

SESSION II: KEYNOTE PRESENTATION I

1. Ocean Finance: Financing the Transition to a Sustainable Ocean Economy

Rashid Sumaila *et al.*

Institute of the Oceans and Fisheries, University of British Columbia

Recommended actions to plug the finance gap:

- Set up and implement new common guidelines and principles that help define what sustainable investment in the ocean economy would look like.
- Strengthen knowledge, data and capacity in ocean health and finance, particularly in developing countries.
- Create a supportive and inclusive enabling environment.
- Stimulate the pipeline of investible sustainable projects.
- Explore new financing mechanisms and tools.
- Develop best practices to incentivize sustainable behavior.
- Boost new approaches to insurance.

SESSION III: ASSESSMENT AND CONSERVATION OF CRITICAL HABITATS AND ENDANGERED SPECIES

2. Working towards a better understanding of Western Indian Ocean deep sea ecosystems

Woodall & Talma

University of Oxford

Given the extensive nature of the knowledge gap on the deep-sea biology of the Western Indian Ocean the paper recommends the following as a way forward in a bid to contribute to making available usable information to policy makers:

- a) Awareness be created on services of the deep-sea ecosystems to parties through WIOMSA, FARI or other suitable organisations.
- b) A comprehensive review of deep-sea biological data (inc. grey literature and traditional knowledge) to provide knowledge gaps and to help prioritise activities.
- c) A deep-sea working group is established to lead the advancement of deep-sea research and data usage in the WIO
- d) Parties should continue to have strong representation in the BBNJ negotiations considering that deep sea is valuable for their prosperity.

3. Supporting national and regional alignment in coral reef management: The Western Indian Ocean Coral Reef IUCN Red List of Ecosystems Assessment

Obura *et al.*

CORDIO East Africa, Kenya

This paper calls the Nairobi Convention Parties and Secretariat to:

- Build on the findings of the Red List of Ecosystems, the regional report of 2017 and other science to identify priority reef areas requiring effective protection, through protected areas or other effective conservation measures (OECM), thereby addressing international conservation area targets in the Western Indian Ocean in a way that is compatible with sustainable use and equity at local levels.
- Ensure the prioritization of coral reefs and threatening activities within Marine Spatial Planning and Sustainable Blue Economy processes and implementation, in order to resolve local stressors to coral reefs from fisheries and land-based development.
- Capitalise on the findings from the Red List of Ecosystems assessment to stimulate support for national policy processes related to coral reef and marine ecosystem conservation and sustainable management e.g., national coral reef action or management plans and strategies
- Promote the inclusion of the Red List of Ecosystems as a component indicator in the Global Biodiversity Framework of the Convention on Biological Diversity thus establishing its relevance for monitoring Sustainable Development Goal 14 and of national reporting in Convention processes.

4. Protecting threatened sharks and rays in the Western Indian Ocean

Rhett Bennett

Wildlife Conservation Society

Recalling Decision CP7/12: Conservation of Sharks, Article 4 of the Nairobi Convention Protocol on species of wild fauna requiring special protection and Article 5 on harvestable species of wild fauna, we urge the Conference of Parties to take the following steps, to reduce impacts on shark and ray populations in the WIO, to improve their conservation status:

1. List appropriate shark and ray species on the respective Nairobi Convention Annexes, as proposed in Annex I to this document: Recommendations for Shark and Ray Listings in the Annexes of the Nairobi Convention Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern African Region.
2. Urge member states to implement their binding commitments in terms of species protections and trade controls at national level, as imposed by the multilateral agreements to which they are party.
3. Encourage member states to voluntarily implement species protections and catch restrictions for threatened species and species subject to trade controls, i.e., those not already required to be protected under other multilateral agreements.

5. Towards A Regional Mangrove Vision

Harifidy Ralison *et al.*

World Wildlife Fund for Nature, Madagascar

Recommendations include:

- I. Call on the Nairobi Convention Parties to develop a regional mangrove vision (and related strategy framework as needed) that encapsulates the region's commitments and priority needs.
- II. Call on the Nairobi Convention Parties to facilitate the mainstreaming of mangroves international development planning
- III. Call on the Nairobi Convention Secretariat and Parties, and the WIO Mangrove Network, to establish the relevant institutional structures such as the proposed Regional Advisory Group for supporting synergies between mangrove-related initiatives, crafting the elements of the regional mangrove vision, and supporting a regional policy dialogue on mangroves.
- IV. Urge the Nairobi Convention Secretariat, Parties and partners to create a strong case for the regional mangrove vision through regional and global dialogues (beyond the dialogues in the proposed Regional Advisory Group) to enhance mangrove conservation goals, commitments and priority needs at regional and international level. This will help profile the WIO region as a "mangrove champion" in the global sphere.

