

MINISTRY OF LIVESTOCK AND FISHERIES

**BOARD OF TRUSTEES FOR MARINE PARKS AND
RESERVES**

**MARINE PARKS AND RESERVES UNIT
(MPRU)**

**ANNUAL PHYSICAL PROGRESS REPORT
FOR JULY- MAY 2022/2023**

JUNE 2023

1.0 INTRODUCTION

The report provides status of activities implemented from July to May 2022/2023 financial year. The implementation report involves both planned and back-log activities implemented at Marine Parks and Reserves Unit Head office (MPRU–HQs) and at its **18** Marine Protected Areas (MPAs). The MPRU's MPAs include three (**3**) Marine Parks namely; Mafia Island Marine Park (MIMP), Mnazi Bay Ruvuma Estuary Marine Park (MBREMP), and Tanga Coelacanth Marine Park (TACMP). Also, includes **five** Marine Reserves systems located in Dar es Salaam referred to as Dar es Salaam Marine Reserve system – DMRs, **three** Mafia Marine Reserves System – MMRs and **five** Tanga Marine Reserve system – TMRs (Table 1).

Table 1: The Marine Protected Areas (MPAs), their respective sizes and year of gazettelement.

No	MPA	CATEGORY	COVERAGE (sq km)	GAZETEMENT YEAR
1.0	Mafia Island Marine Park (MIMP)	Park	822	1995
A.0	Mafia Marine Reserves (MIMR)		21	
A.1	Shungimbili island	Reserve	4.2	2007
A.2	Nyororo island	Reserve	1.3	2007
A.3	Mbarakuni island	Reserve	3.8	2007
2.0	Mnazi Bay Ruvuma Estuary Marine Park (MBREMP)	Park	650	2000
3.0	Tanga Coelacanth Marine Park (TACMP)	Park	552	2009
C.0	Tanga Marine Reserves		56.19	
C.1	Kwale island	Reserve	12.13	2010
C.2	Mwewe island	Reserve	0.4	2010
C.3	Ulenge island	Reserve	3.16	2010
C.4	Kirui island	Reserve	36	2010

C.5	Maziwe island	Reserve	4.5	1975
D.0	Dar Es-Salaam Marine Reserve system (DMRs)	Park	42.68	
D.1	Fungu Yasini island	Reserve	9.43	1975
D.2	Mbudya island	Reserve	11.72	1975
D.3	Bongoyo island	Reserve	7.53	1975
D.4	Pangavini island	Reserve	1.72	1975
D.5	Makatube island	Reserve	4.38	2007
D.6	Sinda island	Reserve	6.41	2007
D.7	Kendwa island	Reserve	1.49	2007

The MPRU planning process was according to its Strategic Plan for 2014 – 2019 and the General Management Plans (GMPs) of each MPA. Besides highlighting the implemented activities, the report also provides challenges encountered and recommendations on the way forward.

2.0 IMPLEMENTED ACTIVITIES

2.1 CONSERVATION OF BIODIVERSITY AND ECOSYSTEM PROCESSES

The main objective of MPRU is to manage and conserve natural resources in the MPAs and its adjacent areas under its jurisdictions, and as well ensure their sustainable use. Several activities were implemented including patrols and enforcement of laws, promotion and implementation of Alternative Income Generating Activities (AIGAs), monitoring of resources status, promotion of eco-tourism in the MPAs and Community involvement in the management of MPAs.

2.1.1 Patrols and Law Enforcement

To assure protection and sustainability of its MPAs, MPRU continues to fulfil its obligation of managing resources by carrying out law enforcement particularly patrols against unsustainable resource harvesting methods and any kind of resource damage. Also, the patrols are important in raising awareness on compliance with the Marine Parks and Reserves laws, regulations and other guide lines. Apart from conducting patrols, also there

are surveillances especially on land which help in gathering information useful during the patrols. The members composing the patrol's team normally vary depending on the situation at hand.

For the period of July-May 2022/2023 a total of **741** patrols were conducted at different parks and reserves whereby **222** were in the park and **519** were in the reserves. A total of **673** culprits were charged fines of Tsh **50,500,000/=**. **12** file cases were opened (table 2).

Table 2: The number of patrols conducted in each park and reserves, culprits involved, fine paid and opened file cases for the July- May 2022/2023 period.

