue Economy into their national and regional development plans. The ECA's Blue Economy policy handbook highlights the need for strong legal, regulatory, and institutional frameworks, social inclusion, and environmental sustainability. It also emphasizes the importance of regional cooperation, trade, and infrastructure development, particularly through the African Continental Free Trade Area (AfCFTA).

2.3.3 Regional Level Context

A. East African Community (EAC) Regional Blue Economy Strategy

The EAC Blue Economy strategy aims to harness the aquatic resources of the region, from the Indian Ocean to inland water bodies, for sustainable development. The strategy focuses on advancing knowledge in marine biotechnology, environmental sustainability, and the development of a robust shipping and transport network. It seeks to drive inclusive economic growth and social prosperity while protecting the environment.

B. FAO Blue Growth Initiative (BGI)

The FAO BGI aims to support the sustainable development of fisheries and aquaculture in Eastern Africa by improving governance, conserving biodiversity, and empowering communities. The initiative focuses on maximizing the economic and social benefits of aquatic resources while minimizing environmental degradation.

C. IGAD Regional Blue Economy Strategy and Implementation Plan (2021-2025)

The IGAD strategy aims to enhance cooperation among member states and support the implementation of the Africa Blue Economy Strategy. It focuses on improving national Blue Economy strategies, fostering regional integration, and developing unifying initiatives that stimulate economic growth and sustainable development.

D. COMESA Blue Economy Strategy

The COMESA strategy embraces the Blue Economy as a mechanism for sustainable economic development across its 21 member states. It covers a wide range of sectors, including fisheries, tourism, transport, and energy, and emphasizes the importance of structural transformation, innovation, and regional cooperation.

E. Indian Ocean Rim Association (IORA) Working Group on Blue Economy

Kenya plays a key role in IORA's Blue Economy initiatives, particularly in maritime safety, fisheries management, and disaster risk management. The IORA Working Group promotes sustainable development and economic growth through initiatives like the Great Blue Wall, WWF's Seascape Strategy, and the Africa Oceans Strategy on blue bonds.

2.3.4 National Level Context

The national policies, legislation, and regulations are integral to effective strategy implementation and operationalization. The existing legal frameworks that govern issues that are directly and/or indirectly linked to blue economy development include:

Table 1: National legislations and regulations

Policy/Act	Key Provisions Relevant to Blue Economy
The Constitution of Kenya 2010	- Ensures sustainable exploitation, utilization, management, and conservation of the environment. - Grants every person the right to a clean and healthy environment and access to clean, safe water. - Divides functions between National and County Governments for environmental management.
Fisheries Management and Development Act Cap 378	- Promotes sustainable use and conservation of fisheries resources. - Enhances the livelihood of fishing communities and food security.
Climate Change Act of 2016	- Promotes low-carbon climate development. - Integrates climate change measures into sustainable development.
Environmental Management and Coordination Act No. 8 of 1999	- Requires Environmental Impact Assessments (EIA) for activities impacting the environment, including land use changes and forestry activities.
National Land Commission Act of 2012	- Recommends national land policy. - Conducts research related to land and natural resources. - Oversees land use planning across the country.
Land Act of 2012	- Emphasizes sustainable and productive land resource management. - Protects ecologically sensitive areas.
Physical and Land Use Planning Act No. 13 of 2019	- Governs the preparation of spatial development frameworks, including in blue economy spaces. - Promotes environmental protection and conservation.
Survey Act Cap 299	- Delineates and delimits boundaries for the sustainable management of water bodies and riparian reserves. - Supports Kenya's obligations under international conventions like UNCLOS.
Kenya Kwanza Plan (2022-2027)	- Integrates Blue Economy strategy through Environment, Climate Change, and MSME economy pillars. - Emphasizes capacity building for small-scale enterprises and sustainable resource utilization.
The Kenya Fisheries Policy 2023	- Guides sustainable development and management of fisheries.

Policy/Act	Key Provisions Relevant to Blue Economy
National Aquaculture Policy 2011	- Addresses production technologies, seed quality, feed quality, and sector investment.
Sessional Paper No.3 of 2009 on National Land Policy	- Promotes conservation of Inland,marine and coastal resources. - Recommends surveys of aquatic resources for sustainable land use.
Sessional Paper No.1 of 2017 on National Land Use Policy	- Emphasizes restoration and protection of blue economy-linked ecosystems. - Encourages integrated land use plans for sustainable water resource utilization.
National Spatial Plan 2015-2045	- Promotes infrastructure and human capacity development for Blue Economy. - Advocates for laws and regulations supporting sustainable resource use.

2.4 Policy Reforms

The EAC Blue Economy strategy aims to harness the aquatic resources of the region, from the Indian Ocean to inland water bodies, for sustainable development. The strategy focuses on advancing knowledge in marine biotechnology, environmental sustainability, and the development of a robust shipping and transport network. It seeks to drive inclusive economic growth and social prosperity while protecting the environment.

2.4 Legal Reforms

The principal statutes in Kenya that regulate and govern fisheries are the Constitution, the Fisheries Management and Development Act Cap 378, the Maritimes Zones Act (CAP 371); the Water Act Cap 372, Wildlife Conservation and Management Act Cap 376; Climate Change Act Cap 387A; the Environment Management and Coordination Act Cap 387; Merchants Shipping Act Cap 389) ;the Land Act Cap 280; Land Registration Act, Cap 300; the Intergovernmental Relations Act, Cap 265F and the County Governments Act, Cap 265.

In the Fisheries and Aquaculture sub sector, the following Regulations were successfully developed by the Ministry of Mining, Blue Economy and Maritime Affairs through the State Department for the Blue Economy and Fisheries and approved by Parliament(National Assembly and the Senate) for better management and utilization of the fisheries and aquatic resources: Fisheries Management and Development Regulations (Beach Management Units), Regulations, Legal Notice No. 121 of 2024; Fisheries Management and Development (Aquaculture), Regulations, Legal Notice No. 126 of 2024; Fisheries Management and Development (Recreational Fisheries), Regulations, Legal Notice No. 127 of 2024; Fisheries Management and Development (Marine Fisheries), Regulations, Legal Notice No. 125 of 2024; Fisheries Management and Development (Inland Fisheries) Regulations, Legal Notice No. 122 of 2024; Fisheries Management and Development (General) Regulations Legal Notice No. 124 of 2024; Fisheries Management and Development (Fish Levy Trust Fund)

Order, Legal Notice No. 123 of 2024 and the Fisheries Management and Development (Safety and Quality) Regulations, Legal Notice No. 120 of 2024.

The following Regulations are currently under development and are yet to be finalized: The Proposed Monitoring Control and Surveillance(MCS) Regulations, 2026, the Proposed Fishing Gear Marking Regulations, 2026 and the proposed Cage Culture Regulations 2026.

2.5 Crosscutting Issues in Blue Economy Sector

The following crosscutting issues are critical for the successful implementation of the National Blue Economy Strategy, each contributing uniquely to the sustainability and resilience of the sector.

2.5.1 Gender Mainstreaming

The Blue Economy is predominantly male-driven, with women occupying the lowest-paying and least protected jobs, making up only 1.2% of the seafarer workforce. To rectify this imbalance, it is essential to develop and enforce laws and policies that increase women's participation in decision-making processes, leadership roles, and access to resources. The strategy will incorporate gender-based budgeting, access to finance, and support initiatives like the Hustler Fund aimed at empowering women.

2.5.2 Climate Change

Climate change poses significant threats to the Blue Economy, including rising sea levels, ocean acidification, and extreme weather events, which negatively impact marine ecosystems and economic growth. The strategy emphasizes strengthening the resilience of blue ecosystems, mainstreaming climate change adaptation and mitigation across all sectors, and promoting renewable energy and technological innovation to safeguard socio-economic development.

2.5.3 Social Issues and Community Well-Being

The sustainable development of Kenya's blue economy requires addressing critical social challenges that impact local communities. Crosscutting social issues such as transmissible diseases (e.g., HIV/AIDS and tuberculosis), drug abuse, child labor, and exploitation, including prostitution in tourism hotspots, are significant barriers to community well-being. These issues undermine productivity, perpetuate cycles of poverty, and hinder equitable participation in blue economy opportunities. The strategy emphasizes adopting inclusive, community-centered approaches to tackle these challenges, including healthcare access, education, enforcement of child protection laws, substance abuse rehabilitation programs, and ethical tourism standards. Addressing these social issues holistically will foster healthier, resilient, and empowered communities to fully participate in and benefit from Kenya's blue economy.

2.5.4 Youth and Persons Living with Disabilities (PLWD)

With youth comprising 29.1% of Kenya's population, their inclusion in the blue economy is crucial. The strategy seeks to create specific opportunities for youth and PLWD, ensuring their representation in decision-making processes and providing targeted support through skills training, entrepreneurship programs, and access to finance, aligned with the Kenya Kwanza Plan.

2.5.5 Maritime Domain Awareness (MDA)

MDA is essential for securing the blue economy by enhancing maritime security. The strategy recommends confirming maritime boundaries, conducting regular ecosystem surveys, and strengthening surveillance and monitoring systems. This includes cooperation with neighboring states and prioritizing local training, access to satellite data, and implementing effective cybersecurity measures.

2.5.6 Disaster and Risk Management

The growth of the Blue Economy introduces new risks, including oil spills, natural disasters, and pollution. A comprehensive disaster response system, including joint operation centers and enhanced education and awareness, is necessary. The strategy will focus on improving communication, access to data, and clear responsibilities to manage and mitigate these risks effectively.

2.5.7 Pollution and the Circular Economy

Maritime pollution is a global concern, affecting both human health and marine life. Kenya's strategy aligns with international conventions like MARPOL, promoting a circular economy that turns waste into resources. This includes community-based value chains for waste collection, recycling, and reuse, supporting Kenya's environmental and economic sustainability goals.

2.5.8 Health and Safety

Health and safety are critical components of National Blue Economy Strategy, particularly in addressing communicable and waterborne diseases that disproportionately affect coastal communities.

The strategy emphasizes improving healthcare infrastructure, access to clean water, and sanitation facilities, alongside public health awareness campaigns.

2.5.9 Interborder Security (Terrorism and Piracy)

Interborder security challenges, including terrorism and piracy, threaten the stability and growth of Kenya's Blue Economy. These issues disrupt maritime trade, endanger lives, and deter investment. The strategy prioritizes enhancing regional cooperation with neighboring states to combat transnational crimes, share intelligence, and conduct joint maritime patrols. Strengthening legal frameworks, improving border surveillance technologies, and investing in coastal community policing initiatives will further mitigate these risks. By addressing inter-border security, Kenya can create a safer environment for economic activities and foster regional stability.

2.5.10 Artificial Intelligence (AI)

Artificial Intelligence (AI) presents transformative opportunities for Kenya's Blue Economy, from optimizing fisheries management to enhancing maritime security and disaster response. The strategy advocates for integrating AI-driven technologies, such as predictive analytics for climate change impacts, automated monitoring systems for illegal fishing, and AI-powered tools for pollution tracking. Capacity building in AI research and development, coupled with partnerships with tech innovators, will ensure Kenya harnesses these advancements effectively.

PART TWO

NATIONAL BLUE ECONOMY STRATEGIC DIRECTIONS OBJECTIVES AND INTERVENTIONS

DIRECTION ONE: SUSTAINABLE UTILIZATION

This strategic direction is about **Sustainable natural resource management**. It prioritizes Sustainable natural resource management the long-term conservation and responsible stewardship of natural resources in the Blue Economy. It seeks to harmonize ecological preservation with economic development, ensuring that resource utilization meets present economic demands without jeopardizing the needs of future generations. The strategy underscores the adoption of advanced technologies, climate-resilient approaches, and community-driven initiatives to optimize value creation while maintaining sustainability.

STRATEGIC FOCUS 1: FISHERIES, AQUACULTURE AND AQUATIC ECOSYSTEM

Goal

To achieve sustainable management, conservation, and development of fisheries, aquaculture, and aquatic ecosystems, ensuring these resources contribute to socio-economic development while maintaining ecological balance.

Objective	Interventions
To promote the application of technologies and innovations in the management of fisheries, aquaculture and aquatic ecosystems.	- Develop and implement advanced technologies such as precision aquaculture systems, remote sensing for fish stock assessment, and advanced breeding techniques.
	- Support research and development (R&D) initiatives to create new technologies that minimize environmental impacts and improve efficiency.
To integrate climate-resilient practices into fisheries and aquaculture.	- Promote the use of climate-adaptive species and sustainable fishing practices.
	- Enhance capacity-building programs for stakeholders to implement climate change mitigation and adaptation strategies.
To enhance post-harvest management, fish marketing, and value addition.	- Develop infrastructure and systems to improve the handling, storage, and transportation of fish and aquatic products.
	- Establish market linkages and value addition strategies to increase the competitiveness of Kenyan fish products in local, regional, and international markets.

Objective	Interventions
	- Promote the establishment of cooperatives and community-based organizations to empower small-scale fishers and aquaculture producers.
To prevent overfishing, rebuild fish stocks, and ensure sustainable fisheries management.	- Implement science-based fisheries management strategies, including harvest control rules, catch limits, and stock rebuilding plans.
	- Enhance monitoring, control, and surveillance (MCS) systems to detect and eliminate illegal, unreported, and unregulated (IUU) fishing.
	- Promote community-based fisheries management (CBFM) initiatives to empower coastal and lake region communities.
To protect and restore critical aquatic habitats.	- Establish marine protected areas (MPAs) and habitat restoration initiatives.
	- Restore and protect mangrove ecosystems through community-led projects.
	- Enhance the protection of fish critical habitats through sustainable utilization and conservation efforts.
	-Develop and implement seagrass protection and restoration policies, integrated into national coastal and marine spatial planning frameworks.
To promote sustainable aquaculture development.	- Develop and implement aquaculture guidelines and standards.
	- Support the expansion of aquaculture activities, including seaweed and shellfish farming, through public-private partnerships.
	- Provide training and resources to local communities to engage in sustainable aquaculture practices.

