International Coral Reef Initiative (ICRI)

Member’s Report | 37th General Meeting

19th – 23rd September 2023 Hawai‘i, – United States of America

Reporting Period: 2021 – 2023

A. Member Information:

- Name of ICRI member: United Republic of Tanzania

- Name of person(s) completing member’s report:
  Eng. Dr. Samuel Gwamaka Mafwenga (Director General), Dr. Menan Jangu, Ms. Rose Sallema Mtui (Focal Point), Mr. Romanus Wilhadi Tairo and Esther Emmanuel Subbi.

- Email:
  Focal Point Person
  Ms. Rose Sallema Mtui: nrsallema@yahoo.com, rose.mtui@nemc.or.tz,
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- Are you a Focal Point: ☒ Yes ☐ No
  o If no, who are you completing the form on behalf of:

- Which was the last General Meeting you attended: 2014

- Will you be attending the 37th ICRI General Meeting: ☒ Yes ☐ No

- Member social media:
  o Twitter: NemcTanzania
  o LinkedIn: N/A
  o Facebook: NemcTanzania
  o Instagram: NemcTanzania
  o You tube: NemcTVTanzania
B. Reporting on the implementation of ICRI Plan of Action 2021-2024: turning the tide for coral reefs. Your responses will help inform the Secretariat about members’ contributions toward the current Plan of Action

Theme 1 - Preparing for the Future: Promoting Resilient Coral Reefs

1.A - Strengthening policies - Supporting conservation and recovery of coral reefs and associated ecosystems through resilience-based management frameworks.

- (ICRI) How have you embedded resilience-based management into your policies? (Tip – refer to the RBM policy brief: https://icriforum.org/resilience-hub/)

Answer: The Tanzania Government enacted the National Environment Policy 2021. The policy recognises and establishes a policy basis for the management of aquatic ecosystems including coral reefs. To achieve this, the policy recommends promoting sustainable management and utilization of aquatic resources, enhancing collaboration between Government and private sector in the management of aquatic resources, law enforcement and compliance and awareness raising on sustainable use of aquatic resources (Pp.16).

The policy calls for strengthening of cross-sectoral coordination and collaboration in the management of aquatic system, trans-boundary coordination in the management of shared aquatic system, enhanced sustainable management, sustainable utilization of aquatic resources and collaboration between Government and private sector in the conservation of aquatic systems (Pp. 44).

To operationalize the directives of the National Environment Policy 2021, the National Environment Master Plan for Strategic Interventions (NEMPSI 2022-32) was developed in 2022. The Master Plan specifically identifies the chief causes of coral reef destruction as blast fishing and climate change. Moreover, there is a National Biodiversity Strategy and Action Plan (NABSAP) that provide the country’s direction in coral reef management. Therefore, both NEMPSI and NABSAP lay down resilience-based management actions for coral reefs as follows:

i. Promotion of alternative livelihood activities in coastal communities.

ii. Conducting assessments of the status and trend of corals reefs health

iii. Developing and implementing management plan for coral reefs located out of the protected areas

iv. Establishing a plan to extend the marine conservation area from the current size of 6.5% to at least 10% by 2032;

v. Enhancing the capacity of Marine Parks and Reserve Unit (MPRU) to manage coral reefs by 2032;

vi. Developing and implement monitoring programs that track trends in coral reef health in Marine Protected Areas by 2027;

vii. Developing comprehensive digital maps and Climate Risk Atlas for all coral reefs by 2025.

viii. Promoting Marine Spatial plans (MSP)

ix. Develop and implement environmental awareness programs focusing on coral reefs conservation and sustainable fishing by 2032.

x. Develop and implement a program for the involvement of the fishing community in coral reefs conservation by 2032;

xi. Equip fishermen with environmentally-friendly gear and vessels by 2032; and

xii. Build capacity of responsible institution on enforcement of legislation to enhance compliance in coral reefs management by 2032.
The National Environmental Policy 2021 is also operationalized by the following:

i. The National Environmental Research Agenda

ii. The National Integrated Coastal Management Strategy (NICEMS)

1.B - Promote capacity building for applying resilience-based management approaches to coral conservation Ad Hoc Committee on Resilience-based Management.

