

2023

2023 Western Indian Ocean Regional Science to Policy Platform (SPP) Meeting Report



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THE 2023 WESTERN INDIAN OCEAN SCIENCE TO POLICY PLATFORM MEETING

Maputo, Mozambique

5th to 7th December 2023

REPORT

EXECUTIVE SUMMARY

Introduction

At the fourth Conference of Parties (COP) of the Convention for the Protection, Management and Development of Coastal and Marine Environment of the Western Indian Ocean (Nairobi Convention), held in Antananarivo, Madagascar, in July 2004, the Secretariat of the Convention (UNEP) was directed to facilitate the establishment of a network of academic and research institutions in the Convention area in collaboration with other organizations. The Network was intended to be a "consultative, communication and advisory body accountable to the Contracting Parties of the Nairobi Convention in the assessment and science-based management of marine and coastal environment".

Subsequently, the Contracting Parties adopted various decisions at its COPs, aimed at strengthening the link between science, policy, and action to enhance informed decision making for the management of coastal and marine resources in the WIO region. The Contracting Parties requested the Secretariat to hold and encourage partners to support regular science to policy dialogues, to establish a dialogue platform, and to convene regular science-policy dialogues, among others. Consequently, the Western Indian Ocean (WIO) Science to Policy Platform (SPP) (hereafter referred to as WIO-SPP), was created as *"a multi-stakeholder platform comprising of representatives of formal and informal knowledge-generating institutions, practitioners, policymakers, communities and the private sector within the WIO region"*.

Following the 2004 COP decision, a number of science-to-policy meetings were organised by the Secretariat of the Nairobi Convention with the collaboration of key partners, particularly WIOMSA. From 5 to 7 December 2023, a meeting of the WIO-SPP was held in Maputo, Mozambique. The meeting was organized by the Nairobi Convention Secretariat in collaboration with WIOMSA, and with the support of the WIOSAP and SAPPHIRE projects, the partnership project for marine and coastal governance and fisheries management for sustainable blue growth (NC-SWIOFC), and the EU Capacity Building Related to Multilateral Environmental Agreements (EU-MEAs) Project. The meeting was held at a time that several relevant global and regional initiatives have come into force or are under implementation. These include the recently adopted Kunming-Montreal Global Biodiversity Framework (GBF), the Biodiversity Beyond National Jurisdiction (BBNJ) treaty, the proclamation of the United Nations Decade of Ocean Science for Sustainable Development, and the ongoing intergovernmental negotiations for an internationally binding legal instrument on plastics.

As with previous meetings, the overall objective of the 2023 WIO-SPP meeting was to promote the linkages between science and policy for evidence-based decision-making and to provide timely technical advice and policy recommendations for consideration in the development of decisions in the upcoming COP of the Nairobi Convention. ***Addressing Global Targets in the WIO in support of a Sustainable Blue Economy*** was the theme for the 2023 meeting. The agreed Sub-themes were:

- i. Implementation of the Kunming-Montreal Biodiversity Framework (GBF) at regional and national levels in the WIO, with focus on Community Conserved Areas (CCAs) as Other Effective Conservation Measures (OECMs).
- ii. Opportunities for implementation of the High Seas Treaty (BBNJ) in the WIO.
- iii. Operationalization of the international legally-binding instruments on plastics.
- iv. Approaches to collaborative regional ocean governance for a sustainable Blue Economy.
- v. Blue financing for sustainable management of coastal ecosystems.
- vi. Implementation of the United Nations Decade on Ecosystem Restoration.
- vii. Progress made in the implementation of the Sustainable Development Goals (e.g. SDGs 11,13, & 14)

The specific objectives of the 2023 meeting included the following:

- Discuss topical emerging scientific findings with potential policy implications for improved ocean governance and management of coastal and marine resources in the region.
- Support decision-makers to maximise synergies across the implementation monitoring, follow up and review, as well as achievement of the targets and deliverables of the 2030 Agenda, the GBF, the BBNJ, etc.
- Assess the contribution that the WIO region can make in the implementation of global initiatives and frameworks, and achievement of global targets of the same.

The meeting was planned to include plenary sessions for presentation of discussion papers on specific fields and progress in the development of various regional strategies and frameworks, and group discussions on the presentations. A Planning Committee was put in place to assist the Nairobi Convention Secretariat in the organisation of the meeting. To make sure that all the sub-themes were covered, the planning committee made special effort to reach out to technical and policy experts to prepare keynote presentations and discussion papers on selected initiatives of relevance to the theme and sub-themes for the meeting. A call for discussion papers was sent out to partners and other organizations and regional programmes operating in the same marine space in the WIO region. It was envisaged that the papers would potentially provide the scientific basis for decision-making at the national and regional levels with respect to the theme and/or sub-themes of the meeting.

Opening of the Meeting

The meeting was called to order by Dr Jared Bosire of the Nairobi Convention Secretariat. This was followed by the Opening Statements by the host country (Mozambique), WIOMSA, the Nairobi Convention Secretariat, the bureau of the Nairobi Convention and other partners.

The meeting was officially opened by Dr Emília Fumo, the Permanent Secretary of the Ministry of Land and Environment of Mozambique. In her opening statement, Dr Fumo recalled the history of the WIO-SPP and noted that this is part of the efforts by governments in the WIO region to promote the management of integrated coastal and marine socio-economic activities based on research results and scientific investigation. She reiterated the fact that even though science plays a critical role in policy formulation and decision-making, decisions and policies have not always been informed by solid scientific data and information, due to several barriers including poor or lack of effective communication between scientists and policymakers. She congratulated the Nairobi Convention for supporting the region through various projects and initiatives to drive the blue economy agenda at various levels across the region. Dr Fumo thanked the Nairobi Convention Secretariat and WIOMSA for organizing and facilitating the meeting and

for choosing Mozambique as the host country, and then officially declared the 2023 WIO-SPP meeting open.

The adoption of the meeting agenda was led by Mr Jacquis Rasoanaina, representing the Chair of the Bureau of the Nairobi Convention, Madagascar.

Presentations and Group Discussions

The first day of the meeting was chaired by Dr Arthur Tuda, and the session was made up of one keynote presentation and five other presentations related to the **Global Biodiversity Framework**. Six discussion groups were formed with each one focusing on key issues emanating from the presentations that are critical for the countries of the region (jointly and severally) in meeting their commitments to the GBF. It was made clear that all discussions and recommendations should aim at assisting the WIO to meet Global Targets in support of Sustainable Blue Economy. The groups presented a summary of the discussions in the plenary.

The second day of the meeting was chaired by Dr Margareth Kyewalyanga, Interim Chair of the Forum for Academic and Research Institutions (FARI). The day started with a recap of the first day, presented by Dr Timothy Andrew of the Nairobi Convention Secretariat, followed by one (1) keynote presentation and fourteen (14) other presentations organised in three sessions on **Locally Managed Marine Areas (LMMAs)** (Session 3), **Crosscutting Papers** (Session 4), and **Ocean Governance** (Session 5). Group discussions and a report back to plenary followed the presentations.

The third day of the meeting was chaired by Ms Nashreen Soogun from the Ministry of Environment, Mauritius. The day's sessions also began with a recap of day two, followed by two keynote presentations and six other presentations focused on **Emerging Issues of Regional Importance**, group discussions and reporting back to plenary as in the first two days.

A summary of the group discussions is presented in the main body of this report below.

Closing Ceremony

The 2023 WIO-SPP meeting came to an end at about 5 pm on Thursday 7 December 2023. Closing Statements were made by Mr Jacquis Rasonainaina, representing the Chair of the Bureau of the Nairobi Convention (Madagascar), Dr Jared Bosire and Mr Dixon Waruinge of the Nairobi Convention Secretariat, Dr Blandina Lugendo of the WIOMSA Board, and Mr Simão Lopes, President of the Board of Directors of the Mozambique Blue Economy Development Fund (ProAzul). In his closing statement, Dr Jared Bosire informed the meeting that a legal team would be reviewing the policy recommendations and filtering proposed areas of decisions to be presented to the meeting of the Focal Points ahead of the 11th Conference of Parties. He also indicated that a second edition of the Science-Policy Platform Series would be produced from the discussion papers presented with FARI supporting the peer review process and WIOMSA coordinating the production.

Speaking on behalf on the Permanent Secretary, Mr Lopes echoed the sentiments of other speakers in relation to the retirement of Mr Waruinge in 2024, stating that the region would still be relying on his expertise, even in retirement. Mr Lopez highlighted the importance of the discussions held over the three days stating that the forum had provided a great opportunity for discussing scientific outputs that influence policy processes at national and regional level. He added that the meeting had identified

subjects that need to be addressed in relation to the global goals and provided options for supporting the development of a Sustainable Blue Economy. He concluded his remarks by congratulating the participants for a successful meeting before officially closing the meeting on behalf of the Government of Mozambique.

Key Outputs from the Meeting

The meeting facilitated access to appropriate data and information for policy formulation and implementation. Specifically, the meeting facilitated formulation of policy recommendations for consideration at the next COP of the Nairobi Convention, strengthening of partnerships between technical experts and policy makers, and identification of key areas where countries should invest in towards achievement of *Global Targets in the WIO in support of a Sustainable Blue Economy*.

For each of the sub-themes, the group discussions resulted in Priority issues, Key challenges, Policy recommendations for consideration in the upcoming COP of the Nairobi Convention and by the countries in national planning, Key gaps in science and policy of relevance to the issue of focus, and the Opportunities in the WIO region.

The meeting also gave a fresh perspective to the structure of the WIO Science - Policy Platform, as well as an indication of the provisional agenda for the next meeting. This should inform WIOMSA, as a major collaborator in the WIO-SPP, on the way forward for some of its programmes to enable its members to make appropriate input into the Forum. Additionally, the results of the meeting should enable the scientists to see what is missing and the current limitations in the required science to support emerging priorities and to direct future efforts.

Papers presented in the meeting will be peer-reviewed and published in the second edition of the WIO Science - Policy Platform Series, a joint publication of the Nairobi Convention and WIOMSA.

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INTRODUCTION

It is widely acknowledged that sound scientific knowledge is required to assist policymakers and resource managers in decision-making. However, while recognizing the important role that science plays in policy and decision-making, it is evident that there are barriers between the two domains that limit the uptake of science into policy, and further challenges in converting policy into action also exist. The barriers include the technical nature of scientific information provided to policy/decision-makers which may not be easily understood by non-experts in the field. There is usually inadequate communication of research needs and priorities to the scientific community to enable them to tailor research to address those needs and priorities. There is the need for proper integration of scientific knowledge into language and format that would be readily understood by policy/decision-makers to effectively and positively influence their work. The question has always been how to bridge the gap between producers of scientific information and users of the information for policy formulation and decision-making.

At the fourth Conference of the Parties (COP) of the Convention for the Protection, Management and Development of Coastal and Marine Environment of the Western Indian Ocean (Nairobi Convention), held in Antananarivo, Madagascar, in July 2004, the Secretariat of the Convention (UNEP) was directed to facilitate the establishment of a network of academic and research institutions in the Convention area in collaboration with other organizations. The Network was intended to be a "consultative, communication and advisory body accountable to the Contracting Parties of the Nairobi Convention in the assessment and science-based management of the marine and coastal environment". Subsequently, the Contracting Parties adopted various decisions at its COPs, aimed at strengthening the link between science, policy, and action to enhance informed decision making for the management of coastal and marine resources in the WIO region. The Contracting Parties requested the Secretariat to hold, and encourage partners to support, regular science to policy dialogues, to establish a dialogue platform, and to convene regular science-policy dialogues, among others.

To address the request from the Contracting Parties, the Secretariat of the Convention established the Forum for Academic and Research Institutions (FARI) with the Western Indian Ocean Marine Science Association (WIOMSA) playing the secretariat role and hosting the Forum. The Forum comprises experts from academic and research institutions in the region with a mandate in marine sciences.

Following the 2004 COP decision, a number of science to policy dialogue meetings were organised by the Secretariat of the Nairobi Convention with the collaboration of key partners, particularly WIOMSA. In June 2019, a joint meeting of the Project Steering Committees (PSC) for the two GEF-funded projects executed by the Nairobi Convention Secretariat, namely 'Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities' (WIOSAP) and the 'Western Indian Ocean Large Marine Ecosystem Strategic Action Programme Policy Harmonization and Institutional Reforms' (SAPPHIRE), both of which also have elements of Science-Policy in their implementation plans, approved the establishment of a Science to Policy Platform (SPP) at the Convention level. In furtherance to the COP decisions and the decision of the above-mentioned joint meeting, a formal structure called the Science to Policy Platform (SPP) was established in 2019 under the Secretariat of the Nairobi Convention. The Western Indian Ocean (WIO) Science to Policy Platform (SPP) (hereafter referred to as WIO-SPP), was created as *"a multi-stakeholder platform comprising of representatives of formal and informal knowledge-generating institutions, practitioners, policymakers, communities and the private sector within the WIO region"*.

Following the 2019 decision, a SPP meeting was held in March 2021. The meeting, held on line because of Covid-19, led to the production of the first edition of the WIO-SPP Series (<https://www.nairobiconvention.org/wio-science-to-policy-platform>).

From 5th to 7th December 2023, a meeting of the WIO-SPP was held in Maputo, Mozambique. The meeting was organized by the Nairobi Convention Secretariat in collaboration with WIOMSA, and with the support of the WIOSAP and SAPPHIRE projects, the Partnership Project for Marine and Coastal Governance and Fisheries Management for Sustainable Blue Growth (NC-SWIOFC), and the EU Capacity Building Related to Multilateral Environmental Agreements (EU-MEAs) Project. A Planning Committee was put in place to assist the Nairobi Convention Secretariat in the organisation of the meeting. The committee was made up of Dr Arthur Tuda, Dr Julius Francis and Dr Obakeng Molelu (WIOMSA), Dr Margaret Kyewalyanga (University of Dar es Salaam and President of FARI), Prof Antonio Hogueane and Ms Clousa Maueua (Mozambique Institute of Oceanography), Prof Salomao Bandeira (University of Eduardo Mondlane), Mr Dixon Waruinge, Dr Jared Bosire and Dr Tim Andrew (UNEP Nairobi Convention Secretariat) and Dr Kwame Koranteng (Science-Policy Advisor).

The meeting was held at a time that several relevant global and regional initiatives have come into force or are under implementation. These include the recently adopted Kunming-Montreal Global Biodiversity Framework (GBF), the Biodiversity Beyond National Jurisdiction (BBNJ) treaty, the proclamation of the United Nations Decade of Ocean Science for Sustainable Development, and the ongoing intergovernmental negotiations for an internationally binding legal instrument on plastics. The list of participants is presented in Appendix 1.

Objectives of the 2023 WIO-SPP meeting

As with previous meetings, the overall objective of the 2023 WIO-SPP meeting was to promote the linkages between science and policy for evidence-based decision-making and to provide timely technical advice and policy recommendations for consideration in the development of decisions in the upcoming COP of the Nairobi Convention. It is important to note that the 2022-2024 work programme of the Nairobi Convention Secretariat takes into consideration the global political processes that took place during the 2018–2021 period and draws from emerging coastal and marine issues in the Western Indian Ocean necessary to inform policy and decision making. It addresses new and emerging issues prioritized by Contracting Parties of the Nairobi Convention; among them marine litter and microplastics, ocean acidification, marine protected areas, coastal and marine water quality assessment and a regional ecosystems indicator monitoring frameworks.

The Nairobi Convention Secretariat has plans to develop a new programme that would, among others, focus on supporting the development of a sustainable and inclusive regional Blue Economy in the WIO region. The proposed programme is intended to support implementation of a new updated Strategic Action Programme, and also takes cognizance of the current momentum, both regionally and globally, towards sustainable blue economy pathways, with cross-sectoral integration as the foundation, including new global multi-lateral environment agreements. The Paris 2015 Agreements and subsequent climate change commitments, Decade of Ecosystem Restoration, the UN Decade of Ocean Science for Sustainable Development, and the post 2020 Global Biodiversity Framework are specifically mentioned in the project concept note.

