



# Sustainable Coastal, Marine Tourism and Mining Activities, and Strengthening Regulatory Frameworks Towards Aquatic Biodiversity Conservation and Ecosystems In Kenya

SECOND PROJECT TECHNICAL COMMITTEE MEETING  
CONSERVING AQUATIC BIODIVERSITY IN AFRICA BLUE ECONOMY

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## Introduction

- Kenya tourism; age old and a major sector in the economy.
- Stood out as a key tourism destination over decades; boasts rich coastal & marine tourism sector & natural heritage.
- Lying on the eastern coast of Africa, Kenya meets the Indian Ocean to the east, hence marine mammals constitute a bigger portion of wildlife found in the country.
- Inland Savannah: home to Big-Five; African bush elephants, Savannah lions, African buffaloes, rhinos and leopards; plus, other iconic native wildlife species, including hippos, zebras, giraffes etc.



## Introduction.....

- Kenya's Indian Ocean waters are home to “Big Marine” Marine mammals (whales, dolphins, dugongs), Billfishes (Marlins, Sailfish, Swordfish) & Sharks incl. Mako shark
- Kenya has enjoyed high tourism numbers since 1990s (with 34,211 hotel beds and +40% occupancy rate since 1995.
- 2000: 1,036,628 visitors, receipts to  $\approx$ US\$257 million.
- 2018(2.03 million visitors); 2019 (2,05 million,  $\approx$ US\$1.6 billion revenue), with 128,222 tourists jetting directly to the coast;
- 2020 - earning rate US\$1,363 per tourist compared to Seychelles at US\$ 1,739 per tourist



## Introduction

- **Need for a more proactive approach;** plan & market to build a sustainable CMT & OGM while safeguarding Aquatic biodiversity and environmental conservation
- **Proposed:** Multisectoral and intersectoral cooperation between coastal and marine tourism, oil and gas exploration and, mineral mining;
- **Steps:** AU-IBAR in collaboration with the Republic of Kenya held a consultative workshop in Nairobi, Kenya from 22-24, March 2023
- **Aimed to:** Gather data & information to contribute to the development of a Masterplan for Sustainable Coastal & Marine Tourism and Mining activities



# National Consultative Workshop

## 22-24 March, 2023 Nairobi, Kenya



**Overall objective of Workshop (NCW):** to develop national master plan for sustainable coastal, marine tourism and mining activities towards aquatic biodiversity and ecosystems conservation in Kenya, and regulatory framework (policies, regulations) for the country

### **Aimed at:**

- Create awareness on key issues, impacts of coastal and marine tourism, oil and gas exploration on aquatic biodiversity, environment
- Identify national priority issues and actions for the development of sustainable coastal, marine tourism, oil, and gas exploration;
- Developing national master plans for sustainable coastal, marine tourism, oil, and gas exploration; and,
- Developing regulatory and policy guidelines for sustainable mining and oil and gas exploration policy and practice in Kenya.
- **NB: Attended by 31 participants: Govt, NGOs, and Private sector**



## Background – Significance of CMT & OGM

- Tourism contributes 5% to total GDP &  $\approx 11.6\%$  together with linkage industry= country's #3 to GDP
- Tourism contributes 18% to total foreign exchange earnings, with 52% and 68% derived from coastal and marine tourism activity.
- Tourism accounts for over  $\approx 8.5\%$  of total employment in the country (1.6 million jobs) (WTTC, 2020).
- In 2022, travel and tourism contributed KES 268 billion to GDP, calculating to KES 160.8 billion for the coastal and marine tourism.
- Sector surged 83% in



## Background – Significance of CMT & OGM



- Oil discoveries though small, are likely impact on the environment can not be underestimated.
- Economically, Kenya's estimated fiscal revenues from oil are  $\approx$ US\$9bn annually, calculating to about 3.4% of Kenya's \$264 billion GDP (2022 estimate).
- investments in the Kenya's CMT are still low, and largely underdeveloped compared to international peers in the region such as Seychelles@ 20 beds/km of coastline; Zanzibar @ its 50 beds/km; Kenya's 21 beds/km



## Current Status of CMT & OGM

- **Tourism:** Kenya had  $\approx 22,500$  available rooms in star-rated hotels during 2021, estimated at 23,800 hotel rooms as at 2023.
- Capacity is distributed as follows;
  - Taita-Taveta ( $\approx 13$  star-rated hotels),
  - Kwale ( $\approx 11$  hotels),
  - Mombasa ( $\approx 53$  hotels),
  - Kilifi ( $\approx 40$  hotels) and
  - Lamu with about 10 star-rated facilities.
- The total investment in sector  $\approx$  USD 108.7 billion





