Building capacity of institutions and stakeholders involved in the MSP process for the Kenyan EEZ and nearshore waters

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Building capacity of institutions and stakeholders involved in the MSP process for the Kenyan EEZ and nearshore waters

Wednesday, 21 October 2020
Abbie Akinyi Allela (IOC-UNESCO Consultant)

Bio

- IOC-UNESCO National Consultant on Marine Spatial Planning
- Profession: Marine Policy and Conservation Scientist
- Experience: MSc in Marine and Lacustrine Science and Management
Objectives

1) To identify the concepts, policies in place and progress made on MSP work in Kenya and regionally
2) To identify the capacity needs relevant to MSP within institutions in Kenya mandated with marine governance
3) To identify the gaps present to be improved that inform capacity development for the different stakeholders in the MSP process whilst increasing stakeholder involvement
4) Make robust and identify the MSP sector needs that need enhancement
Agenda

(09:00-09:30) Introduction & Opening remarks

(09:30-11:15) Session on MSP development in Kenya

(11:15-11:30) Q and A

(11:30-13:00) Session on success MSP cases, data management and capacity requirements

(13:00-13:20) Q and A

(13:20-13:30) Closing
Panelists

Dr. Valentine Ochanda
WIOMSA Coasts and Cities Programme

Dr. Caeser Bita
National Museums of Kenya

Dr. Majambo Gamoyo
COMRED

Harrison Onganda
KMFRI

Dr. Adnan Awad
The Nature Conservancy

Pascal Thoya
KMFRI

Miriam Wainaina
KMFRI

Jackson Marubu
TNC

Maxwell Azali
WCS
Bio

- Ph.D.(Ongoing) in Environmental Science and Fisheries Biology ~ University of Hamburg and Macquarie
- Focus on ecosystem-based management and blue economy in the Indian Ocean region
- Vast experience in MSP ~ MSc in Marine Spatial Planning (Erasmus Mundus)
- Presently at the Leibniz Institute for Baltic Sea Research Warnmunde (IOW) within the Marine Spatial Planning Group.
Summary of Kenya’s national and international commitments to MSP and applicability to relevant sector needs: Review of MSP in the context of the Kenyan EEZ

✓ National obligations
✓ National Aspirations
✓ International Obligations
✓ International Aspirations
✓ Relation to MSP
National Obligations

The Kenya Constitution  Chapter 5, Part 2: 69

a) ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources, and ensure the equitable sharing of the accruing benefits;

d) Encourage public participation in the management, protection and conservation of the environment;

f) establish systems of environmental impact assessment, environmental audit and monitoring of the environment;

g) eliminate processes and activities that are likely to endanger the environment; and

h) utilise the environment and natural resources for the benefit of the people of Kenya.
Big 4 Agenda

Sustainable blue economy has been identified to be of great potential to accelerate the country's development.

Kenya has identified BE as one of the priority sectors that will address the Big Four agenda in the next five years.

Vision 2030

✓ Fisheries alongside other marine sectors to help increase the country’s income and improve food security.
INTERNATIONAL OBLIGATIONS

Some treaties that Kenya is party to.

✓ UNCLOS 1982
✓ CITES
✓ UN Fish Stock Agreement, 1995
✓ The Convention on Biological Diversity (CBD) 1992
✓ Convention on the Territorial Sea and the Contiguous Zone
✓ East African Community (EAC) Treaty and protocols
✓ Nairobi Convention
✓ International Convention for the Safety of Life at Sea (SOLAS)

The treaties address issues such as:

✓ Protections of endangered species
✓ Sustainable Management of shared stocks
✓ Protecting navigation routes
✓ Provision of Space for laying of infrastructure such as submarine cables and pipelines,
✓ Safety of navigation

National boundaries do not conform to ecosystem boundaries,
We have an international duty to protect ecosystems and maritime spaces
What Can MSP Do?

Process of analyzing and allocating parts of three-dimensional marine spaces (or ecosystems) to specific uses or objectives, to achieve ecological, economic, and social objectives that are usually specified through a political process.