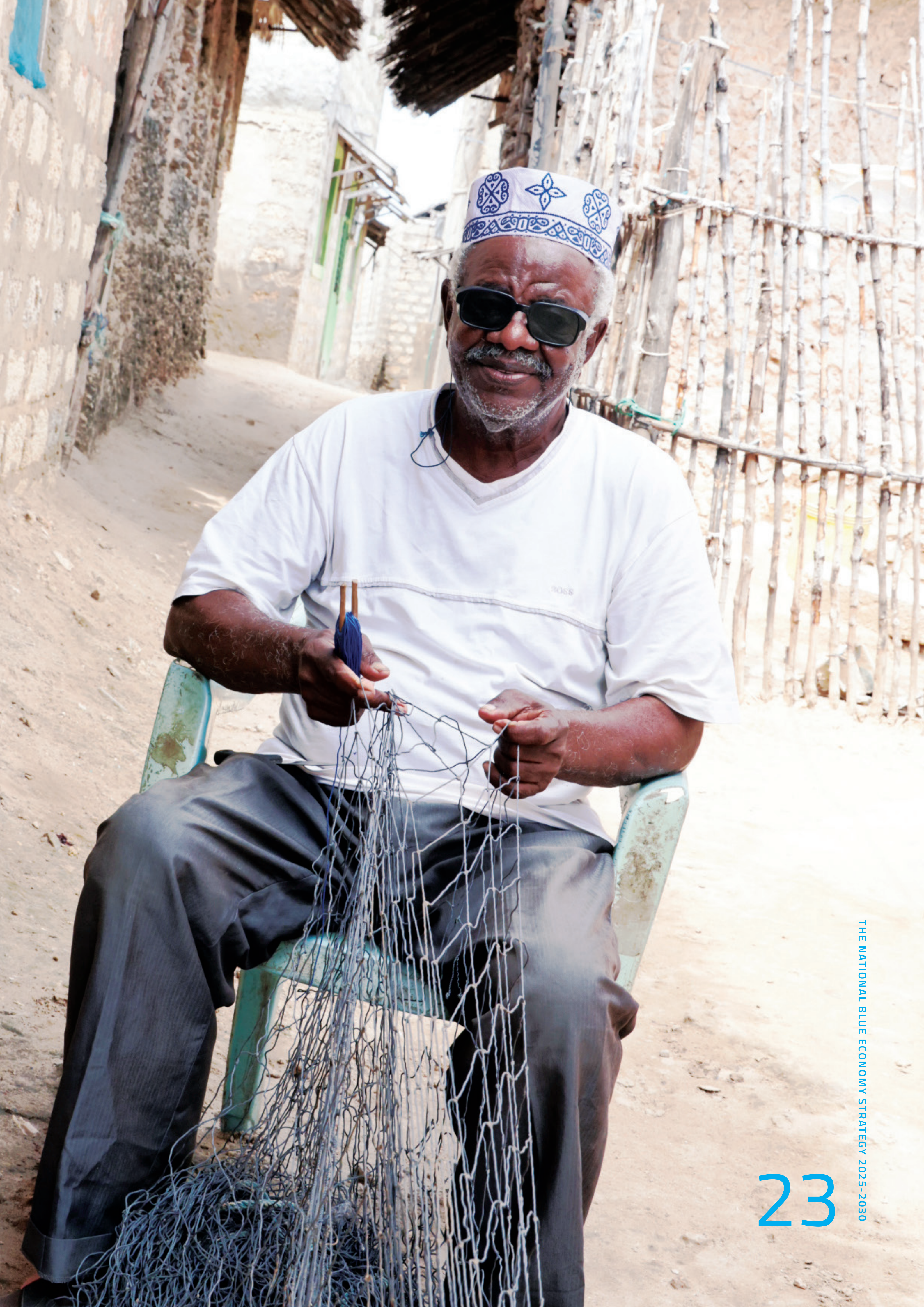
STRATEGIC FOCUS 2:
RENEWABLE ENERGY AND EXTRACTIVE MINERAL RESOURCES

Goal

To optimize the utilization of renewable energy and ensure the sustainable extraction and use of mineral resources within the Blue Economy, contributing to Kenya's energy security, economic growth, and environmental sustainability.

Objective	Interventions
To promote research and training in renewable energy and mineral resources.	- Set up and support research centers focused on exploring renewable energy sources like tidal, wind, wave, and solar energy.
	- Work with universities and technical schools to create training programs that build local skills in renewable energy and sustainable mining.
	- Encourage collaboration between universities, government, and private companies to develop new technologies for energy and mining.
	- Train communities in eco-friendly mining practices and help restore ecosystems affected by mining or energy projects.
To create a system for sharing knowledge and information about renewable energy and extractive mineral resources.	- Build a central database that collects and shares information on renewable energy potential, mineral locations, and extraction methods.
	- Share research findings, market data, and new technologies with stakeholders like government agencies, investors, and local communities in a timely and effective manner.
To strengthen partnerships between the public and private sectors.	- Build strong public-private partnerships (PPPs) that focus on community-centered projects like mariculture, job creation, and sustainable resource use.
	- Encourage collaboration between the public and private sectors to invest in renewable energy and sustainable mining projects.
	- Promote PPPs that prioritize sustainable resource management, balancing economic benefits with environmental protection.

Objective	Interventions
To support community-led efforts in mining and ecosystem restoration.	- Help small-scale miners form cooperatives to share resources, access training, and secure funding.
	- Train local communities in skills like value-added processing and fair benefit-sharing.
	- Support community projects that involve locals in mining and ecosystem restoration, ensuring they benefit from resource use in their areas.
	- Encourage the formation of cooperatives and community groups to manage sustainable mining and ensure fair benefits for everyone involved.
To promote responsible and sustainable mining practices.	- Develop a master plan for exploring deep-water and offshore mining in Kenya's Blue Economy.
	- Launch a national program to research and develop products like medicines, biofuels, and cosmetics from marine and freshwater resources.
	- Create and enforce regulations to ensure mining is done responsibly and with minimal harm to the environment.
	- Improve coordination between government agencies to monitor mining activities and set clear rules for licensing and compliance.



DIRECTION TWO:
ECO-SOCIAL SAFEGUARDS

The direction is concerned with **social and habitat protection.** It emphasizes the critical role of local communities and the preservation of marine and coastal habitat in achieving a sustainable and equitable blue economy in Kenya. It recognizes that empowered communities and healthy ecosystems are essential for long-term prosperity and resilience. It is centered on safeguarding the social well-being of communities by promoting community-led initiatives, enhancing social protection frameworks, and preserving vital ecosystems through protection and restoration of critical habitats within the Blue Economy.

It emphasizes the need for inclusive and equitable approaches that empower local communities to actively participate in the sustainable management of their natural environments.

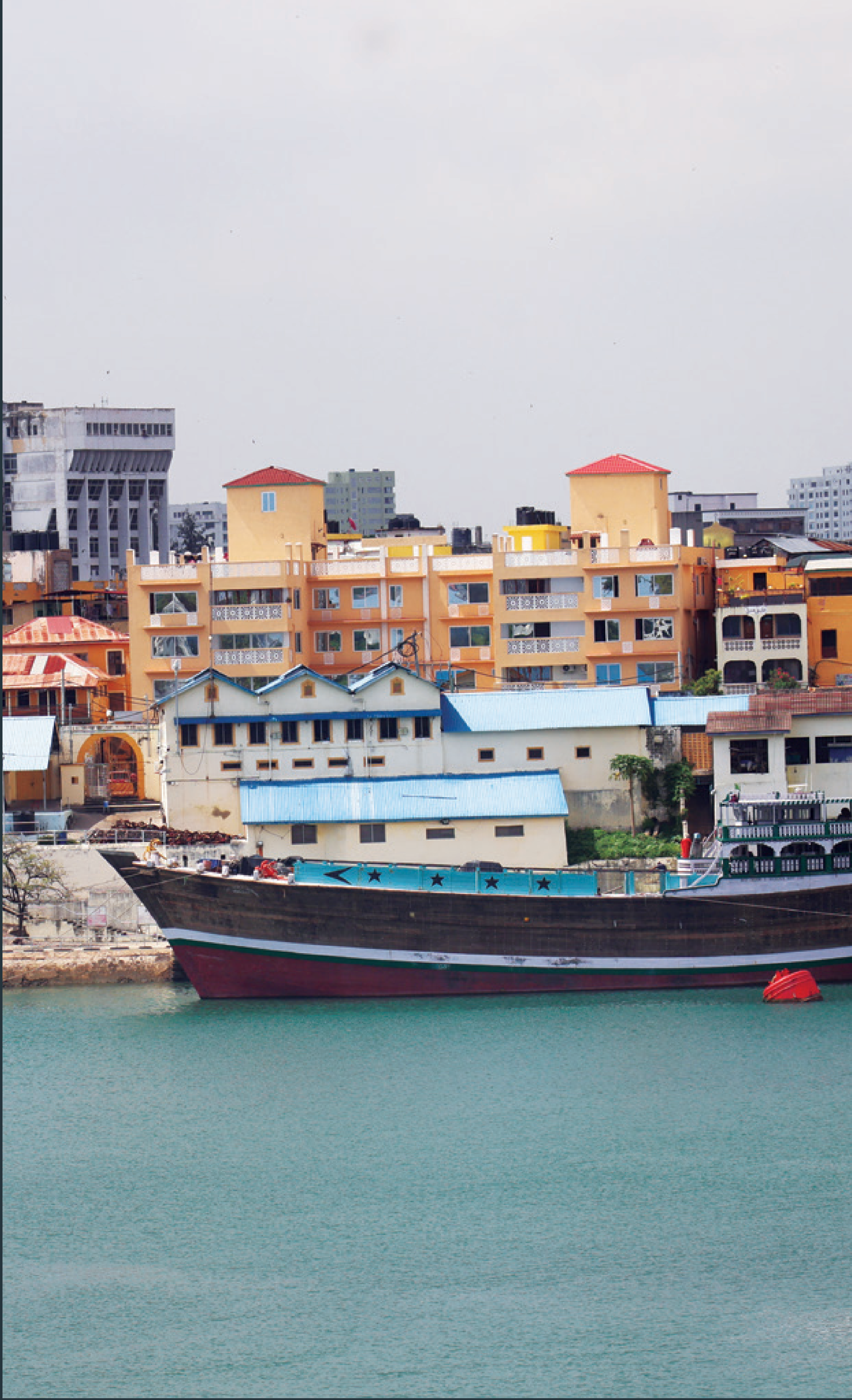
STRATEGIC FOCUS 1:
SOCIAL AND HABITAT PROTECTION

Goal

To promote inclusive and equitable growth in Kenya's Blue Economy while ensuring community empowerment and environmental sustainability by integrating gender equity, social inclusion, cultural preservation, climate resilience, habitat protection and sustainable ecosystem management into the development and management of Blue Economy sectors.

Objective	Interventions
To promote gender equality and inclusivity in the Blue Economy.	- Provide women and youths with training in skills, Science, Technology, Engineering and Mathematics (STEM) education, and leadership to increase their involvement in Blue Economy sectors.
	- Create and enforce policies that ensure fair representation, decision-making, and safe workplaces for women.
	- Improve women's and youth's access to funding, markets, and business opportunities to support inclusive growth and fair benefit-sharing.
To protect fragile habitats and ensure environmental sustainability in Blue Economy areas.	- Develop frameworks for managing ecosystems sustainably, focusing on conserving biodiversity and protecting critical habitats.

Objective	Interventions
	- Create strategies to manage risks from climate change and other environmental challenges affecting Blue Economy activities.
	- Build and equip laboratories for Hazard Analysis Critical Control Points (HACCP)
	- Restore and protect mangrove forests through community-led projects, set up protected areas, and educate communities about their ecological and economic value.
To empower communities in Blue Economy zones through better livelihoods and sustainable resource use.	- Promote seaweed farming as a new income source for coastal communities, especially for women and youth, while using it to fight climate change and restore habitats.
	- Include climate change adaptation and mitigation strategies in Blue Economy planning to help vulnerable communities become more resilient.
	- Support community-led approaches to managing resources, ensuring locals benefit from sustainable use of Blue Economy resources.
	- Empower coastal communities by creating sustainable jobs, ensuring fair use of resources, and encouraging active participation in the Blue Economy while protecting ecosystems and cultural heritage.
To improve community well-being by addressing social challenges like diseases, drug abuse, child labor, and exploitation.	- Work with local stakeholders to run health and social awareness campaigns on diseases, drug abuse prevention, and rehabilitation.
	- Strengthen enforcement of child protection laws in coastal areas, monitor tourism activities for exploitation risks, and promote community-led ecotourism that provides fair jobs and protects cultural heritage.
	- Advocate for policies that include social safeguards to protect vulnerable groups and ensure accountability in the Blue Economy.



DIRECTION THREE: **SKILL SMART WORKFORCE**

Direction three focuses on human resource development and innovations by developing a skilled, capable knowledgeable and adaptable workforce to drive sustainable and inclusive growth in Kenya's Blue Economy. It recognizes that human capital is a critical asset and emphasizes the importance of investing in education, training, and capacity building to empower individuals and communities to actively participate in and benefit from the Blue Economy.

It emphasizes the importance of equipping individuals, communities, and institutions with the knowledge, skills, and tools necessary to drive sustainable growth in the Blue Economy. It further focuses on fostering a culture of continuous learning and innovation by enhancing training programs, promoting research and development, and encouraging the adoption of cutting-edge technologies. By investing in capacity building and nurturing innovation, this direction seeks to empower stakeholders to effectively manage resources, adapt to changing environmental and economic conditions, and contribute to the long-term prosperity of the sector.