# Background – Significance of CMT & OGM

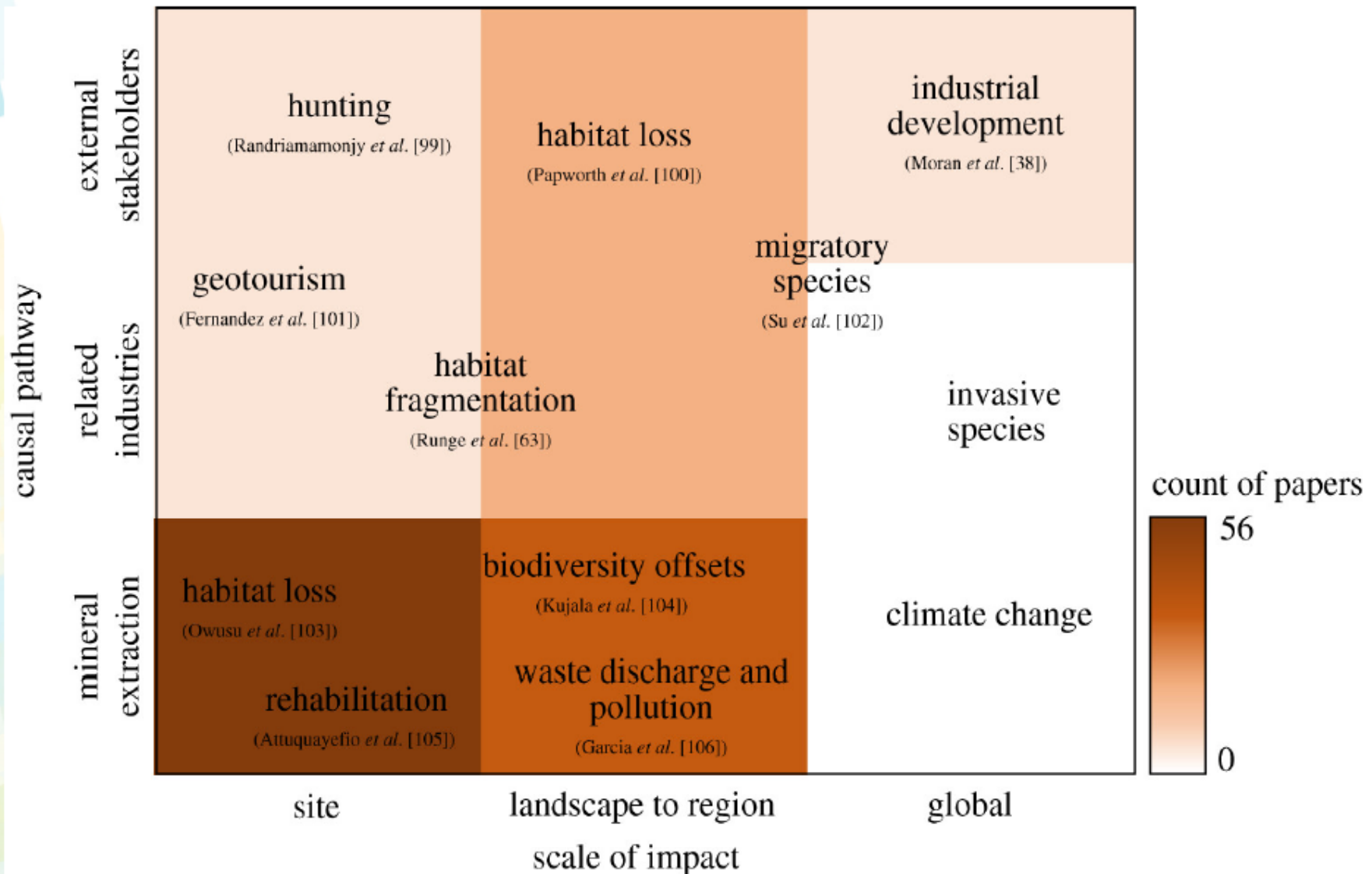


Figure 1. Impacts on habitats, biodiversity at varying spatial and temporal scales



# THE MASTER PLAN



## Objectives of the Master Plan

The overall objective of the Masterplan for Kenya is to “Promote Sustainable Coastal, Marine Tourism and, Mining Activities (including oil, gas exploration and mineral mining), and Strengthen Regulatory Frameworks towards Aquatic Biodiversity Conservation and Sound Environmental Management in Kenya.



## Specific objectives of the Masterplan:-



### Identify

- key stakeholders in the CMT OGM sector
- Priority issues and actions to enhance sustainability in the sector to ensure conservation of aquatic biodiversity and sound environmental management;
- Priority issues and actions to support informed policy formulation geared towards definition of a CMT OGM sustainable sector
- Priority issues and actions and aid definition and strengthening of regulatory frameworks in the sector

Enhance knowledge and awareness on priority issues and needed actions & Conserve, Protect and Enhance Kenya's unique natural capital and heritage to strengthen CMT & OGM



# Purpose of the Master Plan

As a planning framework, the Master Plan Provides;


- **Regulatory and policy guidelines** to the Republic of Kenya to strengthen environmental sustainability in the sector;
- **Avenue for focused and rationale intervention** for the maximization of tourists' satisfaction and attractions through healthy ecosystems, & conservation;
- **Mechanism for advocacy protection and compensation** of project affected persons (PAPs) and communities in impacts attributable to development of CMT & OGM
- **Advocacy towards environment friendly CMT OGM sector** + spatial plans to minimizing impacts on aquatic biodiversity and environments for sustained social economic growth.




# Background – Significance of CMT

- Kenya's main tourism circuits, with Mombasa and its environs covering the coastal and marine circuit.

**Center North**  
Mount Kenya and the national parks of Aberdare and Meru are perfect examples of the unique fauna and flora. Extremely protected, the plateau of Laikipia will astonish you. The lake of Turkana and its arid banks is a spectacle on its own.



**North East**  
The north east is a region inhabited by pastoral societies and suffers from droughts and instabilities. Its barren panoramas are quite impressive.



**West**  
Savannah and wild nature of Masai Mara, or mount Elgon crater are among the many wonders you can see around the city of Kisumu, close to lake Victoria.

**Great Rift Valley**  
Saw-tooth shaped volcanoes, salted lakes, verdant plains, ochre soils are the evidence of an incredibly rich and varied fauna. The wooded slopes and the thousands of flamingoes of Nakuru lake will be a never-ending wonder to you.



**Nairobi and its surrounding**  
Nairobi, the bustling capital of Kenya, is a modern and comfortable city as charming the magnificent wilderness of its surroundings.