**Protection of Key ecological area**
- Coral reefs
- Seagrass
- Mangroves
- Spawning areas
- Nursery areas
- Feeding areas
- Migration corridors

**Promote sustainable utilisation of ocean**
- Fishing area
- Tourism
- Transportation
- Oil and gas
- Mining
- Renewable energy

**Preservation of cultural heritage**
- Areas of archaeological or historic
- areas of spiritual or religious importance
- Indigenous fishing grounds
Expected Results of MSP

- Strategic plan that regulates, manages and protects the marine environment by allocating space.

- Sustainable management of the seas.

- Baseline data for future decision making

- Resolve of potential multiple use conflicts.

- Scientifically useful data for monitoring impact

- Stakeholder participation provides societal acceptance of government regulations

- Improved transparency to our development partners such as (Global Environment Facility (GEF), World bank)
National Obligations
- The constitution
- GOK + County Gov

National Inspirations
- Vision 2030
- Big Four agenda

International Obligations
- Treaties

International Inspirations
- SDGs

MSP
- Defining goals
- Potential uses
- Authority
- Scenarios
- Allocating uses
- Stakeholder involvement

- Baseline Data
- Monitoring
- Impact Assessment

- New jobs
- Opportunities
- Increased production

- Shipping routes
- Migration corridors

- MPAs
- Healthy Ecosystems

Scenarios

Authority

Stakeholder involvement

Baseline Data
Monitoring
Impact Assessment

Defining goals

Potential uses

Allocating uses

International Inspirations
- SDGs

National Obligations
- The constitution
- GOK + County Gov

National Inspirations
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- Shipping routes
- Migration corridors

- MPAs
- Healthy Ecosystems

Scenarios

Authority

Stakeholder involvement

Baseline Data
Monitoring
Impact Assessment

Defining goals

Potential uses

Allocating uses

International Inspirations
- SDGs
Successful marine spatial planning will help in achieving both national/international Obligations and Aspirations

Thank you!

Pascal Thoya
Visiting researcher, Leibniz Institute for Baltic Sea Research Warnemünde (IOW) MSP (Working group)

PhD Fellow - University of Hamburg and Macquarie University

Research Scientist – Kenya Marine and Fisheries Research Institute
Pascalthoyya@gmail.com
Jackson Marubu, The Nature Conservancy

**Bio**

- Project manager for the Kenya blue bonds for marine conservation & delivery of Convention of Biological diversity commitments
- Previously a technical officer with the Freeland Foundation ~ trainer for law enforcement agencies on counter wildlife trafficking & protected area management
- Anthropologist and Social scientist(UoN)
Stakeholder involvement and institutional capacity

The Kenyan MSP scenario

Jack MARUBU-The Nature Conservancy
Kenya's National Parks and reserves constitute 8% of Kenya's land mass.

Private & community conservancies = 11% of the country and secure the <70% of the country's wildlife.

To achieve the CBD 30x30 target, the strategy is to increase conservation through community and marine conserved areas.
Why MSP?

CBD - Target 11 (Conserved Areas) by 2020

Growth of Conservation in Kenya

Aichi Target 17
Kenya 8
Uganda 16
Tanzania 32

Protected area Coverage (%)

Growth of Conservancies in Kenya

Area under Conservancies (Ha)

- 1,461,204 Ha
- 2,582,314 Ha
- 6,311,087 Ha


- 2,000,000
- 4,000,000
- 6,000,000

Kenya
Uganda
Tanzania
Kenyan Exclusive Economic Zone
Protected Area Representation of Nearshore Habitats and Deep Seafloor Geomorphology

Key Ports
- Exclusive Economic Zone, Settled
- Exclusive Economic Zone, Unsettled
- Exclusive Economic Zone, Treaty
- High Seas

Protected Areas (World Database on Protected Areas; IUCN 10/2019)
- Communal Conservation Areas
- Coral: 32.2%
- Mangrove: 41.9%
- Seagrass: 61.2%
- Canyon: 0%
- Continental Rise: 0%
- Abyssal Hills: 0%
- Abyssal Mountains: 0%
- Abyssal Plains: 0%
- Slope: 0.7%
- Terrace: 0.8%

FOR DISCUSSION PURPOSES ONLY
Prepared for The Nature Conservancy
Prepared by Spatial Support Systems, LLC
Scale: 1:2,000,000
Map projection: Cylindrical Equal Area
Datum: WGS84
Data Sources: IUCN, Hansen et al. 2014, MarineRegions.org, The Nature Conservancy, EIM
Enabling Environment