6. Underwater Noise and Shipping and the threats they pose to marine species in the Western Indian Ocean

Tim Collins *et al.*

Wildlife Conservation Society

The parties are urged to take the following steps, to reduce threats associated with Shipping and Underwater Noise in the WIO:

- A technical review of current underwater noise mitigation policies within the Nairobi Convention area be undertaken. The review should identify
 - A plan for targeted regional and collaborative research that improves current understanding of regional WIO ocean noise levels, including establishment of acoustic baselines (such as soundscape maps) and modelled changes over time.
 - A plan for targeted research that highlights the potential impacts to marine habitats and species from underwater noise and shipping traffic and the effects of expanding regional maritime trade.
- The development of regional technical capacity should be encouraged by member states through academic frameworks.
- Regional research that actively investigates oceanic noise and its effects on marine life should be encouraged and supported, including prioritizing targeted research funding.
- Member states should be encouraged to routinely review current national guidance and regulation that pertains to maritime development and to address deficits linked to the following:
 - The assessment and mitigation of underwater noise associated with development projects, particularly ports and associated increases in vessel traffic.
 - To incorporate recommendations identified by the technical review proposed as well as any other relevant guidance provided by other appropriate agencies.

7. Strengthening regional regulatory frameworks and national capacity for handling marine biodiversity data in the Western Indian Ocean – Technical and policy recommendations on data handling and sharing standards

Hauke Kegler *et al.*

Leibniz Centre for Tropical Marine Research (ZMT)

It is recommended that:

- A roadmap vision for the Western Indian Ocean region to be developed and become a model region for the monitoring, handling and sharing of marine biodiversity data.
- A regional inter-sectoral (i.e., academia, government, policymakers, industry, traditional knowledge holders) expert panel be established
- Biodiversity and taxonomic data collection, reporting and sharing through common frameworks be regionally aligned.

8. Overview of oceanographic data and research for improved ocean governance in the Western Indian Ocean Region

Kwame Koranteng & Bernadine Everett

Oceanographic Research Institute, Durban, South Africa

It is recommended that the Contracting Parties of the Nairobi Convention request the Secretariat to support the strengthening of National Data Centers to collect, analyze and share data and information in the region through the following actions:

1. Prepare an action plan for the further development and support of National Data Centers as provided under the SAPPHIRE project.
2. Support capacity development initiatives aimed at strengthening the capabilities of the National Data Centers as well as the data center managers.
3. Ensure linkages between National Data Centers and regional mechanisms such as the Nairobi Convention Clearing House Mechanism are established to ensure the efficient and effective sharing of, and easy access to regionally relevant information.

9. Draft Ecosystem Monitoring Framework for the Western Indian Ocean

Warwick Sauer

Rhodes University

Contracting Parties are urged, after appraisal and suggested amendments, to approve and incorporate this framework for ecosystem monitoring into their national planning processes taking into consideration the following supportive actions:

- The priority indicators suggested in this framework should be evaluated, discussed and approved by the Contracting Parties in order to standardize data gathering for the regional monitoring.
- National Data Coordinators (NDCs) from the National Data Centres of each Contracting Party should be nominated to oversee implementation.
- 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 Coordinator 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.
- A capacity development programme to support the above recommendations should be initiated to strengthen the capacity of NDCs to participate and contribute to regional ecosystem monitoring requirements.