STRATEGIC FOCUS 1: HUMAN RESOURCE CAPACITY DEVELOPMENT AND MARKETING

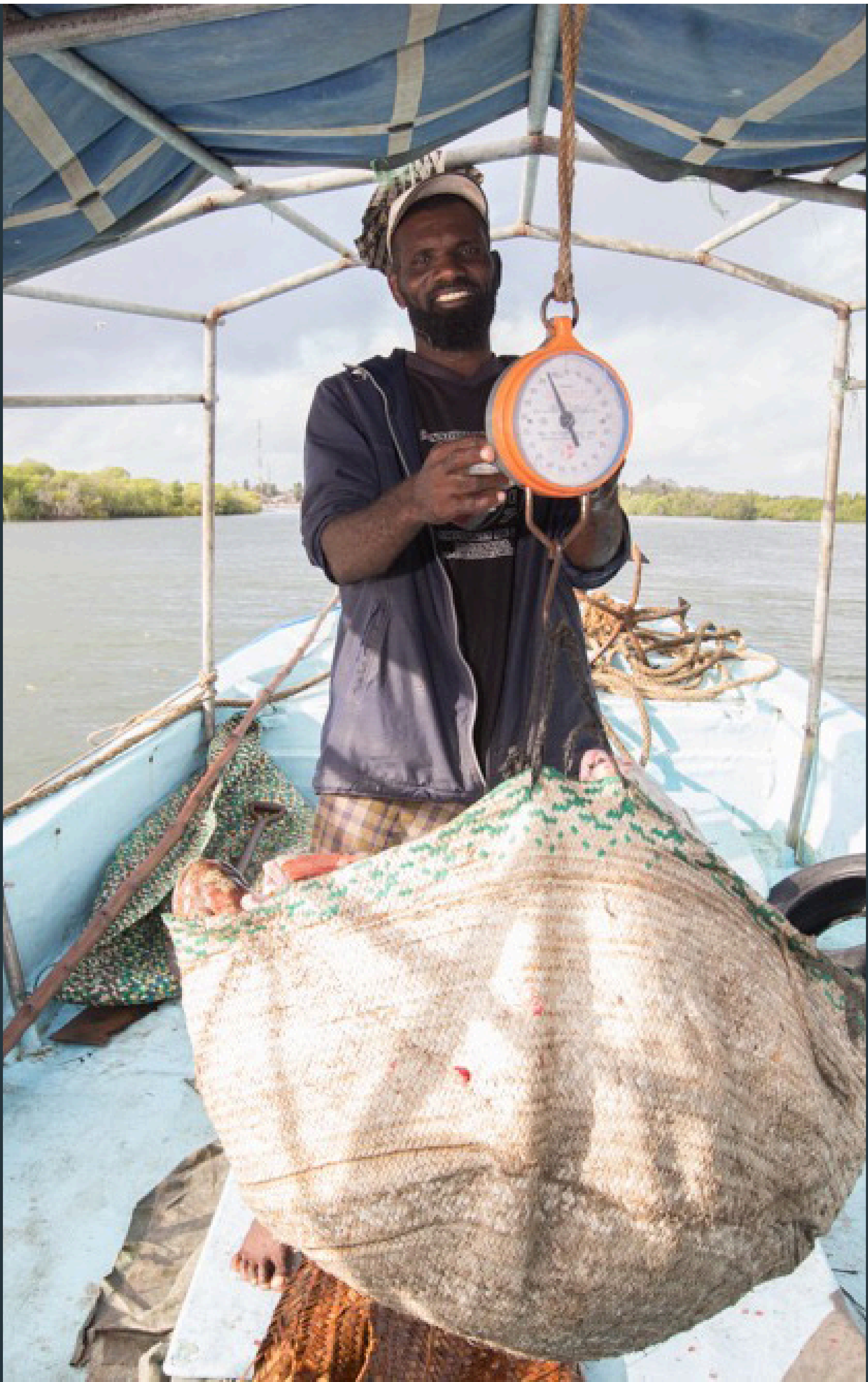
Goal

To build and enhance the human resource capacity and marketing required to drive sustainable development in the Blue Economy, ensuring that Kenya has the skilled workforce necessary to manage, innovate, and sustainably utilize its Blue Economy resources.

Objective	Interventions
To promote research, innovations, and technologies for sustainable utilization of Blue Economy Resources.	- Invest in research institutions and programs focusing on innovations in the Blue Economy, such as sustainable resource extraction, environmental conservation, and renewable energy development.
	- Facilitate capacity-building initiatives to train individuals and organizations in the latest technologies and methodologies for resource management, data analytics, and environmental monitoring.
	- Develop mechanisms for the effective transfer and adoption of new technologies within the Blue Economy, ensuring stakeholders at all levels from local communities to national agencies can implement and benefit from these innovations.

Objective	Interventions
To enhance apprenticeship, Indigenous knowledge, and emerging knowledge transfer in Blue Space Development.	- Establish apprenticeship programs to provide hands-on training in Blue Economy sectors like inland freshwater lakes, maritime industries, aquaculture, and marine conservation, enabling the workforce to gain practical skills and knowledge.
	- Integrate Indigenous knowledge systems with modern practices, recognizing and preserving traditional expertise in sustainable fishing, marine resource management, and coastal conservation.
	- Promote knowledge exchange programs to transfer emerging global best practices to local contexts, ensuring Kenya's Blue Economy development is informed by cutting-edge research and global trends.
To facilitate capacity building in value addition, product development, and exploitation of Blue Economy resources.	- Support training programs focused on value addition and product development within the Blue Economy, helping businesses and communities enhance the marketability and profitability of marine and coastal products.
	- Encourage entrepreneurship and innovation in developing new products and services from Blue Economy resources, such as marine-based pharmaceuticals, sustainable seafood products, and ecotourism ventures.
	- Establish partnerships with educational institutions, private sector players, and international organizations to offer specialized courses and certifications for careers in value-added industries within the Blue Economy.
	- Enhance branding and packaging of products from inland water bodies and marine ecosystems to boost market competitiveness.
	- Integrate Blue Economy awareness into school curricula to foster early education and innovation.
	- Develop complete fish value-chains for both inland and aquatic ecosystems.
To enhance the human capital and innovative capacities necessary for sustainable blue economy development.	- Develop specialized training programs on blue economy governance, focusing on sustainable resource management and innovation.

Objective	Interventions
	- Establish Blue Economy Centers of Excellence in collaboration with universities and research institutions to focus on research, development, and capacity building.
	- Promote public-private partnerships for skill development in emerging blue economy sectors, ensuring alignment with industry needs.



STRATEGIC FOCUS 2: TECHNOLOGY AND RESEARCH FOR INNOVATION

Goal

To leverage advanced technologies and research to drive innovation, sustainability, and efficiency in Kenya's Blue Economy, ensuring the sector is equipped with cutting-edge solutions for resource management, environmental conservation, and economic growth.

Objective	Interventions
Promote Research and Development (R&D) in Blue Economy Sectors	- Invest in research institutions and programs focused on sustainable resource extraction, environmental conservation, renewable energy, and climate-resilient practices.
	- Support interdisciplinary research collaborations between universities, government agencies, and private sector players.
	- Develop a Blue Economy innovation fund to provide grants for research projects addressing overfishing, habitat degradation, and pollution.
	- Promote marine biotechnology research to explore marine-based products like biofuels, pharmaceuticals, and cosmetics.
Facilitate the Adoption of Advanced Technologies	- Introduce precision aquaculture systems, remote sensing for fish stock assessment, and advanced breeding techniques.
	- Use blockchain and AI for traceability in seafood and inland supply chains, AI for market analysis, and IoT for real-time monitoring of marine ecosystems.
	- Invest in satellite technology, drones, and underwater sensors to enhance maritime domain awareness (MDA) and detect illegal fishing.
	- Develop and deploy tidal, wave, and offshore wind energy systems to promote renewable energy.
Strengthen Knowledge Transfer and Innovation Ecosystems	- Establish innovation hubs and incubators to support startups and entrepreneurs in Blue Economy sectors.
	- Facilitate knowledge exchange programs with global research institutions to transfer emerging technologies and best practices.
	- Integrate indigenous knowledge systems with modern technology for sustainable fishing and marine conservation.

Objective	Interventions
	- Develop technology transfer mechanisms to ensure new technologies are accessible to local communities, small-scale fishers, and aquaculture producers.
	- Develop a Blue economy technology action plan to ensure the latest technologies like blockchain, Artificial Intellgence (AI), Internet of Things (IOT) etc are mainstreamed.
Enhance Data Collection and Analytics for Decision-Making	- Build a centralized Blue Economy data platform for collecting, analyzing, and sharing data on marine resources, environmental conditions, and economic activities.
	- Promote open data initiatives to make research findings, market data, and technological innovations accessible to all stakeholders.
	- Invest in data analytics and modeling tools to predict trends in fish stocks, climate change impacts, and market demand.
	- Train stakeholders in data utilization for sustainable resource management and economic planning.
Foster Public-Private Partnerships for Technology Development	- Encourage private sector investment in R&D through tax breaks and grants.
	- Develop collaborative research projects between universities, research institutions, and private companies.
	- Support technology-driven startups through funding, mentorship, and access to markets.
	- Establish technology demonstration centers to showcase and pilot new technologies.

DIRECTION FOUR: **SHARED PROSPERITY**

This direction aims to promote economic growth and community prosperity emphasizing economic well-being, improved livelihoods, and social inclusion through the sustainable and responsible use of inland and coastal resources. It highlights the importance of ensuring that the benefits of the Blue Economy are equitably distributed, reaching all segments of society, particularly marginalized and vulnerable communities.

It emphasizes the application of transformative reforms and the development of robust infrastructure, as well as effective systems to enhance transport, trade, and ecotourism within the Blue Economy for overall economic growth and community prosperity. By upgrading transportation networks, port facilities, hospitality infrastructure, and digital systems, it aims to facilitate the efficient movement of goods and services, attract international tourists, and improve the overall visitor experience. This direction seeks to bolster economic growth by making local products more competitive in global markets and positioning the region as a premier destination for sustainable tourism.

STRATEGIC FOCUS 1: MARITIME TRANSPORT AND TRADE

Goal

To establish and enhance effective, reliable, and secure maritime transport systems and trade networks, positioning Kenya as a key player in local, regional, and international markets.

Objective	Interventions
To develop reliable maritime transport systems and trade networks for local, regional, and international markets.	- Expand and modernize port facilities, including new inland and coastal ports, to handle larger cargo volumes and bigger vessels.
	- Improve inland waterway transport by developing supporting infrastructure like inland ports, rail links, and road networks.
	- Use digital solutions and smart technologies (e.g., automated cargo systems, real-time tracking) to boost port efficiency and reduce turnaround times.
	- Establish cross-border transport routes connecting Kenya to Tanzania, Somalia, and neighboring countries.
	- Work with regional bodies like IGAD and EAC to harmonize regulations and promote maritime trade and passenger transport.

Objective	Interventions
	- Encourage green shipping by incentivizing renewable energy-powered vessels and reducing greenhouse gas emissions.
	- Promote public-private partnerships (PPPs) to develop and manage modern marine fleets.
	- Support cabotage transport by developing policies, infrastructure, and private sector investment for sustainable movement of Blue Economy products.
To improve labor-force reforms in the Blue Economy sector.	- Launch training programs and maritime education initiatives to equip Kenyans with skills in ship management, logistics, and maritime safety.
	- Advocate for labor reforms to enable Kenyan seafarers and maritime professionals to work in global shipping companies, positioning Kenya as a source of skilled maritime labor.
To strengthen international trade relations and connectivity.	- Build stronger diplomatic and trade ties with key partners to expand Kenya's maritime trade routes and market access, especially in the Indian Ocean region.
	- Negotiate and join regional and international maritime trade agreements to boost Kenya's competitiveness and access global trade opportunities.
	- Develop free trade zones and special economic zones in maritime hubs to attract foreign investment and stimulate trade.
To enhance maritime security and safety.	- Strengthen the Kenya Coast Guard, Navy, and other agencies to secure maritime borders and prevent illegal activities like piracy, smuggling, and illegal fishing.
	- Implement advanced surveillance systems (e.g., satellite tracking, radar, AIS) for real-time monitoring of maritime traffic and safe navigation.
	- Collaborate with regional and international partners to share intelligence, conduct joint security operations, and improve coordination in responding to maritime threats.