3. EMCA 2015 - Provides guidelines on access to bio-resources
7. Supportive legal framework for co-management now available
8. GoK with support from development partners has progressively increased budget allocations to the NRM sector.
Basic Principles of stakeholder management

- **Focus on relationships and processes within area of scope**
- **Consult Early and often**
- **Use adaptive management practices**
- **Ensure intersectoral cooperation**
- **Carry out management actions at scale appropriate for the issues being addressed with the decentralization to the lowest level as appropriate**
Stakeholder identification should consider: Best Practice

- Who are the stakeholders?
- What conflict of interest, overlapping interest vs opposing could be involved in the process?
- How, and to what degree, will given stakeholders be affected by the project?
- How will stakeholder perspectives influence the project?
- How much involvement are stakeholders likely to require/ prefer?
- If they are unlikely to support the project, what might convince the stakeholders to support it?
- If we can't convince certain stakeholders how will we manage their opposition?
- Who influences their opinions?
Key Stakeholder groups & Analysis

- Government- National and County
- Technical Agencies
- Host Communities & Demographics
- Research and Academia
- Private Sector Players
- Non-Governmental Organizations
- International and Regional Agencies
How to Engage Stakeholders

• Phase 1: Clarify Context: Identify area of interest, scale, policies & regulations, and institutional agreements.
• Phase 2: ID concerns: Identify goals & actions to be taken and scenarios to consider.
• Phase 3: Concept model development: Identify driving variables and functional relationships
• Phase 4: Define States: Identify number and range of categories
• Phase 5: Process data & Build model: Link GIS software. Participants fill out conditional probability tables
• Phase 6: Produce Maps: Land suitability maps representing different stakeholder groups
• Phase 7: Monitor Outcomes: Measure success/failure. Identify trade-offs
Key Ministries & Stakeholders Involved - example

Technical engagement at the national/ regional level:
Working Group to understand the process and risks, identification of abilities and pathway to achieve the conservation commitments.

- Ministry of Agriculture, Livestock & Fisheries
  State Department for Fisheries, Aquaculture and the Blue Economy

- Ministry of Tourism & Wildlife
  State Department Of Wildlife

- Ministry of Environment & Forestry
  Department of Multilateral Environmental Agreements

- Ministry of Transport, Infrastructure, Housing, Urban Development & Public Works
  State Department of Maritime and Shipping Affairs

- The National Treasury

- The Nature Conservancy & other NGO’s
  TNC Oceans, TNC Kenya/Africa Region, NatureVest.
We are the first generation that has a clear picture of the value of nature and the enormous impact we have on it. We may also be the last that can act to reverse this trend.

1\textsuperscript{st} year of the last decade
Dr. Valentine Ochanda, WIOMSA Cities and Coasts Programme

Bio

- PhD in **Planning (Cities and Sustainability)**
- Programme Manager, **Cities and Coasts Programme**
- Current area of interest is on **sustainable planning of coastal cities, sea front planning, land use and marine integrated planning**
- Accomplished researcher on environmental related matters in the built environment
URBAN PLANNING AND WAYS TO MERGE ASPIRATIONS ON LAND WITH THOSE OF THE MARINE SECTOR

MARINE SPATIAL PLANNING (MSP) WORKSHOP “BUILDING CAPACITY OF INSTITUTIONS AND STAKEHOLDERS INVOLVED IN THE MSP PROCESS FOR THE KENYAN EEZ AND NEARSHORE WATERS”

By Dr. Ochanda Vallentine
COASTAL CITIES AND MSP

- Coastal cities act as “engines” of economic growth, whose development depends on national policies using the sea in connecting to the **global/blue economy**.

- Marine spatial planning is analogous to spatial or land use planning in terrestrial environments.

- Coastal spatial planning is restricted to setback lines.
It is estimated that port demand volume in Africa will grow by 6-8 times by 2040.

An estimated 80% of global tourism takes place in coastal locations.

WWF calculates that coastal and marine tourism contributes US$14.35 billion to the WIO region annually.

These, and other blue economy industries hold significance importance to the economic and socio-development prospects of WIO.
Integrated city marine and terrestrial planning is a relatively new and evolving process in WIO cities.