After extensive discussions on the matter, ***Addressing Global Targets in the WIO in support of a Sustainable Blue Economy*** was selected as the main theme for December 2023 SPP meeting. The agreed Sub-themes were:

- i. Implementation of the Kunming-Montreal Biodiversity Framework at regional and national levels in the WIO, with focus on Community Conserved Areas (CCAs) as Other Effective Conservation Measures (OECMs).
- ii. Opportunities for implementation of the High Seas Treaty (BBNJ) in the WIO.
- iii. Operationalization of the international legally binding instruments on plastics.
- iv. Approaches to collaborative regional ocean governance for a sustainable Blue Economy.
- v. Blue financing for sustainable management of coastal ecosystems.
- vi. Implementation of the United Nations Decade on Ecosystem Restoration.
- vii. Progress made in the implementation of the Sustainable Development Goals (e.g. SDGs 11,13, & 14)

The specific objectives of the 2023 meeting included the following:

- Discuss topical emerging scientific findings with potential policy implications for improved ocean governance and management of coastal and marine resources in the region.
- Present progress in the development of various regional strategies and frameworks under the Nairobi Convention for technical input.
- Promote engagement and networking among various stakeholders engaged in the protection, management and development of marine and coastal resources in the WIO.
- Facilitate the contribution of scientific data and information in decision-making and policy formulation.
- Provide an opportunity for policy/decision-makers to engage with scientists on the best ways to consider scientific data and information in policy formulation and implementation.
- Support decision-makers to maximise synergies across implementation, monitoring, follow up and review, as well as achievement of the targets and deliverables of the 2030 Agenda, the GBF, UN Decade of Ocean Science, BBNJ, etc.
- Assess the contribution that the WIO region can make in the implementation of global initiatives and frameworks, and achievement of global targets of the same.

During the preparations for the meeting, it was noted that, as a follow-up to earlier meetings, the 2023 WIO-SPP meeting was expected to provide an opportunity for scientists, policy makers and enforcement agencies to articulate their needs and thereby influence the setting of research priorities and facilitate access to appropriate data and information for policy formulation and enforcement. The meeting was expected to strengthen dialogue and build trust between the parties. It was also expected to facilitate the preparation of a list of priority issues upon which decisions for the next COP of the Nairobi Convention could be based and to present policy recommendations for consideration in the decisions at the next COP. The meeting was also expected to provide further description and understanding of the process for linking science to policy within the framework of the Nairobi Convention.

The meeting was planned to include plenary sessions for presentation of discussion papers on specific fields and progress in the development of various regional strategies and frameworks, and group discussions on the presentations. To make sure that all the sub-themes were covered, the planning committee made special effort to reach out to technical and policy experts to prepare keynote presentations and discussion papers on selected initiatives of relevance to the theme and sub-themes for the meeting. A call for discussion papers was sent out to partners and other organizations and regional

programmes operating in the marine space in the WIO region. It was envisaged that the papers would have regional relevance, applicability and alignment with priorities of WIO countries and would potentially provide the scientific basis for decision-making at the national and regional levels with respect to the theme and/or sub-themes of the meeting.

In the call for discussion papers, clear instructions were given on the structure of the papers, and potential presenters were asked to consider the following:

- Do we understand or are we prepared for the implementation of the instrument at the national, or regional level?
- What could be the contribution of the WIO region in the global debate?
- Define the policy limitations, or science gaps that may hinder the attainment of the global targets.
- Is there a desire or mechanism available for national level target monitoring?
- Which targets must we place most emphasis on?
- Which policy or what data is needed without appearing as sectoral?

It was indicated that all papers presented in the meeting would be peer-reviewed and published in the second edition of the WIO Science - Policy Platform Series, which is a joint publication of the Nairobi Convention and WIOMSA. All draft discussions papers that were received were reviewed by the Planning Committee and placed under the appropriate sub-theme and slot in the Provisional Agenda for the meeting (Appendix 2). The discussion papers cleared for the meeting and the associated PowerPoint presentations delivered at the meeting may be accessed online from the links provided in Appendix 3.

DAY 1 – TUESDAY 5TH DECEMBER 2023

SESSION 1: OFFICIAL OPENING OF THE MEETING

The meeting was called to order at 9.10 am by Dr Jared Bosire of the Nairobi Convention Secretariat. This was followed by the Opening Statements by the host country, Bureau of the Nairobi Convention and other partners. The meeting was officially opened by Dr Emília Fumo, Permanent Secretary of the Ministry of Land and Environment of Mozambique.

Statement by Prof Antonio Hoguane, Oceanographic Institute of Mozambique:

Prof Hoguane, Director of the Oceanographic Institute of Mozambique, acknowledged the presence of the chief guest, the Permanent Secretary of the Ministry of Land and Environment of Mozambique, Dr Emília Fumo, the head of the Nairobi Convention Secretariat Mr Dixon Waruinge, the Focal points of the Nairobi Convention and the other co-organizers of the workshop. He welcomed participants to the workshop and thanked the guest speakers, facilitators and session chairs for agreeing to participate and sharing their knowledge and expertise. Prof Hoguane stated that this was the first meeting of its kind to be held in Maputo, Mozambique and that it was being held concurrently with COP 28 of the UNFCCC which was taking place in Dubai. He noted a special significance as the same issues of the environment and the sustainability of the planet and mankind being discussed at a global level were also to be discussed at a regional scale at the 2023 WIO-SPP forum. He stated that the theme “Addressing Global Targets in the WIO in support of Sustainable Blue Economy” was well thought out and that the workshop offered exceptional opportunities for challenging and broadening perspectives around environmental sustainability, ecosystem integrity, food security, sustainable livelihoods, and blue economy and for

forging new partnerships and networks. He also thanked the organizers of the forum for putting together a robust programme.

Statement by Dr Arthur Tuda, Executive Director of WIOMSA

Dr Arthur Tuda welcomed participants to the 2023 WIO Science-Policy Forum stating that the forum was one of the key regional events in the WIO that provides scientists and policymakers the opportunity to take stock of the achievements made and whether science has effectively spoken to policy and whether the decisions that policy has made to impact people's lives have been made informed by science. He stated that in reality, science and policy are not worlds apart but interact in many ways and that both could benefit from clearer interaction with each other, especially in the face of rapid change where science and policy cannot keep pace.

Dr Tuda noted that as a region, the WIO has invested resources in investigating the deficiencies on the science side and in addressing these through training and capacity building on how to better communicate science to inform policy making and that much still remains to be done. He added that the current dependence on scientific and technological advancements makes intensive science and policy engagement indispensable; however, at the present, science remains one of the many voices in the policy making process and it is often a weak voice. The WIO-SPP forum provides a mechanism to frame science to better co-create policy through system design, to innovate and look at problems or challenges in a different way. It also provides scientists with the opportunity to access data and knowledge that is held by governments and how best to support government to make use of the data to inform policy making.

Statement by Dixon Waruinge, Head, Nairobi Convention Secretariat

Mr Waruinge thanked the Government of Mozambique, and the co-hosts, WIOMSA, for providing resources for the organization of the meeting and participants for attending the forum. He stressed the importance of a coordinated ecosystems approach for the management and conservation of the marine and coastal environment where nationally coordinated approaches are supported and complimented by bilateral and multilateral cooperation and coordination. He stated that there is a need to acknowledge the gap that exists between the ways science is developed and the way it is incorporated into effective management and policy frameworks for ocean governance and in managing the marine and coastal spaces in the region. Research is often conducted without considering the needs of decision makers while many decisions are based on political premises, often times without the input from science. Mr Waruinge stressed that the gap must be bridged. He said that the focus of the Nairobi Convention in the coming years would be on ocean governance-decision making and the formal and informal arrangements around this concept; the equipping of institutions; promoting practices that shape decisions and actions with the most relevant scientific information; and providing an effective feedback loop for an adaptive governance process that is open to incremental change and adjusts management as appropriate. Mr Waruinge underscored the importance of establishing effective linkages between science institutions and the Regional Economic Commissions who have an inside track to ministers and heads of government on economic matters; including ocean governance. He concluded his remarks by stating that the SPP forum laid the foundation for the Convention's 2025-2028 work program and for strengthening the mechanism for the Convention and WIOMSA, working together with partners, to generate information transfer and information flow to ensure that information that is shared is trusted and credible for decision making.

Statement by Dr Emília Fumo, Permanent Secretary of the Ministry of Land and Environment of Mozambique

The Chief Guest, Dr Emília Fumo, Permanent Secretary of the Ministry of Land and Environment of Mozambique, welcomed participants to the Republic of Mozambique, particularly to the City of Maputo,

and thanked them for their presence at this important regional event that has brought together scientists from the 10 countries of the Western Indian Ocean region. Recalling the history of the WIO-SPP, Dr Fumo noted that this is part of the efforts by governments in the WIO region to promote the management of integrated coastal and marine socio-economic activities based on research results and scientific investigation. She said that Mozambique respects the principles of sustainable development and therefore it was an honour for her to be the Chief Guest at the meeting, the objective of which was “Addressing Global Targets in the Western Indian Ocean in support of a Sustainable Blue Economy”. She reiterated the fact that even though science plays a critical role in policy formulation and decision-making, decisions and policies have not always been informed by solid scientific data and information, due to several barriers including poor or lack of effective communication between scientists and policymakers. She congratulated the Nairobi Convention for supporting the region through various projects and initiatives to drive the blue economy agenda at various levels across the region.

She informed the meeting that with support from its PROBLUE programme, the World Bank has been working with the government of Mozambique to strengthen the knowledge base for the development of a sustainable blue economy. The country’s Blue Economy Development Fund (ProAzul) is working on fisheries issues, plastic pollution and also strengthening the Government's capacity to manage its marine resources in a sustainable way. ProAzul has a working group that was developing initiatives aimed at more sustainable investments in the blue economy, through support for the production of improved data, recommendations on investments and policy changes or adjustments, strengthening capacity in the blue economy, as well as development of an environment favourable to blue innovation and entrepreneurship. The PS also recalled the vision for the UN Decade of Ocean Science programme, i.e., “*The Science we need for the Ocean we want*” and noted the contribution of the WIO-SPP platform towards an inclusive, participatory process of transmission and systematization of knowledge about the conservation status of our marine and coastal resources and ecosystems. She noted the WIO region’s expectation and desire for a healthy, resilient and safe ocean, with sustainable interventions to be guided by the science produced in the region to better materialize effective policy development processes aimed at a sustainable blue economy. She reiterated her assumption that all WIO countries support the goal of protecting at least 30% of the global ocean in Marine Protected Areas for effective area-based conservation measures by the year 2030. She emphasized that she was looking forward to clear and succinct deliberations on how the WIO countries will promote the links between science and policy to make evidence-based decisions and to provide timely technical advice and policy recommendations for consideration in developing decisions at the next Conference of the Parties of the Nairobi Convention.

The Chief Guest thanked the Nairobi Convention Secretariat and WIOMSA for organizing and facilitating the meeting and for choosing Mozambique as the host country. She then officially declared the 2023 WIO-SPP meeting open, wishing participants a very engaging and productive experience, as well as strongly encouraging them to set aside time to enjoy the hospitality of the City of Maputo.

Adoption of the Meeting Agenda

The adoption of the meeting agenda was led by Mr Jacquis Rasoanaina, representing the Chair of the Bureau of the Nairobi Convention, Madagascar. Dr Jared Bosire gave additional information on how the group discussions will be organised; after which the agenda was adopted without any changes.

SESSION 2: GLOBAL BIODIVERSITY FRAMEWORK

The Kunming-Montreal Global Biodiversity Framework (GBF) adopted by 196 nations on 19 December 2022, has 23 action-oriented global targets including taking urgent action to halt and reverse biodiversity loss and to protect 30 percent of land and sea area by 2030; taking effective legal, policy, administrative and capacity-building measures at all levels, to ensure the fair and equitable sharing of benefits that arise from the utilization of genetic resources; ensuring the full integration of biodiversity and its multiple values into policies, regulations, planning and development processes; and ensuring that the best available data, information and knowledge are accessible to decision makers, practitioners and the public to guide effective and equitable governance. It is said that the actions to reach the targets should be implemented in harmony with the Convention on Biological Diversity and its Protocols.

The session on the Global Biodiversity Framework was chaired by Dr Arthur Tuda. The session was made up of one keynote presentation and five other presentations; provision was made for questions and answers and some plenary discussions after each presentation.

1. Recommendations for the implementation of the Kunming-Montreal Biodiversity Framework in the Western Indian Ocean - *Marcos Pereira, Western Indian Ocean Marine Protected Areas Professional Network (WIOMPAN)*

The keynote presentation on the Implementation of the Kunming-Montreal Biodiversity Framework (GBF) in the context of the Western Indian Ocean region was delivered by Mr Marcos Pereira of Western Indian Ocean Marine Protected Area Network (WIOMPAN). The presentation focused on the outputs of the first regional learning exchange workshop organized in Dares Salaam the previous month by WIOMPAN; centred on the regional efforts in reaching the GBF targets and the management effectiveness challenges and site level priorities for the WIO as defined by the participants of the WIOMPAN learning workshop. The presenter raised some key points on the subject matter and asked what the Target 3 of the Kunming-Montreal Global Biodiversity Framework (GBF) (i.e. by 2030 at least 30 per cent of terrestrial, inland water, and of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem functions and services, are effectively conserved and managed through ecologically representative, well-connected and equitably governed systems of protected areas) mean for the WIO.

Policy recommendations:

- Endorse expansion of OECMs including articulation of a road map at a regional level aimed at meeting CBD targets for protection relevant to the region; supporting member states to develop national road maps in alignment with the regional map and that the road maps take note of the 2018 CBD report.
- A regional update on management effectiveness - that the Nairobi Convention supports the development of a regionally coordinated update of the measurement of management effectiveness in MPAs and OECMs by country and site building on the 2018 WIO MPA Outlook.
- Increase understanding of benefits of effectively managed OECMs (LMMAs and MPAs) by means of national audits or studies and that these studies are contextualized to coastal management.

Plenary Discussions

In the discussions that followed the presentation, it was noted that in addition to OECMs and MPAs, the region should consider the inclusion of EBSAs and Marine Significant Areas which are peer reviewed and listed within UN process as a means of attaining the 30 by 30 target. EBSAs have been used for the

identification of MPAs (e.g. the proclamation of Bazaruto Archipelago MPA was a result of it being identified as an EBSA), therefore these offer a valid platform for countries to attain the 30 by 30 target.

2. Delivering the Kunming-Montreal Global Biodiversity Framework: Mainstreaming Marine Spatial Planning and Data Support Process into Marine Biodiversity Conservation in the Western Indian Ocean Region - Ms Joana Akrofi, Early Warning and Assessment Division (EWAD), UN Environment Programme

Ms Joana Akrofi of the Early Warning and Assessment Division of UNEP made a presentation the focus of which was integrating Marine Spatial Planning (MSP) processes into biodiversity conservation to address the challenges of access to, and overexploitation of ocean resources by multiple users and the use of MSP to address the Kunming-Montreal Global Biodiversity Framework Targets 1, 2, 3 and 14. The presentation outlined the data support processes and the information and knowledge management systems that are supporting biodiversity conservation. Ms Akrofi noted that a number of challenges constrain the formulation and implementation of MSP in the WIO region; one of the most critical limitations being inadequate data and disparity in data generation. She noted, however, that the emerging technology of using the concept of digital twinning of the ocean (DTOs), can revolutionize management strategies such as the MSP process.

The meeting was informed that the Global Environment Monitoring System for the Ocean and Coasts (GEMS Ocean Programme) would like to use the opportunity of the WIO Science Policy Platform to demonstrate how the MSP Challenge framework could be adopted in the region to catalyse effective implementation of the WIO Region MSP Framework as well as the implementation of the existing Data Information Strategy.

The following **policy recommendations** came out of the presentation:

- Citizen science needs to become a critical tool to bridge data gaps in monitoring ocean and coastal ecosystems; and there is a need for targeted incentives, e.g., training and capacity enhancement that attract citizen scientists.
- There is a need for targeted incentives to enhance the uptake of solutions to address both slow and rapid onset risks to ocean health and thereby close the science/data/action gaps. For example, addressing waste discharge into the ocean requires incentives – e.g., fiscal incentives like tax breaks, to increase the affordability of solutions needed for wastewater treatment inland to intercept before it gets into the ocean.
- Policy coherence for ocean monitoring is critical to capture cross-sectorial actions needed for ocean health, considering that the ocean is an open system that interacts with other domains. It is worth noting that wastewater and ocean health, land pollution and ocean health, etc., and fostering collaborations across sectors for data collection may require complementary policies. For example, monitoring the state of ocean biodiversity loss may identify an upstream risk of untreated wastewater release getting into the ocean or effluent from farms getting into the ocean. Addressing these risks calls for actions of stakeholders outside the marine realm, and ensuring MSP captures the needed inter-sectoral collaborations for solutions to address ocean health is critical.
- MSP needs to be a tool to unlock the power of the sustainable budgeting approach (SBA) to enhance the uptake of ocean health solutions. E.g., solutions to address waste, like treating wastewater to intercept it before it flows into oceans, can unlock sustainable opportunities e.g., energy, bio-fertilizer from treated waste.

Plenary Discussions

The meeting emphasized the need of taking stock of existing initiatives and data to catalyze synergetic actions between the GEMS Ocean programme and others fit for purposes initiatives, such as the WIO-Symphony tool, to support MSP at the regional level and which can be replicated at a national scale to address the Kunming-Montreal Global Biodiversity targets.