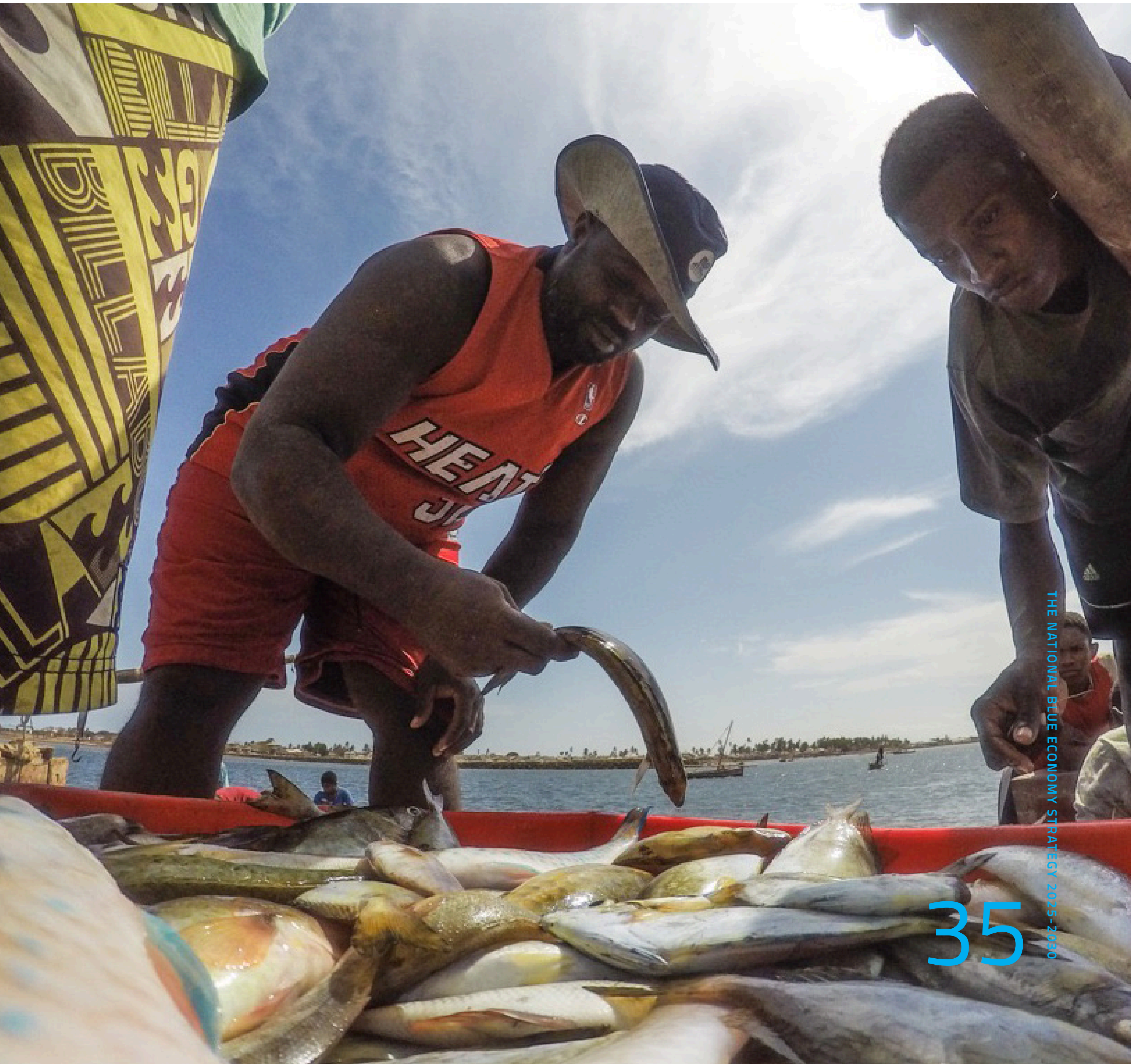
STRATEGIC FOCUS 2: SUSTAINABLE BLUE ECONOMY TOURISM

Goal

To promote integrated, sustainable, and commercially viable Blue Economy tourism that contributes to Kenya's socio-economic development while preserving the natural and cultural heritage of its aquatic environments.

Objective	Interventions
To promote sustainable green and aquatic business models in the Blue Economy.	- Create regulatory frameworks and incentives to encourage sustainable tourism practices, focusing on ecotourism that protects the environment, involves communities, and preserves culture.
	- Develop green certification programs for tourism operators to ensure they meet sustainability standards that safeguard Kenya's Blue Economy ecosystems.
To develop climate-resilient tourism infrastructure and sustainable cities.	- Invest in eco-friendly tourism infrastructure like hotels, resorts, and transport systems that can withstand climate change impacts while reducing environmental harm.
	- Work with urban planners to design sustainable coastal cities that integrate tourism with climate adaptation, waste management, and renewable energy solutions.
	- Develop local tourism opportunities around lakes, rivers, and coastal areas, promoting community-based tourism and improving infrastructure to enhance visitor experiences.
To support community-based ecotourism centers.	- Encourage the creation of community-run ecotourism centers that allow locals to manage and benefit from tourism, while protecting inland water, marine, and coastal resources.
	- Promote eco-tourism activities like lake tourism, sport fishing, and conservation-based attractions.
	- Invest in sustainable tourism infrastructure around major lakes and rivers.
	- Provide training and funding to communities to develop ecotourism businesses, such as guided tours, cultural experiences, and marine conservation activities.

Objective	Interventions
To promote recreational and sport tourism in Blue Economy spaces.	- Market Kenya's Blue Economy as a top destination for recreational and sport tourism, including scuba diving, snorkeling, sport fishing, and sailing.
	- Partner with international sport tourism organizations to host large-scale events that showcase Kenya's marine and coastal attractions, boosting tourism revenue and global visibility.
	- Ensure all recreational and sport tourism activities are environmentally friendly, with regulations to prevent over-tourism and protect natural ecosystems.



DIRECTION FIVE: COLLECTIVE STEWARDSHIP

The direction aims to enhance effective governance frameworks and the importance of transparent, accountable, and participatory governance structures that ensure effective policy implementation, regulatory compliance, and stakeholder engagement. By strengthening institutional capacities, fostering inter-sectoral collaboration, and enhancing legal and regulatory frameworks, this strategy aims to create a governance framework that streamlines sectoral coordination towards a desired goal.

It focuses on establishing and strengthening robust governance structures, policies, and institutions to ensure the sustainable and equitable development of Kenya's blue economy. It emphasizes the importance of clear regulations, transparent decision-making processes, and effective enforcement mechanisms to promote responsible resource management, habitat protection, livelihood promotion, and social inclusivity.

STRATEGIC FOCUS 1: GOVERNANCE AND FINANCING IN THE BLUE ECONOMY

Goal

To establish a robust governance framework that strengthens coordination, cooperation, and data sharing across the Blue Economy sectors, ensuring sustainable utilization and management of Blue Economy resources.

Objective	Interventions
To improve coordination and cooperation among stakeholders for sustainable use of Blue Economy resources.	- Set up formal coordination mechanisms for government, private sector, NGOs, and local communities to work together on planning, decision-making, and resource sharing.
	- Create regular communication channels and working groups to ensure all sectors are aligned with national goals.
	- Build a central database to share best practices, research, and real-time data on resource use and environmental conditions.
	- Develop clear guidelines for collecting, reporting, and sharing data to ensure stakeholders have accurate and timely information for decision-making.
	- Strengthen law enforcement by providing fisheries agencies, coast guards, and local monitoring units with modern tools, training, and legal support for better governance.

Objective	Interventions
To create platforms for stakeholder engagement and inclusive decision-making.	- Launch a National Blue Economy Forum for open discussions on emerging issues, bringing together stakeholders annually to discuss projects, infrastructure, and investments.
	- Use the forum to raise awareness, gather feedback, and build political support for Blue Economy initiatives.
	- Establish an Inter-Ministerial Forum to improve coordination among ministries and agencies, focusing on joint planning, project implementation, and resource mobilization.
	- Develop a structure to involve regional governments in Blue Economy activities, ensuring policies are communicated and implemented locally, with a focus on gender-sensitive and inclusive decision-making.
To develop a clear plan for implementing the Blue Economy strategy and attracting investments.	- Create a detailed Blue Economy Strategy Implementation Framework with specific actions, timelines, and responsibilities.
	- Develop sector-specific investment plans to guide funding for priority projects in the Blue Economy, with clear guidelines for public and private sector involvement.
	- Prepare a comprehensive Blue Economy Master Plan as a long-term roadmap for sustainable development and management of Kenya's Blue Economy.
Strengthen Legal and Regulatory Frameworks for Blue Economy Governance	-Develop, Review and harmonize, existing laws, policies, and regulations to align with emerging Blue Economy priorities, international conventions, and sustainability standards
	-Develop clear mandates and coordination frameworks among national and county institutions involved in the Blue Economy to eliminate duplication and ensure cohesive policy implementation.
	-Build capacity for regulatory agencies to monitor, enforce, and ensure compliance with Blue Economy policies, including through the use of digital tools and community-based enforcement.
	-Develop fiscal and policy incentives (e.g., subsidies, tax reliefs, green finance frameworks) that promote private sector investment in sustainable Blue Economy sectors.

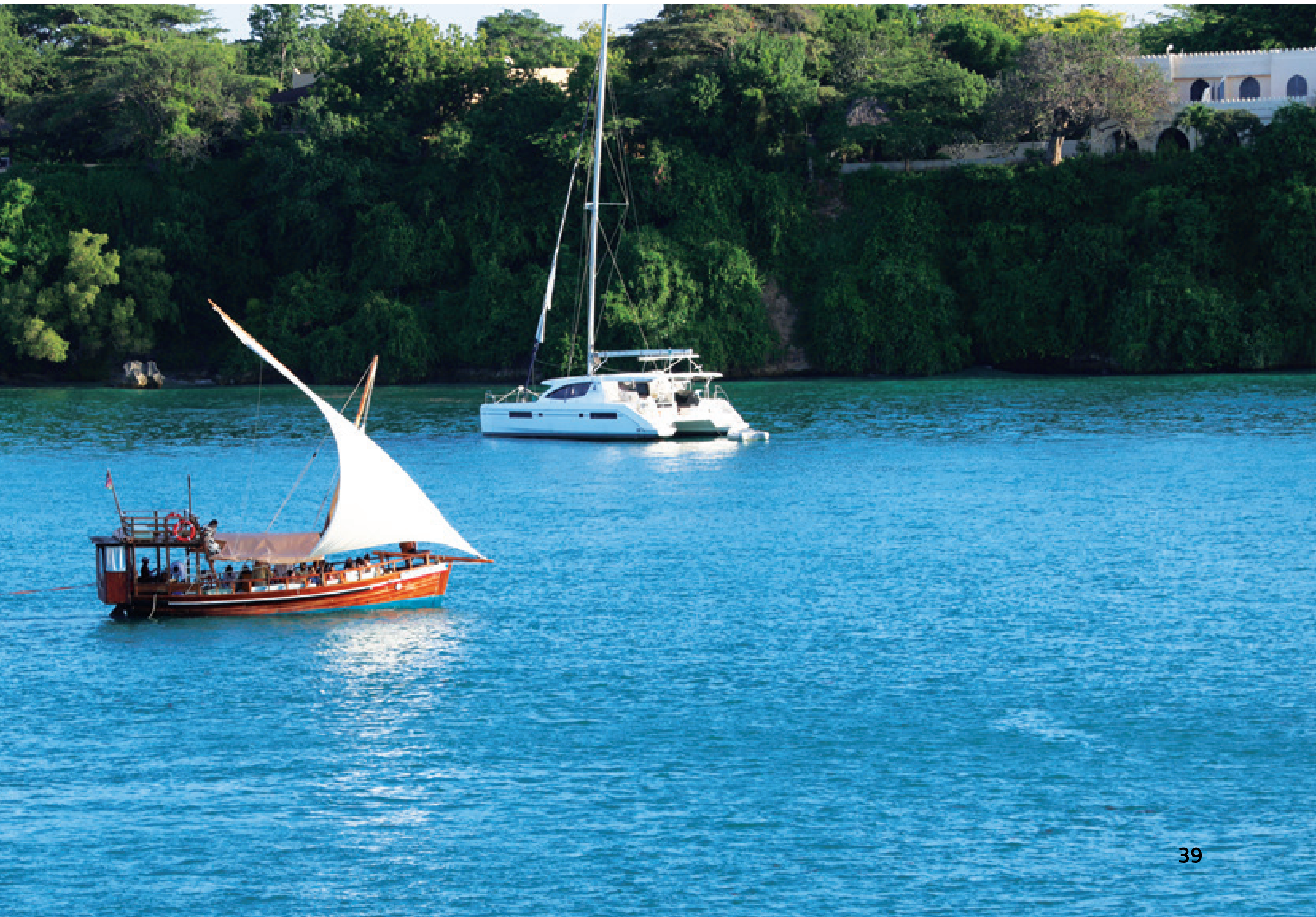
STRATEGIC FOCUS 2:
FINANCING FOR SUSTAINABLE BLUE ECONOMY DEVELOPMENT

Goal

To establish a sustainable financing framework that supports the growth and development of Kenya's Blue Economy through innovative financial mechanisms, fiscal reforms, and strategic partnerships.

Objective	Interventions
To promote innovative and sustainable financing for Blue Economy development.	- Issue Blue and Green Bonds to attract investments in projects like marine conservation, renewable energy, and sustainable fisheries.
	- Use Blue Carbon Credits to fund conservation efforts by monetizing carbon stored in marine ecosystems like mangroves and seagrasses.
	- Introduce insurance products for Blue Economy sectors like fisheries and coastal infrastructure to reduce risks and attract private investors.
	- Facilitate Debt-for-Nature Swaps to reduce national debt in exchange for investments in conservation and sustainability projects.
	- Set up Marine and Freshwater Conservation Endowment Funds to provide long-term funding for protecting and managing marine and coastal resources.
To improve guidelines for Blue Carbon financing and accounting.	- Develop technical guidelines to standardize how Blue Carbon projects are measured, reported, and verified, ensuring they meet global standards and attract investment.
	- Train stakeholders on how to use Blue Carbon financing effectively, ensuring transparency and accountability in managing funds.
To create favorable fiscal policies and incentives for Blue Economy investments.	- Advocate for tax breaks, subsidies, and other financial incentives to encourage investments in sustainable Blue Economy sectors like renewable energy, eco-tourism, and fisheries.
	- Work with financial institutions and government agencies to simplify regulations and make it easier for investors to enter the Blue Economy.
To strengthen Blue Economy value chains for wealth creation and livelihoods.	- Support the development of efficient value chains in Blue Economy sectors, from resource extraction to product marketing, ensuring sustainability and economic efficiency.

Objective	Interventions
	- Improve market access for Blue Economy products locally and internationally by upgrading infrastructure, reducing trade barriers, and ensuring quality through certifications.
	- Encourage the private sector to use technology like blockchain for traceability, AI for market analysis, and digital platforms for market access to improve efficiency and competitiveness.
	- Promote value addition and diversification of Blue Economy products (e.g., processed fish, seaweed-based products) to increase profits and create more income opportunities.
	- Invest in infrastructure and trade facilitation to reduce post-harvest losses and improve market access.
To promote collaboration and partnerships for Blue Economy investments.	- Build partnerships between government, the private sector, international organizations, and local communities to pool resources, expertise, and networks for sustainable Blue Economy development.
	- Encourage public-private partnerships (PPPs) to invest in critical Blue Economy infrastructure, like ports, marine protected areas, and renewable energy projects.



PART THREE

IMPLEMENTATION, MONITORING AND EVALUATION

A. IMPLEMENTATION **FRAMEWORK**

The Blue Economy holds significant potential to drive Kenya's socio-economic development while contributing to the achievement of the Sustainable Development Goals (SDGs). By leveraging the opportunities within the Blue Economy, Kenya can embark on an inclusive and sustainable growth trajectory that addresses key socio-economic challenges such as poverty, income inequality, women empowerment, and unemployment.