Parks	Number of patrols					
	July- May 2022/2023					
	Patrols			Culprits involved	Fine Paid	Cases opened
Total	Park	Reserves				
MIMP	216	77	139	417	13,320,000	4
MBREMP	94	94	0	49	900000	2
TACMP	360	51	309	192	34,480,000	3
DMRS	71	0	71	15	1,800,000	3
Total	741	222	519	673	50,500,000	12

For July-May 2022/2023, the most commonly practices the culprits were involved included: Lack of fishing license, lack of entry permit to the parks, unregistered of fishing vessels, day time fishing of sardines, scuba diving fishing, fishing of immature fish, use of illegal fishing nets i.e. under mesh sizes, beach seines, multi mesh net, and the use of spear guns. Others included illegal harvest of mangroves, dynamite fishing, and catching of sea turtles.

2.1.2 COMMUNITY INVOLVEMENT IN MANAGEMENT OF MPAs

Generally, in managing its resources, MPRU insists in having collaborative management. This is mainly through cooperation with various stakeholders with the common interests. Among stakeholders that MPRU cooperate the most includes: (a) World Wild Life Fund -WWF (i.e. WWF-BAF project in MIMP, WWF/MPRU Coral resilience project). (b) Wildlife Conservation Society-WCS (i.e. support extended in the review of MPRU strategic Plan, capacity building in TACMP, etc.) (c) Western Indian Ocean Marine Science Association-WIOMSA (support extended in capacity building of MPRU through

Empower, etc.). (d) USAID (i.e. funds disbursed to empower for MPRU capacity building, the upcoming Heshimu Bahari USAID project). (e) Tanzania Fisheries Research Institute TAFIRI (Research and data Sharing). (f) Nature Conservancy Tanzania – NCT. (g) National Environmental Management Council NEMC (i.e. collaboration extended in the combat of TSN - oil spill pollution in Tanga, etc.). (h) World Bank budget support for MPRU through our ministry (Tanzania Scaling Up Sustainable Marine Fisheries and Aquaculture Management Project-TASFAM). (i) Thanda Hotel Ltd (collaborates with MIMP in providing alternative income activities to surrounding communities within the park).

Furthermore, MPRU collaborates with the Government Authorities in various matters. For example, collaboration of MPRU with PWANI District and Regional authorities in the handling of Nyororo island issue. Also, MBEMP collaborates with ward and district authorities in the awareness development and management of its dense mangrove forests and in the promotion of the parks and advertisement of tourism attractions.

Locally, MPRU manages its resources in collaboration with the beneficially communities that surround the MPAs through Village Liaison Committees (VLC). Enhanced collaborative management of MPRU and VLC helps to reduce conflicts and create sense of ownership. Also, helps in increased compliance and win the support and commitment from communities and other stakeholders.

For the period of July-May 2022/2023 MPRU through its parks made concerted efforts to enhance collaborative management, aimed at reducing conflicts, fostering a sense of ownership, increasing compliance, and gathering support and commitment from local communities and stakeholders. To achieve this, the MPRU provided support for a range of community activities, including meetings, workshops, environmental education sessions, and field visits. These initiatives were targeted towards engaging with and empowering local communities and stakeholders living in the Marine Protected Areas (MPAs) to promote effective and sustainable management.

2.1.3 PROMOTION OF ALTERNATIVE INCOME GENERATING ACTIVITIES (AIGAs).

Currently, of the biggest challenges MPRU faces in collaborative management with VLC is increased “Fishing Effort”. The increased affinity towards fisheries resources impacts negatively compliancy strategies despite the common goal and understanding. In combating this problem, it was found important in

having Alternative Income Generating Activities (AIGAs) among the communities surrounding the MPAs.

So far, for the period of July-May 2022/2023 among the AIGAs introduced as a strategy to broaden income base and reduce dependence of communities on natural resources included: Seaweed farming, tour guiding, boat hiring, beekeeping, pearl farming, and fish smoking. Provision of entrepreneurship knowledge to youths. Agro-tourism and horticulture for vegetable and fruits are projected as future AIGAs. Sometimes village communities were given loans (in form of Village Community Bank-VICOBA) to capacitate them on activities of their wish (case example is MIMP/WWF-BAF-Project). The goal was to reduce involvement of the Park Residents in unsustainable resource-use activities.

2.1.4 PROMOTION OF ECO-TOURISM IN MPAs

Among the issues of importance MPRU insists in the financial year 2022/2023 is increased publicity of its eco-tourism opportunities for increased revenue collection. During the period of July-May 2022/2023 MPRU undertook various initiatives aimed at promoting eco-tourism within the MPAs. These initiatives included:

i. Participation in Economic Forum.