3. Incorporating mangroves into the national climate biodiversity agenda of WIO countries – Dr James Kairo, Kenya Marine and Fisheries Research Institute (KMFRI)

Dr James Kairo of the KMFRI Blue Carbon Laboratory gave an overview of the status and economic value of mangroves of the WIO and the contribution of mangroves to global SDG targets and the Kunming-Montreal Biodiversity Framework goals. He noted that fishing, aquaculture, salt extraction and ecotourism are economic activities developed in the mangrove areas across the WIO region. Countries in WIO region are signatories to regional and international conventions and agreements that are relevant to mangrove conservation and have set goals of protecting and restoring mangroves as part of their National Biodiversity Strategy and Action Plan (NBSAP) commitments.

Dr Kairo gave an analysis of Loss & Degradation of Mangroves in the WIO, flagging the WIO region's extent and loss trend and cautioning that if it is not arrested, countries will not attain the global targets. He gave an overview of national and international commitments and processes for accelerating the achievement of the National Action Plans while contributing to the global targets. He noted that it is critical that mangroves are included as part of the goals, targets, and indicators in the GBF in order that they can be prioritized for restoration, conservation, and sustainable management.

The following **policy recommendations** were made:

- The regional mangrove vision (RMV) and road map will act as a framework for improved mangrove management in WIO. It is important that the RMV is endorsed by the WIO countries and included in their political agenda.
- Parties are urged to set priority actions for blue carbon conservation, restoration, and sustainable management; enhance ambition via inclusion of mangroves and associated blue carbon ecosystems in the Nationally Determined Contributions (NDCs), National Biodiversity Strategies and Action Plans (NBSAPs) among other processes; develop and implement national policies to enable generation and trade of high-quality blue carbon credits; scale climate finance and mobilize increased financial flows for blue carbon.
- Contracting parties are requested to endorse the guidance on mangrove inclusions in the Kunming-Montreal Biodiversity Framework as a tool to support national reporting on blue carbon.

Plenary Discussions

- In the plenary discussions after the presentation, it was noted that the RECOs project of the Indian Ocean Commission has released a call to support regional networks such as the WIO Mangrove Network and the Sea Grass Network. These networks should work with WIOMSA to submit proposals to implement the RMV and Road Map.
- The meeting noted the need for targeted capacity building among policy makers on how to report on different global indicators that may be confusing; e.g. carbon credit equivalents and the global methane pledge. Dr Kairo proposed the use of the guidance on mangrove indicators in the post 2020 GBF as a resource to guide reporting on mangroves.

- The meeting proposed that to improve the inclusion of the ocean and coastal environment data in the Nationally Determined Contributions, the national oceanographic data collection centres should be designated as the focal institutions for ocean data reporting.

4. Transboundary conservation area (TBCA) Economic Valuation - Dr Jackie Crafford, Prime Africa Consult

Dr Jackie Crafford of Prime Africa Consult made the presentation on economic valuation of the Kenya-Tanzania transboundary conservation area (TBCA) which arose from a bilateral initiative to investigate the options and possibility for a coastal and marine Trans-Boundary Conservation Area (TBCA) with the support of the Nairobi Convention and WIOMSA. The area considered was the Diani-Chale Marine National Reserve to Mkinga District in Tanzania which would provide protection to highly sensitive and endangered ecosystems and species.

The presenter discussed the background for the establishment of the TBCA, the approach and methodology in the valuation, the costs of establishing the TBCA and its annual operational budget, and possible investment options. The following key messages were highlighted by the speaker to make a case for the establishment of the TBCA.

- A new TBCA is an investment opportunity.
- The TBCA would secure a vast and unique ecosystem which would provide livelihoods to a large population and mitigate high and extreme risks to natural assets.
- The TBCA management plan has the potential to significantly increase natural capital value and thus ecosystem service values and national economy value add.
- Investment mechanism precedents exist through which to fund the TBCA management planning activities.
- Considerable work is needed to develop and bank the TBCA investment.

5. Milestones and urgent needs in the development of the Kenya-Tanzania marine TBCA- proposal for the next 5 years - Dr Arthur Tuda, WIOMSA Executive Director

Dr Arthur Tuda delivered the presentation on the process and lessons learnt in the development of the Kenya-Tanzania Transboundary Conservation Area (TBCA) and the actions planned for the next five years. The Project that supported this work adopted the systematic conservation planning framework using co-development processes to be able to balance ecological design principles and socioeconomic considerations.

While the project mostly focused on the TBCA co-development process, it also supported Kenya Wildlife Service (KWS) and the Marine Park and Reserves Unit of Tanzania (MPRU) to organize stakeholder workshops on the institutional arrangements and other enabling conditions required for the TBCA to be established and be successful. From there, the milestones for the TBCA for the next 5 years were determined. Some of the lessons learnt include the need to appoint focal institutions to drive the TBCA implementation, the need for enhanced collaboration among actors Also highlighted was the need for policy harmonization between the two countries.

The following **policy recommendations** were made:

- Establish a coordinated approach to Research and Development (R&D) across Kenya and Tanzania to allow for data consistency across the border. Based on the presentations from stakeholders and the data collated for the TBCA region, there are big differences in data availability, quality and resolution across both countries. There are projects that also benefit just one country (i.e., just in Kenya or in Tanzania), which often use different methods and approaches. The lack of consistency of R&D initiatives across both countries affect the data for the border region, which limits planning activities and requires the use of assumptions.
- Integrate economic valuation in TBCA planning, which requires Total Enterprise Value (TEV) (\$) of different ecosystems based on goods and services they provide.
- Identify strategic partners and provide financial support to coordinate TBCA development.
- Identify and set aside financial resources for TBCA development, R&D for the border & coordination of bilateral meetings.
- Improve management effectiveness of existing MPAs & LMMAs and put in place/strengthen threat mitigation & management until TBCA is established.

Plenary discussions on the TBCA presentations

- Clarity was sought on the negative valuation of the seagrass ecosystem in the economic valuation of the TBCA. The presenter explained that while seagrass is important, its value as an ecosystem varies with the quality of the habitat (the data on the extent of sea-grass cover and the chain of causality- in this case the measure of value is the ability to capture carbon, which is declining due to degradation).
- The meeting discussed the business case for the TBCA and case studies of successful debt for nature financing mechanisms, namely the Ocean Finance Company debt for climate conversion to protect the Galapagos Islands.
- The forum discussed the importance of developing regional policy frameworks to underpin the effective management of the TBCAs in light of the different management systems at the national level.

6. Aligning the national and regional biodiversity targets with the GBF: science informing policy making in Mozambique - *Eleutério Duarte, Wildlife Conservation Society (WCS)*

Eleutério Duarte of the Wildlife Conservation Society (WCS), Mozambique, delivered a presentation on the efforts being made by the Government of Mozambique to align national and regional biodiversity targets with the GBF and other global commitments.

The speaker noted that WCS had engaged with government technicians on the necessary steps for Mozambique to be an active member of the Convention on Biological Diversity (CBD) and the High Ambition Coalition (HAC). In collaboration with IUCN and WWF, WCS has been supporting the Government of Mozambique through technical trainings (for the Focal Points of the CBD, the Nairobi Convention, HAC, RAMSAR, CMS, CITES, etc.); and also in preparation for CBD COP 15 meetings, providing logistical support for attendance of COP15; and development of guidance tools for negotiations and implementations of decisions from COP15 and other CBD COPs. Support is also being provided in updating the National Biodiversity Strategy and Action Plan (NBSAP 2015-2035) to ensure alignment with the new global targets, as well as integration of Key Biodiversity Areas (KBAs) into national legislation and spatial plans.

Technical-scientific tools have also been developed with support from WCS, to inform national policies and legislation aimed at achieving national targets and aligning them with global and, potentially, future regional targets.

Conclusions:

- The development of the technical tools and capacities is the result of two MoUs signed between WCS and the Government of Mozambique: The Ministry of Sea, Inland Waters and Fisheries (MIMAIP) and the Ministry of Land and Environment (MTA) - underscoring the importance of strong science policy linkages.
- The country now has a suite of technical-scientific tools that are ready to be used for decision-making by different types of stakeholders, including private and public sectors;
- The support from WCS further provides the opportunity for Mozambique to align its national efforts with the new global conservation goals, particularly for the marine realm, contributing to reconcile marine biodiversity conservation with economic development.
- The tools, policies and capacity developed will allow the country to increase the protection and conservation of key marine and coastal species and ecosystems, while contributing to increasing resilience to climate change, safeguarding the community benefits of living resources.

Plenary Discussions

A number of issues were discussed in the plenary, including using economic valuation to make the case for the inclusion of KBAs, vulnerable marine areas, important bird areas, important fisheries areas and wetlands ecosystems in the count for 30 by 30 and the use of mangrove indicators for national reporting on contribution to the global biodiversity targets.

DAY 1 GROUP DISCUSSIONS AND REPORTING BACK

Based on the six presentations delivered under the session on 'Global Biodiversity Framework', six groups were proposed with each one focusing on key issues emanating from the presentations that are critical for the countries of the region (jointly and severally) in meeting their commitment to the GBF. The six groups were:

- I. Marine Protected Areas (MPAs) and other effective area-based conservation measures (OECMs).
- II. Transboundary conservation areas/measures.
- III. Mainstreaming climate change concerns in marine protected areas to improve their effectiveness.
- IV. Economic valuation/ocean accounting and their contribution to effectiveness of marine protected areas.
- V. Spatial planning as key for effective planning and management of marine protected areas.
- VI. Science - Policy processes towards sustainable use of, and equitable benefits from, marine biodiversity.

Based on the presentations, the ensuing discussions and the expertise and experiences of group members, each group was expected to come up with the following:

- a. Highlight two or three priority issues from the Kunming-Montreal Biodiversity Framework that are relevant to your subject matter.
- b. Highlight three key challenges that are critical to the issue of focus to the group.
- c. A maximum of five important policy recommendations for consideration in the upcoming COP of the Nairobi Convention, and by the countries in national planning.
- d. Highlight key gaps (not more than five) in science and policy of relevance to the issue of focus.
- e. Highlight opportunities that need to be explored further to address existing science and policy gaps to help the countries of the region to achieve the targets of the Global Biodiversity Framework.

It was made clear that all discussions and recommendations should aim at assisting the WIO to meet Global Targets in support of Sustainable Blue Economy. A summary of the group discussions is presented below.

Group I: Marine Protected Areas (MPAs) and other effective area-based conservation measures (OECMs)

Priority issues from the Kunming-Montreal Biodiversity Framework relevant to MPAs/OECMs

- The need to strengthen inclusive, equitable and effective governance and management of MPAs and in areas outside MPAs i.e. OECMs and Seascapes;
- The Framework provides an avenue towards legal recognition of areas outside MPAs – i.e. OECMs;
- The criteria for identification of priority issues for MPAs – using standard definitions (e.g., IUCN) as some high biodiversity areas may not be MPAs; and
- GBF provides for prioritization of connectivity, ecological representativeness, equitable governance, and biodiversity and ecosystem function and services (people-climate-nature).

Key challenges critical to MPAs/OECMs

- Governance frameworks, encompassing policy and legal frameworks;
- Human resources (capacity development, numbers of staff, etc.); and
- Funding

Policy recommendations for consideration in COP11 and by the countries

- Support the rollout of a Regional Ocean Governance Strategy (ROGS) and support domestication at national level;
- Harmonize policy frameworks for effective governance across transboundary areas (e.g. TBCAs, TFCAs, Seascapes, etc.);
- Encourage and support countries to develop MPAs & OECM 30X30 Expansion Roadmaps;
- Strengthen and empower WIOMPAN as a regional entity to support improving management effectiveness of MPAs & OECMS;
- Develop a regional framework for assessing and improving effectiveness of governance & conservation MPAs & OECMS.

Key gaps in science and policy of relevance to MPAs/OECMs.

- Lack of legal framework to guide identification and recognition of OECMS at national level;
- Inadequate relevant, accessible, and interpretable data & information to inform policy decision making;
- Lack of robust, and consistent long-term monitoring systems at national level to inform tracking of progress and adaptive management on MPA/OECM performance.

Opportunities that need to be explored further to address existing science and policy gaps to help countries achieve the GBF targets

- Scaling up conservation and restoration initiatives of critical areas within MPAs & OECMS;
- Establish and strengthen national Science to Policy Platforms (SPPs) to drive and set agenda for inclusive and equitable effective management of MPAs & OECMS.

Group II: Transboundary Conservation Areas (TBCA)/measures

Priority issues from the Kunming-Montreal Biodiversity Framework relevant to TBCA

- Targets 3, 15, and 19;
- Coordinated development;
- Policy harmonising (all countries are signatories therefore report how much they've achieved toward a common goal);
- Area expansion;
- Equitable community development on either side of the border, value and monitoring ecosystems and establishing a transnational financial system that incorporates the private sector

Key challenges critical to MPAs/OECMs

- Political will - national and maritime boundaries hence require agreements and lack of delineation to reduce maritime disputes

Policy recommendations for consideration in the upcoming COP of the Nairobi Convention, and by the countries in national planning:

- Joint Planning mechanisms
 - Establish regional body or institution for TBCA management.
 - Collaboration and conservation: develop a regional strategy; how to address equity issues.
- Establish joint research institutions for TBCA work and research
 - To reduce lack of continuity
 - The joint institution can ensure that research in country A can be conducted in country B, hence permits issued for research should be issued simultaneously and across the borders. The data is useful and can be used for comparative studies.
 - Policy on co-management, co-research
- Regional collaboration and planning approach
 - Implement regional plans at national level and at all levels
- Capacitate countries in terms of knowledge and training
 - Therefore, capacitate them towards enforcement
 - Transform national transboundary conservation enforcement units
- Establish a financing mechanism for TBCA and regional conservation and collaboration
- Identify regional socio-ecological networks to inform/leverage regional connectivity (collaboration) and conservation or large marine ecosystem scale.

Key gaps in science and policy of relevance to the issue of focus

- Information on Small Scale Fisheries (SSF) - status of catch, size of SSF, stock assessment;
- Lack of information on non-critical ecosystems;
- Lack of a regional objective or goal on conservation;
- Absence of or a lack of data capturing for TBC at national level resulting in a knowledge gap;
- Mainstreaming adaptation and mitigation goals and mitigation targets in TBC;
- Explicit goals for Climate Change
 - a lack of social economic data (how much communities depend on resources and the impact on their livelihoods).

Opportunities

- Area based management tools;
- Conservation funding/financing countries (use private sector financing and participation as a funding tool, more investment, blue economy contribution);
- Inter-country research institutions (Shared data sets, e.g., WIO-SYMPHONY);
- Leverage on standards that have been established on a global level (SEEA-method for valuation of ecosystems) and GEOBON-essential ocean biodiversity variables.

Group III: Mainstreaming climate change concerns in marine protected areas to improve their effectiveness

Priority Areas of GBF relevant to subject matter

- TARGET 8

Minimize the impact of climate change and ocean acidification on biodiversity and increase its resilience through mitigation, adaptation, and disaster risk reduction actions, including through nature-based solution and/or ecosystem-based approaches, while minimizing negative and fostering positive impacts of climate action on biodiversity.

- TARGET 11

Restore, maintain and enhance nature's contributions to people, including ecosystem functions and services, such as regulation of air, water, and climate, soil health, pollination and reduction of disease risk, as well as protection from natural hazards and disasters, through nature-based solutions and ecosystem-based approaches for the benefit of all people and nature.

Priority issues

Maintenance of ecosystem health & resilience, benefit sharing & equity, tools & solutions (Effective governance, adaptive & dynamic planning & management, MSP, National Biodiversity Strategies (NBS), ecosystem-based approaches).

Key challenges

- Disconnect between spatial scales (climate change is a global issue that cannot be managed at the local / MPA scale);
- Lack of inclusivity (vulnerable / marginalized / unheard communities do not have alternative livelihood options or the power at negotiating table – civil society need empowerment & influence.);
- Economic drivers dictated by market forces, this reinforces poverty at the local level.

Policy recommendations for COP

- Create awareness on impacts of climate-change through education and sensitization programs.
- Demonstrate the value of MPAs as resilience and insurance policy for the future.
- Address inclusivity challenges through developments of structures for engagement.
- Establish social safe-guards for local communities and vulnerable groups near MPAs.
- Leverage technologies to address climate-change related challenges.
- Management plans need to have climate-smart objectives: dynamic, integrated, and adaptive.
- Promote activities that allow scaling climate finance and mobilizing increased financial flow for MPAs.

Key gaps

- Lack of policy integration;
- Data and information gaps on climate change impacts & uncertainty;
- Lack of tailor-made science that solves society's immediate problems;
- Disconnect between science and policy;
- Lack of consideration of connectivity at national & regional level, including ecological, economic & social systems.