To realize these opportunities, it is imperative to mobilize resources strategically, prioritize actions within each Blue Economy sector, and establish clear short, medium, and long-term programs of action. A robust monitoring and evaluation framework will be essential for assessing the performance of these plans. Governance and coordination will be at the forefront of the implementation process, ensuring that efforts are well-structured and adhere to the principles of Blue Economy governance.

The implementation plan will focus on addressing the identified challenges while maintaining measurable timelines and outcomes. The primary objectives will include advancing equity, promoting sustainability, and fostering economic development, thereby ensuring that the benefits of the Blue Economy are realized for all stakeholders in Kenya.

B. Coordination of the Strategy Implementation

The Ministry of Mining, Blue Economy, and Maritime Affairs through the State Department for the Blue Economy and Fisheries will coordinate the implementation of the National Blue Economy Strategy under the existing intergovernmental coordination structures as follows:

Legal and Policy

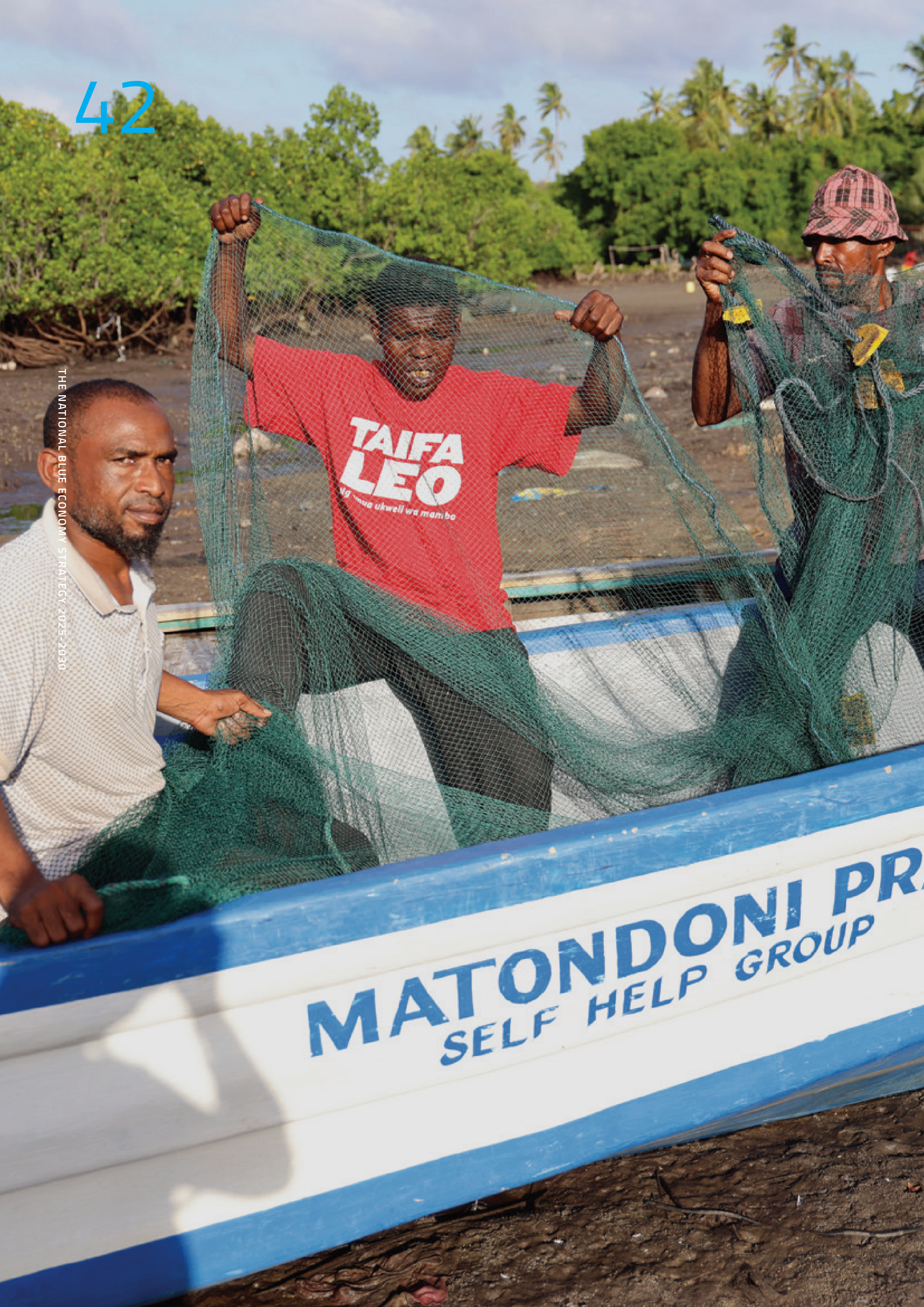
For smooth implementation and adoption by various agencies, it is important that all the strategies are anchored within departmental policies. This includes synergy with the Master Plans, County Integrated Spatial Plans(CISPs), and other programs in the key actors' mandates.

Communication

The secretariat, staff, and stakeholders of the department will be actively involved in implementing this strategy. To enable a strong alignment to strategy, the secretariat will conduct sensitization sessions on the strategy being implemented and its contribution toward the attainment of the strategic objectives developed. It will ensure regular strategic review sessions to ensure the Strategy becomes a living guide to the department's performance priorities.

Budget alignment

For each year, the relevant departments and stakeholders will align their annual budgets with the annual work plan for the year.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This means that the budget must fund the prioritized key programs in the strategy.

Internal consistency

Implementation requires congruence between the various internal dimensions of an organization. Key among these are strategy, structure, systems, style (leadership), staff (skills, number, attitudes) and shared values. These will be aligned to support the implementation of the strategic plan and will be spearheaded by the leadership team.

Cascading of the strategy

The leadership team will ensure the Strategy is broken down into annual work plans that will be incorporated into the performance contract and cascaded to all employees. Further cascading to the employees should take place at the department level so that employees execute aspects of the strategy in their day-to-day operational activities.

C. Roles of Stakeholders in the Blue Economy

Ministry of Mining, Blue Economy, and Maritime Affairs

The ministry will be responsible for coordinating the country's Blue Economy policy, legal, regulatory, institutional frameworks and plans, and capacity building. This is through funding and training, review of Blue Economy and related policies and guidelines, development of monitoring and evaluation mechanisms, sensitization and dissemination of information, and provision of appropriate infrastructure and technologies with the aim of harnessing the country's potential of the Blue Economy for sustainable economic growth.

Ministry of Defence: The Ministry secures Kenya's maritime domain, collaborating regionally on maritime security, including anti-piracy efforts. It also protects sovereignty, supports civil authorities during emergencies, handles defense intelligence, coordinates space activities, and implements the Kenya Space Policy.

Ministry of Interior and National Administration: The Ministry ensures peace and security in blue economy spaces, manages national information systems, coordinates policy implementation, disaster response, promotes national cohesion, and provides correctional services.

Ministry of Roads and Transport: This Ministry improves local and international maritime traffic by enhancing port infrastructure and services, ensuring efficient cargo movement via the SGR, and prioritizing the rehabilitation of key roads.

Ministry of Energy and Petroleum: The Ministry drives investment and capacity in blue renewable energy, promotes economic growth through oil and gas commercialization, and oversees compliance in petroleum operations.

Ministry of Lands, Public Works, Housing, and Urban Development: The Ministry provides guidelines and services for Blue Economy initiatives, focusing on the development control of public lands, including water bodies and sea beds critical for blue economy investments.

Ministry of Environment, Climate Change, and Forestry: The Ministry ensures Blue Economy activities comply with environmental laws, conserving biodiversity and addressing marine pollution and climate change.

Ministry of Water, Sanitation, and Irrigation: The Ministry addresses freshwater shortages, enhances clean water and sanitation, and manages wastewater treatment to support the Blue Economy.

Ministry of Tourism and Wildlife: The Ministry develops policies supporting tourism in the Blue Economy, focusing on wildlife protection and habitat resilience within blue zones.

The National Treasury and Economic Planning: The Treasury provides financial incentives for Blue Economy actors, strengthens subsidies, mobilizes resources, and ensures competitive pricing of sector products.

Ministry of Education: The Ministry, through higher education and TVET institutions, offers courses and training for Blue Economy skills, promotes research, and gradually incorporates blue economy topics into basic education curricula.

Ministry of Investments, Trade, and Industry: The Ministry fosters industrialization and enterprise development, promotes private sector growth, quality control, and productivity, particularly in Blue Economy-related industries.

Ministry of Youth Affairs, Creative Economy and Sports: The Ministry promotes youth participation in the Blue Economy through policies, modern equipment provision, and Public-Private Partnerships to create employment opportunities.

County Governments: County governments will implement localized Blue Economy strategies, ensuring initiatives complement each other within the counties.

The Private Sector: The government will partner with the private sector under Public-Private Partnerships to enhance research, innovation, and sustainable development in the Blue Economy, improving business environments and supporting entrepreneurship.

Development Partners: The government collaborates with development partners to support Blue Economy initiatives such as clean water provision, sanitation, sustainable fisheries, maritime transport, port improvements, and renewable energy.

D. Risk Assessment Framework

Risk management is a critical component of the Blue Economy Strategy, ensuring that the sustainable development and exploitation of aquatic and marine resources are resilient to social, economic, environmental, and governance-related uncertainties. The Blue Economy by its nature operates in complex, dynamic environments where challenges such as climate change, illegal exploitation, geopolitical tensions, market volatility, and natural disasters can significantly impact outcomes.

Implementing structured risk management allows for the identification, assessment, and mitigation of threats that could derail strategic objectives or harm ecosystems and communities. It ensures that development activities—such as fisheries, maritime transport, tourism, extractive industries, and renewable energy—are undertaken with safeguards that protect livelihoods, biodiversity, and investments.

Incorporating risk management strengthens accountability, guides adaptive decision-making, and enhances investor confidence by creating predictable, transparent, and responsive frameworks. It is therefore essential for balancing economic growth with environmental sustainability, social equity, and long-term national resilience in Kenya's Blue Economy.

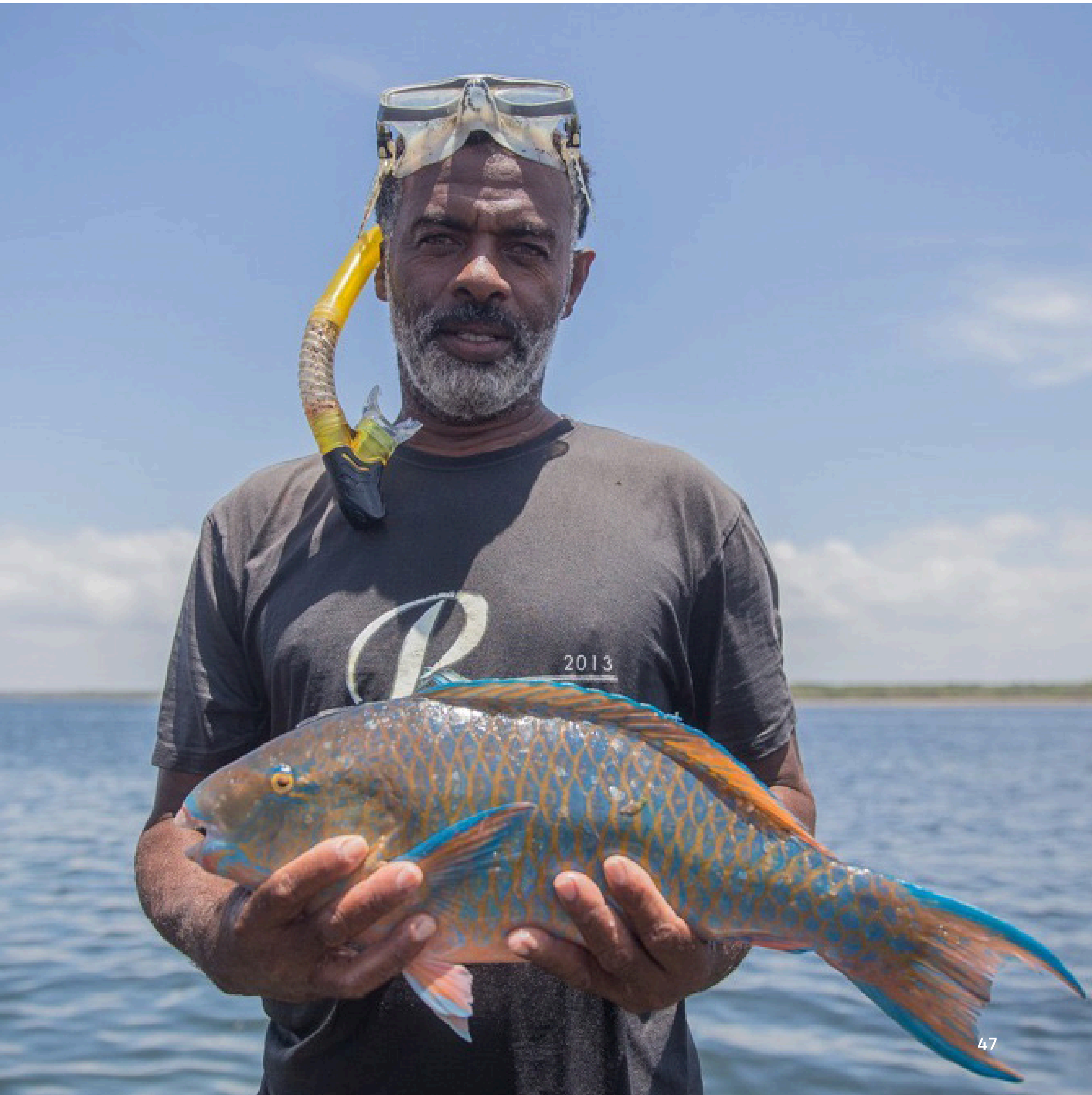
Table 2: Risk management and mitigation

Risk Category	Risk	Potential Impact	Mitigation Measures	Responsible Actors
Environmental Risks	Climate Change	Sea-level rise, storms, flooding damage infrastructure and ecosystems.	- Develop climate-resilient infrastructure. - Implement early warning systems.	Government, NGOs, research institutions.
	Pollution	Plastics, chemical discharge, and oil spills harm marine life and water quality.	- Enforce anti-pollution laws. - Promote circular economy practices.	Environmental agencies, private sector, communities.
	Overuse of Resources	Overfishing and biodiversity degradation threaten food security and ecosystems.	- Implement science-based fisheries management. - Promote sustainable aquaculture.	Fisheries departments, local communities, NGOs.
	Habitat Loss	Damaged reefs and wetlands reduce biodiversity and ecosystem services.	- Restore critical habitats (e.g., mangroves, coral reefs). - Establish marine protected areas (MPAs).	Conservation organizations, government, local communities.
Economic Risks	Market Swings	Price changes and demand shifts affect profitability and livelihoods.	- Diversify products and markets. - Develop value-added products.	Private sector, trade organizations, government.
	Investment Challenges	Funding gaps and risks in adopting new technologies hinder growth.	- Create incentives for private sector investment. - Establish a Blue Economy innovation fund.	Government, development partners, private sector.
	Supply Chain Disruptions	Shipping disruptions impact trade and economic stability.	- Strengthen maritime transport systems. - Develop alternative trade routes.	Maritime agencies, private sector, regional bodies.
	Tourism Risks	Damage to attractions, pandemics, and regional instabilities reduce tourism revenue.	- Promote sustainable tourism. - Develop crisis response plans for pandemics and instabilities.	Tourism boards, private sector, government.