Two staffs from MPRU participated in Italy Tanzania Economic Forum (on 29th and 30th of September 2022) where various institutions and businessmen from Italy attended. “Blue economy investment “opportunities as found in MPAs were presented. Several businessmen were interested in investing in our MPAs.

ii. Participation in SabaSaba Trade Fair.

Two staffs from MPRU participated in SabaSaba (from 1st to 13th July 2022) trade show. Among others also knowledge on MPAs conservation activities and tourism was disseminated to more than 4500 visitors.

iii. Participation in Nanenane.

Two staffs from MPRU participated in NaneNane (from 31st July to 8th August 2022) exhibition. Knowledge on MPAs conservation activities and tourism was disseminated to more than 5200 visitors.

iv. World Tourism Day

Staffs of various parks jointly participated in the World Tourism Day where by social media was used to mobilize visitations to MPAs, and have Physical and

online forum on the theme “Rethinking Tourism”. Contributions from various stakeholders especially on “post COVID recovery on services, employment and attractions” were received.

(v) Stakeholder’s engagement.

On 21st July DMRS held a meeting involving stakeholders from food vendors and transporters. Several matters were discussed including boat time management, upgrading costumer services, ticket management and visitor’s safety.

(vi) Board members visitation.

Four staffs from MPRU escorted the Chairperson of CMC committee and another Board member to oversee conservation, tourism and investment activities at Mbudya Island- Beach two, the area proposed for investment in eco lodge.

(vii) Participation in SWAHILI INTERNATIONAL TOURISM

Two staffs from MPRU and three stakeholders participated in Swahili International Tourism (from 21st to 23th October 2022). The invitees of the exhibitions were tour companies, hotels owners, cultural exclusionists, government organizations and etc. Marine parks used this opportunity to link with other invitees and was able to sell much of its products. In this exhibition marine parks were represented with two staffs and three stakeholders.

(viii) Awareness in Schools, Colleges and government offices

Two tourism officers from MPRU from time to time visited Benjamin Mkapa and Makongo Secondary schools and the National Utalii College to raise awareness on Eco-tourism to students and teachers. Additionally, information on the goods that Dar Es Salaam Reserves can offer was disseminated to members of Ilala Municipal Council.

(ix) Participating in KARIBU KUSINI EXPO

Two staffs from MPRU HQ participated in Karibu Kusini Expo. MBREMP in cooperation with Mtwara Regional commissioner branded MBREMP investment opportunities to visitors. One (1) Company showed interest to invest in accommodation facility for tourists.

NB: Currently, MPRU is on the process to build a grass bottom boat (under Songoro Marine LTD) that will be used in Dar Es salaam Marine Reserves. The boat will enable visitors to view underwater life without diving or snorkeling. Our glass bottom boat at MIMP has given us a pleasant experience.

(X) **KILI FAIR 2023** (East Afrika biggest tourism fair). Five staffs from MPRU participated the KILI FAIR 2023 in Arusha for business networking to sell its MPAs tourism products.

(XI) **Ocean Day Workshop**. For the purpose of increasing its publicity, MPRU prepared a workshop during the Ocean Day of 8th June 2023 on where the United Republic of Tanzania`s Vice President, Hon. Dr isdory Phillip Mpango was a guest of honor. During and before the events various media were invited.

(XII). **MPRU website and Media**. For the purpose of increasing its integration to community and to increase its publicity, MPRU has participated in various events like beach cleaning, media talks in popular media like Wasafi Media and Clouds TV. Additionally, MPRU officially launched its website during the Ocean Day event.

A total of **39948** tourists visited Marine Parks and Reserves for the period of July-May 2022/2023 (Table 3).

Table 3: Number of visitors at parks and reserves for July-May 2022/2023.

Park	Number of Visitors				Total
	Tanzanians		Non-Tanzanians		
	Adult	Child	Adult	Child	
MIMP	354	13	5731	463	6194
TACMP	108	85	257	146	596
MBREMP	9	0	266	439	714
DMRS	18825	598	12487	534	32444
TOTAL	19296	696	18741	1762	39948

For the period of July-May 2022/2023 MIMP, TACMP and DMRS recorded an increase in number of visitors and revenue collection as compared to the period of July- May 2021/2022 (Table 4).

