

MAPPING OA MONITORING AND RESEARCH RECOMMENDATIONS TO POLICY IN AFRICA

MEETING SUMMARY + PARTICIPANT DISCUSSION

May 19, 2023 | 11:00am-1:00pm East Africa Time in Tanzania



OVERVIEW

The OA Alliance and the Western Indian Ocean Marine Science Association ([WIOMSA](https://www.wiomsa.org)) hosted a webinar in May 19 to provide an overview of and seek feedback on, “Mapping OA Monitoring and Research Recommendations to Policy in Africa,” a joint policy communications project they are undertaking together in 2023.

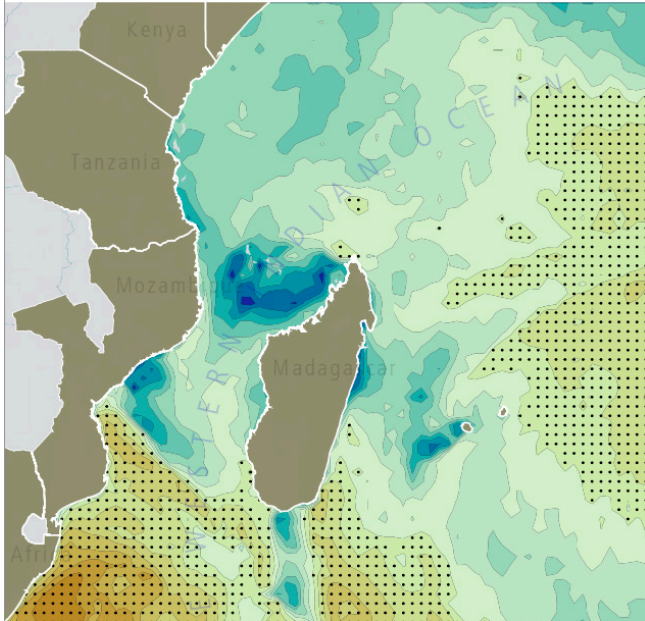
The policy communications project flows from the Western Indian Ocean Acidification (WIO) OA Monitoring project established by WIOMSA in conjunction with regional institutions and experts. The monitoring project resulted in the [WIO OA report in 2022](#), which examines the state of OA and makes recommendations for future research and information priorities across 6 countries: Kenya, Tanzania, Mozambique, South Africa, Mauritius, and Seychelles.

Next steps include expanding monitoring programmes and moving forward on key recommendations of the report. Importantly, there is a desire to ensure existing and expanded OA activities and efforts are understood by policy makers and utilized to inform local and regional policy, management, and adaptation strategies into the future.

In order to support communication about the importance of advancing and funding this work, the OA Alliance/ WIOMSA policy communications project will enhance existing OA efforts in region, by illuminating their relationship to consequential policy goals and targets that decision-makers and managers are already tasked with implementing.



REPORT ON OCEAN ACIDIFICATION MONITORING IN THE WESTERN INDIAN OCEAN REGION



The policy communications project is being designed to help managers and decision-makers better understand the linkages between OA science & monitoring to achieving and implementing climate, marine and development priorities across the WIO region and the continent.

The aim is to develop materials that help policy makers understand the relevance of OA information to policies and targets they care about and develop content that will further support large scale regional funding requests for continuing this work.

Finally, the project provides a unique opportunity to engage additional stakeholders at continental, regional, and domestic levels that can be called upon to take up support for OA research and monitoring across their respective mandates.

This meeting summary describes presentations made about the policy communications project and the participant discussion/ feedback that followed.

PRESENTATIONS

Welcome and Framing Remarks

Jessie Turner, Director of OA Alliance

- There are multiple impacts of climate change to our ocean including ocean warming, acidification, deoxygenation, sea-level rise, more frequent and intense storms, marine heat waves, loss of marine life and habitat. Underscoring the significance of these threats, the IPCC AR6 emphasizes irreversible climate impacts, adaptation needs and vulnerabilities of marine ecosystems and coastal communities.
- The OA Alliance engages and supports governments in creating, “OA Action Plans” which aim to:
 - Reduce carbon emissions.
 - Advance local and regional science.
 - Reduce land-based pollutions that exacerbate OA.
 - Promote adaptation and resilience building strategies.
 - Sustain international support for addressing OA.
- To do this, we need regionalized OA science and knowledge to inform effective mitigation, adaptation, and response strategies.