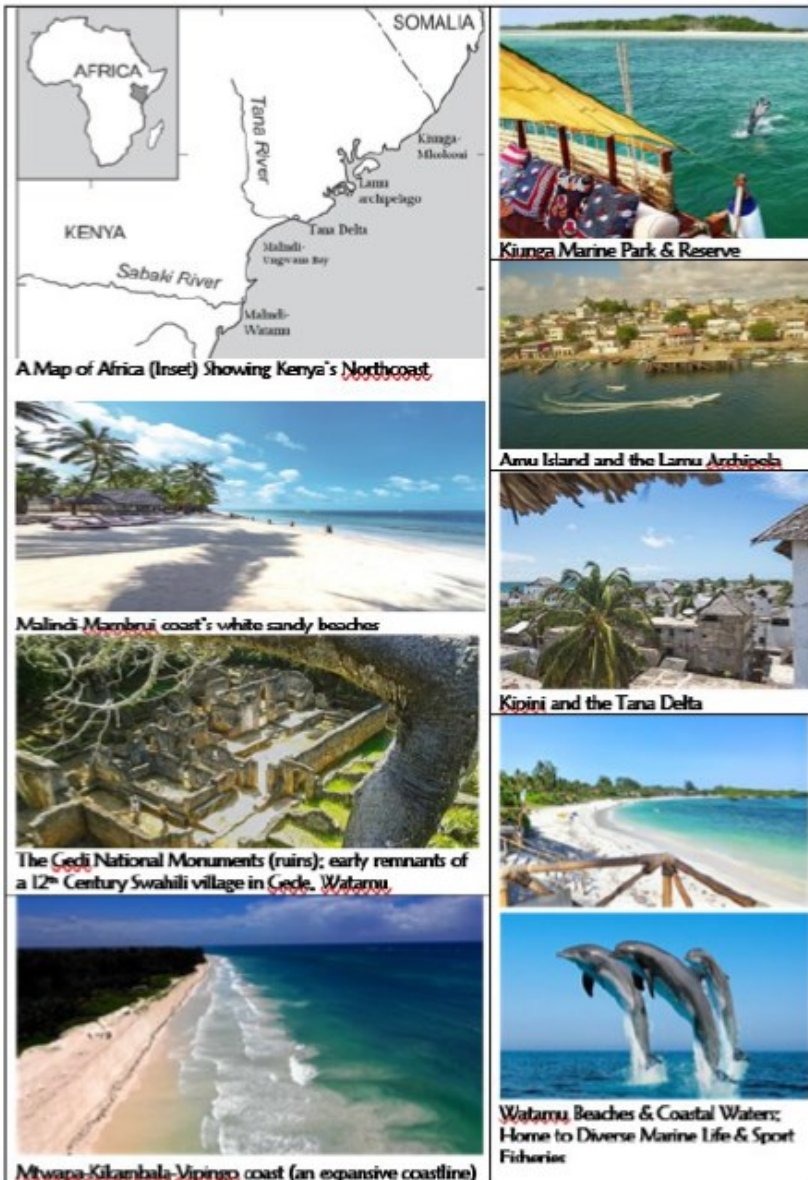
**Mombasa and its surroundings**  
The south is essentially part of the great Kenyan national park, Tsavo National Park, but the vibrant city markets of Mombasa and the old town of Lamu are also worth seeing. Not to mention the stunning coral reefs!



Map labels: Lokichokio, Moyale, Marsabit, Mandera, West, Kisumu, Nakuru, Nyeri, NAIROBI, Magadi, Amboseli, Mombasa, Lamu, THE TERRACE LEVEL - NET



# Background – Significance of CMT & OGM



- Kenya's north coast and the Lamu archipelago: major tourist circuits and attractions



# Background – Significance of CMT & OGM



A Map of Africa, Showing Kenya's South coast (Inset)



Jumba la Mtwapa ruins, remains of a 19th Century Swahili Village, Mtwapa.



The age-old 16th Century Fort Jesus, Mombasa; a defence fortress built by the Portuguese in 1593-1596



Jomo Kenyatta (Pirata) Public Beach, Mombasa - a major for local tourism



Kisite-Mpunguti Marine Park, south coast Kenya; a major attraction for Dolphin watching and Water sports



Diani-Kisumu sandy beaches, south coast; for skydiving & Kite Surfing



Wasini Island, a Paradise across the Shimoni Caves, South coast Kenya



The Shimoni Slave Caves: A Rugged 5-km Cave used as holding pens for Slaves from hinterland, a Clear Embodiment of the Infamous Slave Trade in East Africa.



A cruise ship docked at the Port of Mombasa

- o Kenya's central and south coast: major tourist circuits along the Central & South Coast



# Issues, Challenges, Actions in CMT.....



- Key Issues Environmental pollution; Ecological/ degradation; Socio-economic and Governance

Key issues in CMT	Challenges to Identified issues	Priority actions	Institutional Arrangements
1. Environment	<ul style="list-style-type: none"> <li>• Habitat degradation from pollution, sewage; encroachment</li> <li>• Maritime transport: discharge from ships &amp; oil spills from boats,</li> <li>• Littering of coastal beaches by the public due to uncontrolled dumping of wastes /marine debris,</li> <li>• Lack of receptor facilities for ships,</li> <li>• Ocean mining: dredging of ports and <u>harbours</u>, dumping of dredged materials</li> <li>• Offshore exploration of oil and gas</li> <li>• Unplanned urban and infrastructure development</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of environmental awareness</li> <li>• Develop vulnerability, sensitivity inundation maps to mitigate sea level rise</li> <li>• Incorporate climate change models</li> <li>• development of ocean governance policy</li> <li>• Enforcement of the compliance mechanism for plastic materials</li> <li>• Compliance to international agreements</li> <li>• Enforcement of national laws</li> <li>• Promotion of indigenous and protection of cultural sites.</li> </ul>	<ul style="list-style-type: none"> <li>• NEMA</li> <li>• Ministry of Environment, climate change and forestry</li> <li>• Ministry of interior</li> <li>• Ministry of Tourism and wildlife</li> <li>• Ministry of Agriculture</li> <li>• Ministry of Mining Blue Economy and maritime affairs</li> <li>• County Governments</li> <li>• Private Sector</li> <li>• Other</li> </ul>