Table 4: Comparison on number of visitors and revenue collected at parks and reserves for the period of July-May 2021/2022 and July-May 2022/2023.

Park	Comparison	
	July- May 2021/2022	July-May 2022/2023

	Visitors	Collection (VAT inclusive)	Visitors	Collection
MIMP	4532	827,643,366.76	6428	1,182,593,302.59
TACMP	408	12,883,180	590	24,506,556
DMRS	19,164	237,248,536	32,444	710,849,634

3 RESOURCE MONITORING

MPRU timely undertake environmental monitoring in its MPAs to obtain evidence that environmental management targets are being met. Moreover, monitoring also provides understanding of the impacts that humans are having on it. Normally, the MPAs are being monitored to understand the status of **coral cover, sea grass, mangroves, fish catch, and plastic pollution**. And, for general assessments of the health of parks and reserves.

3.1 CORAL REEFS

Coral reefs are the most complex ecosystems that provide valuable habitat for fish and other animals. They are known by being beautiful with unique structures. In the marine environment coral reefs are appreciated as much important with variety of functions. For example, coral reefs (a) protect coastlines from storms and erosion (b) provide shelter for many organisms such as fish, marine worms, clams and many other animals and plants that all play a vital role in the coral reef ecosystem. (c) deliver ecosystem services for tourism (diving, snorkeling) and fisheries (d) provide jobs for local communities and offer opportunities for recreation. Generally, it is estimated that over half a billion people depend on reefs for food, income, and protection. Figure 1 shows some pictures of corals.



Figure 1: Corals of various ecosystems. Source: MBREMP and MIMP

Percentage of coral cover is the percentage of area covered by coral growth. It is obtained by measuring the coral colony intercepted by the transect line. Coral reef health is an important indicator for the assessment of sustainable protected coral reef management and conservation. The coral reef healthy indicator will include some community properties namely **coral cover and life forms**. Coral cover information is a basic data in sustainable marine protected area management. A healthier coral can be a good spawning, feeding, and nursery ground, thus creating new fishing grounds which indirectly has an impact on improving the community economy from fish catches.

A total of 31 sites were sampled during coral monitoring, with each site having two transects (table 5).

Table 5: Sampling sites for coral monitoring in parks and reserves for July-May 2022/2023.

Park		Sampling sites	
		Each site had two transects	
1.	MIMP	Number	Names
		10	Chawe, Kitutia (A,B), Mange, Msumbiji, Small rock (A,B), Mwambasaidi, Kome reefs (A,B).
2.	DMRS	8	Mbudya (A,B), Bongoyo (A,B), Sinda (A,B), Makatube (A,B).
3.	MBREMP	8	Rasmo (A,B), Matenga (A,B) Kieti (A,B), and Inner Membelwa (A,B).
4	TACMP	5	Shenguwe, Taa, Makome, Kwale, Maziwe

Generally, in the MPAs the average coral cover should be greater than 50% for core zone and not less than 40% for specified and general use zones.

- MIMP observed the average coral cover of **36.9%**, **36.5%** and **45.9%**, recorded at core, specified and general use zones, respectively. In addition, there was increase in hard coral cover at specified use zone as compared to the record of **32.9%** in 2021/2022. Hard coral cover at general use zone has decreased much as compared to the value of **84.2%** in 2021/2022. The MIMP coral healthy status based on all criterial of coral healthy assessment (hard coral cover, life forms, bleaching) was good. There were no any cases of coral bleaching recorded.
- DMRS recorded a hard-coral cover of **60.83%** at Mbudya, **58.13%** at Bongoyo, **53.05%** at Sinda and **43.25%** at Makatube. DMRS had good conditions of reefs and healthy (100%) hard coral cover. MBREMP recorded an average of range of **43%** (Matenga) to 68% (Inner Membelwa) of hard coral cover at a healthy of 96.3% with partial bleaches of **3.7%**.
- TACMP recorded an average coral cover of 43.9%. Shenguwe showed the highest hard coral cover (50.8%) followed by Makome (**48.3%**) and then Maziwe (**41.7%**).

NB: In both MPAs there was no sound coral bleaching observed as compared to the past situation. There was significantly less fish in corals as compared to past situations possibly due to high fishing pressure.



PHOTO: Establishment of transect during coral monitoring

Dynamite blasts to corals is the major threat to these valuable ecosystems, especially in TACMP and DMRS. For example, for the period of February 2023 and March 2023, DMRS has recorded a total of 123 dynamite blasts, 120 of them were recorded at Nsinda island and three at Makatube. The situation demands to be taken care off.