(Supported by the Nairobi Convention under the SAPPHIRE, WIOSAP and EU-ACP MEAs Projects)

10. Proposed Strategic Framework for Marine Water Quality Management in the Western Indian Ocean

Susan Taljaard *et al*

Council for Scientific and Industrial Research (CSIR)

The following recommendations are proposed to the contracting parties for consideration of implementation of the Strategic Framework for MWQM in the region:

- a) Consider adopting as appropriate the framework for MWQM including guidelines for developing EQOs and EQTs
- b) National MWQM Task Forces be established at national level to feed into the Regional Task Force
- c) Established National MWQM Task Force to facilitate the adoption and implementation of proposed Strategic Framework for MWQM
- d) Established National MWQM Task Forces to compile National level status reports, to feed into overarching regional status reports coordinated by the Regional Task Force, to inform various regional processes such as the WIO State-of-Coast reporting.
- e) The NC Secretariat to work with partners to support capacity building programmes in support of the effective implementation of the Strategic Framework for MWQM (including Monitoring) and associated Guidelines on EQOs and EQTs.

(Supported by the Nairobi Convention under the SAPPHIRE, WIOSAP and EU-ACP MEAs Projects)

SESSION IV: CLIMATE CHANGE ADAPTATION AND MITIGATION

11. Ocean Acidification - a hidden risk to sustainable development in the Western Indian Ocean

Sam Dupont *et al.*

University of Gothenburg, Sweden

The paper proposes the following on OA in the WIO:

- Promotion of a national and regional solution-oriented research strategy including implementation of adaptation strategies to mitigate impacts of OA.
- Communication on OA and the threat it poses to the public through outreach and educational programmes. The use of United Nations Policy Brief on OA is proposed as a platform for promotion of National Action Plans formulation, regional and local policies development, and general awareness creation on OA.
- Research, knowledge sharing and transfer, and capacity development on OA to inform development and implementation of efficient adaptation strategies to minimize the impact of OA.
- Contracting Parties are urged to develop and implement mitigation and adaptation solutions to address and minimize impacts of OA as part of their wider climate change intervention strategies including prioritizing solution-oriented OA research to help their countries achieve SDG target 14.3, which aims at minimizing the impacts of OA.
- The Secretariat working with WIOMSA and other partners support the development of a regional strategy for capacity building bringing together scientists, policy makers and ocean users.
- The Nairobi Convention Secretariat working with partners establish a community of practice in the WIO focused on OA.

12. The Climate and Ocean Risk Vulnerability Index: Measuring Complex Climate Threats in Coastal Cities to Enable Action

Jack Stuart *et al.*

The Stimson Center

It is recommended that:

- The Secretariat, working with WIOMSA, and other partners to build capacity and integrate climate risk into coastal city planning, can use this information as part of the implementation of the Climate Change Strategy for the Convention.
- The Secretariat, WIOMSA, and other partners can also apply the CORVI method to other coastal cities in the WIO region. As more cities are added to the CORVI data matrix, a comparative body of city level data will emerge, providing greater insights into the risks these cities face.
- Ministries of Environment and Finance, in collaboration with coastal cities authorities and other partners, can use this information to further integrate climate risks into their city planning and development.

13. Prioritization of climate refugia in the Western Indian Ocean

Nyawira Muthiga

Wildlife Conservation Society

It is recommended that:

- Member states to evaluate and improve the effectiveness of MPAs across the WIO with a focus on the MPAs in the areas identified as climate refugia.
- Parties and relevant organizations to collaborate to identify, map, designate and develop management strategies to protect the climate refugia in the WIO.
- Member states to implement approaches that ensure coordination, integration and inclusion of all sectors in developing local and national MSP and BE initiatives
- Parties when undertaking MSP, marine conservation planning and BE initiatives especially large-scale developments such as ports and oil and gas, to take into account climate refugia.
- Member states to implement their global and regional binding commitments in the protection and management of the coastal zone and ocean governance.

SESSION V: KEYNOTE PRESENTATION II

14. The role of the private sector in the management of plastics as an environmental challenge

Private sector support is crucial in managing plastics. The keynote presentation highlighted that plastic production in South Africa is ca. 1 841 700 tons of polymer (1 504 000 tons virgin material and 37 700 tons recycle). There are about 60 000 people employed by the plastics industry, 49% of all polymer went into packaging. The country has a plastics per capita consumption of ca. 27 kg/person. The increasing demand for plastics packaging products in western Indian Ocean (WIO) region is majorly due to market access to more than 145 million people, numerous investment opportunities, abundant labour force, high level of intra trade and cross border investments. The plastics industry faces several challenges; opposing single use plastics ban and producer fees, lacklustre voluntary commitments, opposing plastic tax and, heavy lobbying needed to implement bans. South Africa had developed an initiative to bring together key stakeholders to implement solutions towards a circular economy for plastics. It also included a collaborative forum and working groups from full plastics value chain. An **African Plastics Waste Management Strategy** was proposed and would encompass:

- Innovation and new technologies
- Investment support to plastics waste collection
- Recycling infrastructure,
- Changing human behaviour re-littering.
- Circular economy and design for recycling.
- Research – science based, knowledge generation.