Opportunities

- Invest in NBS to address biodiversity and climate at the same time;
- Ecosystem accounting to understand the value of ecosystem;
- Political will as reflected in UN Decade on Ecosystem Restoration & UN Decade of Ocean Science for Sustainable Development, and urgent action at all levels of government to improve ecosystem health by reducing threats.

Group IV: Economic valuation/ocean accounting and their contribution to effectiveness of marine protected areas

Priority issues from KM Biodiversity Framework that are relevant to your subject matter.

Establishing a monitoring framework, capacity building, mobilizing financial resources.

Key challenges that are critical to the issue of focus to the group.

- Insufficient capacity for valuation and accounting (building and retaining);
- Appropriate accounting framework;
- To achieve conservation goals through local communities, while ensuring that benefits are maintained;
- A set of indicators that smartly integrate both biophysical and economic information requirements;
- To achieve scale in MPA planning to ensure that sufficient funding can be attracted;
- Absence of suitable intermediaries that would enable biodiversity financing interactions. There is need for national intermediaries with regional collaboration.

Policy recommendations for consideration in the upcoming COP of the Nairobi Convention, and by the countries in national planning.

- Engage with the Global Ocean Accounts Partnership and Ocean accounting network for Africa with the purpose of capacity development.
- Development and update of harmonized monitoring guidelines for ecosystem (extent and condition) and ecosystem services.
- Initiate a regional process to achieve scale in MPAs (as a network) to ensure attraction of biodiversity funds and also to enable regional coordination in securing financing.

Group V. Spatial planning as key for effective planning and management of marine protected areas.

Priority issues/ subjects

GBF Targets 1, 2, 3 and 14

Key challenges in science and policy of relevance to the issue of focus

- Institutional coordination – to implement Marine Spatial Planning;
- National and regional political support (consistencies) and public education (awareness) sustainable use of natural resources, and lack of socioeconomic empowerment (alternative livelihoods);
- Inadequate data for marine ecosystems – (e.g. for spatial planning analysis).

Important policy recommendations for the upcoming Nairobi Convention COP

- Policy on joint transboundary management of marine and coastal natural resources;
- WIO MSP Policy and strategy (aligned with GBF targets) for domestication by parties, recognizing that a WIO MSP Framework already exists;
- Recommend MSP Guidelines and for MSP institutional coordination at national level;
- Effective Participatory and communication approach;
- Long-term funding policy for MPAs; and
- Capacity building for MSP.

Key Gaps (science and policy)

- Capacity in finance;
- accurate and adequate data;
- regional data storage and analysis;
- lack of data sharing protocol;
- human resources (quantity and quality);
- technology and innovation;
- lack of regional cooperation in research.

Opportunities

WIOMSA platform; Nairobi Convention, cooperation and coordination, technologies and innovations (e.g. Symphony tool), existing expert platforms.

Group VI: Science-Policy processes towards sustainable use of, and equitable benefits from, marine biodiversity

Issues from the Kunming-Montreal Biodiversity Framework

- Issue of assessment of “current state” of biodiversity, specifically trends (from some initial reference state). Time series data etc.
- Understanding of (risk) drivers of biodiversity. Threats (pollution, habitat loss, over exploitation etc.), causation, are understood, but not quantitatively.
- Data are collected but not necessarily aligned to policy requirements, scientists need to understand what policy requirements are before collecting data. That said (not all) scientists are not necessarily there to inform policy (fundamental research is still needed, blue sky science).
- Policy makers also don’t communicate their needs.
- Policy makers are reluctant to take up science informed actions, even when they are clear (they have different mandates, or agendas, or priorities). Political will.
- Improved interaction between scientists and policy makers needed, and within that inter- and intra-institutional arrangements need to be strengthened.

Key challenges

- Lack of communication amongst stakeholders (including the environment) who have different needs, priorities, agendas. Wicked problem.
- Lack of long term, systematic, standardised monitoring programmes to collect data to inform management and policy (and even if there, data not available).
- Lack of awareness regarding exploitation (not uniformly the case), lack of agreement (e.g. with local communities), or more fundamental lack of shared vision on what the environment should be, limited options for livelihoods (alternative or others).
- Lack of resources (HR, skills, finances, infrastructure, equipment) in governance to implement science-based management recommendations.

Policy recommendations

- Raise the profile of biodiversity to meet multiple objectives (not just biodiversity protection, also food provision, coastal erosion etc.). “There is financing for climate, but not biodiversity”.
- Train a cadre of scientists specialised in working across the science-policy interface, identify nationally the gaps to inform educational ministries. National and regional platforms for S-P to be established.
- Develop minimum standards for data collection, data storage, data sharing, especially with respect to transboundary biodiversity issues.
- Promote private-public partnerships for financing and implementation.
- Regional Biodiversity Assessment (as it pertains to coastal marine biodiversity), collaboration across nations who develop their own NBAs, develop plan to do this, dates and targets. (Will at least highlight issues pertaining to consistency in data and reporting).

Gaps in science to policy

- Lack science skills
- Lack management (implementation) resources
- Lack data (consistently collected etc.)
- Lack meaningful and effective communication and dialogue
- We lack appropriate national level platforms

Opportunities

- Initiative and interest in Blue Economy creates an opportunity to elevate biodiversity agenda
- New financial mechanisms create a need.
- All countries are members of Convention on Biological Diversity, required to prepare National Biodiversity Strategic Action Plans. Make sure coastal and marine is represented.
- Existing forums (FARI) under NC can be leveraged.
- WIOMSA symposium and WIO-SPP

DAY 2 - WEDNESDAY 6TH DECEMBER 2023

The second day of the meeting was chaired by Dr Margareth Kyewalyanga, President of the Forum for Academic and Research Institutions (FARI). The day started with a recap of the first day, presented by Dr Timothy Andrew of the Nairobi Convention Secretariat. This was followed by one (1) keynote presentation and fourteen (14) other presentations organised in three sessions (Sessions 3, 4 and 5).

SESSION 3: LOCALLY MANAGED MARINE AREAS (LMMAs)

1. Keynote Presentation II: Navigating 30x30 – building bridges between conservation and small-scale fisheries - Maya Pfaff, GIZ

The keynote presentation of the day which was by Maya Pfaff of GIZ originated from an interactive webinar held in October 2023 to identify the potential and pitfalls of marine and coastal Other Effective Area-based Conservation Measures (OECMs) in a WIO region context. The presentation focused on the opportunities, the challenges and questions surrounding OECMs as conservation tools. It recalled that Locally Managed Marine Areas (LMMAs) (coastal & marine resources largely or wholly (co-) managed by coastal communities, land-owning groups, partner organizations, and/or government representatives), are also considered as OECMs.

The presenter discussed the current status towards 30x30 at global and regional levels noting that with global MPAs covering less than 8.2%, and 7% in the WIO region, it is important to explore OECMs as critical tools for sustainable use, particularly in small-scale fisheries. Also discussed were enabling factors for getting 30x30 right or its meaningful achievement in the African context, and the contribution of LMMAs to it. The presenter noted that MIHARI, a network of locally managed marine areas in Madagascar, was created to support LMMAs development and management.

Recommendations on Navigating 30 by 30

- Conduct studies to update the extent of existing area-based management measures (other than MPAs) and their socio-ecological impacts.
- Identify and start reporting OECMs based on GBF through engagement with key stakeholders, including small-scale fishers, LMMA representatives, NGOs and governments to customize existing fisheries OECMs guidance to WIO (underway – WIOMSA, FAO - SWIOFC).
- Formally recognize and support LMMAs through the WIO regional ocean governance strategy.
- Mobilize funding and resources to align local efforts with global targets (e.g. public-private partnerships, trust funds etc.).
- Facilitate knowledge exchange, technical assistance and replication of best-practice in regional and national forums (e.g. WIOMSA).
- Integrate LMMAs in the design of regionally cohesive networks of MPAs / OECMs through scientific processes (KBAs, EBSAs, etc.).
- Facilitate networking, collaboration & alignment of activities among different actors to use resources most efficiently (i.e., reduce duplication and avoid overlaps).
- Develop a joint multi-partner seascape-level programme to ensure sustained funding for LMMAs and MPAs (under IUCN Protected Area Category VI).

2. Enhancing Compliance and Enforcement to Safeguard Small-Scale Fisheries and Biodiversity for Improved Livelihoods in the Western Indian Ocean Region – Dr Benedict Kiilu of CORDIO East Africa

The focus of Dr Benedict Kiilu's presentation was on the findings of a study to understand the drivers of weak enforcement and compliance in small-scale fisheries across the WIO region and the recommendations from a regional stakeholders' workshop based on the findings of the study. From the study, four drivers of weak enforcement and non-compliances, namely lack of awareness, social and cultural ties, corruption, and lack of synergy (inadequate coordination) between different ministries and

state departments, were identified. The presentation gave general policy and technical recommendations to address each of the drivers; these are presented below:

Policy recommendations:

- SSFs need to achieve the desired recognition and agreement by the member states of the Nairobi Convention, and that low enforcement and lack of compliance in SSF fisheries is a threat and should be addressed.
- There is need to develop a WIO regional plan of action by the member states of the Nairobi Convention to address issues of enforcement and compliance in SSF fisheries.

Technical recommendations

- Conduct a WIO regional threat assessment that focuses on enforcement and compliance practices in SSFs.
- Establish a regional inter-sectoral expert panel on SSF fisheries' threats and solutions that will facilitate sustainable ocean-based economic, social and environmental benefits.

3. Enabling effective coastal and marine protection conservation and expansion through OECMs: Piloting OECM legal recognition and implementation in Madagascar – Mr Jacquis Rasoanaina, Madagascar

Mr Jacquis Rasoanaina from Madagascar delivered a presentation focusing on efforts towards the formalization of LMMAs in Madagascar, and the governance and management effectiveness challenges being experienced in their management. He said that in Madagascar, MPAs and LMMAs are located in high biodiversity areas with important coral reefs, seagrass, and mangroves.

Resources belong to the state, so to effectively and securely manage areas, coastal communities require a formal use right transferred from the government. The identified management challenges include overlapping legal and regulatory frameworks; transfer of management of natural and fishery resources to local communities with limited engagement of the beneficiary communities and the long and often complicated process of formalization of LMMAs. There is also the issue of broad scale management plans that barely address local issues and threats, a lack of capacity for integrated planning for interconnected MPAs and LMMAs, and low enforcement capacity.

Policy Recommendations

The Nairobi Convention and partners should support the development of a National Roadmap for Madagascar to achieve effective, inclusive and equitably governed regenerative seascapes that encompass networks of ecologically representative, well-connected and equitably governed systems of MPAs and OECMs. This should be done through:

- Supporting legal recognition of OECMs, initiated by the UNDP GEF 6 funded project for the establishment of a Network of MPAs and LMMAs;
- Clarifying the possible formal status of LMMAs;
- Supporting LMMAs to fulfil OECM criteria and to be reported as OECMs;
- Synthesizing best practice in LMMA design and implementation for replication in the country and region; and
- Development and roll out of an integrated and standardized training course, including training of LMMA managers and practitioners, in order to increase management effectiveness.

4. Vulnerability and adaptation of Mozambique coastal zones to climate change - Prof Antonio Hoguane, Oceanographic Institute of Mozambique

Prof Antonio Hoguane gave an overview of Mozambique's status in terms of vulnerability and adaptation to climate change. The presentation covered the following:

- the definition of climate change,
- diagnosing climate change and its causes,
- the impacts and challenges of climate change, and
- the need for adaptation/mitigation action.

Prof Hoguane noted that Mozambique is particularly vulnerable to:

- Cyclones (with strong winds, heavy rain and storm surges), with one occurring every two years;
- Floods (due to heavy rain, river flow, sea level rise);
- Droughts; and
- Saltwater intrusion.

He underscored the urgent need for sound understanding of the drivers and impact of climate change to address these and, if possible, reverse the scenario through nature-based solutions.

Plenary Discussions

The following are highlights from the brief discussions held at the end of the session:

- The value of mangrove ecosystem services in adaptation and mitigation against the impact of climate change was discussed. Mangroves in Mozambique offer value not only for their protective capacity (shoreline cover against erosion, flooding, cyclone) but also for their regulatory and economic role in terms of carbon sequestration and credits.
- The use of nature based solutions to deal with flooding and drought was discussed with the meeting emphasizing the need for improved management of e-flows (wetlands and riverine systems) over hard- engineering solutions.
- The meeting underscored the importance of distinguishing what constitutes OECMs and LMMAs and noted that if LMMAs are to be counted as OECMs, there has to be an element of sustainability and effective management. To ensure that LMMAs become potential OECMs, the meeting recommended the adoption of a sea-scape management approach for LMMAs as a crucial imperative for sustainability and for addressing the challenge of measuring the benefits of single LMMAs.
- The issue of governance of LMMAs was discussed. The meeting agreed that it is important to support governments of the WIO to govern LMMAs as local legislation that governs their management is recognised as part of national legislative frameworks.
- The issue of dealing with weak enforcement and loss of fisheries resources due to corruption in government systems in the WIO was acknowledged with the meeting emphasizing that mechanisms such as creation of awareness on the need for zero tolerance, reporting corrupt officials, and whistle blowing need to be encouraged as effective tools for ensuring compliance and effective fisheries management.

SESSION 4: CROSSCUTTING PAPERS

1. SDG 14.4: Bridging the divide between intent and implementation – Dr Jim Anderson, Independent Consultant, and Dr Arthur Tuda, WIOMSA

The presentation, given by Dr Jim Anderson and Dr Arthur Tuda, recalled the aim of SDG 14.4 which states that “By 2020 countries should effectively regulate harvesting and end overfishing, illegal, unreported and

unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics". The presentation focused on the illegal, unreported, and unregulated (IUU) fishing component of SDG 14.4. It was noted that IUU fishing is described by the FAO as '...one of the greatest threats to marine ecosystems and undermines national and regional efforts to achieve sustainable fisheries.'

The presentation described the application of the WIOMSA SSF IUU Index in four WIO States (Kenya, Madagascar, Mozambique and Tanzania) to gather perceptions from various fisheries professionals on the management of up to four fisheries (octopus, small pelagic fish, reef and shrimp). It covered the overview of the components of the index, the findings of the study and the following recommendations were made:

- Development of regional and national plan of action to address IUU fishing;
- A systematic stock taking to identify gaps in fisheries management profile; identify challenges to service delivery;
- A review of communication strategies to local fisheries officers and fishers;
- Reduce the prevalence and frequency of illegal fishing;
- Tailoring of surveillance according to what is practical and cost effective for SSF;
- Effectiveness of Reporting Systems - ensure that the reporting system is designed to provide the information that is necessary for management and to ensure that the reporting system is adapted to local conditions and using a coordinated approach across the region;
- Improving regulations.

2. Advancing Seagrass Conservation and Management Across the Western Indian Ocean - Stacy Baez, The Pew Charitable Trusts

The presentation on advancing seagrass conservation and management across the WIO was delivered by Stacy Baez of the Pew Charitable Trusts. It focused on the environmental, economic, and community benefits of seagrass meadows to global society, and the status of seagrass in the IndoPacific region (seagrass cover loss). It also looked at the status of protection of seagrass ecosystems, and the expansion of knowledge on seagrass science - focusing on the Seychelles Seagrass Mapping and Carbon Assessment and the regional verified seagrass map project that is being jointly implemented by the Pew Charitable Trusts (Pew), WIOMSA, Oxford University, and regional partners for several WIO countries.

Policy Recommendations:

- To address knowledge gaps for seagrass: seagrass extent, carbon, and threats.
- To facilitate and strengthen locally led management measures for seagrass.
- To strengthen measures toward protecting and restoring blue carbon seagrass and mangrove ecosystems: technical support to aid countries seeking to preserve these ecosystems within NDCs, NBAPs.
- To strengthen institutional arrangements among research, community, and policy stakeholders to mainstream seagrass into national management frameworks: MSP, MPAs, WIO Seagrass Network.
- To support the development of a regional seagrass strategy, vision and action plan similar to that agreed for mangroves at COP10.

3. Improving shark and ray management in the Western Indian Ocean – Rhett Bennett, WCS

The presentation on improving shark and ray management, delivered by Rhett Bennett of the Wildlife Conservation Society (WCS), covered actions in the Western Indian Ocean on protection of highly threatened species, and controlling international trade.