- (ICRI) Please list any examples of leading practices, techniques and strategies for building reef resilience that your organisation/country is involved in. Include their location and extent, methods of implementation, financing, and an assessment of their results (or likely results), with links for more information if possible.

Answer:

i. Establishment of the Marine Parks and Reserves Unit (MPRU) through the Marine Park and Reserve Act Cap. 279. This unit conducts ecological monitoring, control and survey of the reefs and regular awareness on the role of coral reefs to the marine ecosystems.

ii. Establishment of the National coral Reefs Task Force. The task force acts as national facility to coordinate and provide technical expertise on issues around coral reef research, coral reef information sharing and coral reef management.

iii. Establishment of community-based conservation organs such as Beach Management Units (BMUs).

iv. Implementation of projects aimed at controlling blast fishing

v. Promotion of coral restoration in the degraded areas: about 3000m² area of degraded coral at Sinda and Mwakatumbe island marine reserves have been restored.

vi. Establishment of a Technical Working Group for Implementation of the National Integrated Coastal Environment Management Strategy (NICEMS). The group is comprised of relevant experts from different ministries/sectors. This group is responsible for conducting surveys and researches on the Coastal and Marine Environment and developing the State of the Coast Report. This report identifies threats and counter-measures for such threats in the Coastal and marine environments and proposes means for promoting coral resilience.

- (ICRI) Have you developed, or are you aware of, training materials that you can share?

1.C - Promote and build capacity for the restoration of resilient coral reefs Ad Hoc Committee on Reef Restoration.

- (ICRI) Please list any examples of reef restoration mechanisms that your organisation/country is involved in. Include their limits, conditions of implementation, financing and an assessment of their results, with links for more information if possible.

Answer:

The Country participate in several reef restoration mechanisms apart from the coordination role through TzCRTF. Other activities include awareness raising, instituting policy, legal and institutional frameworks, conducting researches, beach erosion management, water front development
management, coastal pollution management, nomination of coastal area biosphere reserves (e.g., RUMAKI) to enhance focus on projects such as those for coral protection.

Awareness Raising: UHIFADHI NA UTUNZAJI WA BAHARI - YouTube
UHIFADHI NA UTUNZAJI WA BAHARI (SEHEMU YA 2) - YouTube

Researches and Assessments
- Assessment of the Status of Beach Erosion in different parts of Coastal Areas in Dar Es Salaam which are otherwise detrimental to coral reefs.

- This assessment was limited to the beach areas in Dar es Salaam. It is financed by NEMC. Coral reefs are a buffer to erosion and flooding through wave attenuation and the production and retention of sand (Elliff and Silva, 2017; Ferrario et al., 2014; Pascal et al., 2016), however, if exposed to toxic material from the beach, they can be degraded. It has been observed through studies that, two-fifths of coral reefs globally are threatened by sediment runoff i.e. the transportation of accumulated material from land to sea, often with harmful pollutants tagging along. A study conducted by Suárez-Castro, et al., (2021) (doi:10.1111/gcb.15811) shows that reforestation is a potential solution to this challenge. The Mbweni Beach Assessment leads to a project that creates engineering and nature based solutions for beach erosion which will be a first line defence for such toxic materials to reach coral reefs. The projects approach to use nature based solutions includes vegetation along the beach.

RUMAKI Biosphere Reserve Nomination
- One of the coastal area that was nominated by UNESCO into the World Network of Biosphere Reserve is Rufiji-Mafia-Kibiti-Kilwa (RUMAKI). The nomination of the RUMAKI Biosphere Reserve was announced on 14th June 2023. The Biosphere Reserve is comprised of both terrestrial and marine ecosystems. With the nomination, comes conservation responsibilities that will include projects for coral reef conservation. A General Management Plan is underway to stipulate the different approaches for conservation within the Biosphere Reserve including those for coral reef management.