SESSION VI: ESTABLISHING AND MANAGING AREA-BASED CONSERVATION MEASURES

15. Establishment of Marine Transboundary Conservation Areas in WIO: From the Theory to Practice

Arthur Tuda *et al.*

Western Indian Ocean Marine Science Association

It is recommended that:

- Both governments to support the conservation planning exercises to be organised and led by WIOMSA by endorsing the planning process at all government levels
- Both governments to commit to achieving consensus when identifying the conservation and management objectives.
- Both governments to commit to carefully consider the suggested conservation plans, and will collectively and cooperatively decide on the best scenario to adopt for implementation.
- Both governments to support the development of the necessary policy frameworks and institutional arrangements, based on the agreed upon conservation plan.

(Supported by the Governments of Kenya and Tanzania, Nairobi Convention, WIOMSA and other partners)

16. Strengthening the WIO MPA Network and cooperative actions of governments and society

Julius Francis *et al.*

Western Indian Ocean Marine Science Association

Recommendations:

- Strengthen existing partnerships (e.g., WIO MPA management network; country-level LMMA networks), and form new bilateral and multilateral agreements and institutional arrangements to support sharing of knowledge, resources, roles, and responsibilities to help increase MPAN management capacity.
- Develop and adopt a national MPAN management and operational plan, which includes sustainability measures to ensure long-term financing, effective implementation, regular capacity building initiatives, and strong cooperation, coordination, and collaboration across all levels of organization.
- Develop and adopt a regional and systematic MPAN planning and implementation framework to support the development of national MPANs and formation of the corresponding institutional arrangements and structures.
- Adopt a systematic conservation planning approach to ensure that the national MPAN plans adhere to ecological design principles and post-2020 CBD targets, and are attuned to social, economic, and political contexts.
- Develop and adopt a national MPAN monitoring and evaluation framework, which includes regular capacity building initiatives, to ensure that individual MPAs are effectively managed and are contributing to maintaining ecological function of the MPAN.

17. Mainstreaming community managed marine areas into the Western Indian Ocean's governance frameworks

Melita Samoilyls *et al.*

CORDIO East Africa, Kenya

It is recommended that:

- The role of LMMAs in fisheries management is recognized and expanded.
- Legal frameworks to be developed and adopted to streamline community engagement in the establishment of LMMAs.
- Development of legislation to ban damaging fishing gears used in SSFs be supported.
- Develop and implement national and regional long-term sustainable financing mechanisms to support LMMAs and SSFs.

18. The ongoing role of the Nairobi Convention in delivering well-connected and effective systems of protected areas and other effective area-based conservation measures

James Hardcastle *et al*

IUCN Global Programme on Protected and Conserved Areas

Key recommendations provided include:

1. Enable more diverse, inclusive and robust governance frameworks that support *effectiveness* of protected and conserved areas, including ‘other effective area-based conservation measures’ (OECM).
2. Enact policies and programmes that promote region-wide scale and integration of systems and networks of effective protected and conserved areas into marine spatial planning, climate change adaptation programmes and other nature-based solutions for ecosystem protection and restoration, including regional and transboundary processes as well as for the development of a blue economy.
3. Align networks and expert commitments, such as through WIOMSA, IUCN and the IUCN World Commission on Protected Areas, to mentor agencies and site managers, communities and their representatives, in achieving and maintaining standards for effectiveness.

Encourage Parties to adopt ‘next generation’ tools for measuring and reporting effectiveness, including good governance and management effectiveness. In doing so, support WIOMSA to adapt the IUCN Green List Sustainability Standard and criteria for the WIO region, to include regionally defined, locally applicable indicators and evidence.