Planning authorities require enhanced capacity to participate in MSPs and vice versa.

Coastal space is usually an arena of multiple stakeholders' values, interests, and activities.

On top of high ecological values attached to key habitats and ecosystems, coastal areas are often spaces of conflicts of interests of different groups of people.
Processes and strategies for Spatial planning example Lamu County
The intersection of Coastal cities & marine environment requires thinking “together”

Failures of urban planning are detrimental to Marine areas and vice versa.

Lack of understanding of marine systems, produces negative impacts e.g. Sea Level Rise
Ensure Incorporation of social aspects: ensure inclusion, maximize developmental impact, and increase sustainability.

- **Co-contribution to Coastal economy**
  - **Legal Space** - Legal & Policy frameworks;
  - **Conceptual Space** - Physical & social sense, and opportunities for advocacy;
  - **Knowledge and practice space** - Practice, curriculum diversification.
CHALLENGES AND WAY FORWARD

- Non comprehensive approach to MSP and blue economy without complementary linkages—there is need for a policy mix.
- The sensitivity of coastal systems and participation of the citizens.
- Isolated non coordinated responses to degradation of land and marine spaces because of spatial allocation of infrastructure.
- Corresponding enabling policy to facilitate linkages across the region on coastal city planning and the Marine spatial planning.
- Weak link on integrated Coastal city planning—Not properly linked to nodes (Sea), and resource hinterlands/on shore and off shore areas.
Bio

❖ Masters degree in Archaeology (University of Dar-es-Salaam)
❖ Post graduate diploma in Management of Heritage & Museum Collections (UoN)
❖ B.A in Anthropology (UoN)
❖ Head of Department of Coastal Archaeology
❖ Currently Underwater Archaeologist for NMK, coordinating terrestrial and underwater archaeological research and underwater cultural heritage management in coastal Kenya
❖ Published in several international journals and books and presented profesional underwater archaeology papers in many international conferences.
UNDERWATER CULTURAL HERITAGE AND MARINE SPATIAL PLANNING

INTRODUCTION

❖ Kenya views its maritime heritage as a critical element of the country’s wellbeing.
❖ In addition to its intrinsic value, Kenya views its maritime cultural heritage as a resource that can be continuously utilised for the economic benefits to the country.
Kenya has a rich maritime cultural heritage; from ancient Indo-Roman traders to Muslim seafarers, and has always supported extensive networks of maritime communication and trade.

Within its current context, Kenya still offers a rich maritime cultural resource with diverse maritime communities, living heritage such as boat building styles and Underwater Cultural Heritage (UCH) in form of shipwrecks that dot the entire stretch of her waters of the 600km long coastline.
Archaeological works on the coast of Kenya have revealed that the coastal belt of Kenya has been settled since the Pleistocene, through the early pre-Islamic and Islamic periods to the present.

National Museums of Kenya has over the years undertaken underwater archaeological surveys of the Kenyan coast.

Many shipwrecks discovered
Ngomeni village is located 25 km north of Malindi on an arm of land jutting towards the sea (Ras Ngomeni)

Ngomeni shipwreck was discovered by fishermen who reported the find to the National Museums of Kenya Marine Archaeologist Curator of Malindi Museum (then Caesar Bita) in 2007
MANAGEMENT OF UCH IN KENYA

➢ Under the National Museums of Kenya. (The National Museums and Heritage Act, 2006). In this statute, NMK is the custodian of natural and cultural heritage.

➢ All shipwrecks 50 years and above are automatically declared national monuments and protected

➢ NMK and Kenya draws from:
  ❑ international conventions ratified by Kenya as State Party
  ❑ NMK has formulated sound policies and actions to regulate conservation and management of heritage resources.
  ❑ Collaboration with other local institutions, communities and international
  ❑ Municipal and state legislation,
  ❑ Professional “best principles and practices” for cultural heritage resource management
TOURISM: Underwater Cultural Trails / Museums
CAPACITY NEEDS

❖ Underwater archaeology is not an established academic discipline in Kenyan universities

❖ Need for more awareness
  ➢ UNESCO has facilitated several meetings and conference

❖ Need for training
  ➢ Kenya has trained two underwater archaeologists
  ➢ UNESCO has facilitated several training workshops