Bodies like the Western Indian Ocean Marine Science Association (WIOMSA) are critical players in increasing regional scientific knowledge, prioritizing discrete projects at local scales, and are well aligned to provide decision makers and communities with research and monitoring information on current and emerging marine socio-ecological threats.

- This information can—and must—support existing climate adaptation, marine management, and sustainable development goals.
- For example, OA information can guide successful coral reef restoration, climate ready fisheries and aquaculture strategies, innovative nature-based projects, localized land-based pollution controls, climate responsive marine spatial planning and most effective conservation efforts.
- Regional OA collaborations can produce fit-for-purpose programs/platforms to ensure coastal managers, policy makers and climate finance advisors are equipped to advance meaningful and quantifiable adaptation strategies along the coastline that are responsive to policy goals and management targets.
- This project will contribute towards enhancing strategic OA monitoring, research, and vulnerability assessments in the WIO region by illuminating their relationship to achieving consequential policy goals and management outcomes across global, regional, and national scales.



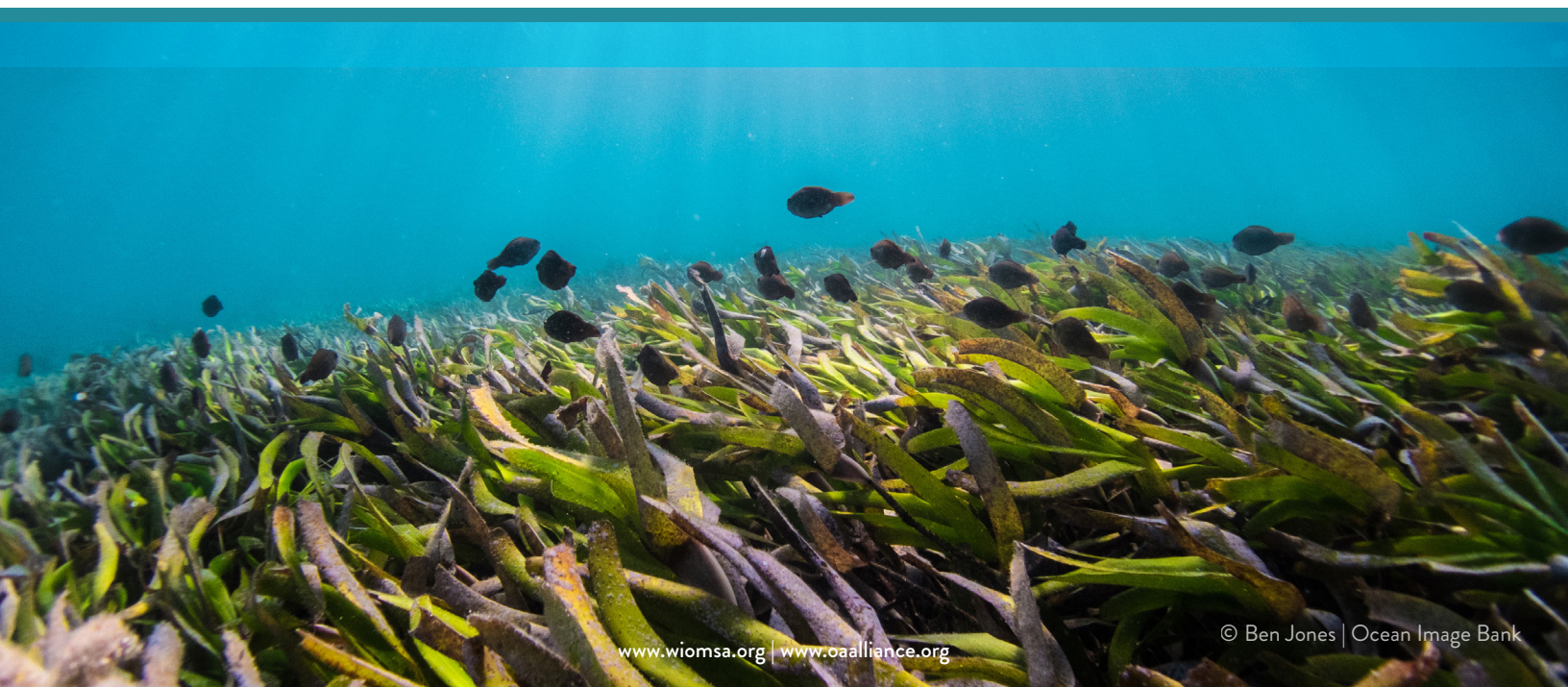
Overview of WIOMSA OA Monitoring Project: Existing Efforts and Future Goals