19. Western Indian Ocean Marine Protected Areas Outlook: Towards achievement of the Sustainable Development Goals (Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)

Arthur Tuda *et al.*

Western Indian Ocean Marine Science Association

The paper recommends that:

- Member states should develop as soon as possible, practicable ambitious national responses to the overall implementation of SDG 14.5 and the new biodiversity target 30% by 2030.
- Countries should integrate MPAs within broader marine spatial planning frameworks and apply systematic conservation planning to address MPA design issues, representatively, and connectivity.
- Member State should conduct regular and inclusive reviews of progress in meeting SDG 14.5 at the national levels.
- Regional strategy to be developed for the establishment and implementation of an effectively and equitably managed WIO MPA network
- Regional approach and programme to sustain systematic monitoring and evaluation efforts across all important sites to be developed and regularly conduct MPA management effectiveness assessments and social assessment of MPAs using agreed methods that also describe biodiversity outcomes.
- Capacity building should be supported at all levels to address the variety of challenges to increase social responsibility among institutions and communities and strengthen the regional commitment to conservation and resource management

20. Addressing shifting governance contexts and development objectives in the Quirimbas National Park, Mozambique

Alima Taju *et al.*

WWF Mozambique

The paper recommends that:

- Management effectiveness assessments should be included in MPA management plans and should be conducted regularly as part of the adaptive management cycle.
- Research on protected area downgrading, downsizing, and degazettement (PADDD) supported and developed to understand its implications on achievement of conservation, social, and economic objectives.
- A more inclusive approach to MPA management be promoted by considering access, use rights, and cultural and historical values of local communities to reduce PADDD.
- Complementary financing sources (e.g., sustainable tourism, nature-based solutions, biodiversity offsets) should be identified and encourage broader stakeholder engagement to sustain MPA management.
- Criteria and guidelines as part of the regional MSP implementation process should be formulated to accommodate current and future transformations caused by social, economic, political and climate change events to minimize the negative impacts of PADDD.

SESSION VII: REGIONAL OCEAN GOVERNANCE: EMERGING ISSUES/FRAWORKS

21. Improving the understanding and regional awareness of illegal, unreported, and unregulated fishing occurring in small-scale/ artisanal fisheries and the impacts it has on ocean conservation, blue economies and communities in the Western Indian Ocean – Technical and policy recommendations

Keith Roberts *et al*

Terranautics

An integrated and participatory approach to sustainable development and management of small-scale fisheries involving all stakeholders (resource users, academia, civil society, and Governments) is recommended through:

- Achieve recognition and agreement by the Parties to the Nairobi Convention that IUU fishing conducted by both industrial fishing vessels and small-scale fishermen within artisanal/ small-scale fisheries is not only a fisheries issue, but also greatly undermines the ability to sustainably manage ocean and coastal resources. Therefore, it is relevant to be recognized as a threat and addressed by the Parties to the Nairobi Convention.
- IUU fishing should also be recognized as a threat toward achieving SDGs and blue economy initiatives at both a country and regional level, hindering potential benefits such as food security, sustainable livelihoods, and social protection through strengthened trade and improved economic performance.
- Develop a WIO regional plan of action by the Parties to the Nairobi Convention to address IUU fishing performed by both industrial fishing vessels and small-scale fishermen within artisanal/ small-scale fisheries and unlock the full potential of the blue economy in alignment with and in support of other regional efforts. The plan will include:
 - assistance and support to national Governments to elaborate legislation and regulations for small-scale fisheries.
 - improving research and information gathering to create awareness and sensitization of fisherfolks and policymakers on biodiversity and the sustainability of resources; and
 - the strengthening of local fisheries organizations and institutions for community-based and/or participatory management, or co-management and improving MCS in small-scale fisheries.
- Conduct a WIO regional threat assessment focusing on IUU fishing practices by both industrial fishing vessels and small-scale fishermen within artisanal/ small-scale fisheries.
- Mobilize actors' networks and establish a regional inter-sectoral IUU fishing expert panel.