For the period of July-April 2022 /2023 TACMP recorded a total of **2134** blasts (Table 6). The recorded levels are critically high.

Table 6: Dynamite blasts record in TACMP for the period of July – April 2022/2023.

Month	Number of blasts					Daily
	Mnyanjani	Mwambani	Mchukuuni	Kigombe	Total	
July	122	31	33	2	188	6
August	122	0	0	4	126	4
Sep	108	0	0	6	114	4
Oct	113	102	94	8	317	11
Nov	126	102	111	10	349	12
Dec	102	112	116	19	349	12

Jan	76	62	52	7	197	7
Feb	61	50	48	8	167	6
March	70	49	52	10	181	6
April	71	14	58	3	146	5
Total	971	522	564	77	2134	8

3.2 MANGROVES AND SEA GRASS MEADOWS

3.2.1 MANGROVES

Mangroves are among the important habitats that MPRU pay attention the most especially in TACMP and MBREMP. This is mainly due to their importance in many aspects as far as aquatic marine environment is concerned. For example, mangroves are important because: (a) They help stabilize coastline ecosystem and prevent erosion because their dense roots help bind and build soils and encourage sediment deposits that reduce coastal erosion. (b) They help in absorbing storm surge impacts during extreme weather events because their above-ground roots plus their strong stem slow down water flows (c) Mangroves have complex root systems that filter nitrates, phosphates and other pollutants from the water, thus help in improving water quality flowing from rivers and streams into the estuarine and ocean environment (d) Mangrove forests are appreciated in capturing massive amounts of carbon dioxide emissions and other greenhouse gases from the atmosphere, and then trap and store them in their carbon-rich flooded soils for years. This buried carbon is known as “blue carbon” because it is stored underwater in coastal ecosystems like mangrove forests, seagrass beds and salt marshes. (e) Mangrove forests also provides habitat and refuge to wildlife such as birds, fish, invertebrates, mammals and plants. (f) Mangroves also are known as important spawning and nursery territory for juvenile marine species including shrimp, crabs, and many sport and commercial fish species (g) Mangrove forests provide nature experiences for people such as birding, fishing, snorkeling, kayaking, paddle boarding, and the therapeutic calm and

relaxation that comes from enjoying peaceful time in nature. Figure 2 shows some pictures of mangroves (i) the tree itself (ii) the dense root system and (iii) the illustration of roles it plays by being the feeding and habitat of vertebrates and invertebrates.



Figure 2: Mangroves with complex rooting system: Source MBREMP and internet.



PHOTO: Establishment of transect during mangrove monitoring in TACAMP.

3.2.2 SEA GLASS MEADOWS

Seagrasses are submerged flowering plants mostly found in the shallow marine waters, such as bays and lagoons and along the continental shelves. Sea glass forms the vital part of the marine ecosystem due to their productivity level. The importance of seagrasses in the marine environment is based on the numerous functions they perform: For example, seagrasses (a) help in stabilizing the sea bottom due to their extensive root system which extends both vertically and horizontally. Ocean bottom areas that are devoid of seagrass are vulnerable to intense wave action from currents and storms (b) help in providing food and habitat for other marine organisms. Green sea turtle is known to graze directly on seagrass leaves. Some species of dolphins are known to feed on organisms that live in seagrass areas. Detritus from bacterial decomposition of dead seagrass plants provides food for worms, sea cucumbers, crabs, and some filter feeders (c) help in providing nursery areas for juvenile fish and as best escape grounds of most invertebrates. Seagrass leaves are also ideal for the attachment of larvae and eggs of important commercial fish species (d) help in improving water quality by trapping fine sediments and particles that are suspended in the water column, which increases water clarity. A sea floor area without seagrass communities, the sediments are more frequently stirred by wind and waves, decreasing water clarity, affecting marine animal behavior, and generally decreasing the recreational quality of coastal areas (e) Seagrasses also filter nutrients coming from land-based industrial discharge and water runoff before these nutrients are washed out to sea and to other sensitive habitats such as coral reefs. Figure 3 shows some pictures of sea glass meadows of various ecosystems.