Dr. Arthur Tuda, WIOMSA Executive Secretary

- Background and origin of WIOMSA Ocean Acidification Monitoring Project
 - Why it was commissioned; why the 6 country locations were chosen.
 - Partners involved: university academic + relevant departments/ resource managers.
- Takeaways/ key findings and recommendations of the 2022 OA Report:
 - Presents the current state of knowledge on OA in the WIO region.
 - Provides a baseline that will foster the development of an integrated science strategy for OA monitoring, research, and impact assessment in the WIO.
 - Identifies information gaps required to improve regional understanding.
 - Underscores the importance of understanding marine socio-ecological risks associated with OA and other climate-ocean change variables in the WIO region.

- Example OA monitoring and science recommendations from the report include:
 - Expanded coverage.
 - Increased frequency.
 - Incorporation of sensors, chemical and biological analyses
 - Capacity for robust laboratory equipment.
 - Promotion of data continuity with increased funding for research assistants conducting ex-situ and in-situ experiments.
 - Expanded research to incorporate multiple stressors of warming, OA and deoxygenation.
 - Monitoring OA conditions in coastal waters to identify hot spots or refugia (worse or better conditions) for organisms.
 - Increased biological research on the impacts of OA to key species.
 - Research to confirm potential of mangrove and seagrass to mitigate the effects of OA on nearby coral reef or near shellfish.

- Promote protection and restoration of coastal habitats (mangroves/ seagrasses).
 - Promote reduction of land-based pollution sources (wastewater, agriculture run-off) that exacerbate coastal acidification.
 - Develop frameworks for regional vulnerability assessments that list species and ecosystems of socioeconomic importance/ dependence.
- Overview of the [Nairobi Convention 2022-2024 work plan and 2021 decision text](#) which states a request by Contracting Parties to develop, “a regional action plan to monitor and support national climate change intervention strategies and to minimize the impacts of ocean acidification.”
 - What is the Nairobi Convention
 - 2022-2024 WP priorities (conservation/ sustainable use)
 - OA regional programme as key to implementation
 - Ideally, what does Phase 2 of the WIOMSA OA Monitoring Program look like?
 - Ongoing funding for building baselines.
 - Undertaking biological research on keystone species.
 - New sites.
 - Information for management and policy response.
 - Supporting implementation of Nairobi Convention and other regional targets.
 - Increasingly, it will be important to demonstrate case studies to support actions in other countries; work happening in the Tanga -Pemba seascape is a good example.
 - One important outcome is the development of a regional OA monitoring program that includes monitoring, research, adaptation priorities, alongside policy connections and communications aspects.
 - It must be clear that monitoring is not a stand-alone activity, but rather, regional monitoring can provide information which then becomes part of a larger process for management of ocean resources in the region.
 - A regional OA monitoring program—as called for by the Nairobi Convention—should be part of WIO’s approach to integrated ocean management in the context of climate change.