Development of Coastal Management Guidelines and Tools
- Tanzania develops and implements different tools for coastal and marine environments. Such tools include mechanisms and strategies for the management of coral reefs.
  - The National Integrated Coastal Management Strategy (NICEMS)
  - The National Environmental Research Agenda (NERA)
  - State of the Coast Report (SoCR)
  - National Master Plan for Strategic Interventions for 2022/2032.

Theme 2 – Coral Reef Science and Oceanography: Advancing and Utilizing the Latest Science and Technology

2.A – Coral monitoring capacity building

- (ICRI) Do you have information / case studies that could contribute to the update of the “Methods for ecological monitoring of coral reefs” (https://portals.iucn.org/library/efiles/documents/2004-023.pdf), especially related to the use of new technologies.
The Report on the Status and Trends of Coral Reefs for 2022 by Tanzania Coral Reef Task Force can be used to identify new approaches for ecological monitoring of coral reefs. The State of the Coast Report is another basis under which a decision to update the contents of the Methods for ecological monitoring of coral reefs can be informed.

- (ICRI) Are you aware, developing, or involved with, any capacity building activities related to the use of coral reef monitoring mechanisms, especially regarding the advancement of monitoring practices (noting technology)?

Answer:

NEMC being a coordinator of TzCRF has a chance to learn from Institutions that are monitoring coral reef on the ground such as the Institute of Marine Sciences (IMS) and Marine Parks and Reserves Unit (MPRU). Generally, NEMC is informed of new methodological and technological innovations for monitoring.

2.B – The Global Coral Reef Monitoring Network (GCRMN)

The GCRMN would like to receive feedback on the Status of Coral Reefs of the World: 2020 report to improve the production of future regional and global reports. As such, please kindly respond accordingly to the questions below:

- (ICRI) In reference to the Status of Coral Reefs of the World: 2020 report:
  o Have you read the report?
  o Did you utilise the report and/or use the results and contents?
  o How could the next report be improved (considering the entire process from data acquisition to reporting)?

Answer:

We have read the Status of Coral Reefs of the World: 2020 Report

We have utilised it as a basis towards establishing a more contextual approach towards coral reef management in Tanzania. It has been an important point of reference with relation to developing more local contexts. It was also used as a basis for decision making towards other approaches to coastal and marine ecosystem management especially in the Nomination of the Rufiji-Mafia-Kibiti-Kilwa (RUMAKI) Biosphere Reserve, Assessment of the Status of Beach Erosion along coastal areas and development of the Fourth State of the Coast Report.

- (ICRI) The GCRMN intends to establish time-bound task forces to address specific priority issues and to build capability and capacity across the network. As a first priority, a Data Task Force was established. The Task Force brings together subject matter experts to increase the transparency, reproducibility, and robustness of future GCRMN reports
alongside capacity in monitoring, data collection, analysis, management and sharing of coral reefs and associated ecosystems. The Task Force will focus on:

- Improving data integration and analyses to facilitate the production of GCRMN regional and global reports; and
- Promoting good data management practices based on FAIR data principles for the coral reef scientific community.

Tell us if you will be interested in joining the Data Task Force, or upcoming task forces. More so, please inform us if you have data to contribute to upcoming regional, or global, reports and if you will be organising and/or partaking in any capacity building activities regarding data monitoring:

**Answer:**

1. **Taskforces:** Tanzania through its Focal Point for Coral Reef Activities would like to join the Data Task Force and also any other coral reef initiative in the globe.

2. **Data to contribute (GCRMN Region Country, Data description):** Tanzania may contribute data from time to time depending on the coral reefs researches and/or assessments it conducts through the National Coral Reef Task Force in collaboration with other stakeholders.