❖ Need for more survey
  ➢ maritime survey of the Kenyan coast
  ➢ NMK

❖ Increased collaboration
  ➢ Local institutions, Kemfri, KMA, KPA, Coast Guard etc.
  ➢ UNESCO, Universities
  ➢ Countries with greater
Miriam Wainaina, KMFRI

Bio

❖ Holds MSc. in Aquaculture from Ghent University
❖ A research scientist at KMFRI in the Mariculture department
❖ Involved in fish breeding, broodstock development and larviculture research interventions. Also promotion of coastal aquaculture through technology transfer & community outreach
Why aquaculture in MSP

- Addressing rising fish demand globally (FAO)
- SDGs and BIG 4 Agenda
  - Food security, Healthy foods, Employment
- Reducing wild fishing pressure
- Limited space-activities within the sea space
- Future production levels will be dependent on access to adequate areas for production
- Aquaculture considerations in MSP will
  - Propel aquaculture development
  - Reduce conflict ("last kid in the block")
  - Social acceptance
  - Spatial efficiency
Various fish farming systems & Species

• Extensive or intensive, closed or open systems, farmed species - high or low value

• Suitable sites in accordance with ;
  ❖ biology of the organism
  ❖ Culture system
  ❖ Production level

• Selection of an appropriate site is key to success of aquaculture

• Decision-making approaches; participatory mapping & GIS softwares

• Balance between preservation of culture, habitats, biodiversity & aquaculture (FAO, 2017)
Optimum environmental Needs

- Nearshore, intertidal area & creeks: Seaweeds milkfish/rabbit fish/Artemia/Crustacean/seacucumber & bivalve
  - Sheltered coast
  - Operational costs
  - Farming adoption level
  - Feeding trophic level
  - IMTA capabilities

- Offshore fish ranches: Tuna/ grouper/ Pompano/ macro-algae & bivalves
  - Scale of production
  - Special fish Biology needs
    - Habitat preservation
    - Biodiversity protection

- Carrying capacity (spatial/temporal/production)
  - Sustain culture
  - conserve ecosystem

KCDP, mariculture baseline survey (2014)
Optimum environmental Needs

• If computer assisted tools; Multi-criteria models; site specific needs of different species & systems

• FAO (2017) in Kenya; Selection of farming sites influenced
  ❖ Conscious of sensitive habitats
  ❖ safeguard interests of other users
  ❖ physical-chemical parameter
  ❖ infrastructure & costs of operations

• Environmental Cost Benefit Analysis

• Aquaculture kept at moderate level of development= minimized/eliminate tradeoffs

Environment monitoring for expansion of seaweed farming at Kibuyuni
Way forward

- Enabling regulations e.g. EIA, EMP

- Incentives to locals / capacity development for offshore fish farming

- Innovative solution (R&D)
  - Adaptability
  - Sustainability

- Kenyan coastal waters are relatively deep water body, thus suitable water depth within territorial waters (FAO, 2017)

- Reduce risk & optimize production
Thank you
Questions and discussion
Dr. Majambo Gamoyo, COMRED

Bio

- PhD in Ocean and Atmosphere (University of Capetown)
- MSc. Applied Marine Science
- Interests in climate science, oceanography & marine ecological systems
- Focus in Miji Bora Project involves data collection, analysis & interpretation to facilitate learning and policy generation
The overall aim is to examine city systems and codesign practical pathways towards a smart and sustainable port city of Mombasa.

- To conduct a situational analysis of the key drivers of urban form,
- To predict future trajectories based on business as usual scenarios and
- To envision, prototype and mainstream smart and sustainable future pathways.

Overall, this project will facilitate learning, co-generation and co-creation of knowledge among policy makers, urban researchers and other stakeholders. Furthermore, it will provide up-to-date information on the status of city systems and chart pathways to a smart and sustainable coastal city of Mombasa.
THE MANGROVES SITUATIONAL ANALYSIS IN MOMBASA COUNTY

- Mangroves are seriously threatened
- Dominant species: *Rhizophora mucronata*
- Forest is young; recovering from previous disturbances
TRANSFORMATIVE RIVER MANAGEMENT
Coastal cities are at the forefront of MSP process; therefore, cities must recognize the value of their natural capital, including their waterbodies.

