

# **ENGAGEMENT WITH BMUs IN THE SHIMONI-VANGA SEASCAPE TO ASSESS THE STATUS OF IMPLEMENTATION OF CO-MANAGEMENT MEASURES FOR SUSTAINABLE FISHERIES AND ADDRESSING IUU FISHING**



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## 1. Introduction

Coastal communities play a crucial role in promoting the sustainable management and conservation of coastal and marine resources. They are custodians of local knowledge and, hence have a role in the decision-making process about the management of fisheries resources. In Kenya, coastal fisheries are managed through a co-management approach involving the Beach Management Units (BMUs). The BMUs are mandated to oversee the implementation of fisheries management and conservation measures within a particular geographic area referred to as a co-management area, and guided by a co-management plan.

Since fishers utilize common fishing grounds, several co-management areas form a joint fisheries co-management plan, and management, and conservation measures are stipulated through a joint co-management plan. The Shimoni-Vanga seascape is considered among the most bio-diverse marine eco-regions in Eastern Africa bordering Tanzania in the south. The seascape is endowed with myriad ecosystems including coral reefs, mangrove forests, seagrass beds, and rich fishing grounds attracting both local, as well as migrant fishers from Tanzania.

The Shimoni-Vanga seascape is among the three fisheries joint co-management areas in Kwale County and includes several co-management areas including; Shimoni, Mkwiro, Wasini, Kibuyuni, Majoreni, Vanga, and Jimbo BMU. Marine capture fisheries are the mainstay of the communities Within the seascape. Community-based conservation and livelihood initiatives are being undertaken by the community members and include among others, coral, and mangrove restoration, as well as mariculture activities such as seaweed farming, pond and cage culture of milkfish and tilapia, and beekeeping.

TuFAK through the SBE project conducted engagement meetings with fisher communities from Mwazaro BMU Self-Help Group, Shimoni BMU, Mkwiro, Wasini, Kibuyuni, and Majoreni. The engagement meetings were undertaken in the respective BMU offices within the Shimoni-Vanga seascape. The BMUs under the supervision of the county and national government are supposed to develop and implement fisheries management and conservation measures in line with the existing fisheries legislative, policy, and regulatory frameworks.

## 2. The Purpose of the Engagement Meetings

TuFAK through its advocacy strategy is advocating for the implementation of Minimum Terms and Conditions (MTCs) fisheries access arrangements, and IUU mitigation frameworks, at the national, county, and local levels. The purpose of the two-day event was therefore to:-

- a) Sensitize the BMU, and community members on the advocacy interventions being pursued by TuFAK towards the adoption and implementation of sustainable blue economy plans/strategies and MTCs fisheries access arrangements;
- b) Assess the status of adoption and implementation of BMU Bylaws/Co-management plans for Sustainable Management and Conservation of fisheries resources including addressing IUU Fishing;

### **3. Sensitization of the BMU members on the advocacy interventions being pursued by TuFAK towards the Adoption and Implementation of SBE plans/strategies, and MTCs fisheries access arrangements**

#### **3.1. Overview of the Sensitization exercise**

TuFAK conducted a sensitization exercise in all the BMUs engaged to inform the community members on the advocacy interventions being pursued by TuFAK towards the adoption and implementation of Sustainable Blue Economy (SBE) plans, and the Minimum Terms and Conditions (MTCs) fisheries access arrangements. Advocacy is a game of numbers and thus the sensitization exercise was aimed at mobilizing the BMUs for a joint advocacy campaign. The following are key highlights of the oral presentations on SBE and MTCs made by TuFAK.

#### **3.2. Key Highlights of the TuFAK Policy Brief on Leveraging Blue Economy for Inclusive and Sustainable Small-Scale Fisheries Development and Growth in Kenya**

**Oceans have great value and potential:** The Kenyan Coast has approximately 13,000 small-scale fishers, and the number of people supported indirectly by the sector as households, traders, processors, input suppliers, merchants of fishing accessories, or providers of related services, is far much higher.

The “blue economy” concept seeks to promote economic growth, social inclusion, and improvement of livelihoods while ensuring environmental sustainability of the oceans and coastal areas.

The blue economy focuses on the use and management of marine and other aquatic resources for sustainable economic development.