3. **Upcoming capacity building activities:** Tanzania conducts regular capacity building activities and shall include data monitoring.

**Theme 3 - Local Threat Reduction: Integrating Response Planning Frameworks**

**Please tick the most appropriate box/boxes:**

- (ICRI) Do you have (or in the process of developing) a coral reef response plan(s) on, for example, but not limited to:
  - ☒ coral disease
  - ☒ vessel groundings
  - ☒ bleaching
  - ☒ invasive species outbreaks (lionfish and COTS)
  - ☒ large storm events
  - ☒ other:

  If yes, please provide us with more information.

**Answer:**

Specifically, Tanzania does not have a coral reef response plan. However, in 2018, the country participated in the regional report on “Ocean Health Index” and most of the itemized items above were included. Moreover, through the Tanzania Coral Reef Task Force, the plan is to develop such a plan with consideration to all parameters indicated above and any other which may deem necessary. This plan may work better if we develop a country project with different components, which is the main plan.
Theme 4 - Diversity and Inclusion: Expanding the Coral Reef Community

4.A – Connect with youth audiences:

- (ICRI) Are you developing (or planning to develop) any communication campaigns or outreach materials? What will your primary target audiences be and what would your key messages include?

Answer:

Communication materials and campaigns are regularly developed by NEMC especially for awareness raising during different occasions and events. The target audience are all stakeholders for environmental matters.

The key messages include marine pollution, dangers of blast fishing, illegal underwater activities that are all a threat to coral reefs. With marine pollution, we are currently focussing on the reduction of plastic waste at the coastal and marine ecosystems by 10% in 2023/24 and by 20% by June 2024/25. Therefore our current key messages would revolve majorly at coastal and marine plastic pollution.

4.B - Collaborate with Indigenous people and seek to incorporate indigenous and local knowledge into policies and management plans:

- (ICRI) How do you incorporate indigenous and local knowledge into policies and management frameworks. Please provide us with some examples. Do you have any plans or strategies to further promote this incorporation?

Answer:

The National Environment Management Council (NEMC) developed the National Integrated Coastal Environment Management Strategy (NICEMS) with the aim to work very close to communities who are resource users. The development of NICEMS involves incorporating both scientific local knowledge strategies which ought to be identified from and by the indigenous peoples themselves. The NICEMS of 2003 is currently under review and one of the priorities is to incorporate indigenous and local knowledge strategies which can contribute to the coastal and marine management including coral reefs.

Further, the development of the State of the Coast Report and Coral Reef Status Reports also recognises the existence and use of such knowledge. The Council intends to continue using such knowledge in future policy and framework developments.

- (ICRI) Do you have any, or know of, best practices to solicit Indigenous and local community knowledge?

Answer:

The main approach used in Tanzania is stakeholders’ consultations from the village, ward, district and regional levels. Specific methods involved include identification and categorisation of stakeholders
involved in terms of gender and age. The categorisation is important because local knowledge involves both tangible and intangible cultural practices. In that context, some indigenous practices for local communities are classified, others are outdated and others have been lost/forgotten with time and generational changes. Therefore categorisation especially by age and gender enhances the freedom to express such knowledge especially the classified ones.

The process also involves convenience identification of “information-rich persons” from the relevant category (especially elderly) who have historical backgrounds and experiences on the matter. After this is achieved then group discussions and face to face interviews are utilised for data collection. This approach also enhances ownership of the management frameworks by the locals.

C. Kunming-Montreal Global biodiversity framework

- (ICRI) Do your current National Biodiversity Strategies and Action Plans (NBSAP) incorporate coral reefs? If not, what kind of material will be useful for your Country/organisation to ensure coral reefs are integrated in the revision of NBSAPs?

Answer:

The Current National Biodiversity Strategies and Action Plan (NBSAP) for Tanzania incorporates coral reefs by laying down a target (target 10) to ensure that the multiple anthropogenic pressure on coral reef and vulnerable ecosystems impacted by climatic change are minimized.