Harnessing the potential of cities to benefit from the MSP process – such as sustainable livelihoods, sustainable housing and infrastructure, waste management, ecological protection and restoration.

Integrating urban planning and marine spatial planning must be a priority. Bringing together spatial planning and integrated coastal zone management (ICZM) through the development of integrated coastal and marine spatial plans (CMSP) are therefore important.

Restoring and protecting coastal and other water ecosystems – will be crucial in strengthening cities resilience to climate-induced.

More scientific research is needed to draw the linkages between cities and MSP process, in terms of cities as drivers of sustainable development.
Maxwell Azali, WCS

Bio

- MSc(Ongoing) in Coastal Science and Policy (University of Santa Cruz)
- Early career scientist
- Worked in fisheries and coral reef conservation projects in Kenya and the WIO
- Trained in marine planning process at the Nicholas Duke School of Environment
- Aspires to strengthen the connection between effective policy, natural resource sustainability & coastal community livelihoods.
DEVELOPING A MARINE SPATIAL PLAN FOR THE MALINDI-WATAMU SEASCAPE
WCS launched the MPA fund in Sept 2016 to significantly advance the conservation of the world’s ocean resources.

Goal is to assist countries to meet their marine protection goals (CBD)

The fund has supported MPA initiatives in at least 20 countries including Kenya and Tanzania.
https://mpafund.wcs.org

WCS supporting 2 projects in Kenya TBCA, Malindi-Watamu
PROPOSED AREA

- Extends from Tezo to Marereni, covering the entire continental shelf (200m depth)
- Covers 1757.9 km²
- Implemented in two phases: Phase one (2018 – 2019) was to evaluate feasibility of MSP in the area
- Phase two (July 2019 to current), development of MSP
FEASIBILITY ASSESSMENT

• Together with a team of core stakeholders (WCS, KWS, Kilifi County Directorate of Fisheries, WMA), we collected opinions from stakeholders on the feasibility of MSP.

• We had 3 stakeholder forums that brought together 141 participants including resource users, and resource managers.

• We also collated information on the ecological, socio-economic and institutional attributes on the proposed area.
EXISTING SECTORAL MARINE STRATEGIES, PLANS AND ACTIVITIES
ECOLOGICAL SIGNIFICANCE

Malindi Watamu Arabuko Sokoke Biosphere Reserve

Important Bird Areas

Important Marine Mammal Area

Key habitats (Mangroves, Coral reefs, Seagrass, Soft bottom habitats)
SOCIOECONOMIC SIGNIFICANCE

- Tourism
- Fisheries — approx. 4000 fishers and fish traders in the proposed area
- Salt mining in Marereni
THREATS
**CONSULTATIONS**

<table>
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<tr>
<th>Participant category</th>
<th>Number</th>
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<tr>
<td>Managers eg. Fisheries</td>
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<tr>
<td>Academia</td>
<td>3</td>
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<tr>
<td>Resource users</td>
<td>41</td>
</tr>
<tr>
<td>NGOs and Civil Society</td>
<td>41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>141</strong></td>
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RESULTS

PERCEPTIONS ON CURRENT OCEAN HEALTH

- Good: 8%
- Very good: 0%
- Poor: 26%
- Average: 52%
- Very poor: 14%

PERCEPTIONS ON CURRENT MANAGEMENT

- Somewhat effective: 29%
- Very effective: 3%
- Very Ineffective: 10%
- Somewhat Ineffective: 36%
- Neutral: 22%

PERCEPTIONS ON FUTURE OCEAN HEALTH (BAU)

- Improve somewhat: 2%
- Improve significantly: 11%
- Stay the same: 2%
- Deteriorate somewhat: 43%
- Deteriorate significantly: 42%
RESULTS

ARE YOUR INPUTS CONSIDERED IN MANAGEMENT/POLICY

- Strongly agree: 10%
- Strongly disagree: 3%
- Disagree: 20%
- Agree: 41%
- Neutral: 26%

PERCEPTIONS ON CURRENT MANAGEMENT

- Very effective: 3%
- Very ineffective: 10%
- Somewhat effective: 29%
- Neutral: 22%
- Somewhat ineffective: 36%
• A review of the policy and institutional framework found that there are many overlapping sectors, legislations, etc and that MSP would help harmonize and guide integrated management of the area
### Problematic User Issues

<table>
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<tr>
<th>Mentioned conflicts</th>
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<th>Fisher</th>
<th>Government</th>
<th>Manager</th>
<th>Grand Total</th>
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<td>Resource users and government institutions</td>
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<td>Beach development</td>
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<td>Conservation groups and resource users</td>
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PHASE TWO - DEVELOPING MSP

- Project inception workshop to raise awareness and discuss goals and objectives for the planned area.