A challenge of the blue economy for the small-scale fishers is thus to better understand and manage the many aspects of marine resources sustainability, ranging from sustainable fisheries, ecosystem health, pollution, oil and mineral wealth extraction, bio-prospecting, sustainable energy production, and marine transport among other emerging activities.

The blue economy has mainly focused on economic growth, causing a worry about the placement of small-scale fishers in the blue economy value chain, there is therefore need to balance the economic, social, and environmental dimensions of sustainable development of the blue economy.

The Fisheries Management and Development Act 2016 provides for the conservation, management, and development of fisheries and other aquatic resources to enhance the livelihood of communities that depend on fishing. The Act provides for the import and export trade of fish and fish products, fish quality, and safety among other provisions that support sustainable utilization of marine products in Kenya.

## **Challenges**

The following challenges were identified by the civil society groups during a workshop in Mombasa as among the impediments to the adoption, and implementation of an inclusive BE.

- ❖ Lack of knowledge of the blue economy potential.
- ❖ Lack of inclusive and collective SBE decision-making framework.
- ❖ Poor marine governance
- ❖ Inadequate small-scale fisheries development and little added value creation.
- ❖ Depletion of fish stocks and marine habitat degradation
- ❖ Non-conformity of fisheries data and research development.
- ❖ Lack of streamlined and dependable fisheries development financing
- ❖ Emerging Issues: Climate change, plastic pollution

## **Recommendations**

- ❖ Prioritize Sustainable Blue Economy Education and Awareness Creation to SSF and the wider Community.
- ❖ Enhance sustainable marine resource use and management through conservation, protection, and rehabilitation.
- ❖ Enhance Marine Governance

- ❖ Prioritize the gradual development of Small Scale Fisheries
- ❖ Establish a financing mechanism that conforms to Small Scale Fisheries
- ❖ Fund research that promotes SSF development while integrating climate change and other emerging issues

### 3.3. Key highlights of the TuFAK Advocacy Plan on MTC Guidelines and IUU fishing

#### Background

The Southwest Indian Ocean Fisheries Commission (SWIOFC) Minimum Terms and Conditions for Fisheries Access (MTCs) are voluntary guidelines for granting fisheries access including fishing, supply, and transport vessels with interest in tuna and tuna-like species in the Southwest Indian Ocean (SWO) region. The guidelines are domesticated by the respective SWIOFC Member States for implementation.

The purpose of the MTC Guidelines is to provide for fair fisheries while promoting conservation and sustainable utilization of tuna and tuna-like species, including by-catch for improved socioeconomic and working conditions in the SWIOFC Region fisheries.

The MTC Guidelines were adopted by the Southwest Indian Ocean Fisheries Commission (SWIOFC) Member states during the 9th Session of the SWIOFC Commission in October 2018. The MTC guidelines are addressed to the following parties:

- ❖ SWIOFC States
- ❖ Flag States of vessels operating in the SWIOFC Region
- ❖ Fishing associations
- ❖ Sub-regional, regional, and global organizations, whether governmental or non-governmental
- ❖ All persons and vessel operators engaged in fishing and fishery-related activities.

#### Objective and Rationale for the SWIOFC MTCs Guidelines

Development of the SWIO regional fisheries MTCs guidelines was inspired by the desire for the coastal states to derive Sustainable benefits from their EEZ tuna resources.

The main objective of the MTCs guidelines is to establish a common access regime for foreign vessels fishing tuna and tuna-like species in the region purposed to:

- ❖ Monitor and control fishing activities more efficiently and effectively;
- ❖ Improve conservation and management of tuna and tuna-like species, including bycatch, and;
- ❖ Improve and generate economic benefits for the SWIOFC states.

### **Legal Basis for MTCs**

The MTCs align with International and Regional legal and policy instruments including the UNCLOS 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA,1995), FAO Code of Conduct for Responsible Fisheries 1995, Indian Ocean Tuna Commission (IOTC), ILO Fishing Convention 2007 and Port State Measures Agreement 2009.

Kenya adopted the SWIOFC MTCs in 2018 and thus should implement the guidelines for the benefit of its fisheries and the fisherfolk.