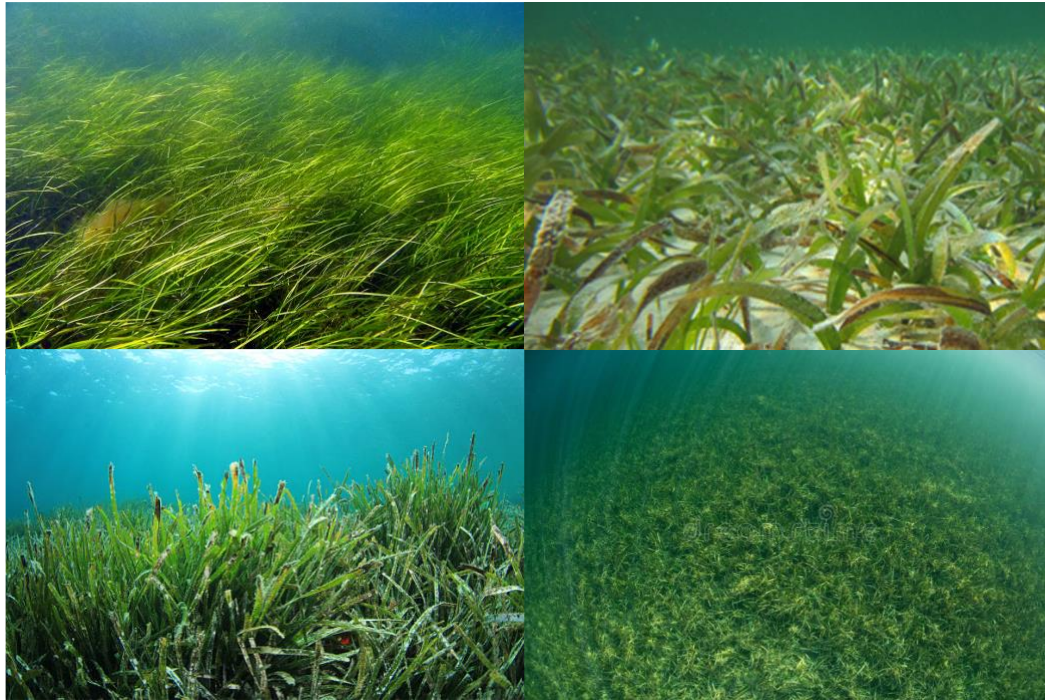


Figure 3: Sea glass meadows. Source: internet.

Generally, activities around the sea grass meadows normally highly affects its diversity and abundance.

- MBREMP is known to have the highest diversity of sea grass (i.e more than 10 species) with wider coverage as compared to other parks. Matenga area had highest density of sea grass with 51.5 and 23 stipes per m^2 in an area of 625 s m^2 .
- TACMP recorded five species and a density of 150 stipes per m^2 at Sinawe and 240 stipes per m^2 at Kigombe.
- DMRS recorded five species of sea grass. Sinda reserve area had highest density (267 stipes per m^2) of sea grass whilst Makatube had the lowest (96 stipes per m^2).

Generally, the status of mangroves and sea grass as monitored for the period of July-May 2022/2023 was good and did not present any threat requiring immediate measures. However, MBREMB reported increased cutting of mangroves for use. So far there are measures taken accordingly to stabilize the situation. Also, TACAMP reported destruction of its mangroves from oil

pollution as done by Tanzania Sisi ni Nyumbani (TSN). The oil spills has suffered a lot some mangroves of TACMP. MPRU in collaboration with National Environmental Management Council (NEMC) are handling the matter. So far, TSN has been ordered a payment of 30,000,000m as fine and to conduct a restoration plan under the supervision of MPRU and NEMC.

3.2.3 FISH CATCH.

Fish catch is amongst the important indicators that is monitored to understand the healthy and sustainability of the MPAs. For the period of July-May 2022/2023:

- MIMP recorded a total of 5321 fishing gears of various types with a total catch of 8903kg. This catch had a value of Tsh 35,496,800/=.
 - MBREMP recorded a total catch of 6200 tons of fish, 800.7 kg of mud crabs and 340 kg of Octopus. This catch generated a total of Tsh 667,544,394/=.
 - TACMP recorded a total of 10082 fishing gears and a total fish catch of 72505 Kg. This catch had a value Tsh 336,912,000/=.
- During the year 2021/2022 it recorded a total of 10,967 fishing gears, and a total fish catch of 78595Kg which valued Tsh 325,234,000/=.

NB: Generally, looking at the fish catch versus fishing effort, the situation is not that worse, however more effort is needed to protect the resource.