Overview of Project, “Mapping OA Monitoring and Research Recommendations to Policy in the Western Indian Ocean”

Dr. Reuben Makomere, Policy, Law, and Governance Researcher, University of Tasmania Faculty of Law

- WIO marine ecosystems are highly vulnerable to the cumulative impacts of OA and climate change. The risks across the region and Africa are both ecological and developmental.
- Addressing current and emerging policy challenges caused by OA and climate change requires situating ocean science & monitoring within existing policy priorities across scales.
- It is critical to help managers/decision-makers understand and harness linkages between OA science & monitoring, current, and emerging policy priorities across the WIO region and the continent.
- There is a diverse suite of existing policy arrangements whose implementation would benefit from increasing OA information in the WIO. (e.g., *Continental, regional and national climate change mitigation and adaptation strategies, marine ecosystem management frameworks, and development plans.*)
- Existing frameworks and policy priorities can be used to anchor OA research and monitoring, which will avail more avenues for understanding, mainstreaming, and funding this work; while building local capacity to respond to current and emerging challenges caused by climate-ocean change.
- OA information need not be limited to serving a single institution, policy or management goal but can support a suite of policy and management goals that are already being implemented now.

The Policy Communications Project Will:

- Build upon the recommendations in the WIOMSA OA report especially in Kenya, Tanzania, Mozambique, South Africa, Mauritius, and Seychelles.
- Provide justification and understanding for strengthening OA science and monitoring in the context of current and emerging policy priorities across WIO region (climate adaptation, marine management, development).
- Create materials that support large scale regional funding requests for this work.
- Engage other key stakeholders at continental, regional, and domestic levels to incorporate support for OA research and monitoring in their respective mandates.

Project Deliverables Include:

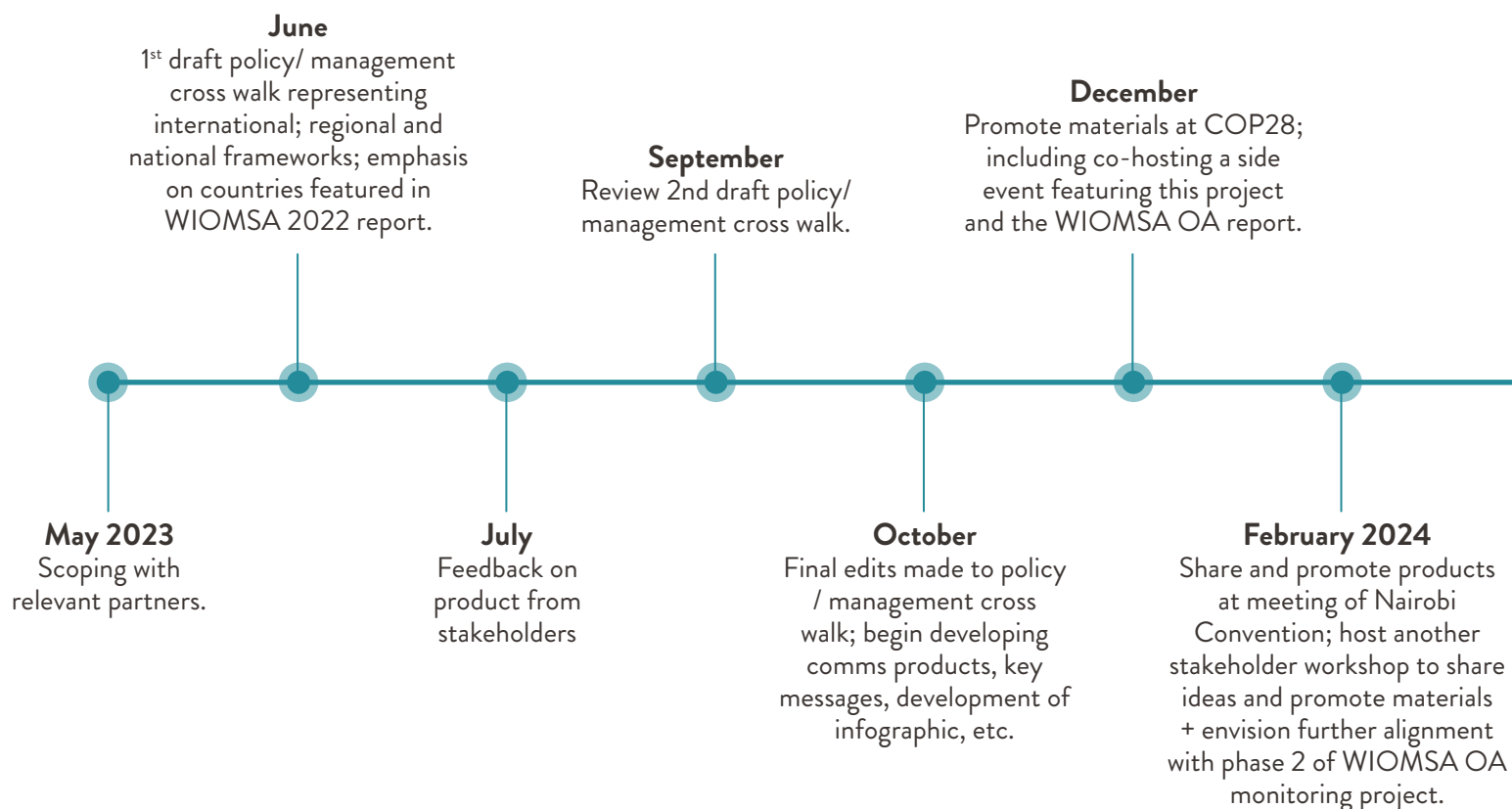
- Short publication “Mapping Ocean acidification (OA) Monitoring and Research Recommendations to Policy and Management Portfolios across the WIO region” providing larger narrative and context.
- Policy map (for managers & decision makers) highlighting linkages to OA efforts across climate, marine management and development goals.
- Additional communication and outreach materials to highlight the WIOMSA OA project & illuminate OA’s relevance to existing policy priorities.
- Expanding a community of practice comprised of scientists, resource managers, policy makers, and other stakeholders across the WIO region.