### **MTCs “A Tool for Addressing IUU Fishing in the SWIO Region”**

- ❖ Illegal, Unregulated, and Unreported (IUU) fishing is a serious impediment to fisheries sustainability in the SWIO region, this is mainly because of inadequate Monitoring Control, and Surveillance (MCS) capacity by the majority of the SWIO States.
- ❖ Estimates indicate that tuna fisheries loss to IUU fishing in the SWIO region is approximately US \$ 400 million per annum, and Kenya loses up to 11 billion dollars per annum.
- ❖ The SWIOFC MTCs Guidelines offer an opportunity for the region to pool resources to combat IUU fishing and associated crimes in the tuna fishery.
- ❖ The procedures and the establishment of the SWIOFC Regional Record provide for increased transparency and minimize corruption in fisheries through assessments, validations, and inspections.

**Table. Status of MTCs Implementation in Kenya (Source: SWIOFC MTCs Project Report, Volume 1, 2021)**

<b>Minimum Terms and Conditions for Fisheries Access Agreement</b>	<b>Status</b>
1. Definitions “fishing”	Partly Met

4. Pre-Inspection of Fishing Vessels	Partly Met
5. Conditions to Operate	Met
6. Conditions for Licensing	Met
7. Financial Compensation	Partly Met
10. Fishing Zones	Partly Met
11. Vessel Reporting Requirements	Partly Met
12. Regional Observers	Met
13. VMS and AIS	Partly Met
14. Appointment of Agents	Partly Met
15. Foreign fishing vessel in transit	Partly Met
16. Vessel and gear markings	Partly Met
17. Authorised gear	Met
18. Use of FADS	Partly Met
19. Foreign fishing vessels in port	Met
20. Transshipment	Partly Met
21. Landing	Partly Met
22. Bycatch and discards	Partly Met
23 & 24 Crew, Working conditions	Partly Met

## Key Recommendations

- ❖ The government should ensure all licensed foreign vessels land their catches in designated ports in Kenya to spur economic and social development in the country and ensure the allocation of adequate resources for the development of appropriate infrastructure to support landing at the designated ports;
- ❖ The government should ensure suitable mechanisms are in place for maximizing and sharing benefits arising from the use of by-catch in Kenya's marine waters and landed in the designated ports for food security, value addition, job creation, and poverty eradication;
- ❖ The government should secure increased employment opportunities for Kenyan crew on foreign vessels with terms and conditions in line with the International Labour Organization (ILO) standards, including the ILO Convention 188;
- ❖ The government should secure long-term social and economic benefits through a coherent, coordinated, and sustainable national tuna fisheries management and development framework that incorporates the SWIOFC MTCs guidelines.
- ❖ The government should ensure the allocation of substantial resources for the implementation of the relevant frameworks for addressing IUU fishing, and for enhancing capacity for Monitoring, Control, and Surveillance (MCS) in Kenya.

## **4. An Overview of the BMUs Assessed**

### **1) Mwazaro BMU Community Self-Help Group**

Mwazaro is among the five landing stations within the Shimoni BMU. However, since 2015 the group has been undertaking its activities as the Mwazaro BMU Self-Help group separate from its mother BMU Shimoni. Nonetheless, it has not been gazetted as a full BMU. The group at present has 168 members. In the pursuit to exploit fisheries resources, the group has 3 fiber engine-powered boats two with a carrying capacity of five crews, and one bigger boat provided by the government through the KeMFSED project with a carrying capacity of 10 crews. The group also noted that plans are in place for acquiring a recreational boat.

### **1.2. Conservation and Livelihood Initiatives**

Within the Mwazaro BMU Self-Help Group, there are several subgroups and each of the subgroups has its certificate, accounting, and governance system. The subgroups are as follows:

- ❖ Bati Seaweed farmers-they are undertaking seaweed farming and the majority of the members are women (accounting for 90%);
- ❖ Tushikane group undertakes pond fish farming of milkfish and tilapia, and further substantiated by Village Savings and Loan Associations (VSLAs). VSLAs are self-managed groups that meet to save their money and access small loans;
- ❖ Simba Self Help Group- grows casuarina trees, and other small businesses;
- ❖ Viranet group-culture fish including milkfish and tilapia incorporated with VSLAs;
- ❖ Tushauriane group- fishing farming, and VSLAs
- ❖ Nnrini- fish farming (tilapia and milkfish) and VSLAs
- ❖ Mwambao Mkuyuni youth group- mangrove conservation, VSLAs, and also undertaking seaweed farming jointly with Bati seaweed farmers.