Recommendations:

- i. Protect highly threatened shark and ray species, by:
 - Fully protecting all CMS (Convention on the Conservation of Migratory Species) Appendix I shark and ray species,
 - Imposing retention bans in relevant fisheries for all species with IOTC retention bans,
 - Protecting all Critically Endangered and Endangered shark and ray species.
- ii. Control international trade in threatened shark and ray species, particularly through the effective implementation of CITES trade controls for listed shark and ray species, through:
 - Prohibiting international trade in CITES Appendix I shark and ray species,
 - Prohibiting international trade in CITES Appendix II shark and ray species for which harvesting and international trade would be detrimental to wild populations,
 - Permitting international trade in only those shark and ray species that can be caught and traded legally and sustainably.
- iii. Implement management measures and harvesting regulations for shark and ray species not otherwise required to be protected, that ensure that utilization is sustainable, through:
 - Implementing management measures for CMS Appendix II species, including regional/multilateral management measures/agreements, where appropriate,
 - Implementing management measures for the harvesting in non-tuna fisheries of species with IOTC retention bans (i.e., in fisheries not under the IOTC mandate),

Plenary discussions

The plenary discussions following the presentation focused on a range of issues including the uptake of seagrass terminology in Seychelles; improving sharks and rays management through penalties for non-compliance; possible expansion of the coverage of the seagrass project to include Comoros, and the adoption of technology to improve surveillance of IUU fishing.

4. Towards a regional MSP vision and roadmap for the Northern Mozambique Channel – Dr Samantha Petersen, WWF

The presentation, delivered by Dr Samantha Petersen of WWF, outlined the ecological and biological importance of the Northern Mozambique Region and the threats facing the Northern Mozambique Channel (NMC) which is seen as an important corridor due to its high productivity and significant contribution to the total economic value of the WIO. It was noted that the region's critical ecosystems are in decline from the combined impacts of local use and global threats, including growing pressures from coastal infrastructure development, extractive industries (in particular recently discovered natural gas and oil), population growth and climate change.

The presentation provided an overview of the NoCaMo (Integrated Management of the Marine and Coastal Resources of the Northern Mozambique Channel) project, and highlighted MSP as a tool for integrated ocean governance in the NMC.

Policy and technical recommendations

The following recommendations were provided by the presenter:

- The Nairobi Convention is requested to endorse a regional vision for the NMC region;
- The Convention is requested to establish conservation priorities for increased protection of the NMC region and strengthen LMMA networks; and
- The Convention is requested to agree on a regional roadmap for the NMC region.

5. Progress towards an Ecosystem Indicator Monitoring Framework for the WIO – Prof Warwick Sauer, Rhodes University

Highlighting the ecosystem challenges in the Western Indian Ocean region, the presentation by Prof Warwick Sauer covered the rationale for the development of a standardised system for the contextualization, design, implementation and reporting processes of ecosystem monitoring that is based on the adaptive management principles. Suggestion was made for a standard system that will support the production of data that are fully reproducible, integrated, comparable and accessible and give a big picture of the trends and changes in the WIO. The presentation gave an overview of the value of the framework to reporting progress in achieving regional and global commitments and 30 draft indicators underpinned by common emergent themes on challenges experienced across the region.

Technical recommendations:

- The 30 priority indicators suggested in the framework should be discussed and approved by the Contracting Parties in order to standardize data gathering for regional monitoring. This includes reviewing the situational assessment and updating it accordingly.
- National Data Coordinators (NDCs) from the National Data Centres of each Contracting Party should be nominated to oversee implementation. NDCs are responsible to 1) conduct national self-assessments on the availability of information for the priority indicators, 2) harmonize data collection methods, ensuring comparability nationally and regionally and facilitating data aggregation, and 3) coordinate the development and implementation of regional indicators.
- NDCs should designate indicator coordinators, who will evaluate the indicator data, oversee the progress and review the indicator monitoring for quality control and assurance.
- The NDCs, indicator coordinators and expert groups should discuss the specific methodology and parameters to be collected for each of the priority indicators to ensure regional standardization, continuous updating and evaluation of data.

Policy recommendations:

- All Contracting Parties should, after appraisal and suggested amendments, approve and incorporate this framework in their national planning processes.
- A capacity development and mentoring programme is urgently required to support these recommendations and will serve to strengthen the capacity of National Data Centres to participate and contribute to regional ecosystem monitoring requirements.

6. Rising climate risk and loss and damage to coastal small-scale fisheries livelihoods – Dr Joseph Maina, Macquarie University

The presentation by Dr Joseph Maina of Macquarie University focused on a regional case study to quantify climate risk to subsistence-oriented communities in Kenya, Tanzania, Mozambique and Madagascar. The presenter noted that the study assessed the community's adaptation potential and gaps and valued the potential loss and damage to ecosystem services caused by climate change with a view to inform effective policy actions aimed at adapting, mitigating, and compensating for the loss and damage caused by climate

change. The study considered the adaptation gaps and residual risks identified and determined that managing agro-ecological risks in the WIO will require significant investment of financial resources, possibly facilitated through climate financing, biodiversity financing and damage and loss compensation. The presenter flagged the limited capacity, in the WIO, to determine where support is necessary and how best to strengthen climate resilience.

Technical recommendations

- The contracting parties to support countries in implementing region-wide climate risk assessments of the coastal agro-ecological systems in the WIO.
- Carry out ecosystem service/natural capital valuation to estimate and quantify the economic risk, realized damages and losses and document the same. MPA expansion should target habitats of high ecosystem service value.
- Mainstream climate change adaptation strategies through ecosystem-based practices (e.g. LMMAs, restoration activities) which also have co-benefits to climate and biodiversity.
- Establish a regional climate information service for coastal and marine environment to measure the influence of climate variability and climate change; and disseminate this information to a broader audience.

Policy recommendations

- Enhance the Contracting Parties abilities to develop policy frameworks for coordinating adaptation and mitigation investment in climate information and knowledge generated at all levels.
- Capacity building targeting policy makers to improve Contracting Parties' efficiency in mainstreaming climate concerns into development frameworks.
- Ensure a solid foundation of applied climate science and reliable assessments of climate vulnerability, risks and impacts.
- Embed coastal marine climate adaptation options and strategies within the national adaptation plans - currently coastal marine issues are classified under different sectors (e.g. environment, fisheries etc.); develop and implement a monitoring and evaluation of adaptation strategies for coastal and marine environment sector and NAPs.
- Ensure local populations, especially those most susceptible to the effects of climate change are included in adaptations efforts.

Plenary discussions

The brief plenary discussions following the presentation focused on the political will and funding to conduct climate risk and loss and damage assessments. The meeting agreed that countries of the WIO should collectively request funding from the Loss and Damage fund and noted the importance of generating data and information to support the process.

SESSION 5: OCEAN GOVERNANCE

1. The Draft Regional Ocean Governance Strategy (ROGS) - Kieran Kelleher, Fisheries and Ocean Consultant, and the ROGS Adviser

Mr Kieran Kelleher outlined the challenge of ocean governance in the WIO which is primarily characterized by fragmented institutional seascapes arising from multiple political agendas (global, African, RECs, states), multiple institutions and mandates, multiple inter-related sectors (shipping, fisheries, tourism, urban development, offshore industries), multiple thematic agendas (environmental, social, economic,

trade, competing paradigms), collective regional versus national interests, and overlapping mandates and sector interests.

Mr Kelleher noted the challenge of designing a regional cooperation ecosystem which is functional and efficient and with the following elements: shared vision, consensus and aligned policies and rules, one ocean voice, shared knowledge, mutual support and pooled finance/resources, among others. He then gave an update on the process of designing a WIO ROGS under the Nairobi Convention and noted the participatory development process involving the ROGS Task Force and community of practice; the expected outputs; the structure and content of the draft strategy; the policy mandate for the strategy; the state of the WIO and the regional priorities as identified by the task force; the institutional/implementation arrangements and financing. He gave the vision of the WIO ROGs as “A peaceful stable Western Indian Ocean region with an environmentally healthy ocean, and a blue economy based on the protection and conservation of natural resources that delivers sustainable benefits with due regard to equity and wellbeing.”

Policy recommendations:

The following policy recommendations were outlined:

- Approve the ROGs;
- Include implementation in the Nairobi Convention work programme;
- Encourage Contracting Parties and regional organizations to make best efforts to implement the strategy;
- Request the (development) partners to support implementation;
- Establish interim institutional and financing arrangements;
- Prepare effective long-term institutional arrangements; and
- Arrange for regular reporting, review and adjustments.

2. The Information Management Strategy (IMS) for the Western Indian Ocean – Dr Harrison Onganda, KMFRI

The presentation delivered by Dr Harrison Onganda of the Kenya Marine and Fisheries Research Institute, was on the draft Information Management Strategy (IMS) for the western Indian Ocean which will be presented for adoption at COP 11 in 2024. He recalled Decision COP 10/5.3 of the Nairobi Convention, i.e. *“To request the secretariat to strengthen national data centres, through capacity development on information and knowledge management, and in collaboration with partners, to develop a regional information management strategy and mechanisms to address common challenges and take informed decision-making for ocean governance”*.

The presentation focused on the development process for the IMS using the co-creation approach; the core components of the WIO IMS; institutional and technical arrangements for housing the IMS; and the lessons learned in the development process. Dr Onganda stressed on the need to assign clear roles within the process, including an organization to drive the process forwards according to set timelines.

Recommendations

- Technical infrastructure and security:
- establish a secure, centralized database infrastructure to address the critical challenge of technical security. The technical framework must be versatile enough to accommodate data storage at both national and regional levels, promoting data exchange and ensuring the reliability of datasets.

- Governance and Oversight: establish a regional steering committee as the apex governing body responsible for data and information sharing.
- Data Access and Licensing: implement user authentication mechanisms on the WIO data platform. This approach allows for different access rights based on user roles, managing the accessibility of open and restricted datasets.
- Capacity Development: implement capacity development initiatives to harmonize processes, tool usage, and knowledge essential for comprehensively managing IMS components.
- The GEMS Ocean programme provides a good fit under the strategy to incentivise the use of data initiatives in supporting policy and decision making.

3. Source-to-sea management in the western Indian Ocean: policy, governance and technical considerations for regional implementation – Dr Joseph Maina, Macquarie University, Australia

Dr Joseph Maina of Macquarie University made a presentation on a source to sea approach to protection of the marine and coastal environment from land based activities. He gave an overview of the concept including comprising segments; relevant policy instruments and global and regional processes that support the source- to- sea approach (e.g. GBF, SDGs, UNFCCC, ICZM, MSP, land-sea planning etc.). The presenter noted that Source-to-Sea systems are highly dynamic systems that stretch across two realms – the land and sea – that are influenced by interacting multi-level and multi-scalar governance systems. He also touched on mainstreaming source-to-sea into processes for managing biodiversity, pollution and water flow; and a description of the source-to-sea WIOSAP pilot project being implemented in the Rufiji Delta which will make spatially explicit management recommendations to reduce sediment loading and foster sustainable water-flow regimes.

Technical recommendations

- Implement capacity building on source-to-sea planning for the relevant agencies and create additional pilot catchments to cover the diverse typologies of land-sea connections.
- Mainstream source-to-sea in climate change adaptation, biodiversity conservation, marine litter and other relevant processes and initiatives.

Policy recommendations

- Establish a regional community of practice on source-to-sea (a source to sea network).
- Develop national and regional platforms for sharing lessons and best practices

4. Principles for transformative ocean governance - Prof Amanda Lombard, Nelson Mandela University

Prof Amanda Lombard delivered the presentation on principles for transformative ocean governance. She mentioned that Transformative governance has the capacity to respond to, manage, and trigger regime shifts in coupled social-ecological systems (SEs) at multiple scales and is, therefore, required to arrest current ocean-use practices based on economic growth models that have created inequities and fuelled conflict and environmental decline.

The presentation focused on a study to develop a set of principles to ensure participation and inclusion of all rights holders and stakeholders towards transformative ocean governance to enable sustainability. She noted that in response to the global calls for transformation in ocean governance, and a move away from business-as-usual, the One Ocean Hub Programme developed 13 principles for transformative ocean

governance (just published in Nature Sustainability). The objective of the principles is to inform local, regional and global policies, strategies and legal frameworks serving as guidance for new documents, or benchmarks to assess existing documents.

Recommendations/Lessons:

- The principles be applied as a comprehensive set.
- Learn from the interaction of the principles; particularly those that reveal hidden tensions.
- The principles can bring or keep together partnerships for innovative ocean governance.
- This action must respond to the many calls to reform current ocean-use practices which are based on economic growth models that have perpetuated inequities and fuelled conflict and environmental decline.

Plenary discussions

Several issues were discussed in plenary following the presentations. These included the need to explore synergies between the WIO information management system and other data management programmes in the WIO (e.g. the GEMS Ocean Programme and the UN Ocean Decade Africa Road Map and its ocean data requirements); the involvement of the private sector in data collation - e.g. oil and gas companies conduct research and are the custodians of ocean data that they could be willing to share; the possible inclusion of maritime security (piracy, armed robbery, terrorism on the high seas) in the Regional Ocean Governance Strategy; and use of the source-to-sea- approach for managing MPAs and LMMAs in a seascape approach.

DAY 2 GROUP DISCUSSIONS AND REPORTING BACK

Based on the day's presentations under the Sessions 3 (Locally Managed Marine Area (LMMA)), 4 (Crosscutting issues) and 5 (Ocean Governance), six groups were formed to discuss the key issues emanating from the presentations and that are critical for the countries of the WIO and the region as whole meeting their commitment to related global frameworks.

The six groups were:

- I. Strengthening and expanding LMMAs/OECMs as a contribution to achieving the GBF targets.
- II. Mainstreaming climate variability and change into fisheries management.
- III. Understanding and mitigating Illegal, Unreported and Unregulated (IUU) in small-scale fisheries.
- IV. Laying a foundation for implementation of the WIO Regional Ocean Governance (ROG) Strategy.
- V. Strengthening the Source to Sea approach as a tool for integrated ocean planning and management.
- VI. Sharing data and information for effective ocean governance.

As done in the Day1 discussions, each group was expected to come up with the following:

- a. Three key challenges that are critical to the issue of focus to the group.
- b. A maximum of three important technical/science recommendations and policy recommendations for each.
- c. Highlight key gaps (not more than three for each) in science and policy of relevance to the issue of focus.
- d. Highlight opportunities that need to be explored further to address existing science and policy gaps.

All discussions and recommendations for the group discussions were aimed at assisting the WIO to meet Global Targets in support of a Sustainable Blue Economy. The summaries of the group discussions are presented below.

Group 1: Strengthening and expanding LMMAs/OECMs as a contribution to achieving the GBF targets

The identified key challenges in relation to strengthening and expanding LMMAs/OECMs as a contribution to achieving the GBF targets on SSF.

1. Non-unanimous brand identity across the region and lack of or varying regimes in their legal recognition hinders local community agency, voice and grounded decision-making in local ocean governance;
2. Current approaches in LMMA establishment may not lead to inclusive mechanisms that integrate multi-faceted dimensions beyond a focus on small-scale fisheries;
3. The size of current LMMAs in the WIO is too small to create a dent towards the 30X30 GBF target in relation to biodiversity conservation. Narrow scope on SSF;
4. Access to financing and resources to sustain LMMAs.

Technical/science recommendations

- Map and validate existing and potential LMMAs in the WIO and clarify their mandates, functions, uses;
- Develop harmonized guidelines on LMMA establishment as a basis for creating coherent LMMAs across the WIO region, to provide clarity on integration of ecological and social data, monitoring and evaluation, human rights/gender mainstreaming, reporting, etc.;
- Establish a regional process for adoption of global/regional OECM guidance for the WIO and develop a roadmap towards their identification and recognition as OECMs.

Policy Recommendations

- Encourage and support national governments in the WIO to develop legal and policy frameworks to guide inclusive, equitable and effective LMMA establishment and governance;
- Establish a regional LMMA umbrella platform/forum with strong national chapters to advocate and elevate local management/co-management, voice and agency and strengthen their participation and contribution in WIOMPAN.

Key gaps in science and policy of relevance:

- Varying legal/policy frameworks across countries
- Non-ground-truthed unvalidated LMMAs (extent, scope, etc.)
- Lack of community of practice on LMMA/co-management
- Inconsistencies on LMMA establishment
- How to achieve sustainability of LMMAs for perpetuity (social/conservation outcomes, financing)
- Lack of resource monitoring (ecosystem function, services, and values)
- Human resource capacity for effective LMMA planning, management and implementation

Opportunities to address existing science and policy gaps

1. Explore and pilot emerging financing models e.g. PFPs, Biodiversity offsets, D4N Swap, blue carbon, blue bonds, climate fund funds, biodiversity funds
2. Develop and customize capacity building, training and certification program in WIOCOMPAS targeted at LMMA managers
3. Maximize on prevailing global momentum on GBF (30X30 target – biodiversity, human rights) and climate commitments, UN Ocean Decade

Group 2: Mainstreaming climate variability and change into fisheries management

Challenges

- Enforcement
 - Monitoring IUU
 - Pressure from destruction of ecosystems, compounded by CC and misuse.
- Consistency in monitoring fish catch and community communication.
 - Understanding the social ecosystem of fishing communities
 - Reporting back to the community and using the right language
- Capacity to communicate about climate change.
 - Need technical capacity-data, information, science.
 - Science communication-package it for different users at different levels
- Adaptation planning

Technical Recommendations

- Capacity development for technical ground staff
 - Also need to make use of local community (youth and women) to participate and thus create employment while providing skills.
- Education: establish SOPs that are useable on a long-term basis where they don't exist.
- Adoption of technologies to assist fisheries management
 - MCS: monitoring control surveillance

Policy Recommendations

- Community engagement
 - Encourage or formalise working with communities e.g. for mapping zones that could be damaged, and those damaged due to CC.
- Set-up inter-ministerial and inter agency platform and tech communities of practice at different levels to advance the coordination and mainstreaming of CC mitigation and adaptation in fisheries.
- To review and align existing enforcement regulations to align them to emerging issues, especially climate variability.