# Policy Interventions, Strategies & Actions in CMT

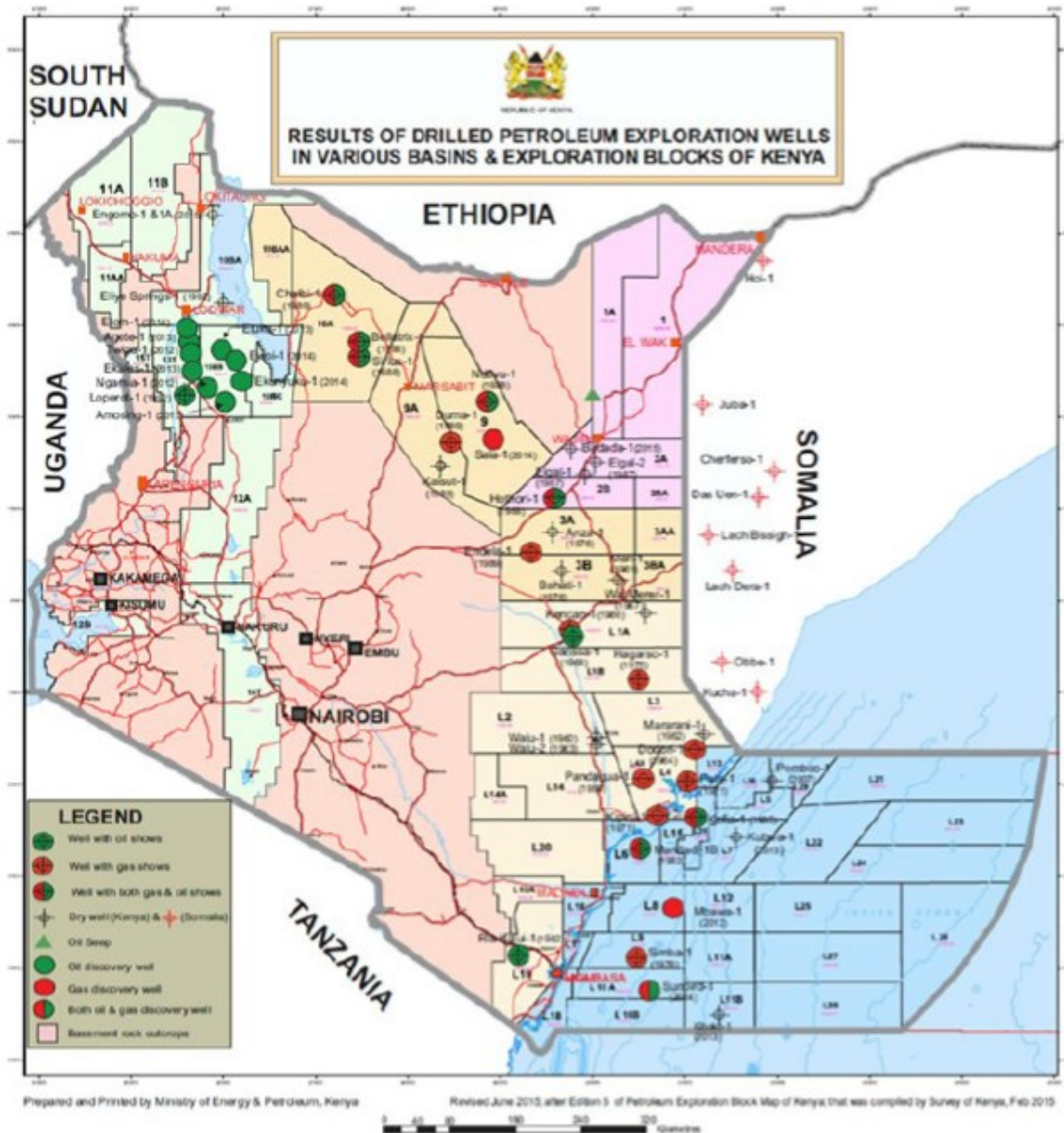
**Table 4. Policy Interventions, Strategies and Action Steps for Sustainable Coastal and Marine Tourism Sector for Conservation of Aquatic Biodiversity and Environment**

Priority actions / Policy Area	Baseline / Context	Policy objective	Expected Outcomes	Strategies and Actions	Existing Policy/ documents	Existing Legislative (regulations) frameworks	Proposed revisions / Actions if any
Sensitization and creation of environmental awareness	Inadequate information dissemination mechanisms	To increase public awareness & information sharing	Enhanced awareness	<ul style="list-style-type: none"> <li>Information packaging targeting all stakeholders (Newspaper, Seminars, workshops, Publications)</li> <li>Capacity building workshops.</li> </ul>	<ul style="list-style-type: none"> <li>National Environment Policy 2013</li> <li>National Oceans and Fisheries Policy 2008</li> <li>Tourism Policy 2006</li> <li>Sessional Paper No. 1 of 2020 on wildlife policy</li> </ul>	<ul style="list-style-type: none"> <li>EMCA ACT 1999 (Rev 2012)</li> <li>Wildlife conservation and Management Act 2013</li> <li>Forest Conservation and Management Act 2016</li> <li>Fisheries Management Act 2016</li> </ul>	<ul style="list-style-type: none"> <li>Revision of the tourism Policy 2006</li> <li>Revision of the Museum Act</li> </ul>
Develop ocean governance policy	Inadequate policies on ocean governance	To strengthen ocean governance frameworks	Enhanced ocean governance	Develop Ocean governance policies	<ul style="list-style-type: none"> <li>National Oceans and Fisheries Policy 2009</li> <li>East African Community Vision 2050</li> <li>Kenya Vision 2030</li> <li>Kenya Kwanza Bottom-up</li> </ul>	<ul style="list-style-type: none"> <li>The Fisheries Management Act 2016</li> <li>Africa Integrated Maritime Strategy 2050</li> <li>African Charter on Maritime Transport Safety and Security 2016</li> <li>The Shipping Act of 2015</li> </ul>	<ul style="list-style-type: none"> <li>Develop an Integrated Maritime Policy</li> <li>Blue Economy Policy</li> </ul>