22. Coastal Cities of the Western Indian Ocean Region and the Blue Economy

Valentine Ochanda *et al*

Western Indian Ocean Marine Science Association

The report recommends:

- Helping the parties enhance their operational environment to maximise gains in BE in WIO cities
- WIOMSA, the Secretariat and other regional partners strengthen and integrate BE governance and planning in waterfront development, ports, and maritime trade for the WIO region.
- An effort by the parties to offer Blue Economy technical assistance to local authority and county governments in the region and integrating Coastal Cities in BE.
- *Blue Economy Governance and Planning* - Formalize local MSP in legislation and allow local governments to plan 5km into the ocean, establishing coordinated city structures for BE planning.
- *Ports and Maritime Trade* - Identify additional supply chain opportunities (processing, other value addition activities) economically proximate to existing port activities.
- *Tourism* - Develop and promote city region tourist strategies, promoting local assets, local communities, connecting cities and beach resorts, and coordinating between regional tourist locations.
- *Fishing* - Incentivize bulk buyers in WIO cities to buy local seafood produce. E.g., restaurants that can showcase local produce.
- *Waterfront Development* - Public-private partnerships (PPP) to facilitate waterfront development, including multiple area market analysis, land use assessment, financing, and/or operations.
- *Operational Environment* - City mapping of circular economy opportunities including livelihood opportunities for local communities; transportation planning and infrastructure, innovative plastic waste solutions; resilient and anticipatory planning, and systematic interventions with respect to recycling infrastructure and processes. Creation of city circular economy strategy.

23. Co-Design as the basis for collaboration and science to policy uptake in the Western Indian Ocean

MeerWissen Secretariat on behalf of MeerWissen partnership projects

WIOMSA

The paper proposes an adaptive framework to jointly develop research projects and policies based on a common agenda and a shared vision. Such an adaptive approach is the four-step approach developed by Future Earth Coasts – Our Coastal Futures, which aims to engage stakeholders for joint problem definition, goal setting and strategy development. A key point of this approach is the establishment of a reliable partnership among stakeholders, a mandate to act (and an institutional framework for doing so), and joint definition of targets.⁹ The co-design and co-production will involve scientists, regional decision makers, the private sector, non-government organizations as well as local and indigenous knowledge-holders.

The paper recommends that:

- For the implementation of co-design approaches, an institutionalization similar to that of participation processes on a regional level may be considered which requires strong political support and the will to eventually anchor such approaches formally if necessary
- To convey a competence base for co-design methods, a knowledge transfer approach with a (digital-) modular system is conceivable, which can be called upon depending on the scientific problem.

24. Shaping action and measures to effectively address marine plastic pollution in the Western Indian Ocean

Region

Peter Manyara

IUCN

The following recommendations are provided:

1. Urge governments to undertake measures to strengthen plastic recycling capacity, lessen the burden of entry and scaling for informal and formal actors, and adherence to established norms, standards, and licensing requirements as applicable.
2. Encourage governments to implement measures that discourage the production and import of plastic objects that do not benefit from a recycling solution within national jurisdiction.
3. Facilitate the strengthening of tools, capacities and knowledge for municipalities and local government to address plastic pollution in major cities, towns and peri-urban areas.
4. Urge municipalities and local governments to scale measures to address widespread littering and open burning of plastics through increased waste collection effort.
5. Urge governments and private sector in the WIO region to develop and support measures that increase the value of after-use plastics and encourage the redesign of products and materials for End-of-Life value and circularity.
Call for scaling up of measures for plastic waste collection and recovery, improved integration of the informal sector in the waste economy; and increased funding to local initiatives for enhanced community livelihood options and to address the socio-equity gap in circular economy.

25. A Draft regional Marine Spatial Planning strategy for the Western Indian Ocean

Amanda Lombard *et al.*

Nelson Mandela University

Recognizing that countries of the WIO are at different stages and have different priorities with regards to MSP, the countries of the Nairobi Convention are asked to:

- Once finalized, agree to ratify and adopt the marine spatial planning strategy for the region to achieve improved governance of the WIO.
- Agree to harmonise in-country MSP development in support of regional marine ocean use and planning.
- Secure funding and develop capacity for regional and in-country MSP.
- Develop regional partnerships with regional economic communities (e.g., SADC), regional fisheries management organizations and other regional communities (e.g., the IOC).
- Ensure that MSP follows an ecosystems-based approach, according to the “Malawi Principles” and the IOI-UNESCO steps.
- Harmonize in-country MSP processes with the regional strategy.
- Promote an enabling policy environment for development of in-country MSP legislation.
- Assist with establishment of in-country cross-sectoral forums/committees/working groups to provide integration of sectoral policies and to assist with the MSP process.
- Develop in-country knowledge management systems that contribute to, and benefit from, a regional knowledge management system.