Gaps: Long-term monitoring data on CC impacts on fisheries; incoherent law enforcement; including local knowledge systems into existing research frameworks.

Opportunities: collaborating/partnering with capacitated organisations in the region; Fisheries Twinning (for joint monitoring and assessment of climate impacts and risks on fisheries; and twinning to be designed as a peer to peer learning programme); leveraging synergies through using regional frameworks and process (RFMOs).

Group 3: Understanding and mitigating Illegal, Unregulated and Unreported (IUU) fishing in small-scale fisheries

Challenges that are critical to IUU fishing:

- The vast scale of IUU fishing in small scale fisheries: it is large and complex in terms of operations and geographical coverage (multiple gears, multiple species, multiple regimes of governance in various areas)
- Limited resources for carry out monitoring, control and surveillance (MCS): limited capacity to operate and manage the few existing resources, limited data collection to inform management, etc.

- Corruption, mainly caused by low integrity and lack of transparency in fisheries management (reporting and regulations).

Technical/science recommendations and policy recommendations for each of the challenges

Policy recommendations

- Recognize the role played by small scale fisheries and pay attention to their IUU fishing operations at the NC regional level.
- Create synergy between fisheries management and conservation (integration of approaches for both) in all NC member States.
- Strengthen and implement existing regulations and develop new legislation where necessary.
- Promote multi-agency approaches to increase transparency and reduce corruption.

Technical recommendations

- Provide support to NC member states to curb illegal harvesting and trade in some high value fisheries like shark fins, sea cucumbers, lobsters, octopus etc.
- NC to request United Nations Office on Drugs and Crime (UNODC) to promote multi-stakeholder approach to fisheries enforcement and compliance.
- Establish a regional inter-sectoral expert panel on IUU fishing threats and solutions in SSF fisheries that will address sustainable ocean-based economic, social and environmental issues.
- Collect data to understand species level of catch landings and fishing effort for different species.
- Sensitization and awareness creation, and joint trainings and multi-agency approach in fishing licensing and enforcement.

Key gaps in science and policy in IUU fishing issues: lack of adequate data on the resource and extent of IUU fishing problem in SSF in the WIO region, including low capacity to collect the requisite data; lack of best practices and examples of success stories of well managed fisheries, in that we keep doing the same things at every opportunity e.g. when implementing fisheries projects.

Opportunities that need to be explored further to address science: the UNODC, an avenue for interagency and regional cooperation; the draft Regional Ocean Governance Strategy; existing regional mechanism and structures (specifically the MPA managers course) for capacity development and training; WIOMSA provides an opportunity to promote and coordinate research in social aspects of fishing, fisheries governance, technologies, etc.

Group 4: Laying foundation for implementation of the WIO Regional Ocean Governance (ROG) strategy

Key challenges that are critical to the issue of focus to the group: Lack of political will and inertia; One (regional) size does not fit all, some countries are more 'advanced' than others – common but differentiated requirements. Differing national priorities, pace of ROGS implementation; conflicting mandates for agencies within some countries; weak institutional capacity and finance.

Technical/science recommendations and policy recommendations for each

- Effective science communication to policy makers.
- Develop sensitization/ communications material on ocean governance strategy targeting different audiences.
- Develop regional project to support implementation of the strategy, i.e. ROGS to bring additional finance and resources and not draw on scarce existing resources.

Key Gaps in science and policy of relevance to the issue of focus: lack of understanding of benefits related to the implementation of the strategy by countries; insufficient data and information to inform planning, policy, implementation; challenges in translation of available scientific data and information into effective policies; lack of public awareness of ocean issues and scientific advice.

Opportunities that need to be explored further to address existing science and policy gaps: political will (show clear benefits for the country from regional cooperation and ROGS – jobs, incomes, cost savings); increase Ocean literacy – politicians, media, public, school curricula; financing opportunities increasing for Blue Economy, climate actions; get a high profile celebrity such as Leonardo di Caprio to launch the strategy.

Group 5: Strengthening the source- to- sea approach as a tool for integrated ocean planning and management

Three key challenges that are critical to strengthening the source- to- sea approach are:

- **Governance – policy and institutional challenges**
Traditionally, governance frameworks such as policies and regulations are often fragmented and directed towards maximizing local benefits for individual segments or sectors with no or little consideration on the linkages between land, freshwater, coasts and the ocean. Such governance frameworks often result in actions and outcomes that may not be optimal in producing ecosystem services in interconnected systems.
- **Poor coordination among source to sea sectors.**
- **Lack of technical and financial capacity.**
The assessment of the source to sea flows (biodiversity, ecosystems, sediments etc.) requires technical expertise which is lacking.

Technical/science recommendations and policy recommendations for each

- **Mainstream source to sea in the implementation of relevant processes including the ICZM, MSP and GBF among others.**
- **Capacity development and building on source to sea approach.**
- **Develop a regional strategy on source to sea approach to facilitate coordination among sectors in implementing source to sea**

Key gaps in science and policy of relevance to the issue of focus: Data and information gaps; lack of financial mechanisms to support Source-to-Sea approach; and lack of coordination and coherent policy across sectors and transboundary catchments.

Opportunities that need to be explored further to address existing science and policy gaps: Leverage existing complementary policies, processes and activities at national and regional level, for example, MSP, ICZM and GBF; Establish a regional/national community of practice on source to sea; Establish national and regional platforms for exchanging of best practices as lessons learned.

Proposed decisions: Source to sea approach

1. **Baseline/pilot studies:** To request the secretariat to undertake the development of a baseline assessment for source-to-sea and the establishment of guidelines for its implementation at both the national and regional levels. The baseline assessment shall comprehensively evaluate governance structures, delineate crucial flows within each catchment, and compile an exhaustive inventory of all socio-ecologically significant catchments in the region.

2. To request the Convention to initiate the development, in a participatory process, with the support of partners, the source to sea guideline for the Western Indian Ocean region as a harmonizing framework for existing processes/guidelines/strategies of ICZM, MSP, IWRM, E-Flow, Marine Litter, and ocean governance, among others.
3. To request the secretariat to establish a regional community of practice on source to sea approach as the overarching group encompassing existing relevant working groups and task forces (e.g., critical habitats, water quality, Marine litter) to support the implementation of relevant processes such as water quality, ICZM protocol and addressing issues related to marine litter.
4. **Financial capacity:** The convention is urged to establish financial mechanisms to support S2S.
5. **Comprehensive Source-to-Sea Integration Policy:** The convention is urged to mainstream source-to-sea thinking in projects, plans, governance, and investments, stimulating increased investment in understanding linkages, safeguarding ecosystems, and incentivizing holistic management, while also fostering the development of capacity and governance for cross-sectoral cooperation to identify solutions at the source.

Group 6: Sharing data and information for effective ocean governance

Key challenges that are critical to sharing data and information for effective ocean governance

- Data availability, quality, format and fragmentation.
 - Data and information availability.
 - Required data and information are not available in some cases (e.g. benthic habitat data).
 - Required data and information are present but undiscoverable (e.g. Traditional Ecological Knowledge).
 - Required data and information are present but inaccessible (e.g. paywall, long request process, ownership, etc.).
 - Data quality (lack of information on the data quality).
 - Data format (lack of skills to process and analyse).
 - Data fragmentation (data are fragmented across many institutions)
- How to capture information and knowledge and wisdom that are expert, traditional, or intrinsic (different and innovative means of collecting this data e.g. through art, stories, theatre, community conversations).
- A data and information platform for sharing is required (an efficient and effective clearing house mechanism is required, but note that the Nairobi Convention is developing an information management system).

Key gaps in science and policy of relevance to data and information sharing for effective ocean governance

Science, technology and innovation

- Seabed mapping (and the mapping of other marine habitats).
- Surveillance and monitoring.
- Capacity (people, infrastructure and financial).
- Long-term data: collection, storage and dissemination with data sharing protocols, including data to monitor climate change and inform climate change adaptation strategies.

Policy

- Develop criteria against which to evaluate Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs), for the oil and gas industry and seabed mining.
- Develop agreements for data sharing for e.g. for transboundary projects.

- Develop a best practice Community of Practice (CoP) for data standards and data custodianship and sharing.

Technical/science recommendations and policy recommendations for each

Technical/science

- Minimum standards and guidelines for regional data sets (how to collect, store, manage, disseminate) – to facilitate comparability.
- A regional monitoring system with key high-level indicators to report on, including long-term data sets (social and ecological). Use existing monitoring sites, select these smartly. Climate change indicators are important.
- Regional (and shared) technical infrastructure (e.g. a regional research ship).

Policy

- Each project needs a data management plan, and the data then need to go to the clearing house, so each data producer needs to budget for, and then provide, a data management plan.
- Identify the ocean governance indices that are needed. We need a clear set of well-crafted indicators that can be collected at a regional level. These indices need to be biophysical and socio-economic (and include security e.g. IUU).

Opportunities

The regional clearing house mechanism that is being developed in the NC – we need national data centres to be established to feed into these (e.g. South Africa’s OCIMS) (both social and ecological data are required); opportunities for research collaboration, including funding instruments and ships of opportunity; the blue economy movement – building collaboration between nations and then for nations to nest their policies under the ROGS which needs to feed into the African Union blue economy strategy (so policy coherence is needed to benefit from this opportunity).

DAY 3 - THURSDAY 7 DECEMBER 2023

The third day of the meeting was chaired by Ms Nashreen Soogun from the Ministry of Environment, Mauritius. The day’s meeting began with a recap of day two by Dr Tim Andrew of the Nairobi Convention Secretariat. On Day 3 were two keynote presentations and six presentations focused on emerging issues of regional importance.

SESSION 6: EMERGING ISSUES OF REGIONAL IMPORTANCE

1. Developing Mozambique’s Blue Economy – Mr Simão Lopes, President of ProAzul, Mozambique

The first keynote presentation for day three, which was on developing Mozambique’s Blue Economy sector for sustainable development, was delivered by Mr Simão Lopes, President of the Board of Directors of the Mozambique Blue Economy Development Fund (ProAzul). The presenter recalled that it is expected that by 2030 Blue Economy in Africa will grow to USD 405 billion and support about 57 million jobs. Noting that in Mozambique, blue economy is extensive and diversified, Mr Simão Lopes highlighted on the steps in the process of developing Mozambique’s Blue Economy sector. These included:

- Establishment of the Ministry of the Sea, Inland Waters and Fisheries (MIMAIP) in 2015;

- Approval of the Sea Policy and Strategy (POLMAR) in 2017;
- Establishment and operationalization of Blue Economy Development Fund (ProAzul) in 2019;
- Revision of the Maritime Law, and the establishment of the Crescendo Azul platform in the same year (2019);
- Approval of the Aquaculture Development Strategy in 2020;
- Maritime Spatial Planning (POEM) in 2021;
- Development of the Blue Economy Development Strategy (EDEA) in 2022; and
- Establishment of the first Blue Economy Satellite Account in 2023.

He also outlined the challenges associated with development of Blue Economy - notably financing- and the enabling factors for successful Blue Economy implementation including cross-sectoral coordination, environmental sustainability, social inclusion, technological empowerment and integrating science into decision making. In conclusion, Simão Lopes noted that Mozambique's journey towards sustainable development through the Blue Economy represents a promising and challenging path that will mark the beginning of significant and structural changes for the country.

2. Charting the course for WIO countries for BBNJ Treaty implementation – Dr Joseph Maina, Macquarie University

The presentation by Dr Joseph Maina sought to chart a course and provide options for the implementation of the BBNJ treaty in the WIO region. The presentation covered the current governance of ABNJs (multi-agency management with varying mandates and governance instruments - fishing, whaling, shipping and sea-bed mining - all of which have significant impact for the ocean). It also covered "Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ) and Conservation, Surveillance and Monitoring in the High Seas - Implications for the Western Indian Ocean Region".

The presenter provided the following key highlights of the BBNJ treaty:

- **Conservation:** Sets up a procedure to establish large-scale marine protected areas in the high seas.
- **Equity:** Establishes the sharing of benefits from marine genetic resources.
- **EIA:** Contains clear rules to conduct environmental impact assessments, with the right checks and balances, before human activities take place in the high seas.
- **Capacity Building:** Foresees capacity building and the transfer of marine technology between the Parties.

Dr Maina highlighted on proposed measures and a roadmap towards implementing the BBNJ treaty in the WIO, building on lessons learnt from the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the OSPAR Commission in establishing MPAs in the high seas. He also outlined the possible governance arrangements and the challenges (data for decision making, lack of capacity for monitoring and surveillance in the high seas, enforcement and compliance, finance and technology as well as equity issues).

Recommendations:

- Mandate Public Vessel Tracking.
- Transparent Management and Monitoring Plans: the transparency of management and monitoring plans, along with their resource allocation and responsibilities, should be upheld.
- Inclusive proposal and designation process.

- Encourage the Nairobi Convention Secretariat and capacity building implementation programs to co-produce a definition of how their capacity building measures will meet the identified needs for achieving the high seas area-based management tools (ABMT) in the western Indian Ocean and establish partnerships appropriately.
- Acknowledge the different motivations of actors participating in capacity development projects and build consistency and synergies across projects and countries.
- Request the Convention to facilitate in the establishment of a regional platform and approach on BBNJ to help in development of a common regional vision and understanding of MPAs beyond national jurisdiction. This can lead to the establishment of a platform where stakeholders in the region can come together to identify and propose areas for MPAs in the high seas.
- Capacity and technology needs assessments, and further applied research to inform evidence-based decision-making may be required. This could include: Assessments of all forms of connectivity between EEZ and ABNJ; Threat mapping to understand human impacts and climate risks within the ABNJ; Evaluate sociocultural significance of the ABNJ in the WIO.
- Consider joining the High Seas Coalition.

3. Application of the Urban Monitoring Framework in Linking Data to Policy and Action - Daniel Githira, UN Habitat

The presentation on the Urban Monitoring Framework was delivered by Daniel Githira of UN Habitat. The presenter noted that since coastal regions are home to a large and growing population and face higher environmental vulnerabilities than other regions, coastal cities require monitoring systems to support their vision and long-term plans for sustainable development.

The focus of the presentation was on the application of the Global Urban Monitoring Framework (UMF) for Mombasa and Dar es Salaam cities. It was noted that as part of global implementation of the framework, the UN-Habitat in collaboration with WIOMSA supported the implementation of the UMF for Mombasa and Dar es Salaam cities between June 2022 and May 2023. The process involved stakeholders' engagement and extensive data processing. The presentation outlined the findings of the study noting that the two cities have significant gaps to overall sustainability in terms of governance measures and weaknesses in economy pertaining to unemployment and tertiary education. The presenter outlined some of the threats to coastal ecosystems associated within the two cities including uncontrolled/unplanned growth/ urban sprawl; the reduction of green and public spaces, limited and ineffective protected natural areas and pollution.

Technical recommendations for Mombasa and Dar es Salaam:

- Enhance urban data management as huge data gaps were identified for important indicators.
- Focus on the city beyond administrative demarcations as urbanization impacts areas beyond administrative boundaries.
- Integrate urban and marine spatial planning.
- Invest in enhancing the environment.
- Work on spatially targeted interventions.

Policy recommendations for the Nairobi Convention

- Data intervention - Promote development of integrated city/urban and marine data system for WIO cities, preferably based on the model of the Urban Observatory.

- Promote data disaggregation - Urban challenges in the WIO region are strongly linked to inequalities; their interventions are grounded on data disaggregation - by geographical, income groups/ social strata, etc.
- City diagnosis - Scale up UMF implementation to other WIO cities.
- Integrated development - Promote integration of urban and marine spatial planning, including on leveraging -in a balanced way- the opportunities from blue economy.