# Significance of Oil and Gas Exploration in Kenya

- Sector is largely unexploited
- Exploration date back to 1950s in Lamu Basin
- 2012 first viable oil in Tertiary rift,
- Gas in offshore Lamu
- ≈ 4 billion barrels of crude oil reserves Lokichar sub-basin





# Key Issues in Oil and Gas Exploration

**Table 2. Key issues in Oil and Gas Exploration and Mining, Challenges, Priority Actions and Proposed Institutional Arrangements to support Aquatic Biodiversity and Ecosystem Conservation**

Key issues in Oil & Gas Exploration/ Mining	Challenges to Identified issues	Priority actions	Institutional Arrangements
I. Environmental	<ul style="list-style-type: none"> <li>• Destruction and degradation of critical marine flora &amp; fauna</li> <li>• Seismic noise that affects marine mammals</li> <li>• Disturbance of Underwater heritage sites</li> </ul>	<ul style="list-style-type: none"> <li>• Develop a robust Marine Spatial Planning (MSP) (on-going)</li> <li>• Marine mammal and fisheries monitoring and observation any time there is a seismic operation</li> <li>• Identify migratory routes, seasons and biodiversity hotspots e.g. MPAs</li> <li>• Collect baseline data (bathymetry, seafloor and ecological habitats, valuation of marine ecosystems)</li> </ul>	<ul style="list-style-type: none"> <li>• KMFRI</li> <li>• KeFS</li> <li>• KFS</li> <li>• KWS</li> <li>• NEMA</li> <li>• KCGS</li> <li>• State Dept. of Petroleum</li> <li>• NOCK</li> <li>• NMK</li> <li>• CDA</li> <li>• Kenya Navy</li> <li>• Appropriate NGOs and CBOs</li> <li>• Universities/Academia</li> </ul>



# Policy Interventions, Strategies & Actions in OGM

**Table 5. Policy Interventions, Strategies and Action Steps for Sustainable Oil and Gas Sector for Conservation of Aquatic Biodiversity and Environment**

Priority actions / Policy Area	Baseline / Context	Policy objective	Expected Outcomes	Strategies and Actions	Existing Policy/ documents	Existing Legislative (regulations) frame works	Proposed revisions / Actions if any
Marine Spatial Plan	-Existing conflicts in resource use -Lack of planned resource use	Develop and establish a robust MSP	<ul style="list-style-type: none"> <li>• Reduced conflicts</li> <li>• Better managed oil and gas resources</li> </ul>	Establish an MSP Inter-agency & Multi-sector MSP workgroup	<ul style="list-style-type: none"> <li>• State of the coast Report</li> <li>• State of the environment</li> <li>• Draft EAC BES</li> <li>• ABES</li> <li>• Tourism masterplan</li> <li>• Kenya Natural resources map</li> </ul>	Petroleum Act	
Biodiversity Sustainability /protection	<ul style="list-style-type: none"> <li>• Habitat degradation</li> <li>• Biodiversity loss</li> <li>• Species migration, extinction</li> <li>• Loss of breeding &amp; spawning</li> </ul>	Map and identify living aquatic resources and their habitats for long-term sustainability	Ecosystem/Habitat at Integrity	<ul style="list-style-type: none"> <li>• Collect location-specific baseline data (species, habitats,)</li> <li>• Map out species migratory routes</li> <li>• Conduct marine mammal census</li> <li>• Monitor the distribution of species and habitats</li> </ul>	<ul style="list-style-type: none"> <li>• Marine protected areas management plans</li> <li>• Integrated Coastal Zone Management (ICZM)</li> <li>• Kenya BE strategy</li> </ul>	<ul style="list-style-type: none"> <li>• Convention on Wetlands (Ramsar convention (1976)</li> <li>• Sessional Paper No. 01 of 2020 on Wildlife Policy</li> <li>• IUCN</li> </ul>	<ul style="list-style-type: none"> <li>• Establish offshore MPAs</li> </ul>