(Supported by the Nairobi Convention under the SAPPHIRE, and WIOSAP and ACP MEAs Projects working with the Regional MSP Working Group)

26. Private Sector Engagement for a Sustainable Blue Economy in the Western Indian Ocean Region

Alex Benkenstein *et al.*

Nairobi Convention Secretariat

Once finalized the Contracting Parties are encouraged to: (a) Adopt the Strategic Framework for Engagement of the Private Sector in the Western Indian Ocean and the recommendations therein including:

- Develop an implementation plan and a framework for reporting on progress in implementing the Strategic Framework for Private Sector Engagement.
- Assess the feasibility of a WIO Blue Economy Platform (WIO-BEP) to support more effective private sector partnerships in the region.
- Establish focus groups to assess and drive forward the proposed partnerships contained in the Strategic Framework for Private Sector Engagement.

(b) Endorse a strategic regional multi-stakeholder advocacy initiative to create an easy entry point for private sector engagement in coastal and ocean stewardship, encouraging companies to provide resources and influence through individual actions and multi-stakeholder partnerships. This will help to accelerate the transformation to a sustainable and inclusive blue economy.

(Supported by the Nairobi Convention under the SAPPHIRE Project and GIZ under the joint Western Indian Ocean Governance Initiative)

27. Regional Ocean Governance –the Road to a Regional Ocean Governance Strategy for the Western Indian Ocean

Yvonne Waweru *et al*

GIZ - Western Indian Ocean Governance Initiative

The following immediate way forward could be considered with support from various regional structures, initiatives, and projects:

- a) Request the Nairobi Convention Secretariat to facilitate, together with partners, continued dialogue with the RECs in the WIO and other stakeholders on the establishment of a regional Ocean Governance Taskforce or Coordinating Structure and develop a roadmap towards Strategy development.
- b) Building on previous COP decisions around Ocean Governance, request the Nairobi Convention Secretariat to facilitate a process led by the RECS to develop a regional Ocean Governance Strategy for the WIO by March 2022.

It is recommended that the above processes should:

- Align ocean governance engagement with RECs to their Blue Economy Strategy and Policy development processes and continental processes under the AU.
- Align support for this process among regional structures, initiatives and projects including Regional Fisheries Bodies in the WIO.
- Link discussions around ABNJ/BBNJ connectivity and related area-based management to national EEZs, into the ocean governance dialogues.
- Link discussions around private sector engagement to the ocean governance dialogues.
- Strive to draw the environmental and fisheries sectors within the WIO closer together in an Ecosystems Based Approach to enhance regional ocean governance.

(Supported by the Nairobi Convention under the SAPPHIRE and ACP MEAs Project and GIZ under the joint Western Indian Ocean Governance Initiative)

DAY THREE

28. COVID-19 and the future of Ocean Sustainability – supporting adaptation to post-COVID changes in the Western Indian Ocean

David Obura *et al.*

CORDIO East Africa, Kenya

The paper calls on the Nairobi Convention Secretariat, Parties to the convention and partners, to:

- a) Incorporate scenario or ‘future thinking’ approaches into project development and adapting to COVID-19. Identify how one or more of the strategic interventions can be mainstreamed into COVID-recovery and other projects and processes: Ensure inclusive, blue, sustainable approaches, Build resilience of people and ecosystems to withstand future shocks, Embrace interconnectivity and complexity, Leverage digitalization to enhance activities, outputs and outcomes, Reduce ecosystem pressures and threats and, Support shifts in mindsets, to promote positive and reduce negative scenarios.
- b) Support dialogues and consultations at relevant levels (local, national, regional) for WIO participants to explore and define their experience of COVID-19 and its implications for their lives and work.