- Conducted socioeconomic surveys in 6 communities dependent on the area, including Management preferences, Material style of life and household surveys

- Participatory mapping exercise
NEXT STEPS

Fill identified information gaps that are useful for MSP
Form strategic partnerships and collaboration with relevant institutions
Outreach activities to raise awareness
Develop MSP plan, launch and get relevant approvals
ASANTE SANA

We thank our donors, partners and the people of Malindi-Watamu seascape
Harrison Onganda, KMFRI

- MSc in Marine Ecology (Brussels), BSc. Hons (UoN)
- Principal Research Scientist, KMFRI, Mombasa
- Member - National MSP Interagency Working Group
- Chair - Regional MSP Technical Working Group
- Contact: hongada@kmfri.co.ke
Data, information, and knowledge areas to guide MSP

Presented during the Marine Spatial Planning (MSP) workshop: Building Capacity of Institutions in the Kenyan MSP process, 21-22 October 2020
INTRODUCTION

KEY THEMATIC AREAS OF MSP
• Skills identification & development
• Data & information clearing house
• Stakeholder engagement
• Equipment infrastructure
• Legal and institutional environment
• Reference materials
• Case studies (bench marking/on-going projects)
• Grounding of the new paradigms/ paradigm shift
• News sources and communication
Skills identification & development

- MSP is multi-disciplinary undertaking. In this instance the most supportive structure would be a database of experts with the most current data.
- Such a database should be Complete & Accurate
- We foresee a knowledge platform where we can capture – existing skills and details of previous trainings
- Lastly it’s also imperative to do a skills gap analysis for the Kenya
Data & information clearinghouse

• Need for MSP portal for key datasets on environment, social and economic data – to assist is understanding impacts on current and future demands on marine space and biodiversity

• Implication here is to set up a select group to develop a concept on such a portal, as well the operational procedures
Stakeholder engagement

• MSP is a participatory process
• Multi-stakeholder dialogues need to be facilitated by decision support tools to achieve the following state of knowledge i.e.
  • evaluate trade-offs
  • identify the most appropriate multiple-objective scenarios across different sectors and interest groups

• A baseline of stakeholder also need to be compiled and reviewed continually for inclusivity

It’s therefore imperative that the country address this important knowledge tool (decision support tools)
  • Symphony tool – marine planning at strategic level (Swedish agency for strategic management)
Planning and execution of MSP must recognize existence of spatialized laboratories, computing facilities & specialized equipment.

Mapping of ocean resources to inform zonations will include:

- Bathymetric maps
- Bioprospecting
- Stock assessments of fish resources
- Mapping of nearshore & deep water resources
- Mapping of off-shore canyons and ridges
- GIS & RS laboratories

Part photo – RV Mtafiti of KMFRI

IOC-UNESCO OTGA Training facility in KMFRI


Crabs displayed at Dar-es-Salaam fish market
Legal and institutional environment

Need to persuade the stakeholders

This deals with integrating MSP into national and local strategies, policies, and institutional frameworks for the management and governance of marine biodiversity and resources.

It will be imperative to design targeted knowledge programs at the two Government:

• National Government (posters, workshop, brochures, factsheets)
• County Government (posters, workshop, brochures)

• Recommend a task team dealing with production and delivery of IEC
Reference materials

Key institutions should be encouraged to implement institutional repositories

- Suitable platform
- Staffing
- IR policy

- Example
- JKUAT repository - http://ir.jkuat.ac.ke/
- KMFRI repository - http://41.89.141.8/kmfri/
Case studies (bench marking/on-going projects)

- A number of national initiatives/projects operate in silo modes

- MSP coordinating team may also be supported to benchmark with other resource management initiatives
  