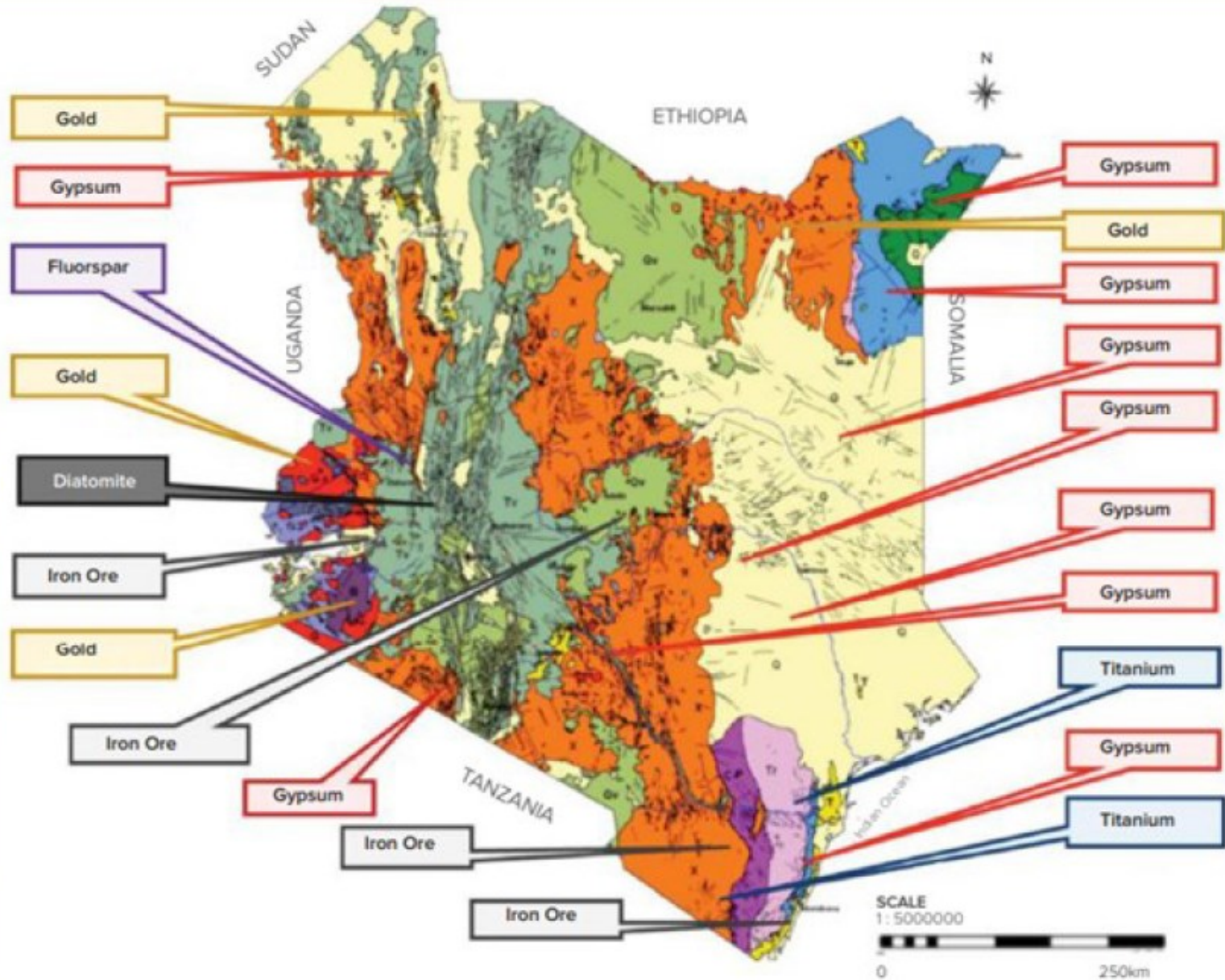
## Significance of Mineral Mining in Kenya



- Kenya is still in early exploration of its mineral potential, owing to the initial mapping of the country as an agricultural zone, leading to reduced exploration for minerals.
- Minerals mainly inland: soda ash, fluorspar, gold and iron ore etc ; e.g. In 2014, for instance, Kenya exported 281,503 Mt of ilmenite, 52,465 Mt of rutile and 23,000 Mt of Zircon
- Coastal mining limited to titanium in Kwale and limestone for cut stone; Titanium estimated at  $\approx$ US\$ 62.4 billion, expected to propel Kenya to the list of top five countries with rare earth deposits in the world.