3.2.4 PLASTIC BOTTLES

In order to understand the main contributors of pollution and possibly negotiate with them on the possibility of collaborative management of the pollution problem, plastic bottles were analysed at our parks. The outcome is as shown in table 7.

Table 7: Plastic bottles Waste Brand Audit at different parks

SN	BRAND	QUANTITY (Pieces per 25 m ²)			
		MIMP	DMRS	TACAMP	MBREMP
	PARKS				
1	Uhai Pure Drinking Water	402	229	19	59
2	Afya soft drink	377	219	0	96
3	Azam Energy Drink	312	285	3	0
4	Mo Energy Drink	83	587	0	77
5	Azam Mango Juice	129	0	2	17
6	Drop of Zanzibar	0	133	0	0
7	Hospital Syringe	0	5	0	0
8	Ndanda Pure drinking water	0	0	0	88



PHOTO: (a) Beach cleaning at MBREMP(b) Sorting and counting of beach trashes at Kigombe, TACAMP.

4.0 CHALLENGES AND RECOMMENDATIONS ON WAY FORWARD

4.1 CHALLENGES ENCOUNTERED

4.1.1 There is increased pressure from fishers' adjacent reserves (no take areas) due to increased demand of fish. And, cases of fishers to encroach the reserve for fishing are currently increasing in an alarming speed.

WAY FORWARD: There is a need for joined effort in diversifying the livelihood strategies of communities around the parks. Apart from the existing efforts in place, a lot need to be done for positive results of significant impact. Among the plans for the coming financial year more focus will be put on this area.

4.1.2 So far, the funds disbursed to facilitate conservation activities (monitoring and patrols), though helpful, but not adequate enough to fulfil the required.

WAY FORWARD. MPRU apart from its internal sources will put more efforts (i.e. consolidate collaboration and partnerships with its stakeholders, write collaborative scientific and management proposals) to solicit funds from donors and other sources to implement conservation activities as required.

- 4.1.3** There is urgent need of demarcation buoyance as visible boundaries of the reserves and open waters. The boundaries will help to resolve conflicts, law enforcement, and discourage encroachment.

WAY FORWARD: it is a wish that MPRU will solicit funds to put demarcating boundaries in all of its parks and reserves either itself or through partnerships. The possibility for locally made buoyancies (for example through SIDO) also should will be explored.

- 4.1.4** Outdated General Management Plan (GMP) for North DMRS, and MBREMP. DMRS south has no GMP at all.

WAY FORWARD: Plans to review MPRU Act and the outdated GMP for its MPAs are among MPRU first priorities now and for the coming financial year.

- 4.1.5** Lack of diving/snorkeling gears, GPS, and underwater camera has complicated regular resource monitoring and benthic cover surveys.

WAY FORWARD: So far MPRU has already procured underwater camera for DMRS. WCS is on the way to hand over some equipment's useful to our park in TACAMP. We hope in due time we will manage to procure all the required.

5. CRITICAL ISSUES

5.1 DYNAMITE BLASTS

Dynamite blasts that highly affects coral reefs (highly valuable ecosystems) is becoming a major issue of concern as far as conservation of MPAs is concerned. The main affected areas are TACMP and DMRS. The condition for TACMP is alarming. However, despite the present alarming situation MPRU continues to hand the situation in the best way possible that includes increased surveillance information for more efficient patrols and others.

5.2 TANGA OIL SPILLS

Tanzania Sisi ni Nyumbani (TSN) Co. LTD due to its negligence and lack of concern spilled some of its crude oil to the TACMP waters of which resulted to adverse effects in nearby mangroves and corals. To make sure issues of Oil Spills become history in Tanga, MPRU decided to deal with this issue at its weight. In this regard, MPRU handled the issue in cooperation with National Environmental Management Council (NEMC). So far, after series of meetings and discussions, TSN has been issued a fine of Tsh 30 million by NEMC and ordered to conduct a restoration plan under the supervision of MPRU and NEMC. As a way forward MPRU during the review of its Act, matters like this need to be delt by itself.

5.3 THE ISLAND OF NYORORO

It was agreed that the “illegal fishers” of the island of Nyororo have to be evacuated with immediate effect. The whole issue was left to the authorities of the Pwani Regional offices at their advice. UM and WIC-MIMP has been making some follow-ups on the matter, especially after the change of leadership. It’s our hope that finally we succeed as we wish.