4. Marine plastic pollution: Research needs to support the upcoming international legally binding instrument – Prof Agnes Muthumbi, University of Nairobi

Prof Agnes Muthumbi of the University of Nairobi made a presentation on research needs to support the upcoming agreement on plastics. It was noted that there have been reports of plastic ingestion and entanglement of various marine organisms leading to distress and even mortalities. She said that ingested plastic materials cause obstruction of the digestive tract as well as acting as vectors for persistent organic pollutants (POPs), heavy metals and microorganisms from the environment. Recognizing the danger that plastic pollution continues to pose in the environment, biodiversity and humans, many countries bordering the Indian Ocean have attempted to put in place policies and regulations, including ban on single use plastic carrier bags, to curb plastic pollution throughout the plastic life cycle stages (upstream, midstream, and downstream components) with varying success.

The presenter continued that in most WIO countries there is under-reporting of the status of plastic pollution especially microplastics in the marine environment due to paucity of data. She gave an overview of the policies and regulations to manage plastic waste in various African countries- including the Regional Action Plan on Marine Litter developed by the Nairobi Convention and the Institute of Marine Science (IMS) of the University of Dar es Salaam, and the Marine Litter Monitoring Manual developed by WIOMSA, Sustainable Sea Trust and African Marine Waste Network. She then highlighted on the findings of a study carried out on concentration of microplastics in invertebrates (three species of brachyuran crabs and *Saccostra cucculata*) collected at different sites along the Kenyan coast in 2018.

In conclusion, the presenter spoke about the components of the zero plastic multi-lateral agreement that is being negotiated and presented the following recommendations:

- Need for a coordinated regional regulation on plastic waste management (including land-locked).
- Need to develop standardized assessment and reporting protocols for (micro) plastics waste for comparability.
- Need to set up long term continuous monitoring program to assess the evolution of plastic pollution to guide policies.
- Need to support capacity development (human and infrastructure) to facilitate the process of data collection.
- Strengthen regional networks and collaborations on plastic pollution research like 'Regional Technical Working Groups on Marine Litter and Microplastics'.
- WIO governments to invest in research in offshore and deep-sea sediments.

5. Leading the Coordination of a Regional Ocean Acidification Monitoring Network to Inform Implementation of Marine, Climate and Sustainable Development Goals - Jessie Turner, Ocean Acidification Alliance

The presentation on the regional Ocean Acidification (OA) network to inform the implementation of marine, climate and Sustainable Development Goals covered the OA action plans or hubs to support governments. It also looked at the actions that governments can take to mitigate, adapt or manage ocean acidification underpinned by regional information needs and reporting that is context specific and put the existing OA monitoring work by WIOMSA and partners in context to support and inform policy actions in the WIO through communication products.

The speaker gave examples of relevant Global and Regional governance arrangements that call for - or would benefit from - OA monitoring and research in the WIO. She made reference to the Western Indian Ocean Acidification (WIO) OA Monitoring project established by WIOMSA in 2018 in conjunction with regional institutions and experts.

Recommendations

Bearing in mind what the WIO region's contribution to the global debate on ocean acidification could be, the speaker made the recommendations listed below.

- Operationalise a regional OA programme
 - Implement a regional OA program as advocated by the Nairobi Convention that supports the WIO's approach to resource management.
 - Under the Nairobi Convention, governments should advance the development of a robust regional OA program that integrates monitoring, research, and impact assessment to directly inform mitigation, adaptation efforts across regional and national policies.
 - A coordinated and well-funded OA monitoring network and research agenda can help support the realization of regional goals, deliver a sustainable blue economy and assess how to feed a growing population.
- Integrate OA information across relevant policy goals
 - A diversity of existing policy strategies and their governance mechanisms can be leveraged to stimulate early OA actions and bolster the resilience of marine ecosystems and resources in the WIO. Existing marine management, climate change, and sustainable development policies provide a crucial foundation for utilizing OA information.
- Call for increased climate adaptation funding to support OA knowledge and response
 - Regional proposals should be put forward to funding entities like the Green Climate Fund, Global Environment Facility, or Development Banks, making the case that well-funded and intentionally coordinated regional OA monitoring and research agenda is an imperative and a necessary use of climate-adaptation financing at scale.
 - Climate-related financial mechanisms have existing marine and coastal project portfolios that increased OA information could further support and enhance. Examples include projects focused on developing the blue economy, coastal adaptation, sustainable aquaculture, and ecosystem restoration.
- Institutionalize and Enhance Science-Governance Collaboration:
 - Establish and enhance research and advisory frameworks that bridge the gap between scientific knowledge and governance. This facilitates the identification and utilization of the most influential marine, climate and developmental policy frameworks that can benefit from and mainstream the existing and emerging scientific information. This fosters a more

profound connection to policy responses aimed at addressing current and emerging socio-ecological challenges in the region.

6. A Toolkit for Sustainable Port Development in a Blue Economy - Dr Steve Weerts, Council for Scientific and Industrial Research, South Africa

Dr Steve Weerts made a presentation on the proposed toolkit for sustainable port development in the WIO, following on the Nairobi Convention Conference of Parties (COP) Decision CP.9/13 (To request the Secretariat, in collaboration with the International Maritime Organization (IMO), the Port Management Association of Eastern & Southern Africa (PMAESA) and other partners, to develop a toolkit for green (sustainable) port development and expansion in Western Indian Ocean region). Touching on the need for more sustainable ports, the presenter noted that originally ports were developed for safe anchorage and navigation, cost-effective trade without competition for coastal space, but rapid coastal urbanization, growing global trade, and depletion of natural resources, among other factors, increased societal and regulatory pressures on port development. The Concept of 'Green Ports' or 'Sustainable Ports' emerged to describe economically viable but also environmentally and socially responsible ports.

Dr Weerts provided examples of Green Ports initiatives and ended the presentation with the following recommendations.

Recommendations for participating countries

- Test and adopt IPM Framework in national port policies – to guide logical alignment between engineering and environmental processes.
- Test and adopt the Toolkit as a national guide for port planning and operations.

Recommendations for implementation

- The Nairobi Convention Secretariat should work with partners to support capacity development programmes in support of the effective operationalization of Sustainable Port Development in the WIO region.
- Port Management Association of Eastern & Southern Africa (PMAESA) – Leading roll out across ports in region.
- Mechanisms to be discussed between UNEP and PMAESA.

7. Blue Finance in support of improved Ocean Governance in the WIO - Kieran Kelleher, ROGS Adviser

Mr. Kieran Kelleher, the Regional Ocean Governance Strategy Adviser for the Nairobi Convention, made a presentation on financing the Regional Ocean Governance Strategy, building on his presentation on the first day on the ROG strategy for the WIO. He gave the following as key messages on affordable blue finance: that all ROGS priorities require affordable finance; there is a structural gap between demand for and the supply of affordable blue finance; a regional approach can help national access to affordable blue finance and support strengthened regional cooperation mechanisms.

The presenter proposed a Blue Finance Platform, the role of which includes: regional coordinating facility on blue finance, host a regional (virtual) blue portfolio and taxonomy, and link ocean accounts to investment impact.

8. Update on the UN Ocean Decade in Africa - Dr Kwame Koranteng, Member of Ocean Decade Africa Taskforce

Dr Kwame Koranteng provided an overview of the United Nations Decade of Ocean Science for Sustainable Development (Ocean Decade) programme implementation in Africa, recalling the background and rationale for the decade, the decade action framework including the objectives, the challenges, and expected outcomes. He noted that the *Vision* of the Ocean Decade is “*The science we need for the ocean we want*”. He talked about the Ocean Decade coordination structures and national committees, stressing that only a few national committees have been set up in Africa.

The Ocean Decade Africa Roadmap was developed to provide a vision and plan for the implementation of the Ocean Decade in Africa. The Ocean Decade Africa Taskforce was established to oversee the implementation of the Africa Roadmap. The speaker gave some information about the umbrella Decade Program for Africa which is under development and expected to be launched at the Ocean Decade Barcelona Conference in April 2024.

Plenary discussions

There were brief plenary discussions after the presentations, and emanating from questions and answers, the following were touched upon.

- The meeting discussed the cross-sectoral challenges in coordination of Blue Economy in the region and Mozambique where Blue Economy is hosted by the Ministry of Sea, Inland Waters and Fisheries but there are many other competing interests—fishing, tourism, energy etc. It was noted that to deal with the challenge, Mozambique chose a single entry point for implementation of the Blue Economy Strategy which is the Blue Economy Development Fund, ProAzul.
- Data limitation was discussed as a challenge in the application of the Urban Monitoring Framework. It was noted that it was not easy to establish the waste/load burden of Mombasa and Dar es Salaam cities to the coastal and marine environments; making it difficult to take adaptive measures.
- The development of regional standards that govern importation of sustainable plastics, trade and waste management was discussed as an option to deal with the issue of plastic pollution.
- The meeting discussed the need for enhanced contribution to the implementation of the Ocean Decade implementation in the WIO region and Africa at all levels including establishing national decade committees, greater involvement of the youth and early career professionals; contribution to the data ocean needs for the Decade; applying for decade actions and programme; serving on the various committees- the taskforces and working groups etc.
- The structural gap between supply and demand for blue financing and “sea blindness” was discussed with the meeting emphasizing the need for a regional approach to give greater impetus to access blue financing for the WIO region.
- Ocean Decade implementation structure was raised and concerns were raised about the low rate of formation of national Ocean Decade committees in Africa.

DAY 3 GROUP DISCUSSIONS

From the presentations of the day, and under the session on ‘Emerging issues of regional importance’, six groups were formed with each one of them focusing on key issues emanating from the presentations that are critical for the countries of the WIO and the region as whole meeting their commitment to related global frameworks. The six groups were:

- i. Mainstreaming Blue Economy into national development agenda.

- ii. Strengthening the participation of WIO countries in the BBNJ processes.
- iii. Coastal cities as agents and facilitators for ocean sustainability.
- iv. Addressing ocean acidification risks in the WIO.
- v. Greening large scale infrastructure development.
- vi. Appropriate models for blue financing in the WIO.

A summary of the group discussions for the day are presented below.

Group 1: Mainstreaming Blue Economy into national development agenda

Key challenges:

Limited integration (more sectoral) in existing national blue economy strategies; limited understanding/awareness of blue economy, especially at high-level players; limited/weak clear national leadership and coordination framework and policy framework in the region; and ocean economy (including oil & gas) versus blue economy.

Science/Technical recommendations

- Creation of awareness at high-level
- Improve technical knowhow on blue economy integration across all the sectors.

Policy recommendations

- High-level national multi-agency blue economy coordination framework/committee
- The Nairobi Convention to provide guidelines for establishment of regional blue economy framework.

Key gaps: national blue economy valuation, financing gaps, limited awareness on importance of ocean to climate change and technical capacity (human resources, infrastructure)

Opportunities: Leadership (Moroni Declaration, Nairobi Declaration); Increased interest on the blue economy (from use perspective); existing tools for sustainable blue economy – Sustainable ocean planning, MSPs, Financing opportunities; increasing understanding; international and regional processes and frameworks – Ocean Decade, Ocean Panel, Ocean Conference; Effective stakeholder engagement models

Group 2: Strengthening the participation of WIO countries in the BBNJ Process

Key challenges: conflict between MPAs and Fishing; what rights do countries have over BBNJ; the treaty only provides general provisions without specific mechanisms/frameworks for countries to manage BBNJ in terms of enforcement; some countries do not have clearly defined EEZ boundaries

Gaps: no governance systems e.g. EIAs, penalties for non-compliance; insufficient data to support decision making on BBNJs; funding

Technical /Science recommendations: support for science by members states to carry out research in the BBNJ; develop monitoring and evaluation mechanisms for BBNJ; strengthen capacity building and transfer of technology arrangements

Policy Recommendations: enhance regional corporation at a bilateral level or through the RECs; national governments should take up management of the areas; and valuation of the ocean health in the ABNJ to motivate governments to take ownership and manage these areas.

Opportunities: the BBNJ treaty is an opportunity to address the threats to biodiversity and ecosystems – (overfishing, marine pollution happening in the high seas.); the WIO region is relatively well placed to discuss issues related to trans-boundary management.

Group 3: Coastal cities as agents and facilitators for ocean sustainability

Key challenges

- Poor planning: road networks, green spaces, informal settlements and unmanaged urban growth.
- Urban densities: carrying capacity; high population growth; rapid urban development.
- Municipal waste management: sewerage system planning and management; storm water/grey water infrastructure; Solid waste management.

Policy recommendations

- Frameworks to promote proper urban planning and management.
- Ease pressure on primary cities by promoting development of satellite/secondary cities through private investments and public-private partnerships.
- Strengthen and/or operationalize urban development authorities by creating an enabling environment and capacity building.

Technical recommendations

- Develop proper solid waste and sewerage systems
- Establish and protect urban green areas
- **Key gaps:** lack of/ delays in the implementation of development plans; Insufficient data on urban planning and development; resource constraints (financial and human)
- **Opportunities:** availability of human capital; Innovation platforms and technological advancements; Lab/ urban observatories; nature based solutions for example SDG cities programme, blue carbon, green parks, MPAs, Capacity development

Group 4: Addressing ocean acidification risks in the WIO

Key challenges/gaps: lack of capacity in terms of measuring instruments and manpower for regular monitoring; lack of awareness of the impact of ocean acidification, lack of knowledge of the impact of ocean acidification on the ecosystems' functionality and services

Important recommendations/opportunities

- Initiating a long-term monitoring network at the local/regional level - to be linked at the global scale (establishing stations/mapping monitoring institutions)
- Using citizen science for monitoring and management within the communities
- Increase ocean literacy to enhance behavioural change
- Further studies to understand the scale and impact of riverine flows in the acidification process / Ensuring research programs that addresses specific acidification-related questions
- Need a better understanding of how ocean acidification is impacting community livelihoods
- Identify risk areas that might be impacted by these climate scenarios to understand how we can access mitigation funds

Group 5: Greening large scale infrastructure

Large scale infrastructure = Ports, Airports, Waterfront development, Aquaculture, Revetments, Rock Armouring, Beach Nourishment, Wind farms, Wave energy generation

Key challenges that are critical to the issue of focus to the group.

Development initiative vs Green initiative

- Lack of integrative policies, where policy exists - lack of legislation, where legislation exists - lack of compliance
- Engineering design (traditional philosophy) criteria, rather than ecological design criteria
- Lack of standards for “green” development, result in infrastructure failure down the line, degradation and increased costs (maintenance costs). Could lead to pollution (or other adverse environmental impacts)
- Lack of shared vision, public participation and stakeholder engagement
- Lack of education/capacity
- Investment policy and supply chain issue. Large-scale developments are funded, designed, constructed by international companies, who don’t necessarily have a long-term sustainability agenda or national interests.

Science Recommendations

- Capacity development in engineering university curricula to include sustainability / greening concepts. Innovation hubs
- Create awareness of the benefits of Green Infrastructure in local communities and general public (media, youth, education school curricula)
- Green Development Toolkits for different sectors and types of development

Policy Recommendations

- Strict regional and national policy recommendations to deal with downstream/transboundary impacts, e.g. dredging, sediment dynamics
- Deal with supply chain issues, strong terms of reference and adjudication on award of tenders, include independent experts (e.g., NGOs) on adjudication panels
- A national standpoint on Green Infrastructure. Strategic planning must be done, use MSP to align current and planned uses, do this in consultation.

Key Gaps: green certification; no good examples/test cases/pilot cases, to showcase proof of concept; tomorrow's benefit at today's expense; limited knowledge amongst policy makers, don't see the (relative) value given other priorities; funding case studies that can be scaled; long term benefits accounted for in capex and operational expenditure

Opportunities: compliment and strengthen existing framework, Integrative coastal zone management initiatives, AU Agenda 2063 (the Africa we want), AIMS 2050; interest in Blue/Green economy, regional platforms (NC); innovative financing, Carbon marketing, Biodiversity Offsets; and Nature Based Solutions

Group 6: Appropriate models for blue financing in the WIO

Challenges: Lack of enabling environment to develop and implement blue financing that includes blue economy strategy at a national level for action; Lack of de-risking tools for private sector investment; Lack of awareness of blue economy concepts across government institutions.

Technical/science Recommendations

- Create capacity in blue economy;
- Create opportunities for financiers and marine scientists to communicate about blue economy development;

- Create opportunities for data and valuation of ocean resources;
- develop blue economy strategies and mainstreaming blue economy in different sectors;

Policy Recommendations

- Create certification and standardization for blue economy to be adopted across WIO;
- Develop private sector and government standards for blue financing.

Gaps: poor enabling environment to develop and implement blue financing; lack of specialized staff to work on blue economy; supply chain needed to market blue economy; and quality checks needed to verify data for blue economy projects

Opportunities: Support supply chains that promote investment in blue economy; create a market for blue economy; funders want to invest in blue economy – create a pipeline of investable blue economy projects; opportunity to apply regional experiences in blue economy at a national level regarding blue financing options.