Information for Whom?

- Decision makers, resource managers and policy makers across 6 national governments involved in the WIOMSA OA project and the WIO region broadly.
- Climate adaptation and financing bodies, who are charged with supporting adaptation/ resilience building projects (e.g. ocean & coastal, blue economy, reef resilience).
- Implementing partners of relevant regional conventions or agreements (Nairobi Convention; African Union; others).

Timeline and Benchmarks:



Concluding Thoughts:

- WIO marine ecosystems are highly vulnerable to the cumulative impacts of OA and climate change. The risks across the region and Africa are both ecological and developmental amid transformational change.
- There exists an increasing strategic imperative: Addressing current and emerging policy challenges caused by OA and climate change requires situating ocean science and monitoring within existing policy priorities across scales.
- Mapping existing climate, marine, and development, policy frameworks will help illuminate linkages between OA science and monitoring; and policy priorities across both the WIO region and the continent.



PARTICIPANT DISCUSSION AND FEEDBACK

(1) Are the desired outcomes of the policy communications project clear? Should other outcomes be added or emphasized/ deemphasized?

- Ensure that the comms policy project supports a regional outlook for next steps with OA monitoring work; wrapped up in Nairobi Convention, etc.
- Work to communicate the difference between actions we can be taking now with existing information and actions that may need more specific data.
- Agreement on the best approach: Integrate policy into the science we are already advancing, bring policy goals and targets into the science program as it expands (rather than trying to match the science to policy/ management goals in the future.
- Think about timescale for action “readiness” as critical elements for guiding work and recommendations. Highlight the actions that can be taken now; implementation timeline should be the driver of priority actions and recommendations. This can also be linked to a benefits/ risks analysis showing the “no regrets strategies” like reducing CO₂, reducing nutrient pollution, deploying nature-based solutions, etc.” This approach will also help identify more funding opportunities by linking data collection with ongoing project implementation.
- Big potential for this project; especially because there is limited available on climate -ocean change information in Africa. This impedes progress on climate negotiations (like adaptation needs and financing support.)
- Will be important to ensure recommendations are implementable and practical; this includes understanding what success will look like in addressing OA at global, regional and national scales.
- There is a growing community that can help push this work forward in the WIO; will be important to have short-, medium- and long-term goals with clear metrics/ targets and take the steps piece by piece.
- Broadly, we share a goal of helping to achieve the UN 2030 SDG Agenda, Africa’s regional environmental and developmental agenda, and UN Decade outcomes.