Risk Category	Risk	Potential Impact	Mitigation Measures	Responsible Actors
Social Risks	Jobs & Livelihoods	Fishing losses and community impacts lead to unemployment and poverty.	- Provide alternative livelihoods (e.g., aquaculture, ecotourism). - Train communities in new skills.	Government, NGOs, local communities.
	Inclusivity Issues	Unequal benefits and lack of access marginalize vulnerable groups.	- Promote gender equality and youth inclusion. - Ensure fair resource distribution.	Government, NGOs, community leaders.
	Health Risks	Safety at sea, lakes and food safety issues harm communities.	- Enforce safety regulations. - Improve food safety standards and monitoring.	Health agencies, fisheries departments, local communities.
	Cultural Loss	Loss of traditions and cultural heritage reduces community identity.	- Document and preserve cultural practices. - Integrate traditional knowledge into modern practices.	Cultural organizations, local communities, government.
Governance Risks	Coordination Challenges	Poor planning and conflicting rules hinder strategy implementation.	- Establish inter-agency coordination mechanisms. - Develop a unified Blue Economy policy framework.	Government, regional bodies, private sector.
	Data Gaps	Lack of information leads to poor decision-making.	- Build a centralized data platform. - Promote open data initiatives.	Research institutions, government, private sector.
	Lack of Community Input	Excluding locals reduces buy-in and effectiveness of initiatives.	- Involve communities in planning and decision-making. - Establish community advisory boards.	Government, NGOs, local communities.
	Unclear Laws	Unclear rules create confusion and non-compliance.	- Develop clear and enforceable regulations. - Conduct stakeholder consultations on policy reforms.	Government, legal experts, private sector.

Risk Prioritization and Monitoring

Risk Level	Description	Actions
High	Risks with severe impacts and high likelihood (e.g., climate change, overfishing).	- Immediate action required. - Allocate resources for mitigation.
Medium	Risks with moderate impacts and likelihood (e.g., market swings, data gaps).	- Develop mitigation plans. - Monitor regularly.
Low	Risks with limited impacts and low likelihood (e.g., cultural loss).	- Monitor periodically. - Address if likelihood or impact increases.



ANNEX TWO: IMPLEMENTATION FRAMEWORK

FISHERIES, AQUACULTURE, AND AQUATIC ECOSYSTEM

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Advanced Technologies in Fisheries and Aquaculture	Precision aquaculture systems, remote sensing, and advanced breeding techniques implemented.	Increased efficiency and sustainability in fisheries and aquaculture.	Number of technologies adopted; reduction in environmental impacts.	State Department for the Blue Economy and Fisheries, Kenya Fisheries Service, Research Institutions, Private Sector	150	50	25	25	25	25
Research and Development for Sustainable Technologies	New technologies developed to minimize environmental impacts and improve efficiency.	Enhanced innovation and sustainability in Blue Economy sectors.	Number of R&D initiatives; new technologies developed.	Kenya Fisheries Service, Research Institutions, Universities, Private Sector	300	100	50	50	50	50
Climate-Adaptive Species and Sustainable Fishing Practices	Climate-adaptive species and sustainable fishing practices promoted.	Improved resilience of fisheries to climate change.	Number of climate-adaptive species adopted; reduction in overfishing.	Kenya Fisheries Service, Local Communities, NGOs	300	40	90	50	90	20
Capacity Building for Climate Change Mitigation and Adaptation	Stakeholders trained in climate change mitigation and adaptation strategies.	Enhanced capacity to address climate change impacts.	Number of training programs conducted; stakeholders trained.	State Department for Environment and Climate Change, NEMA, County Governments	100	20	20	20	20	20
Improved Handling, Storage, and Transportation of Fish Products	Infrastructure and systems for handling, storage, and transportation developed.	Reduced post-harvest losses and improved product quality.	Number of facilities upgraded; reduction in post-harvest losses.	State Department for the Blue Economy and Fisheries, Kenya Fisheries Service, Kenya Fish Marketing Authority, Research Institutions, Private Sector, County Governments	2100	500	400	400	400	400
Market Linkages and Value Addition Strategies	Market linkages and value addition strategies established.	Increased competitiveness of Kenyan fish products in local and international markets.	Number of market linkages created; increase in value-added products.	Kenya Fish Marketing Authority, Private Sector, County Governments	200	40	40	40	40	40

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Empowerment of Small-Scale Fishers and Aquaculture Producers	Cooperatives and community-based organizations established.	Empowered small-scale fishers and aquaculture producers.	Number of cooperatives formed; increase in community participation.	Local Communities, NGOs, County Governments	100	20	20	20	20	20
Science-Based Fisheries Management	Science-based fisheries management strategies implemented.	Sustainable fish stocks and improved fisheries management.	Number of management plans implemented; improvement in fish stock levels.	Kenya Fisheries Service, Research Institutions, Local Communities	1000	200	200	200	200	200
Monitoring, Control, and Surveillance (MCS) Systems	Enhanced MCS systems to combat IUU fishing.	Reduced illegal, unreported, and unregulated fishing activities.	Number of MCS systems implemented; reduction in IUU fishing incidents.	Kenya Fisheries Service, Kenya Coast Guard, County Governments, Local Communities	2000	400	400	400	400	400
Community-Based Fisheries Management (CBFM)	Community-based fisheries management initiatives established.	Empowered coastal and lake region communities.	Number of CBFM initiatives; increase in community-led resource management.	Local Communities, NGOs, County Governments	100	20	20	20	20	20
Marine Protected Areas (MPAs) and Habitat Restoration	MPAs and habitat restoration initiatives established.	Enhanced biodiversity and ecosystem health.	Number of MPAs established; area of habitats restored.	NEMA, Kenya Wildlife Service, Local Communities	50	10	10	10	10	10
Mangrove Ecosystem Restoration and Protection	Mangrove ecosystems restored and protected.	Improved ecological and economic benefits from mangroves.	Area of mangroves restored; number of community-led projects.	NEMA, Kenya Forest Service, Local Communities	50	10	10	10	10	10
Protection of Fish Critical Habitats	Fish critical habitats protected and sustainably utilized.	Enhanced conservation of critical fish habitats.	Number of habitats protected; improvement in fish population metrics.	Kenya Fisheries Service, NEMA, Local Communities	300	60	60	60	60	60
Aquaculture Guidelines and Standards	Aquaculture guidelines and standards developed and implemented.	Improved sustainability and quality of aquaculture practices.	Number of guidelines implemented; compliance rate among aquaculture producers.	Kenya Fisheries Service, Research Institutions, Private Sector	40	5	5	10	10	10
Expansion of Aquaculture Activities	Aquaculture activities, including seaweed and shellfish farming, expanded.	Increased production and income from aquaculture.	Number of aquaculture projects initiated; increase in production volumes.	Kenya Fisheries Service, Private Sector, Local Communities	60	20	10	10	10	10
Training for Sustainable Aquaculture Practices	Local communities trained in sustainable aquaculture practices.	Enhanced skills and knowledge in sustainable aquaculture.	Number of training programs conducted; participants trained.	Kenya Fisheries Service, NGOs, County Governments	150	30	30	30	30	30

RENEWABLE ENERGY AND EXTRACTIVE MINERAL RESOURCES IN THE BLUE ECONOMY SPACE

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Research Centers for Renewable Energy	Research centers established for tidal, wind, wave, and solar energy exploration.	Increased knowledge and innovation in renewable energy.	Number of research centers established; research outputs published.	Research Institutions, Universities, Private Sector	100	10	15	30	25	20
Training Programs for Renewable Energy and Mining	Training programs developed for renewable energy and sustainable mining skills.	Enhanced local expertise in renewable energy and mining.	Number of training programs conducted; participants trained.	Universities, Technical Schools, State Department for Energy	80	15	20	20	15	10
Collaboration for Technology Development	Partnerships between universities, government, and private companies established.	New technologies developed for energy and mining.	Number of collaborative projects; new technologies developed.	Universities, Government, Private Sector	70	10	20	20	10	10
Community Training in Eco-Friendly Mining	Communities trained in eco-friendly mining practices.	Reduced environmental impact from mining activities.	Number of communities trained; reduction in environmental degradation.	NGOs, County Governments, Local Communities	50	5	5	20	10	10
Central Database for Renewable Energy and Minerals	Central database for renewable energy and mineral information established.	Improved access to information on renewable energy and mineral resources.	Number of users accessing the database; data points collected.	State Department for Energy, Research Institutions, Private Sector	60	10	10	20	10	10
Dissemination of Research and Market Data	Research findings and market data shared with stakeholders.	Enhanced decision-making and investment in renewable energy and mining.	Number of dissemination events; stakeholder satisfaction with data access.	Research Institutions, Government Agencies, Private Sector	40	5	5	10	10	10
Public-Private Partnerships (PPPs) for Community Projects	PPPs established for mariculture, job creation, and sustainable resource use.	Increased community-centered investments in Blue Economy sectors.	Number of PPPs formed; community benefits from projects.	Government, Private Sector, Local Communities	90	20	20	30	10	10
Collaboration for Renewable Energy and Mining Investments	Public and private sectors collaborate on renewable energy and mining projects.	Increased investment in sustainable energy and mining.	Number of collaborative projects; investment levels achieved.	Government, Private Sector, Development Partners	80	10	20	30	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Sustainable Resource Management through PPPs	PPPs prioritize sustainable resource management.	Balanced economic benefits and environmental protection.	Number of sustainable PPP projects; reduction in environmental impact.	Government, Private Sector, NGOs	70	10	20	30	10	10
Cooperatives for Small-Scale Miners	Cooperatives formed for small-scale miners.	Empowered small-scale miners with access to resources and training.	Number of cooperatives formed; miners trained and equipped.	Local Communities, NGOs, County Governments	50	5	15	10	10	10
Training in Value-Added Processing and Benefit-Sharing	Local communities trained in value-added processing and benefit-sharing.	Increased income and equitable benefits from resource use.	Number of training programs conducted; participants trained.	NGOs, County Governments, Local Communities	40	5	10	10	10	5
Community Projects for Mining and Ecosystem Restoration	Community projects for mining and ecosystem restoration supported.	Enhanced community involvement and benefits from resource use.	Number of community projects; area of ecosystems restored.	Local Communities, NGOs, County Governments	60	10	20	10	10	10
Cooperatives for Sustainable Mining	Cooperatives and community groups for sustainable mining established.	Fair benefit-sharing and sustainable mining practices.	Number of cooperatives formed; increase in sustainable mining practices.	Local Communities, NGOs, County Governments	50	5	15	10	10	10
Master Plan for Deep-Water and Offshore Mining	Master plan for deep-water and offshore mining developed.	Strategic exploration and sustainable use of deep-water and offshore mineral resources.	Completion of master plan; number of stakeholders engaged.	State Department for Mining, Research Institutions, Private Sector	70	10	20	20	10	10
National Program for Marine and Freshwater Products	National program for marine and freshwater product development launched.	Innovation and commercialization of marine and freshwater-derived products.	Number of products developed; commercialization success rate.	Research Institutions, Private Sector, Government	80	20	30	10	10	10
Regulations for Responsible Mining	Regulations for responsible mining developed and enforced.	Reduced environmental harm from mining activities.	Number of regulations enacted; compliance rate among mining operators.	State Department for Mining, NEMA, County Governments	60	10	20	10	10	10
Coordination for Mining Activities	Improved coordination among government agencies for mining oversight.	Enhanced monitoring and regulation of mining activities.	Number of inter-agency coordination meetings; improvement in licensing and compliance processes.	State Department for Mining, NEMA, County Governments	50	5	5	20	10	10

SOCIAL EQUITY AND HABITAT PROTECTION IN BLUE ECONOMY

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Women's Empowerment in Blue Economy	Women trained in skills, STEM, and leadership.	Increased participation of women in Blue Economy sectors.	Number of women trained; percentage of women in leadership roles.	State Department for Gender Affairs and Affirmative Action, NGOs, Private Sector, County Governments	50	10	10	10	10	10
Policy Development for Gender Equity	Policies ensuring fair representation and safe workplaces for women.	Improved workplace diversity and safety for women.	Number of policies enacted; workplace safety improvements.	State Department for Gender Affairs and Affirmative Action, Labor, Private Sector	150	30	30	30	30	30
Access to Funding and Markets for Women	Women gain access to funding, markets, and business opportunities.	Increased economic empowerment and benefit-sharing for women.	Number of women accessing funding; growth in women-led businesses.	The National Treasury, Financial Institutions, NGOs, County Governments	100	20	20	20	20	20
Sustainable Ecosystem Management	Frameworks for sustainable ecosystem management developed.	Enhanced conservation of biodiversity and critical habitats.	Number of frameworks implemented; increase in protected habitats.	Kenya Fisheries Service, NEMA, Kenya Forest Service, County Governments	50	10	10	10	10	10
Climate Risk Management Strategies	Strategies to manage climate change risks developed.	Increased resilience to climate change impacts.	Number of strategies implemented; reduction in climate-related losses.	State Department for Environment and Climate Change, NEMA, County Governments	40	8	8	8	8	8