#### **Shared activities**

- ❖ Waste management which entails sorting, recycling, and the sale of materials for income is shared among the groups.
- ❖ Beekeeping
- ❖ Mangrove nursery



Fig 1: Engagement with Majoreni BMU Self-Help Group

### 1.3. Emerging Issues and Key Observations from the Mwazaro BMU Self-Help Group

- ❖ The Mwazaro BMU Self-Help Group has not been gazetted as an independent BMU, hence still recognized by both the national and the county government as a landing station of Shimoni BMU;
- ❖ In terms of addressing IUU fishing, the group is very aware of the gears that are not allowed under the Fisheries Management and Development Act of 2016. Nonetheless, many fishers are still fishing with undersized gear, hence threatening the well-being of the seascape;
- ❖ The Mwazaro landing station is undertaking its operations independently;
- ❖ The community members noted that the Mwazaro fish landing station does not submit its data to the Shimoni BMU, and thus very difficult to determine the catch trends, and whether the landed catches are caught with legalized gear. There is underreporting of fish catches by the Shimoni BMU to the county government due to the failure of Mwazaro to submit their catches.

- ❖ The group also noted that NGOs and other civil society groups should play a major role in sharing knowledge with the community groups on the current issues in the fisheries, and conservation world.
- ❖ The group also noted that it needed assistance in proposal writing especially in sourcing funds beyond the

## 2) Shimoni BMU

### 2.1. Background of the BMU

Shimoni BMU has five landing sites namely; Mwazaro, Anzwani, Shimoni, and Changai. Shimoni BMU is a major fish landing hub, and at the moment a fishing port is being developed by the Kenya Ports Authority. The Shimoni port is among the three designated ports in Kenya and will be crucial for the implementation of port state measures. Within the Shimoni co-management area, community-based groups have been established focusing on mangrove nursery management & restoration, fish farming, etc. The Shimoni BMU through the Changai no-take zone has targeted to restore at least (50m\*50m\*5) of coral reefs at Changai. The coral reef restoration project was supported by the GEF small-grants project.

### 2.2. Fisheries Management Measures

The Shimoni BMU has revised its bylaws and has been submitted to the minister for fisheries (Kwale County). The BMU requires all its members to abide by the set fisheries management and conservation measures as stipulated in the national fisheries legislation and those indicated in the JCMA.

Concerning data collection, the BMU uses the Kobo Collect data collection toolkit, and data is submitted electronically to the Kwale County Department of Fisheries.

The members of the self-help group noted that the Mwazaro fish landing site does not submit its fish catch, and effort data to the Shimoni Beach Management unit.

The Shimoni BMU has a patrol unit for undertaking MCS measures. Nonetheless, the lack of resources has limited the number of patrols being undertaken to deter IUU fishing.

#### Changes as a result of the coral restoration work

Coral restoration has led to the recovery of corals and fish stocks.

Seagrass restoration has also led to an increase in the number of sea turtles foraging the area.

### **2.3. Emerging Issues and Key Observations from the Shimoni BMU Engagement**

- ❖ All the people who have acquired training in deep sea fishing from Shimoni and received STCW certification, have not acquired jobs.
- ❖ Some fishers are still using monofilament reef seines despite it being illegal gear according to the laws of Kenya, hence posing significant threats to the marine environment.
- ❖ Some fishers are also fishing using reef seines with a mesh size of below 2.5 inches which is deemed illegal according to the law.
- ❖ The Shimoni BMU members noted that many of the fisheries regulations largely target the small-scale fishers within the territorial waters, with many infringements going unpunished beyond the 12nm.
- ❖ The fishers noted that quota allocations have not been established for fishers fishing in the co-management areas, and the marine reserve resulting in overfishing, and little spill-over effect from the reserve to the adjacent fishing grounds.
- ❖ The Shimoni BMU has both shark and tuna-targeted fishermen and goes all the way to the Pemba channel. Fishing is mainly undertaken during the northeast monsoon season.
- ❖ A few community members affiliated with the Shimoni BMU recently received some deep-sea fishing boats. The boats are anticipated to increase fish landings at the Shimoni BMU.
- ❖ The coral and seagrass restoration at Changai CCA will likely be impacted during phase 2 of the Shimoni Port which will entail dredging, and thus the project proponent needs to come up with a framework for securing community conservation initiatives.