(2) Are we targeting the right audiences? Who should be added or emphasized/deemphasized?

- Ensure there are biologists as part of the project development and co-design of communications aspects and larger philosophical framing when it comes to fisheries.
- Also consider including environmental and social implications of these climate-ocean changes; this might include involving social science disciplines and actors.
- Stakeholders need to understand how this work is relevant to critical developmental aspects including but not limited to food security—should be a major awareness raising point.
- Important to “capacity build” with media policy and political decision-makers among other stakeholders including through targeted advocacy campaigns.
- Environmental policy in the WIO is very focused on ocean/blue economy as significant part of development agenda. This includes tourism, aquaculture, and fisheries. It will be important to help “create an appetite for OA data” that will help stakeholders understand that OA is likely to pose risks to key operations and species.
- This will help connect OA activities to critical policy goals like tourism and aquaculture, and importantly connect to the drivers and evaluations of these goals.
- Conventions and economic communities (RECs) are essential audiences to reach national governments. This should be considered core constituency to help integrating OA policy across national scales.
- African Union Commission helps countries implement and fulfil national resource mandates. They can help support a paradigm shift: ensure that scientists are not working by themselves without larger institutional systems awareness or integration.
- Opportunity to assist regional bodies in implementation and funding requests to groups like GCF, GEF, etc. This about this outcome as core constituency; big need for ongoing instruments, tools, capacity building and technical transfer. There is an opportunity to identify these needs/ knowledge gaps and promote with funding bodies by leveraging the continental voice and common position on needs and priorities.
- Critical to help policy makers understand the current gaps. This is especially true with UNFCCC, CBD and other national negotiators that the African Union is responsible for supporting.



(3) Are we developing the right products? What should be added or emphasized/ deemphasized?

- Emphasis on blue economy development plans and targets. Make sure social and cultural impacts are considered; this includes lost income from tourism, fish catch depletion, etc.
- Important to include specific case studies of projects already occurring across WIO region.
- Opportunities to share best practices across the continent; particularly when it comes to building capacity around climate impact assessments and blue economy considerations. While these priorities are politically acknowledged, evidence is lacking to best situation OA across these core policy agendas.
- Very important to ensure communications products are helping to break down sectoral silos; OA can help be the connective tissue across difference sectors, policies, and conventions.
- Project should help the OA community in the WIO explore whether we need an “OA policy center” somewhere specific or whether OA information should be integrated across multiple sectors.
- Also want to ensure we are messaging broadly the cumulative impacts of warming, acidification, and oxygen depletion within the specific socio-developmental, policy and political context.
- Additional opportunity to focus on linkages to ocean and human health; not just a financial risk/ costs but impacts to human communities that are harder to measure and compensate.
- Important to make clear that OA monitoring is not a stand-alone activity but supports information flow as key part of ongoing management process in the regional; the goal includes taking an integrated approach to ocean management.
- Relevance for thinking about how we explore “policy uptake” in the context of Covid and ideas about right to development.
- With our messages and products, we need to ensure we are mitigating the risk of information overload and indecision; bring and consolidate practical linkages/ recommendations. OA response actions are “as complex as they are multiple.”
- Opportunity to better connect the science in WIO to policy in practice; governments should be getting a better understanding of who to come to for data, information, and expertise; this awareness will also help drive regional funding requests/ interest.
- Literacy must be considered a key part of this project; communications, education and awareness raising. There are also story telling aspects to explore as part of communications policy project.
- Offer to utilize AUDA platforms to help align with governments and understand what they are needing.