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Fish and Aquatic Product Safety	Labs built and equipped.	Improved safety and quality of fish and aquatic products.	Number of labs operational; reduction in harmful fishing practices.	Kenya Fisheries Service, County Governments	430	70	80	100	100	80
Mangrove Restoration and Protection	Mangrove forests restored and protected.	Enhanced ecological and economic benefits from mangroves.	Area of mangroves restored; number of community-led projects.	State Department for the Blue Economy and Fisheries, NEMA, Kenya Forest Service, Local Communities	80	10	20	30	10	10
Seaweed Farming Promotion	Seaweed farming established as an income source.	Increased income for coastal communities, especially women and youth.	Number of seaweed farms; income generated from seaweed farming.	State Department for the Blue Economy and Fisheries, County Governments, Research Institutions, NGOs, Private Sector	100	20	20	20	20	20
Climate Change Adaptation in Blue Economy	Climate adaptation strategies integrated into Blue Economy planning.	Improved resilience of vulnerable communities to climate change.	Number of strategies implemented; community resilience metrics.	State Department for the Blue Economy and Fisheries, State Department for Environment and Climate Change, County Governments	40	8	8	8	8	8
Community-Based Resource Management	Community-led resource management initiatives established.	Greater community benefit and stewardship of Blue Economy resources.	Number of community-led initiatives; increase in community engagement.	Local Communities, NGOs, County Governments	75	15	15	15	15	15

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Coastal Community Empowerment	Sustainable jobs created and fair resource use ensured.	Empowered coastal communities with equitable access to Blue Economy benefits.	Number of jobs created; increase in community income levels.	County Governments, NGOs, Private Sector	100	20	20	20	20	20
Health and Social Awareness Campaigns	Awareness campaigns on diseases and drug abuse conducted.	Reduced prevalence of diseases and drug abuse in coastal communities.	Number of campaigns conducted; reduction in disease and drug abuse cases.	State Department for Public Health and Professional Standards, NGOs, County Governments	100	20	20	20	20	20
Child Protection and Ethical Tourism	Child protection laws enforced and ethical tourism promoted.	Reduced child labor and exploitation in tourism hotspots.	Number of laws enforced; reduction in exploitation incidents.	State Department for Children Services, County Governments, NGOs	100	20	20	20	20	20
Social Safeguards in Blue Economy Policies	Policies with social safeguards developed and implemented.	Increased protection and accountability for vulnerable groups.	Number of policies updated; stakeholder engagement sessions held.	State Department for Social Protection and Senior Citizens, NGOs, County Governments	100	20	20	20	20	20

GOVERNANCE AND FINANCING IN THE BLUE ECONOMY

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Formal Coordination Mechanisms	Coordination mechanisms established for government, private sector, NGOs, and local communities.	Improved collaboration and resource sharing among stakeholders.	Number of coordination mechanisms established; stakeholder satisfaction with collaboration.	National and County Governments, Private Sector, NGOs, Local Communities	50	5	5	10	10	10
Regular Communication Channels and Working Groups	Communication channels and working groups established.	Enhanced alignment of all sectors with national Blue Economy goals.	Number of communication channels; frequency of working group meetings.	National and County Governments, Private Sector, NGOs, Local Communities	40	5	10	5	10	10
Central Database for Resource and Environmental Data	Central database for sharing best practices, research, and real-time data established.	Improved access to accurate and timely information for decision-making.	Number of users accessing the database; data points collected.	State Department for the Blue Economy and Fisheries, Research Institutions, Private Sector	60	5	15	20	10	10
Guidelines for Data Collection, Reporting, and Sharing	Clear guidelines for data collection, reporting, and sharing developed.	Enhanced transparency and accuracy in data management.	Number of guidelines implemented; stakeholder compliance rate.	State Department for the Blue Economy and Fisheries, NEMA, County Governments	30	5	5	10	5	5
Strengthened Law Enforcement for Governance	Fisheries agencies, coast guards, and local monitoring units equipped with modern tools and training.	Improved governance and enforcement of Blue Economy regulations.	Number of agencies equipped; reduction in illegal activities.	Kenya Fisheries Service, Kenya Coast Guard, Local Communities	70	10	20	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
National Blue Economy Forum	National Blue Economy Forum launched for stakeholder engagement.	Enhanced awareness, feedback, and political support for Blue Economy initiatives.	Number of forum events held; stakeholder participation levels.	State Department for the Blue Economy and Fisheries, Stakeholders	50	5	10	20	10	5
Inter-Ministerial Forum for Coordination	Inter-Ministerial Forum established for joint planning and resource mobilization.	Improved coordination among ministries and agencies.	Number of forum meetings held; joint projects implemented.	State Department for the Blue Economy and Fisheries, Other Relevant Ministries	40	5	10	10	10	5
Involvement of Regional Governments	Structure to engage regional governments in Blue Economy activities developed.	Effective communication and implementation of policies at the local level.	Number of regional governments involved; policy implementation rates.	State Department for the Blue Economy and Fisheries, County Governments	50	5	15	10	10	10
Blue Economy Strategy Implementation Framework	Detailed implementation framework with actions, timelines, and responsibilities developed.	Clear roadmap for achieving Blue Economy goals.	Framework completion date; number of actions implemented.	State Department for the Blue Economy and Fisheries, Stakeholders	60	5	15	20	20	10
Sector-Specific Investment Plans	Investment plans for priority Blue Economy projects developed.	Increased investment in key Blue Economy sectors.	Number of investment plans created; funding attracted.	State Department for the Blue Economy and Fisheries, Private Sector, Development Partners	70	10	20	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Comprehensive Blue Economy Master Plan	Blue Economy Master Plan developed as a long-term roadmap.	Sustainable development and management of Kenya's Blue Economy.	Master Plan completion date; number of strategic interventions implemented.	State Department for the Blue Economy and Fisheries, Stakeholders	80	10	30	20	10	10

FINANCING FOR SUSTAINABLE BLUE ECONOMY DEVELOPMENT

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Blue and Green Bonds	Blue and Green Bonds issued for marine conservation, renewable energy, and sustainable fisheries.	Increased investment in sustainable Blue Economy projects.	Amount of funds raised through bonds; number of projects funded.	The National Treasury, State Department for the Blue Economy and Fisheries, Private Sector, Development Partners	100	30	40	10	10	10
Blue Carbon Credits	Blue Carbon Credits implemented to fund marine conservation.	Enhanced funding for conservation through carbon monetization.	Number of Blue Carbon projects; carbon credits monetized.	State Department for the Blue Economy and Fisheries, State Department for Environment and Climate Change, NEMA, Private Sector	80	10	30	20	10	10
Insurance Products for Blue Economy	Insurance products introduced for fisheries and coastal infrastructure.	Reduced risks and increased private investment in Blue Economy sectors.	Number of insurance products offered; private investment levels.	Insurance Companies, Private Sector, Government	60	10	10	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Debt-for-Nature Swaps	Debt-for-Nature Swaps facilitated to reduce national debt.	Increased funding for conservation and sustainability projects.	Amount of debt reduced; conservation projects funded.	The National Treasury, International Organizations	70	10	20	20	10	10
Marine and Freshwater Conservation Endowment Funds	Endowment funds established for marine and freshwater conservation.	Long-term funding for protecting marine and coastal resources.	Amount of funds raised; conservation projects supported.	State Department for Environment and Climate Change, NEMA, Private Sector	90	10	30	20	10	10
Technical Guidelines for Blue Carbon Projects	Technical guidelines for Blue Carbon projects developed.	Standardized measurement, reporting, and verification of Blue Carbon projects.	Number of guidelines implemented; compliance with international standards.	State Department for Environment and Climate Change, Research Institutions, Private Sector	50	10	10	10	10	10
Training on Blue Carbon Financing	Stakeholders trained on Blue Carbon financing mechanisms.	Enhanced transparency and accountability in managing Blue Carbon funds.	Number of training programs conducted; stakeholders trained.	State Department for Environment and Climate Change, NGOs, Private Sector	40	5	15	10	5	5
Tax Breaks and Financial Incentives	Tax breaks and subsidies introduced for sustainable Blue Economy sectors.	Increased investment in renewable energy, eco-tourism, and fisheries.	Number of incentives implemented; investment levels achieved.	The National Treasury, Private Sector, County Governments	60	5	15	20	15	5
Simplified Regulations for Investors	Regulatory processes streamlined for Blue Economy investments.	Reduced barriers to entry for investors in the Blue Economy.	Number of regulatory reforms; investor satisfaction levels.	The National Treasury, Financial Institutions, Government Agencies	50	5	15	15	10	5

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Efficient Value Chains in Blue Economy	Efficient value chains developed from resource extraction to product marketing.	Enhanced economic efficiency and sustainability in Blue Economy sectors.	Number of value chains optimized; increase in economic efficiency.	State Department for Trade, Private Sector, County Governments	70	10	20	20	10	10
Improved Market Access for Blue Economy Products	Infrastructure upgraded and trade barriers reduced for Blue Economy products.	Increased market access for Blue Economy products locally and internationally.	Number of infrastructure projects; reduction in trade barriers.	State Department for Trade, Private Sector, County Governments	80	10	20	30	10	10
Technology Integration in Blue Economy	Technology like blockchain, AI, and digital platforms adopted.	Improved efficiency, transparency, and competitiveness in Blue Economy sectors.	Number of technologies adopted; improvement in operational efficiency.	Private Sector, Research Institutions, Government	60	5	10	20	15	10
Value Addition and Diversification of Blue Economy Products	Value-added and diversified Blue Economy products developed.	Increased profitability and income opportunities from Blue Economy products.	Number of value-added products; increase in product profitability.	State Department for Trade, Private Sector, County Governments	70	10	20	20	10	10
Infrastructure and Trade Facilitation	Infrastructure and trade facilitation measures implemented.	Reduced post-harvest losses and improved market access.	Number of infrastructure projects; reduction in post-harvest losses.	State Department for Trade, Private Sector, County Governments	80	10	20	30	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Partnerships for Sustainable Blue Economy Development	Partnerships between government, private sector, and international organizations established.	Enhanced collaboration and resource pooling for sustainable Blue Economy development.	Number of partnerships formed; joint projects implemented.	National and County Governments, Private Sector, International Organizations	90	10	30	30	10	10
Public-Private Partnerships (PPPs) for Blue Economy Infrastructure	PPPs established for critical Blue Economy infrastructure.	Increased investment in ports, marine protected areas, and renewable energy projects.	Number of PPPs formed; infrastructure projects funded.	National and County Governments, Private Sector, Development Partners	100	20	30	30	10	10

HUMAN RESOURCE CAPACITY DEVELOPMENT AND MARKETING FOR THE BLUE ECONOMY

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Invest in Research Institutions and Programs	Research institutions and programs focusing on Blue Economy innovations established.	Sustainable resource extraction, environmental conservation, and renewable energy development.	Number of research programs funded; innovations developed.	State Department for TVET, State Department for Higher Education, Research Institutions, Private Sector	200	30	30	50	50	40

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Capacity-Building Initiatives	Individuals and organizations trained in resource management, data analytics, and monitoring.	Improved capacity for sustainable Blue Economy practices.	Number of training programs conducted; participants trained.	State Department for the Blue Economy and Fisheries, State Department for TVET, State Department for Higher Education, NGOs, Private Sector	150	30	30	30	30	30
Technology Transfer Mechanisms	Mechanisms for technology transfer and adoption developed.	Stakeholders at all levels benefit from new technologies.	Number of technologies transferred; stakeholders adopting innovations.	State Department ICT and the Digital Economy, County Governments, Private Sector	90	20	20	30	10	10
Apprenticeship Programs	Apprenticeship programs established in Blue Economy sectors.	Workforce gains practical skills and knowledge.	Number of apprenticeship programs; participants trained.	State Department for TVET, State Department for Higher Education, County Governments, Private Sector	300	40	60	80	80	40
Integration of Indigenous Knowledge	Indigenous knowledge integrated with modern practices.	Traditional expertise preserved and applied in sustainable practices.	Number of indigenous knowledge systems integrated; communities benefiting.	Community Groups, NGOs, State Department for Culture, the Arts and Heritage	70	10	20	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Knowledge Exchange Programs	Knowledge exchange programs established.	Kenya's Blue Economy development informed by global best practices.	Number of knowledge exchange programs; best practices adopted.	State Department for the Blue Economy and Fisheries, State Department for TVET, State Department for Higher Education, International Organizations, Private Sector	20	4	4	4	4	4
Training Programs for Value Addition	Training programs on value addition and product development implemented.	Enhanced marketability and profitability of marine and coastal products.	Number of training programs; businesses and communities benefiting.	State Department for the Blue Economy and Fisheries, State Department for Trade, Private Sector, NGOs	190	30	50	50	40	20
Entrepreneurship and Innovation in Blue Economy	New products and services developed from Blue Economy resources.	Increased innovation and entrepreneurship in Blue Economy sectors.	Number of new products/services developed; revenue generated.	State Department for Trade, Private Sector, Development Partners	15	2	3	4	4	2
Partnerships for Specialized Courses and Certifications	Specialized courses and certifications offered for value-added industries.	Skilled workforce prepared for careers in Blue Economy sectors.	Number of courses/ certifications offered; participants trained.	Educational Institutions, Private Sector, International Organizations	70	10	10	30	10	10
Branding and Packaging of Blue Economy Products	Branding and packaging of marine and inland water products enhanced.	Increased market competitiveness of Blue Economy products.	Number of products with improved branding/packaging; market share increase.	State Department for Trade, Private Sector, County Governments	50	10	10	10	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Integration of Blue Economy Awareness in School Curricula	Blue Economy awareness integrated into school curricula.	Early education and innovation fostered in Blue Economy sectors.	Number of schools incorporating Blue Economy topics; student engagement.	State Department for TVET, State Department for Higher Education, Curriculum Development Institutions	30	6	6	6	6	6