SESSION 7: CLOSING CEREMONY

Session 7 of the meeting was devoted to its closure. The statements made by representatives of the organisers, key partners and the host country are summarised below.

Statement by Mr Jacquis Rasonainaina

On behalf of the Chair of the Bureau of the Nairobi Convention, Madagascar, Mr Jacquis Rasonainaina thanked participants for a productive three days and their contributions that made the technical meeting a success.

Statement by Dr Jared Bosire

Dr Jared Bosire lauded the engaging, productive forum stating that the commitment of the participants shone through in the quality of presentations and plenary discussions and the feedback from the group discussions. He thanked the planning committee of the Platform meeting and the INOM team for the outstanding execution of all aspects of the meeting; the session chairs, Dr Koranteng and Dr Francis for coordinating the group discussions.

He outlined the next steps stating that a concise meeting report capturing the salient discussions would be developed and that the Secretariat would be requesting for permission to compile all presentations into a compendium for reference. He added that a legal team would be reviewing the policy recommendations and filtering proposed areas of decisions to be presented to the meeting of Focal Points, ahead of the 11th Conference of Parties. He stated that a 2nd edition of the Science- Policy Platform Series would be produced from the SPP papers with FARI supporting the peer review process and WIOMSA coordinating the production.

Dr Bosire concluded his remarks by thanking Mr Dixon Waruinge, the outgoing Head of the Nairobi Convention Secretariat, for his strategic vision, leadership and direction of the Nairobi Convention and the WIO region as a whole. He led the participants in a standing ovation to Mr. Waruinge.

Statement by Dr Blandina Lugendo, WIOMSA Board Member

Dr Blandina Lugendo joined in the appreciation of Mr Dixon Waruinge, thanking him for his efforts in relation to coastal and marine governance in the WIO region and wish him well for the future. She stated that in WIOMSA's estimation, this SPP meeting was a large success due to the active participation and engaging discussions as well as the seamless behind the scenes coordination by the planning committee team.

Statement by Mr Dixon Waruinge

Mr Dixon Waruinge began his statement by appreciating the kind sentiments expressed by various speakers stating that he was grateful to have walked the journey with amazing friends. He thanked the Government of Mozambique for hosting the forum, INOM for agreeing to be the technical host and WIOMSA for being a long-standing partner of the Nairobi Convention through the years. He appreciated the GEF for funding the meeting through the WIOSAP and SAPPHIRE projects. He thanked the partners, experts, session chairs and the planning committee for ensuring that the meeting went well.

Mr Waruinge stated that the meeting had underscored the value of ocean governance and urged the region to claim its space in the global ocean governance dialogue. He noted that the draft Ocean Governance Strategy for the region would be a useful tool for mitigating against the triple planetary crisis of biodiversity loss, climate change and biodiversity loss. He impressed the need to seize the opportunities presented by the BBNJ treaty stating that the Nairobi Convention can be an implementing framework for the agreement.

Closing Statement by Mr Simão Lopes

Mr Simão Lopes spoke on behalf on the Permanent Secretary, echoing the sentiments of other speakers in relation to Mr Waruinge, stating that the region would still be relying on his expertise, even in retirement. Mr. Lopez highlighted the importance of the discussions held over the three days stating the forum had provided a great opportunity for discussing science outputs that influence policy processes at national and regional level. He added that the meeting had identified subjects that need to be addressed in relation to the global goals and provided options for supporting the development of a Sustainable Blue Economy. Mr Lopez stated that recommendations that would be taken forward to COP 11 and translated into decisions will assist national efforts to address some of the challenges faced by the countries of the region. He concluded his remarks by congratulating the participants for a successful meeting. Mr Lopes officially closed the meeting at 4.45 pm.

APPENDIX 1: LIST OF PARTICIPANTS

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APPENDIX 2: PROVISIONAL AGENDA

Tuesday 5 December 2023		
Time	Event	Responsible
08:00 – 08:55	Registration	Nairobi Convention Secretariat/INOM
Session 1: Official Opening of the Meeting		
09:00 – 09:30	Opening statements	Nairobi Convention Secretariat
	<ul style="list-style-type: none"> • Oceanographic Institution of Mozambique • Nairobi Convention Secretariat • WIOMSA • Government of Madagascar • Government of Mozambique 	
09:30 – 09:45	Adoption of the Agenda	Chair of the Bureau Supported by Government of Mozambique
09:45 – 10:15	Group Photo and Tea/Coffee Break	All
Session 2: Global Biodiversity Framework		
10:15 – 10:45	Keynote Presentation I: implementation of the Kunming-Montreal Biodiversity Framework in the Western Indian Ocean	Wilcox et al
10:45 – 11:00	Delivering the Kunming-Montreal Global Biodiversity Framework: Mainstreaming Marine Spatial Planning and Data Support Process into Marine Biodiversity Conservation in the Western Indian Ocean Region	Joana Akrofi
11:15 – 11:30	Incorporating mangroves into the national climate and biodiversity agenda of WIO countries	James Kairo
11:30 – 11:45	Transboundary conservation area (TBCA) Economic Valuation	Jackie Crawford
11:45 – 12:00	Milestones and urgent needs in the development of the Kenya-Tanzania marine transboundary conservation area – Proposal for the next 5 years	Vera Horigue et al
12:00 – 12:15	Aligning the national and regional biodiversity targets with the new Global Biodiversity Framework: science informing policy making in Mozambique	Duarte et al.
12:15 – 13:00	General Discussion	
13:00 – 14:00	Lunch Break	All
14:00 – 15:30	Group Discussions and report back	
15:30 – 16:00	Tea / Coffee Break	All
16:00 – 17:00	Report Back	
Wednesday 6 December 2023		
Time	Event	Responsible
08:45 – 09:00	Recap of the Day 1	Secretariat
Session 3: Locally Managed Marine Area (LMMA)		

09:00– 09:30	Keynote Presentation II: Navigating 30x30 – building bridges between conservation and small-scale fisheries	Maya Pfaff
09:30 – 09:45	Enhancing Compliance and Enforcement to Safeguard Small-Scale Fisheries and Biodiversity for Improved Livelihoods in the Western Indian Ocean Region –	Samoilys et al
09:45 – 10:00	Enabling effective coastal and marine protection conservation and expansion through OECMs: Piloting OECM legal recognition and implementation in Madagascar	Government of Madagascar
10:00 – 10:15	Advancing Conservation through Community-Led Area-Based Fisheries Management: A Pathway to Achieving 30x30 Targets and Recognizing the Role of Local Knowledge and Participatory Science Tools	Atanasio Brito et al
10:15 – 10:45	Tea/Coffee Break	
Session 4: Crosscutting Session		
10:45 – 11:00	SDG 14.4: Bridging the divide between intent and implementation	Jim Anderson and Arthur Tuda
11:00 – 11:15	Advancing Seagrass Conservation and Management Across the Western Indian Ocean	Baez et al.
11:15 – 11:30	Improving shark and ray management in the Western Indian Ocean -	Rhett Bennett et al
11:30 – 11:45	Towards a regional MSP vision and roadmap for the Northern Mozambique Channel	Samantha Petersen
11:45 – 12:00	Progress towards an Ecosystem Indicator Monitoring Framework for the WIO	Warwick Sauer
12:00 – 12:15	Rising climate risk and loss and damage to coastal small-scale fisheries livelihoods	Maina et al
12:15 – 12:30	Vulnerability and adaptation of Mozambique coastal zones to climate change	Antonio Hogueane
12:30 – 13:00	Plenary Discussion	All
13:00 – 14:00	Lunch Break	All
Session 5: Ocean Governance		
14:00 – 14:30	The draft Regional Ocean Governance Strategy (ROGS)	Kieran Kelleher
14:30 – 14:45	The Information Management Strategy (IMS) for the western Indian Ocean	Siajali Pamba and Nadjim Ahmed Mohamed
14:45 – 15:00	Source-to-sea management in the western Indian Ocean: policy, governance and technical considerations for regional implementation,	Joseph Maina
15:00 – 15:15	Principles for transformative ocean governance	Prof Amanda Lombard
15:15 – 15:35	General Discussion	
15:35 – 16:00	Group Discussion	Chair
16:00 – 16:20	Tea / Coffee Break	
16:20 – 17:15	Discussions and Report Back	Chair
Thursday 7 December 2023		
Time	Event	Responsible
08:45 – 09:00	Recap of Day 2	Secretariat

Session 6: Emerging Issues of Regional Importance		
09:00 - 09:30	Keynote Presentation: ProAzul: Developing Mozambique's Blue Economy	Simão Lopes
09:30 – 10:00	Keynote Presentation V: Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ)	Joseph Maina
09:30 – 09:45	Conservation, Surveillance and Monitoring in the High Seas - Implications for the Western Indian Ocean Region	Tuda et al
10:15 – 10:30	Application of the Urban Monitoring Framework in Linking Data to Policy and Action -	UN-Habitat and WIOMSA
10:30 – 11:00	Tea/Coffee Break	
11:00 – 11:15	Marine plastic pollution: Research needs to support the upcoming international legally binding instrument	Agnes Muthumbi and Maurine Kerubo
11:15 – 11:30	Leading the Coordination of a Regional OA Monitoring Network to Inform Implementation of Marine, Climate and Sustainable Development Goals	WIOMSA
11:30 – 11:45	A Toolkit for Sustainable Port Development in a Blue Economy	Steven Weerts et al
11:45 – 12:00	Blue Finance in support of improved Ocean Governance in the WIO	Kieran Kelleher
12:00 – 12:10	Update on the UN Ocean Decade in Africa	Kwame Koranteng
12:10 – 12:20	Plenary Discussion	All
12:20 – 13:00	Group Discussion	
13:00 – 14:00	Lunch Break	
14:00 – 15:00	Group Discussion	All
15:00 – 16:00	Report Back	
16:00 – 16:30	Tea / Coffee Break	All
Session 7:	Closure of the Meeting	
16:30 – 17:00	<ul style="list-style-type: none"> • Nairobi Convention Secretariat • WIOMSA • Government of Madagascar • Government of Mozambique 	

APPENDIX 3: LINKS TO THE POWERPOINT PRESENTATIONS AND DISCUSSIONS PAPERS

	Item	Title
a.	A compilation of approved discussion papers for presentation at the 2023 SPP	Compendium of 2023 SPP discussion papers
b.	A compilation of presentations made at the 2023 SPP	Compendium of 2023 SPP presentations
	Presenter	Title of Presentation
SESSION 2: GLOBAL BIODIVERSITY FRAMEWORK		
1	Marcos Pereira	Keynote Presentation I: implementation of the Kunming-Montreal Biodiversity Framework in the Western Indian Ocean
2	Joana Akrofi	Delivering the Kunming-Montreal Global Biodiversity Framework: Mainstreaming Marine Spatial Planning and Data Support Process into Marine Biodiversity Conservation in the Western Indian Ocean Region
3	Dr James Kairo,	Incorporating mangroves into the national climate biodiversity agenda of WIO countries
4	Dr Jackie Crafford	Transboundary conservation area (TBCA) Economic Valuation
5	Dr Arthur Tuda	Milestones and urgent needs in the development of the Kenya-Tanzania marine TBCA- proposal for the next 5 years
6	Eleutério Duarte	Aligning the national and regional biodiversity targets with the GBF: science informing policy making in Mozambique
SESSION 3: LOCALLY MANAGED MARINE AREA (LMMA)		
1	Maya Pfaf	Navigating 30x30 – building bridges between conservation and small-scale fisheries
2	Dr Benedict Kiilu	Enhancing Compliance and Enforcement to Safeguard Small-Scale Fisheries and Biodiversity for Improved Livelihoods in the Western Indian Ocean Region
3	Mr Jacquis Rasoanaina	Enabling effective coastal and marine protection conservation and expansion through OECMs: Piloting OECM legal recognition and implementation in Madagascar
4	Prof Antonio Hogueane	Vulnerability and adaptation of Mozambique coastal zones to climate change
SESSION 4: CROSSCUTTING SESSION		
1	Dr Jim Anderson and Dr Arthur Tuda	SDG 14.4: Bridging the divide between intent and implementation
2	Stacy Baez	Advancing Seagrass Conservation and Management Across the Western Indian Ocean
3	Rhett Bennett	Improving shark and ray management in the Western Indian Ocean
4	Dr Samantha Petersen	Towards a regional MSP vision and roadmap for the Northern Mozambique Channel
5	Prof Warwick Sauer	Progress towards an Ecosystem Indicator Monitoring Framework for the WIO
6	Dr Joseph Maina	Rising climate risk and loss and damage to coastal small-scale fisheries livelihoods

SESSION 5: OCEAN GOVERNANCE		
1	Mr Kieran Kelleher	The Draft Regional Ocean Governance Strategy (ROGS)
2	Dr Harrison Onganda	The Information Management Strategy (IMS) for the western Indian Ocean
3	Dr Joseph Maina	Source-to-sea management in the western Indian Ocean: policy, governance and technical considerations for regional implementation
4	Prof Amanda Lombard	Principles for transformative ocean governance
SESSION 6: EMERGING ISSUES OF REGIONAL IMPORTANCE		
1	Mr Simão Lopes	Developing Mozambique's Blue Economy
2	Dr Joseph Maina	Charting the course for WIO countries for BBNJ Treaty implementation
3	Mr Daniel Githira	Application of the Urban Monitoring Framework in Linking Data to Policy and Action
4	Prof Agnes Muthumbi	Marine plastic pollution: Research needs to support the upcoming international legally binding instrument
5	Mr Jessie Turner	Leading the Coordination of a Regional Ocean Acidification Monitoring Network to Inform Implementation of Marine, Climate and Sustainable Development Goals
6	Dr Steve Weerts	A Toolkit for Sustainable Port Development in a Blue Economy
7	Mr Kieran Kelleher	Blue Finance in support of improved Ocean Governance in the WIO
8	Dr Kwame Koranteng	Update on the UN Ocean Decade in Africa

APPENDIX 4: ACRONYMS

ABMT	Area-Based Management Tools
BBNJ	Biodiversity Beyond National Jurisdiction
CBD	Convention on Biological Diversity
CCAMLR	Convention on the Conservation of Antarctic Marine Living Resources
CCAs	Community Conserved Areas
COP	Conference of the Parties
DITTO	Distribution Transformation Tool
EBSA	Ecologically or Biologically Significant Marine Areas
EEZ	Exclusive Economic Zone
FARI	Forum for Academic and Research Institutions
GBF	Global Biodiversity Framework
GEMS	Global Environment Monitoring System for the Ocean and Coasts
HAC	High Ambition Coalition
ICZM	Integrated Coastal Zone Management
IMO	International Maritime Organization
IMS	Institute of Marine Science
IOTC	Indian Ocean Tuna Commission
IPOA	International Plan of Action
IUU	Illegal, unreported and unregulated fishing
IWRM	Integrated Water Resources Management
KBAs	Key Biodiversity Areas
KMFRI	Kenya Marine and Fisheries Research Institute
KWS	Kenya Wildlife Service
LMMAs	Locally Managed Marine Areas
MEAs	Multilateral Environmental Agreements
MIMAIP	Ministry of Sea, Inland Waters and Fisheries
MPA	Marine Spatial Planning
MPRU	Marine Park and Reserves Unit of Tanzania
MTA	Ministry of Land and Environment (Mozambique)
NBA	National Biodiversity Assessment
NBSAP	National Biodiversity Strategy and Action Plan
OA	Ocean Acidification
Ocean Decade	UN Decade of Ocean Science for Sustainable Development
OCIMS	National Oceans and Coastal Information Management System (South Africa)
OECMs	Other Effective Conservation Measures
PMAESA	Port Management Association of Eastern & Southern Africa
POLMAR	Sea Policy and Strategy (Mozambique)
POPs	Persistent Organic Pollutants
ProAzul	Blue Economy Development Fund (Mozambique)
RBAS	Regional Biodiversity Assessment
RFMOs	Regional Fisheries Management Organisations
RMV	Regional Mangrove Vision
ROGS	Regional Ocean Governance Strategy
SDGs	Sustainable Development Goals
SEAs	Strategic Environmental Assessments
SIBMOZ	Mozambique Biodiversity Information System
SPP	Science to Policy Platform

SSF	Small Scale Fisheries
TBCA	Trans-Boundary Conservation Area
TEV	Total Enterprise Value
TFCAs	Trans Frontier Conservation Areas
UMF	Urban Monitoring Framework
UNFCCC	UN Framework Convention on Climate Change
WCS	Wildlife Conservation Society
WIO	Western Indian Ocean
WIOMPAN	Western Indian Ocean Marine Protected Areas Professional Network
WIOMSA	Western Indian Ocean Marine Science Association