## **3) Mkwiro BMU**

### **3.1. Background of the BMU**

Mkwiro BMU is situated on Wasini Island and is a renowned fishing destination. The BMU membership includes men, women, and the youth. The BMU is responsible for spearheading fisheries management, and conservation measures within the Mkwiro co-management area. The group noted that they have reviewed their bylaws, and are currently awaiting gazettment by the county minister of fisheries, and subsequent implementation. The chair of the Mkwiro BMU is also the current chair of the Kwale BMU network, as well as the secretary of the Indian Ocean Water Body Network (a

network of BMUs from the five coastal counties bordering the Indian Ocean). With the representation of Mkwiro BMU in all these platforms, it has increased its visibility, and also the conservation work being undertaken by the community has attracted partnerships with several NGOs, and other non-state actors within the country.

### **3.2. Fisheries Management and Conservation Measures**

The BMU has a co-management plan that stipulates fisheries management, and conservation measures in place including the allowed fishing methods.

Within the CMA, only traditional fishing methods with limited impact on the environment are allowed.

Within the CMA the BMU undertakes 1-2 patrols in a month. While in the no-take zone up to five patrols are undertaken in a week with support from Reefolution. The BMU uses the Kobo Collect toolkit for data collection and subsequent submission to the Kwale County Department of Fisheries.

The BMU regularly undertakes sensitization to the community members against IUU fishing. Offenders are usually given several warnings before an action is undertaken which includes reporting of the accused persons to the Kenya Coast Guard Services stationed at Shimoni.



Fig 2: Engagement with Mkwiro BMU Members on 25<sup>th</sup> of July 2024

### 3.3. Emerging Issues and Key Observations from the Mkwiro BMU Engagement

- ❖ The BMU received deep sea freezers which are being powered with solar energy and have a capacity of about 140Kg, and noted they may need more freezers in the coming years.
- ❖ In addition to capturing fisheries, the BMU especially the women and youth are engaging in seaweed farming, as a complementary livelihood.
- ❖ The group has also received adequate capacity building on seaweed value addition from NGOs including, Reefolution.
- ❖ The group received funding from Blue Ventures and the Go Blue project to establish seaweed drying racks, which have reduced spoilage, especially during rainy days.
- ❖ The BMU members have received intensive training on leadership and governance with financial and technical support from NGOs, and other partners.

- ❖ With the establishment of the Mkwiro no-take zone, many changes have been witnessed. The conservation work has led to the establishment of fish and seaweed storage facilities, landing site infrastructure, and other social amenities including classrooms, etc.
- ❖ The coral restoration work at the no-take zone created immense job opportunities for the community members, especially the youth who are directly engaged in undertaking the conservation work. The coral restoration work has been supported by the Wildlife Conservation Society and Reefolution.
- ❖ To date, 6 coral restoration projects have been implemented in the Mkwiro no-take zone area.
- ❖ The community conservation initiatives are slowly turning Mkwiro into a tourist destination, creating employment opportunities, hence increasing revenue streams into the community.
- ❖ The BMU members noted that the no-take zone is conserving biodiversity through the conservation of fish breeding, and nursery areas, hence contributing towards increased fisheries productivity.
- ❖ The BMU noted that they are aspiring to practice eco-tourism, especially by taking tourists to the no-take zone area, as well as establishing a restaurant, and some tents for camping.
- ❖ The BMU is currently working towards the establishment of an octopus closure within their CMA, and the initiative is expected to enhance the livelihoods of the women who are engaged in octopus gleaning. The initiative will also help to rebuild the octopus population by reducing the fishing pressure.