29. A review of the current status of marine litter and microplastics knowledge in the Western Indian Ocean region: amounts, sources, fate and resultant ecological and human health impacts on the coastal and marine environment (Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)

Martin Thiel *et al.*

Western Indian Ocean Marine Science Association

The following recommended actions were provided to curb the release of litter in the WIO region:

- Extend regional monitoring programme to all WIO countries with a coordinated and harmonised protocols and reporting units within WIO and among other regional programmes.
 - Include understudied habitats (e.g., water column, seafloor) and strengthen research of understudied topics (e.g., ecological impacts and on human health)
 - Reduce production and consumption of single-use plastics and promote the reusable/returnable alternatives
 - Establish Extended Producer Responsibility (EPR)
 - Impose tax on imported plastic products (especially in island states)
 - Develop educative campaigns to manufacturers to support litter curbing measures and anti-littering campaigns
 - Improve waste management and pickup services at the municipal level
 - Implement and enforce stricter international regulations (to e.g., reduce litter released from land-based activities, and ensure adhesion of ships to MARPOL)
 - Require waste audits on board ships upon departure and docking
 - Adopt regional approach of coordinated rates at litter reception facilities on harbours
- (Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)*

**30. Economic consequences of unmanaged plastics and the economic opportunities in the WIO region
(Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)**

Anthony Ribbink *et al.*
Sustainable Seas Trust

This paper recommends:

1. Increasing waste management enterprises
2. Data are sparse so it is recommended that the tables provided should be used as a foundation for building databases
3. Lack of empirical information calls for more intensive research
4. State of knowledge of plastic polymers, manufacturing, the industry and enterprises needs to be boosted by training courses
5. Plastic products need to be designed for recycling
6. Economic considerations must become core aspects of national and regional action plans
7. Opportunities for enterprises should be expanded to include non-recyclable plastics.
8. The Roles of informal collectors should be expanded and supported in future
9. Those involved in the plastic industry should become part of a structured network to share ideas.

(Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)

**31. A review of marine plastic litter in the WIO region: Effectiveness of measures undertaken, and opportunities
(Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)**

Franck Oliver *et al.*
WIOMSA, ECOGEOS

After conducting a SWOT analysis, this paper gives these policy and technical recommendations:

1. Regulatory framework and waste management – using a top-down approach.
 - i. Collaborating with industry on EPR development
 - ii. Incorporating microplastics in national-level regulatory frameworks
 - iii. Ensuring regulatory measures via education and enforcement
 - iv. Including informal sector in collection and recycling of litter
 - v. Promoting upstream measures like avoidance and eco-design

2. Building initiatives – via a bottom-up approach
 - i. Developing awareness continuously
 - ii. Supporting win-win partnerships with governments intervention where there exists no private initiatives.
 - iii. Facilitating access into international programmes and funding

(Supported by the Nairobi Convention (under the WIOSAP Project) and WIOMSA)

32. Sans frontières - Ocean and Coastal Sustainability of the Western Indian Ocean

Louis Celliers *et al.*

Climate Service Center Germany

Practical actions and deliverables arising from this policy recommendation may include:

- Developing a white paper for Integrated Ocean and Coastal Management in the WIO.
- Developing of a high-level integrated ocean and coastal management strategy for the WIO, incorporating the principles of both ICM and MSP, and the targets of the SDGs.
- Including a chapter on the four axes of sustainable coastal and ocean management in the WIO Regional State of the Coast.
- Developing a set of indicators to monitor the state of the coastal-ocean systems across contemporary concepts of boundaries
- Convening a work group to consider a more comprehensive understanding of the flow of benefits from the Blue Economy, especially between ocean resources (planned at the national level) and local communities and coastal urban administration. Such a working group needs to pay more attention to economic development synergies between coastal and inland areas in the context of the Blue Economy.
- Developing a protocol for engagement of stakeholders across the four axes of coastal and ocean sustainability. This should address the issue of involvement of local stakeholders (citizens, communities, urban settlements, cities) in the planning process and sustainable utilization of marine resources.

33. Open Data for Regional Marine Spatial Planning Decision Support

Duncan Hume *et al.*

Swedish Agency for Water Management

Recommendations from this paper include:

At a policy level:

It is recommended that stakeholders in the WIO consider adopting an approach that ensures that open-data principles are the default for sharing of marine data both in support of and resulting from joint analysis and decision support tools.

At a technical level, it is recommended that the following actions are considered:

- 1) Define and agree on regional data and metadata standards for marine data.
- 2) Ensure data are available for download via open access archives.
- 3) Create training and support materials on data principles and standards.
- 4) Publish summary metadata on restricted and open data assets via a central portal.
- 5) Publish regular updates on gaps and quality issues in the data, information and knowledge available.