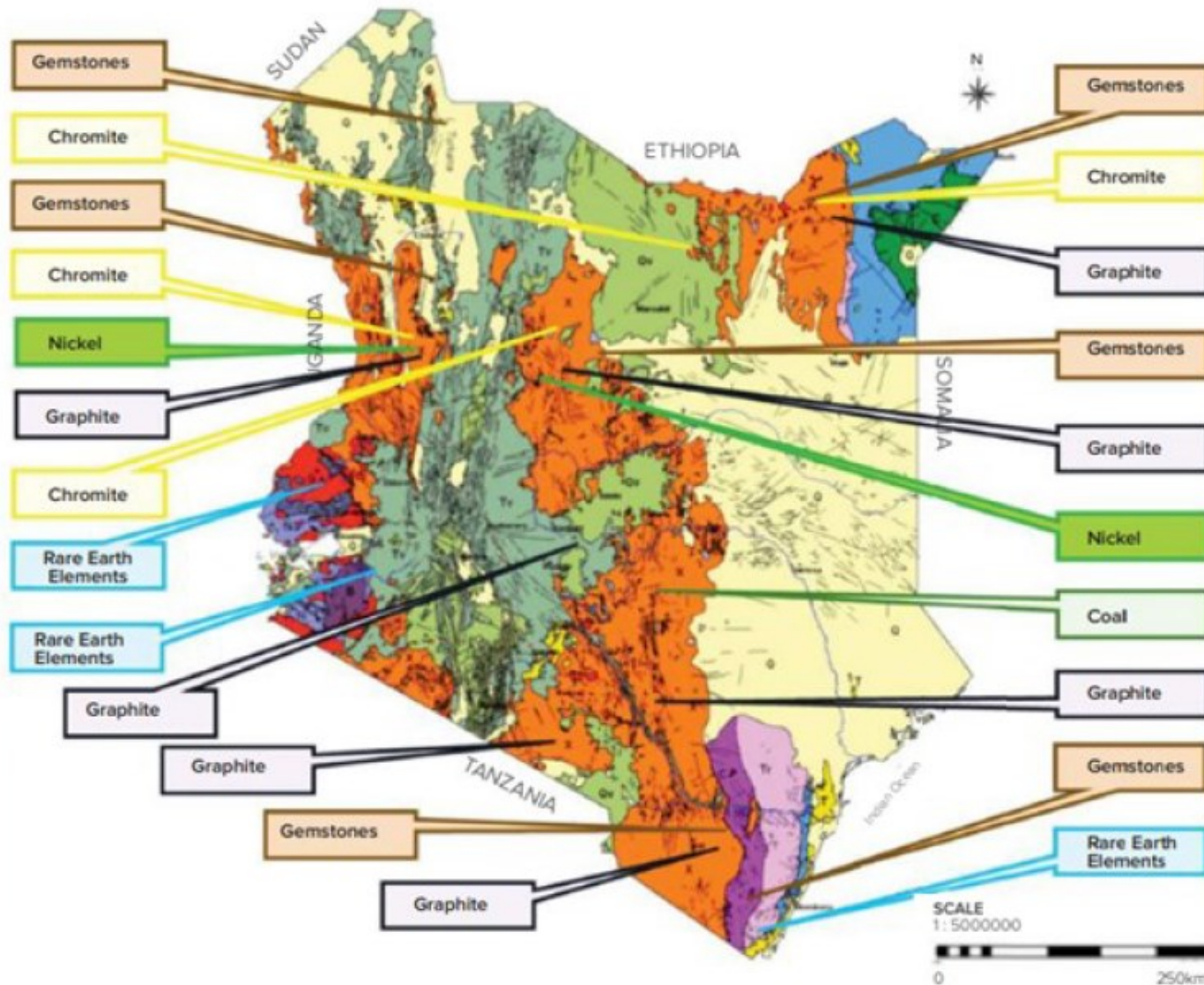


# Kenya Mineral Map 1





# Kenya Mineral Map 2





## Key Issues in Mineral Mining

**Table 3. Key issues in Mineral Mining, Challenges, Priority Actions and Proposed Institutional Arrangements supporting Aquatic Biodiversity and Ecosystem Conservation**

Key issues in Oil & Gas Mining	Challenges to Identified issues	Priority actions	Institutional Arrangements
1. Legal	<ul style="list-style-type: none"> <li>• Illegal mining – manganese, sand, building stones,</li> <li>• Non-compliance – lack of capacity to enforce standards and regulations.</li> <li>• Education and awareness/sensitization.</li> </ul>	<ul style="list-style-type: none"> <li>• Enforcement of the Mining Act</li> <li>• Community sensitization.</li> <li>• Formalization of artisanal mining activities.</li> </ul>	<ul style="list-style-type: none"> <li>• SDM (Mining Act, 2016)</li> <li>• Counties</li> <li>• NEMA</li> </ul>
2. Over-exploitation	<ul style="list-style-type: none"> <li>• Over-exploitation in disregard of mining guidelines and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Regular audits/Inspections and penalties</li> </ul>	<ul style="list-style-type: none"> <li>• SDM (Mining Act, 2016)</li> </ul>
3. Compensation	<ul style="list-style-type: none"> <li>• Landowners compensation and resettlement</li> <li>• Revenue Sharing between National government/Counties/Community</li> <li>• Poor remuneration</li> </ul>	<ul style="list-style-type: none"> <li>• Community Engagement</li> <li>• Establishment and implementation of benefit sharing <u>framework.e.g CDA</u></li> <li>• Integrate land owners in the BE dialogue for</li> </ul>	<ul style="list-style-type: none"> <li>• SDM (Mining Act, 2016)</li> </ul>





# Policy Interventions, Strategies & Actions in Mineral Mining

**Table 6. Policy Interventions, Strategies and Action Steps for Sustainable Mineral Mining Sector for Conservation of Aquatic Biodiversity and Environment**

Priority actions / Policy Area	Baseline / Context	Policy objective	Expected Outcomes	Strategies and Actions	Existing Policy/ documents	Existing Legislative (regulations) frameworks	Proposed revisions / Actions if any
Sustainable mining	<ul style="list-style-type: none"> <li>• Illegal mining (sand, building stones)</li> <li>• Non-compliance – lack of capacity to enforce standards and regulations.</li> <li>• Inadequate Education &amp; awareness/sensitization</li> </ul>	To achieve full compliance with regulations & guidelines for sustainable extraction of minerals	Sustainable mining practices	<ul style="list-style-type: none"> <li>• Enforcement of the Mining Act</li> <li>• Improve community sensitization.</li> <li>• Formalization of artisanal mining activities.</li> <li>• Regular control audits/ Inspections &amp; penalties.</li> <li>• Monitoring &amp; Evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>• Mining &amp; minerals Policy 2016.</li> <li>• Vision 2030.</li> <li>• National Land Policy 2009.</li> </ul>	<ul style="list-style-type: none"> <li>• The Mining Act No. 12 of 2016.</li> <li>• The Constitution of Kenya 2010.</li> <li>• EMCA 1999</li> <li>• Physical and Land Use Planning Act 2019.</li> </ul>	Inclusion of sand as a mineral In schedule 1 of the Mining Act 2016.
	Over-exploitation In disregard of mining guidelines and regulations	To ensure sustainable utilization of minerals resources	Socio-economic development & environmental sustainability	<ul style="list-style-type: none"> <li>• Increase Regular audits/Inspections and penalties.</li> <li>• Monitoring and Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• Mining &amp; minerals Policy 2016.</li> <li>• Vision 2030.</li> </ul>	<ul style="list-style-type: none"> <li>• The Mining Act No. 12 of 2016.</li> <li>• The Constitution of Kenya 2010</li> </ul>	<ul style="list-style-type: none"> <li>• Make adequate financial provisions &amp; allocation to facilitate effective</li> </ul>



In the **Coastal and Marine Tourism** sector faces several challenges:

- inadequate **information dissemination** mechanisms;
- Inadequate policies on ocean governance;
- **Low compliance** augmented by **absence of compliance frameworks**; mechanisms, weak enforcement, low regard of indigenous knowledge; **inadequate incentives, compensation**;
- **Inadequate safety & security frameworks** & measures to counter transboundary crimes, illegal trafficking;
- Inadequate **capacity building and knowledge**, ecotourism promotion and sectoral approach in handling issues.