## **4) Wasini BMU**

### **4.1. Background of the BMU**

Similar to other BMUs the Wasini BMU was established in 2007 when the BMU regulations came into force, and has a membership of 260 people. The majority of the members are women and are engaged in various activities within the fisheries value chain. 70% of the BMU executive members are women, and overall women account for about 65% of the BMU members. The majority of the women are fish traders, and some are engaged in octopus gleaning, and harvesting of crustaceans within the intertidal areas. The BMU has reviewed its bylaws and is awaiting gazettelement by the county minister of fisheries. Wasini BMU has a no-take zone area where fishing activities are prohibited. The BMU has tuna-targeted fishermen fishing with handlines, troll lines, and gillnets.

## **4.2. Fisheries Management and Conservation Measures**

The Wasini BMU has a no-take zone area within its CMA whereby fishing is prohibited. The community members have received adequate training in coral restoration from KMFRI, and other NGOs, and at present, there are 12 certified coral restoration experts and are all youth community members. In the no-take zone area coral and seagrass restoration are being undertaken, and these initiatives have been supported by both governmental and NGOs.

The BMU undertakes about two patrols in a month to address illegal fishing activities within their CMA. The BMU usually undertakes awareness and sensitization campaigns and culprits caught undertaking IUU fishing activities are given up to four warnings after which the BMU chair reports the matter to the County fisheries directorate or the Kenya Coast Guard Services. Occasionally joint patrols are undertaken in collaboration with the Kenya Coast Guard Services.

Fishers caught violating the BMU bylaws are expected to be fined which also adds to the sources of revenues to the BMUs. The BMU has a patrol boat and undertakes at least 1 patrol within the CMA.

The no-take zone (Tengefu) covers about 1-1.5ha and several coral restoration projects have been undertaken in collaboration with KMFRI, Africa Nature Organization, Coast Development Authority, and Base Titanium, etc. The BMU members indicated that there are plans to expand the no-take zone area.

The Wasini Women also have a mangrove boardwalk for ecotourism as well as a coral garden whereby coral and seagrass recovery is via natural regeneration, unlike the artificial reefs being planted at the Wasini Tengefu.

The Wasini BMU aspires to expand the Tengefu, and also establish an octopus closure within their CMA.

## **4.3. Emerging Issues and Key Observations from the Wasini BMU Engagement**

Unlike many of the CMAs in the coastal region, aquarium fishing is prohibited by the BMU within the CMA. The question is, do the BMUs have the mandate to restrict licensed aquarium fishing within their co-management areas?

The issue of waste management is still a challenge and one could see sewerage flowing into the ocean, and plastic bags scattered all over the beach, and in the intertidal waters.

The Wasini no-take zone is likely to be impacted by the dredging activities during the second phase of the Shimoni port. Nevertheless, the site where the no-take zone will be relocated has not been identified.

The patrols being undertaken by the BMU are limited spatially and temporally hence limiting their effectiveness towards addressing IUU fishing.

The recent monitoring assessment in the Wasini no-take zone by the community showed that the corals had experienced bleaching.

## **5) Kibuyuni BMU**

### **5.1. Background of the BMU**

The Kibuyuni BMU was established in 2007 and has about 750 members. The BMU has five landing sites which include; Kibuyuni, Kijiweni, Ngomani, Kiromo, and Mchimbwani. The BMU has revised its bylaws and has been taken to the minister for approval. The dugout canoes are the majority, and thus fishing activities are limited to nearshore waters. The BMU also noted that it had received three fiber engine-powered boats each with a gross tonnage of 500kgs from the Go-Blue project. However, they noted that deep-sea fishing is mainly done during the northeast monsoon season. With the support of the KeMFSED project, several community groups affiliated with the BMU have received grants to undertake mangrove restoration, while others are doing chicken farming as an alternative source of livelihood.

### **5.2. Fisheries Management and Conservation Measures**

The BMU is undertaking several fisheries management and conservation measures within their co-management area. The BMU undertakes at least 4 patrols in a year ensuring compliance with fisheries management measures. The BMU undertakes two types of patrols as follows; 1) for sensitization purposes of the fishers within the CMA against the use of illegal gear, and also on the need to land the fish within the designated landing sites, and 2) patrols undertaken to arrest fishers engaged in illegal fishing activities. In the event a fisher is caught, the gear is confiscated and the offender is arrested and taken to the Kenya Coast Guard Services for subsequent prosecution. The BMU noted that many of these offenders go unpunished due to interference by political leaders within the seascape.