  - Kuruwitu LMMA
  
  - Pate Island Marine Conservancy
  
  - etc
Grounding of the new paradigms/ paradigm shift

- Sustainable Development Goals (SDGs), adopted in 2015 – MSP members should be versed with the reporting obligations and status of Kenya’s report
- UN Decade of Ocean Science 2021-2030 - to support efforts to reverse the cycle of decline in ocean health
- Ocean Acidification
- Marine Litter
- Harmful Algal Blooms

Recommendation: keep abreast of call for actions and follow-up

News sources and communication

Advances in communication and outreach and therefore important in developing such skills:

• Data analytics
• Social network skills and opportunities
• Artificial intelligence

• Recommendation: create a task team to scope the extent that these may be harnessed for efficient implementation of MSP
THANK YOU
Dr. Adnan Awad, The Nature Conservancy

- PhD in **Marine Biology**, University of Cape Town (UCT)
- MSc in **Conservation Biology**, UCT
- 20+ years working on oceans in Africa
- Previous roles include:
  - International Ocean Institute (IOI)
  - International Maritime Organization (IMO)
  - Global Invasive Species Programme (GISP)
MSP Capacity Requirements in Kenya
Adnan Awad, Africa Oceans Strategy Director, TNC

Download Guide (PDF 1.5MB)

Guidelines for step-by-step approach from IOC-UNESCO

STEP 1: Establishing Authority
STEP 2: Obtaining Financial Support
STEP 3: Organizing the MSP Process
STEP 4: Engaging Stakeholders
STEP 5: Analyzing Existing Conditions
STEP 6: Analyzing Future Conditions
STEP 7: Developing the Plan
STEP 8: Implementing the Plan
STEP 9: Evaluating Performance
STEP 10: Adapting the Process

MSP – Key Capacities

- Process Design and Approach
- Stakeholder Engagement
- Science, Data and Tools
- Finance and Funding
- Facilitation
- Policy and Government Relations
- Project Management
Capacity within Key Marine Sectors

Every planning process is different, some or all of these sectors are involved in MSP

- AQUACULTURE: Invertebrates, Fish, Plants
- BIOTECHNOLOGY: Medicine, Biomedical Technology
- CONSERVATION: Biodiversity, protected areas, endangered species
- ENFORCEMENT: Coast Guard, Maritime Security, Military, Surveillance
- FISHERIES: Industrial, Semi-Industrial, Artisanal, Sports, Subsistence, Recreational
- MARITIME INFRASTRUCTURE: Marinas, Ports, Shipping, Transportation, Utilities
- NON-RENEWABLE RESOURCES: Oil & Gas, Mining
- RECREATION: Diving, Kayaking, Sailing, Watersports
- RENEWABLE ENERGY: Offshore Wind, Solar Power, Tidal, Biomass
- TOURISM: Charters, Resorts, Self-guided
Enabling Conditions for MSP

1. Authority to plan
2. Champion for the MSP
3. Driver or reason to plan
4. Financial resources
5. Information, data, knowledge
6. Leadership for the process
7. Legal instruments
8. Proponents and Opponents
9. Staff capacity
10. Stakeholder engagement capacity

Human Resource Needs for MSP

- **Process Management**
  - Process Lead
  - Committee Chairs
  - Project manager
  - Admin, finances, legal

- **Stakeholder Engagement**
  - Community Engagement Lead
  - Facilitator

- **Science and Planning**
  - Science Director or Lead
  - Technical Planner(s)
  - GIS Spatial Analyst & Mapping

- **Communications**
  - Communications Lead
  - Media Relations
  - Webmaster for Website
  - Social Media & other Public Outreach

- **Consultancies**
Develop Implementation Plans

- Governance Arrangements
- Implementation Options
- Financing Components and Costs
- Monitoring, Control and Surveillance
- Long-term Sustainable Financing Options
- Legislation or Regulations to Legally Adopt the Plan
- Research and Monitoring
- Plan Evaluation Indicators and Criteria
- Management Plans
Thank you!

adnan.awad@tnc.org
Questions and discussion
Thanks to National Partners

MINISTRY OF AGRICULTURE, LIVESTOCK, FISHERIES AND COOPERATIVES

United Nations Educational, Scientific and Cultural Organization
Intergovernmental Oceanographic Commission
Sustainable Development Goals
Sweden Sverige

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