- (ICRI) How are you planning to implement the Kunming-Montreal Global biodiversity framework. For you, which targets are the most relevant for coral reefs?

Answer:

Tanzania intends to implement the Kunming-Montreal Global Biodiversity Framework by:

a) Incorporating its strategies and guidelines in national and local government policies and legal frameworks, guidelines and other tools for implementation

b) As a threshold, benchmark, reference point and rationale to meet targets by 2030 such as reducing threats to biodiversity, meeting people’s needs through sustainable use and benefit sharing and as a tool and solution for implementation and mainstreaming by 2030

c) As a basis for awareness raising for sustainable use of coral reefs.

The most relevant targets of the Framework to Tanzania include:

i. Targets 1-8: Reducing to biodiversity

ii. Targets 9-13: Meeting People’s needs through sustainable use and benefit sharing

iii. Targets 14-23: Tools and solutions for implementing and mainstreaming

D. Upcoming events

Please tick the most appropriate box/boxes:

☒ September 19th – 23rd 2023: 37th ICRI GM, USA, Hawaii
30th November – 12th December 2023: 28th Conference of the Parties to the United Nations Framework Convention on Climate Change

26th February – 1st March 2024: 6th session of the United Nations Environment Assembly

10th – 12th April 2024: 2024 UN Ocean Decade Conference, Barcelona, Spain.

2024: United Nations Biodiversity Conference (COP16) of the Parties to the UN Convention on Biological Diversity (CBD), Turkey.

☐ Other

Please list any upcoming regional / international events relevant to ICRI that your organisation plans to attend:

Answer:
- The 37th General Meeting of the ICRI
- 26th February – 1st March 2024: 6th session of the United Nations Environment Assembly
- 10th – 12th April 2024: 2024 UN Ocean Decade Conference, Barcelona, Spain.
- 2024: United Nations Biodiversity Conference (COP16) of the Parties to the UN Convention on Biological Diversity (CBD), Turkey.

E. Publications. Please list relevant publications / reports you have released recently (+ add a link if possible)

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F. ICRI Member Feedback. What do you find most valuable about being a member of ICRI as well as completing the ICRI member reports? If you have any ideas to improve the Member Reports, please list below:

Answer:
i. Sharing best practices from Tanzania with other stakeholders at global level
ii. Learning best practices from other areas globally
iii. Including Tanzania’s voice and expertise in laying down approaches for future coral reef management.
iv. Accessing information resources for matters related to coral reefs conservation.

G. Contact information & member information. (Note that this information will be posted on the ICRI website on your member page: https://icriforum.org/members/).
Please use the table below to provide us updates to your member’s focal points as well as the blank cells to indicate changes to information (please add more rows, as needed):

<table>
<thead>
<tr>
<th>Focal Point 1:</th>
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<tbody>
<tr>
<td>Name:</td>
<td>Ms. Rose Sallema Mtui</td>
</tr>
<tr>
<td>Title/Organisation:</td>
<td>National Environment Management Council (NEMC)</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:nrsallema@yahoo.com">nrsallema@yahoo.com</a>, <a href="mailto:rose.mtui@nemc.or.tz">rose.mtui@nemc.or.tz</a>,</td>
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<th>Focal Point 2:</th>
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<tbody>
<tr>
<td>Name:</td>
<td>Dr. Christopher Muhando</td>
</tr>
<tr>
<td>Title/Organisation:</td>
<td>Senior Lecture, IMS University of Dar es Salaam</td>
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<tr>
<td>Email:</td>
<td><a href="mailto:cmuhando@gmail.com">cmuhando@gmail.com</a>,</td>
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**Member page updates:**

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**Do you have new resources (reports, guidelines etc.) that you would like to display?**

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Thank you very much for sharing your valuable experiences and information with ICRI. Members reports, meeting outputs and resources will be uploaded to: https://icriforum.org/events/37th-icri-general-meeting/