The BMU has established a Tengefu (includes a no-take zone, and a reserve) within the CMA whereby fishing is prohibited. The Tengefu conserves fish, corals, seagrass, etc and recovery of degraded habitats is via natural generation. Fines are charged against fishers that are found fishing in the Tengefu. The Tengefu was established about 10

years ago, however, the buoys marking its boundaries were swept by currents, and at the moment it is susceptible to exploitation due to the absence of its boundary markings. In efforts towards addressing the IUU fishing the BMU keeps a record of the vessels and people engaged in IUU, and can be used as a reference especially when information is needed by the government.

There are several groups within the BMU undertaking other livelihood and conservation initiatives, including the seaweed farmers which have a cooperative and have been supported by both the national, and county governments, as well as the go Blue project to establish a seaweed storage facility, a facility for value addition is being developed as well as solar drying racks to minimize losses, especially during the wet the season. Other groups have established mangrove nurseries, and are undertaking restoration which is further complimented by beekeeping.



Fig 4: Engagement with Kibuyuni BMU Executive

### **5.3. Emerging Issues and Key Observations from the Kibuyuni Engagement**

The BMUs and civil society need to engage with the politicians within the Shimoni-Vanga seascape to sensitize them to the effects of IUU on the socioecological production seascape to avoid interfering with IUU-related cases.

The community members cited that the NGOs and other funding institutions should undertake adequate consultations with the community/fishers in the development of community livelihood improvement projects to ensure the sustainability of these initiatives.

The Kibuyuni Tengefu needs permanent buoys similar to those in the Kisite-Mpunguti marine protected area. Also, ecological assessment should be undertaken in the Tengefu to determine the status of the critical habitats.

The BMU mentioned that they need a communication tower to be erected at the beach, and fishers to be provided with advanced radio communication gadgets for timely communication with fishers at sea in case of distress, and for monitoring purposes.

For sea safety, the BMUs also need a rescue boat.

For enhancing the effectiveness of the Tengefu towards rebuilding fish stocks, and conserving marine habitats, as well as in preventing fishers from entering the reserve the BMU members indicated that there is a need to introduce a seasonal closure.

Adequate sensitization needs to be undertaken and adhered towards collaborative management to address IUU fishing, especially among the small-scale and semi-industrial fishers.

## **6) Majoreni BMU**

### **6.1. Background of the BMU**

The BMU was established in 2006 and gazetted in 2007. The BMU has 436 registered members majority of which are women. The BMU governing council includes a considerable number of women. The youth are also participating in BMU activities unlike in the past. The BMU has 2 landing sites namely Aleni and Chetechakale. The Majoreni co-management area is situated between Kibuyuni and Vanga. The BMU bylaws were revised in 2024 and have been submitted to the minister for approval. The dugout canoes comprise about 99% of the fishing crafts in Majoreni. The community members indicated that fish catches have been depreciating since 2004, and it could be associated with the increases in human population, as well as demand for fish products within Majoreni, and adjacent villages. Among the noticeable overexploited stocks

include, the mangrove crabs, and mainly the mud crabs which are also exploited by the women.

Destructive fishing practices using beach seines were introduced by the Pemba fishermen and later adopted by the local fishermen. However, after years of sensitization, the local fishers are now adopting sustainable fishing methods. The community members also noted that the Vanga fishers have big boats, fishing with very big ringnets in the Majoreni CMA, as well as areas adjacent to the CMA, which has led to overcapacity, and overfishing, as well as the degradation of critical habitats including corals and seagrass beds. The BMU's sources of income include the levies from the landed catches.

## **6.2. Fisheries Management and Conservation Measures**

The BMU noted that the Majoreni co-management plan is under development. They noted that fisheries officers are unresponsive when they are called to discuss critical issues affecting the fishers that the BMU has been unable to address. The BMU does not have a boat for undertaking patrols, and thus illegal fishing activities are taking place within their CMA. The BMU established a Tengefu nearly 10 years ago with support from some NGOs, but the buoys that were placed were swept away by currents, and the area is open, and being exploited by fishers from within, and other areas. However, they noted that some local fishers have made pleas to well-wishers to be supported to revive the Tengefu.