### Coastal and Marine Tourism sector Proposed Strategy:

- Enhanced information packaging targeting all stakeholders,
- **Capacity building**
- Development of sound ocean **governance policies**, enhanced Interagency approaches to enforcement while incorporating community knowledge in decision making organs;
- **Mangrove rehabilitation** campaigns / awareness;
- **Stronger enforcement (MCS)** existing laws & regulations on reefs and coral ecosystems especially;
- Enact stricter antifouling paint standards;
- Facilitate participation in regional and international processes



In the **Oil and Gas** sector, the key issues: -

- Lack of spatial planning leading to conflicts in resource-use,
- Habitat degradation / Biodiversity loss,
- Loss of ecosystems services and biodiversity,
- Increasing competition for maritime space;
- Unequitable resource sharing and benefits,
- Loss of cultural and genetic resources; and
- Pollution.



### Interventions Oil and Gas Sector:-

- Establishment of an MSP inter-agency & Multi-sectoral MSP Working Group, Location-specific baseline Database for habitats, ecosystems and species;
- Mapping of species migratory routes, conduct marine mammal census;
- Fast-track, domesticate, implement international conventions related to biodiversity conservation,
- Stricter enforce of existing regulations- e.g. EMCA's polluter pay principle;
- Manage, maintain, exercise, and periodically review and update the Oil Spill Response Contingency Plans;
- Maximize Kenya's marine pollution response capability;



### Oil and Gas Interventions continued....

- Conduct public awareness campaigns on ship source and land-based oil/chemical pollution;
- Ensure proper environmental impact assessment (EIA) on offshore projects with Enhanced review of environmental impact assessment reports;
- Enact a compensation fund/authority and advance implementation on Access and Benefit Sharing;
- Develop curricula local institutions, TVETs and Universities to producing quality skill; Develop inter-agency data sharing protocols and Establish an open source data access platform/repository



## CONCLUSIONS AND RECOMMENDATIONS



- In the Mineral Mining sector, the big challenges: -
- Illegal mining especially with regards to de-classified materials such as sand and building stones;
  - Non-compliance due to low capacity to enforce standards and regulations;
  - Over-exploitation in disregard of mining guidelines and regulations; increasing conflicts between land owner's compensation and resettlement;
  - Lack or harmonization in revenue/benefit sharing mechanism between National government/Counties/Community augmented by poor remuneration; all leading to increasing biodiversity loss and alteration of physical landscape, uncontrolled erosion,



In the Mineral Mining sector cont...

- Storm-water; Sedimentation;
- Pollution from dust emissions, oil spills and other chemicals; poor mine-waste management practices;
- Use of child labour, gender issues relating to lack of inclusion and parity,
- Poor access to financing; Lack of direct access to markets;
- Lack of technology/ expertise especially in the artisanal mining sector; Environmental pollution;
- Land degradation, Intrusion of sea water into the ground water; Inadequate geological data on mineral distribution,
- Conflicts with community & non-documented heritage sites.





Mineral Mining Proposed strategies include:

- Enhanced enforcement of the Mining Act;
- Improve community sensitization,
- Formalization of artisanal mining activities;
- Establishment and implementation of benefit sharing framework e.g. Coast Development Authority;
- Integrate land owners in the BE dialogue for mineral/land compensations; Enforcement of ESIA/EIA;
- Enhance environmental rehabilitation plans,
- Biodiversity conservation and management Plans,
- Mine waste management Plan, Community integration in BE process development & minerals;



### Mineral Mining Proposed strategies ....

- Formation and gazettement of Artisanal Mining Committees; Sensitization/enforcement of Children's Act;
- Enhanced research to provide information on the impact of various mining activities (including sea water mining) for sound policy formulations;
- Adherence to/and continuous improvement exploration and mining standards; Geological mapping & Mineral exploration;
- Map out Sensitive habitats & development of disaster resilience plans; Gazettement of heritage sites;
- Develop capacity for health & safety mining, & Continuous audits and inspections with aim of improving conditions.



## RECOMMENDATIONS

Successful implementation of the Masterplan, calls for:

- Adopt/Adapt & incorporate modern technology into marine and coastal tourism development, oil and gas exploration; mining activities;
- Adapt biodiversity conservation friendly technologies and approaches in their operations in all sectors;
- Identify and document all actors for engagement while integrating all Civil Societies, CBOs etc., tap indigenous knowledge;
- Develop sound Marine Spatial Plans (Coastal marine tourism, oil and gas, Mineral mining, shipping and maritime logistics, Conservation (MPAs), Security etc.;



## RECOMMENDATIONS

- Enhance Monitoring, Control and Surveillance (MCS), with adequate funding linked/drawn from the blue economy sectors;
- Enhanced Environmental awareness programmes, enactment of the Polluter-Pays-Principles; Coastal; clean-up programmes for marine debris and plastics;
- Modernization of Disaster preparedness systems including Oil spills, Port pollution, fires, etc. with stronger regulatory/ punitive measures for infringements;
- Regularize artisanal mining esp. coral mining, cut stone, shell collectors etc. to curb the destruction caused to aquatic ecosystems and enhance the OSH of the miners



## RECOMMENDATIONS

- Strengthen synergies between Community, Primary, High School, TVET institutional, and Tertiary Education and training to incorporate enhanced Conservation studies into the system;
- Enhance inter/intra institutional (National, County and Local governments; Ministries, Departments, CBOs, CSOs, etc. strengthen Multi-agency conservation approaches;
- Gender mainstreaming in All sectors of the Blue Economy; stronger emphasis on Livelihoods, Livelihood Restoration Programmes among others;
- Enhance interproject linkages to ensure synergy within the Blue Economy Sectors e.g. Aquatic Biodiversity, Go-Blue, etc. for better results;



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Thank you