CAPACITY BUILDING AND INNOVATION FOR BLUE ECONOMY

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh Million)	Y1	Y2	Y3	Y4	Y5
Promote Research & Development	Research institutions and programs established.	Increased innovation in sustainability and renewable energy.	Research projects funded; publications and patents.	National and County Government, Research Institutions, Universities, private sector.	500	50	100	200	100	50
	Interdisciplinary collaborations.	Enhanced academia-government-private sector partnerships.	Collaborative projects; partnerships formed.	National and County Government, Universities, private sector.	300	30	70	100	50	50
	Blue Economy innovation fund launched.	Funded projects addressing overfishing, habitat degradation, and pollution.	Grants awarded; project impact.	National and County Government, development partners, Private sector.	200	30	70	50	30	20

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh Million)	Y1	Y2	Y3	Y4	Y5
	Marine biotechnology research initiated.	Exploration of marine-based products (e.g., biofuels, pharmaceuticals).	Marine biotech projects; products developed.	Research Institutions, Private sector, Development partners.	150	30	50	20	30	20
Adopt Advanced Technologies	Precision aquaculture and remote sensing introduced.	Improved efficiency and sustainability in fisheries and aquaculture.	Adoption rate of technologies; fish stock health.	State Department for the Blue Economy and Fisheries, Kenya Fisheries Service, Aquaculture firms, Tech providers.	400	80	100	100	100	20
	Blockchain and AI for traceability and market analysis.	Transparent and efficient seafood supply chains.	Supply chains using blockchain; market analysis accuracy.	Private sector, tech firms, fisheries associations.	300	50	100	100	25	25
	Satellite tech, drones, and underwater sensors deployed.	Enhanced maritime domain awareness (MDA) and illegal fishing detection.	Illegal fishing incidents detected; surveillance coverage.	Kenya Fisheries Service, Kenya Coast Guard, maritime agencies, tech providers.	500	100	150	100	100	50
	Tidal, wave, and offshore wind energy systems developed.	Increased renewable energy use in the Blue Economy.	Installed renewable energy capacity; reduced fossil fuel use.	Energy companies, Development partners.	1,000	100	200	300	200	200
Strengthen Knowledge Transfer	Innovation hubs and incubators established.	Increased startups and entrepreneurs in Blue Economy sectors.	Startups supported; jobs created.	National and County Governments, Private sector, universities.	300	40	80	80	60	40

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh Million)	Y1	Y2	Y3	Y4	Y5
	Knowledge exchange programs with global institutions.	Transfer of emerging technologies and best practices.	Knowledge exchange programs; technologies adopted.	National and County Governments, Universities, international research institutions.	200	30	60	50	40	20
	Indigenous knowledge integrated with modern tech.	Enhanced sustainability in fishing and marine conservation.	Communities using integrated systems; resource health improvement.	National and County Governments, Local communities, research institutions.	100	20	20	30	20	10
	Technology transfer mechanisms developed.	Increased accessibility of new technologies to communities and small-scale fishers.	Technologies transferred; adoption rate by communities.	National and County Governments, NGOs, private sector.	150	30	20	30	40	30
	Blue Economy Technology Action Plan developed.	Mainstreaming of blockchain, AI, IoT, and other advanced technologies.	Technologies mainstreamed; sectors adopting new technologies.	National and County Government, private sector, tech firms.	100	20	30	20	20	10
Enhance Data Collection and Analytics	Centralized Blue Economy data platform established.	Improved data-driven decision-making in resource management and planning.	Platform users; data sets available.	National and County Governments, research institutions, private sector.	200	20	80	60	20	20
	Open data initiatives promoted.	Increased accessibility of research findings and market data.	Open data sets published; stakeholders using open data.	National and County Governments, research institutions, private sector.	100	30	40	10	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh Million)	Y1	Y2	Y3	Y4	Y5
	Data analytics and modeling tools implemented.	Enhanced ability to predict trends in fish stocks, climate impacts, and market demand.	Accuracy of predictive models; decisions influenced by data.	National and County Governments, Research institutions, private sector.	150	30	40	50	20	10
	Stakeholders trained in data utilization.	Improved capacity for sustainable resource management and planning.	Stakeholders trained; data application in decision-making.	National and County Governments, training institutions, NGOs.	100	20	30	30	10	10
Foster Public-Private Partnerships (PPPs)	Private sector investment in R&D encouraged.	Increased funding for Blue Economy research and innovation.	Private sector investment in R&D; projects funded.	National and County Governments, Private sector, development partners.	300	50	100	50	50	50
	Collaborative research projects developed.	Enhanced innovation through joint research efforts.	Collaborative projects; technologies developed.	National and County Governments, Universities, private sector, research institutions.	200	30	50	50	40	30
	Technology-driven startups supported.	Increased innovation and entrepreneurship in Blue Economy sectors.	Startups supported; jobs created.	National and County Governments, Private sector, innovation hubs.	150	20	30	30	40	30
	Technology demonstration centers established.	Increased adoption of new technologies through pilot projects.	Technologies demonstrated; adoption rate by stakeholders.	National and County Governments, private sector, tech providers.	100	10	20	30	30	10

MARITIME TRANSPORT AND TRADE

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Port Expansion and Modernization	Port facilities expanded and modernized to handle larger cargo volumes and bigger vessels.	Increased port capacity and efficiency.	Number of ports upgraded; increase in cargo throughput.	National and County Governments, Kenya Ports Authority, Private Sector.	200000	1200	56	44	44	44
Inland Waterway Transport Development	Supporting infrastructure like inland ports, rail links, and road networks developed.	Improved efficiency and connectivity of inland waterway transport.	Number of infrastructure projects completed; reduction in transport costs.	State Department for Transport, County Governments, Private Sector	400000	5000	10000	85000	150	150
Digital Solutions and Smart Technologies	Digital solutions and smart technologies implemented in port operations.	Enhanced port efficiency and reduced turnaround times.	Number of digital systems implemented; reduction in cargo handling time.	National and County Governments, Kenya Ports Authority, Private Sector.	3000	600	600	600	600	600
Cross-Border Transport Routes	Cross-border transport routes connecting Kenya to Tanzania, Somalia, and neighboring countries established.	Enhanced regional trade and connectivity.	Number of cross-border routes established; increase in trade volumes.	State Department for Transport, Regional Bodies (IGAD, EAC)	120	10	30	40	20	20

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Harmonization of Maritime Regulations	Regulations harmonized with regional bodies like IGAD and EAC.	Improved maritime trade and passenger transport.	Number of regulations harmonized; increase in maritime trade.	State Department for Transport, Regional Bodies (IGAD, EAC)	80	10	10	30	15	15
Green Shipping Initiatives	Renewable energy-powered vessels incentivized and greenhouse gas emissions reduced.	Reduced environmental impact of maritime transport.	Number of green shipping initiatives; reduction in greenhouse gas emissions.	State Department for Transport, NEMA, Private Sector	5000	500	1000	2500	500	500
Public-Private Partnerships (PPPs) for Marine Fleets	PPPs established to develop and manage modern marine fleets.	Increased investment in modern marine fleets.	Number of PPPs formed; marine fleets developed.	State Department for Transport, Private Sector, Development Partners	100	20	20	20	20	20
Cabotage Transport Development	Policies and infrastructure for cabotage transport developed.	Sustainable movement of Blue Economy products.	Number of policies implemented; increase in cabotage transport activities.	State Department for Transport, Private Sector, County Governments	100	10	30	20	20	20

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Maritime Training and Education	Training programs and maritime education initiatives launched.	Skilled workforce in ship management, logistics, and maritime safety.	Number of training programs conducted; participants trained.	State Department for TVET, State Department for Higher Education, State Department for Shipping and Maritime Affairs, Private Sector	60	10	20	10	10	10
Labor Reforms for Maritime Professionals	Labor reforms advocated to enable Kenyan seafarers to work globally.	Increased employment of Kenyan maritime professionals in global shipping companies.	Number of labor reforms enacted; Kenyan seafarers employed globally.	State Department for Labor and Social Protection, State Department for Shipping and Maritime Affairs, Private Sector	50	5	10	20	10	5
Diplomatic and Trade Relations	Stronger diplomatic and trade ties with key partners established.	Expanded maritime trade routes and market access.	Number of trade agreements signed; increase in trade volumes.	State Department for Foreign Affairs, State Department for Trade, Private Sector	80	10	20	20	20	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Regional and International Maritime Trade Agreements	Regional and international maritime trade agreements negotiated and joined.	Enhanced competitiveness and access to global trade opportunities.	Number of trade agreements joined; increase in trade competitiveness.	State Department for Trade, Regional Bodies (IGAD, EAC)	70	10	20	20	10	10
Free Trade Zones and Special Economic Zones	Free trade zones and special economic zones developed in maritime hubs.	Attracted foreign investment and stimulated trade.	Number of free trade zones established; foreign investment levels.	State Department for Trade, Private Sector, County Governments	90	20	30	20	10	10
Maritime Security and Border Protection	Kenya Coast Guard, Navy, and other agencies strengthened.	Secured maritime borders and prevented illegal activities.	Number of illegal activities prevented; improvement in maritime security.	Ministry of Defence, Kenya Coast Guard Services	100	10	30	20	20	20
Advanced Maritime Surveillance Systems	Advanced surveillance systems (e.g., satellite tracking, radar, AIS) implemented.	Enhanced real-time monitoring of maritime traffic and safe navigation.	Number of surveillance systems implemented; improvement in monitoring capabilities.	Kenya Coast Guard Services, Kenya Navy, Private Sector	80	10	10	20	30	10
Collaboration for Maritime Security	Partnerships with regional and international partners established for joint security operations.	Improved coordination and response to maritime threats.	Number of joint operations conducted; reduction in maritime threats.	Kenya Coast Guard Services, Kenya Navy, Developmental Partners	70	10	20	20	10	10

SUSTAINABLE BLUE ECONOMY TOURISM

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Regulatory Frameworks for Sustainable Tourism	Regulatory frameworks and incentives established for sustainable tourism practices.	Increased adoption of sustainable tourism practices.	Number of regulations enacted; percentage of tourism operators adopting sustainable practices.	State Department for Tourism, NEMA, County Governments, Private Sector	50	5	10	20	10	5
Green Certification Programs	Green certification programs developed for tourism operators.	Tourism operators meet sustainability standards.	Number of certified operators; reduction in environmental impact.	Kenya Tourism Board, NEMA, Private Sector	30	5	10	5	5	5
Eco-Friendly Tourism Infrastructure	Eco-friendly tourism infrastructure developed.	Reduced environmental harm and increased climate resilience.	Number of eco-friendly facilities built; reduction in carbon footprint.	State Department for Tourism, Private Sector, Development Partners	100	10	20	20	30	20
Sustainable Coastal Cities	Coastal cities designed with sustainable tourism and climate adaptation.	Integrated tourism, waste management, and renewable energy in coastal cities.	Number of cities adopting sustainable designs; improvement in waste management systems.	State Department for Tourism, State Department for Lands and Physical Planning, State Department for Housing and Urban Development, County Governments	80	10	30	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Local Tourism Opportunities	Tourism opportunities developed around lakes, rivers, and coastal areas.	Enhanced visitor experiences and community benefits.	Number of local tourism projects; increase in visitor numbers.	County Governments, Community Groups, Private Sector	70	10	20	20	10	10
Community-Run Ecotourism Centers	Community-run ecotourism centers established.	Locals benefit from tourism while protecting resources.	Number of centers established; income generated for communities.	State Department for Tourism, Community Groups, NGOs	60	10	15	15	10	10
Eco-Tourism Activities	Eco-tourism activities like lake tourism and sport fishing promoted.	Increased eco-tourism revenue and conservation efforts.	Number of eco-tourism activities; increase in participation.	Kenya Wildlife Service, County Governments, Private Sector	40	5	5	10	10	10
Sustainable Tourism Infrastructure Around Lakes and Rivers	Infrastructure developed around major lakes and rivers.	Improved tourism experiences and environmental protection.	Number of infrastructure projects completed; increase in tourist visits.	State Department for Tourism, County Governments, Private Sector	90	10	20	30	15	15
Training and Funding for Ecotourism Businesses	Communities trained and funded to develop ecotourism businesses.	Increased local participation in tourism and economic growth.	Number of businesses established; income generated for communities.	State Department for Tourism, NGOs, Development Partners	50	5	10	10	15	10
Marketing Kenya's Blue Economy for Recreational and Sport Tourism	Kenya marketed as a top destination for recreational and sport tourism.	Increased tourism revenue and global visibility.	Number of marketing campaigns; increase in tourist arrivals.	State Department for Tourism, Kenya Tourism Board, Private Sector	70	10	20	20	10	10

Program Area	Key Output	Result	Indicators	Actors	Cost (Ksh) Million	Y1	Y2	Y3	Y4	Y5
Partnerships for International Sport Tourism Events	Partnerships established to host international sport tourism events.	Boosted tourism revenue and global recognition of Kenya's marine attractions.	Number of events hosted; increase in tourism revenue.	State Department for Tourism, International Sport Tourism Organizations	60	10	10	20	10	10
Environmentally Friendly Recreational and Sport Tourism Regulations	Regulations enforced to ensure eco-friendly recreational and sport tourism.	Prevention of over-tourism and protection of natural ecosystems.	Number of regulations enforced; reduction in environmental degradation.	NEMA, Kenya Wildlife Service, County Governments	30	5	5	10	10	10

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