The group noted that fish landing data is collected effectively. The group has not adopted the Kobo Collect data collection toolkit and is recording the data on paper forms. Several groups affiliated with the BMU are undertaking mangrove restoration and conservation work notably through the Pongwe-Kidimu Community Forest Association (CFA). The BMU noted that mangrove cutting is prohibited, and lawbreakers are given several warnings, if the problem persists the CFA sits down, and discusses the matter, and if a decision is not arrived, the matter is reported to the Kenya Forest Service within Lunga Lunga Sub County for final judgment.

The BMU noted that in 2021 they did some patrols and at least 30 boats were caught fishing with illegal gear. The different community groups undertaking mangrove restoration, are as well undertaking beekeeping as a complementary source of livelihood.



Fig. 3: Engagement with Majoreni BMU Executive

### 6.3. Emerging Issues and Key Observations from the Majoreni BMU

The Shimoni-Vanga joint co-management area should adopt a plan that will address the resource user conflicts between the Vanga fishermen and those of Majoreni, as the Vanga fishermen are exerting too much pressure on the declining fisheries which have been greatly impacted by illegal fishing activities by the Pemba fishermen in the past.

The nearshore fishery resources including the mangrove mud crabs, and sea cucumbers have been overexploited.

The Majoreni Tengefu needs to be re-designed and new boundaries established. Adequate sensitization be undertaken on the benefits of having the Tengefu towards marine biodiversity conservation, and fisheries productivity.

The BMU has only one fiber boat capable of venturing into deep sea fishing during the northeast monsoon season, while the rest are traditional fishing crafts which are exerting immense pressure on the nearshore waters.

## 5. Next Steps, and Way Forward

- 1) Adequate sensitization and awareness campaigns should be undertaken within the Shimoni-Vanga Seascape on the three aspects of IUU (Illegal, Unreported, and Unregulated) fishing to determine which accounts most to enable the joint co-management unit to adopt appropriate management measures within the seascape to address the situation;
- 2) The BMUs should be capacity build, and supported to come up with sustainable fisheries management measures to avert overfishing, and destructive fishing practices (including the usage of monofilament nets, and beach seines) within the co-management areas;
- 3) The BMUs, and local communities especially within the Shimoni-Vanga seascape should start acquiring the necessary skills through training that will enable them to secure jobs, especially through the Shimoni fishing port.
- 4) With the establishment of the Shimoni fishing port, and associated fisheries infrastructure, huge amounts of fish and associated bycatch and thus the community members should register themselves as fish dealers to ensure they benefit through fish trade;
- 5) The county Department of Fisheries, and the BMUs should come up with a plan that will strengthen the implementation of MCS measures within the co-management areas adhered towards addressing destructive fishing practices;
- 6) The BMUs should adopt co-management measures that will regulate the fishing capacity with their co-management measures to minimize overfishing on the nearshore fisheries amid ever-increasing demand for seafood due to increasing population along the coastal areas;
- 7) To avert interference by political leaders on issues of fisheries compliance the civil society groups, and BMUs need to undertake dialogues with the local politicians for a collective approach towards addressing IUU fishing within the Shimoni-Vanga Seascape. The Secretariat of the Shimon-Vanga multi-stakeholder forum should therefore invite the local politicians to participate in the forum meetings;

- 8) The BMUs should dialogue with the state Department of Blue Economy, and Fisheries to enable secure jobs for the BMU members who have received training in deep sea fishing in any of the fishing companies fishing within, and beyond the country's EEZ;
- 9) The issue of Tengefu (no-take zones) should be looked into, especially concerning the design, area coverage, and their effectiveness towards biodiversity conservation. The majority of the community no-take zones established are very small and lack detailed management plans, and thus difficult to ascertain if they contribute substantially towards the rebuilding of the adjacent fisheries;
- 10) All planned mangrove, coral, and seagrass restoration projects in the co-management areas of Shimoni, Mkwiro, Wasini, and Kibuyuni should take into account the potential impacts that are likely to arise during the second phase of the Shimoni fishing port development project, and thus safeguarding resources;
- 11) The civil society groups and BMUs within the seascape should dialogue with the Kenya Ports Authority concerning the second phase of the Shimoni fishing port development project which will impact the community conserved areas, and livelihoods, and possibly come up with a framework for the implementation of the mitigation measures provided in the environmental impact assessment report of the project;