

# NRF SAEON

National Research Foundation South African Environmental Observation Network

# **POLICY BRIEF**

LEVERAGING REGIONAL MULTI-STAKEHOLDER PLATFORMS FOR SCIENCE AND INNOVATION IN SOUTH AFRICA

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Objective – A briefing note/policy brief aims to provide a concise outcome-based synopsis of recent research or expert opinion that may inform decision making and activities by authorities, NGOs and NPOs. The policy note series aims to complement the academic peer reviewed literature published by NRF-SAEON, and highlight key messages from high-level engagements.

# Recommendations

- Government should facilitate communication of aligned priorities and agendas
  across the ocean science and policy organisations/platforms (including regional
  technical groups) it participates in to assist information sharing and collaboration
  across similar programmes in Africa. This could also assist South African
  researchers and civil society organisations working in different ocean
  basins/regions to learn from each other.
- Government, in collaboration with other African states, should request that international developmental funding instruments and bodies review existing regulations and application processes with the aim of harmonising the processes to be less challenging to complete.
- Focus should be placed on assisting programme/project applicants and financial institutions with developing metrics to support evidence of the outcomes at project inception.
- Government should encourage the eventual disintermediation of the funding space, and facilitate large NGOs to assist in institutionally strengthening local NGOs so that local communities are more directly involved.

# **Executive Summary**

South Africa, with its unique geographic position washed by the Atlantic and Indian Oceans and a footprint in Antarctica, plays a pivotal role in support and development of African ocean science. It serves as a knowledge broker, leveraging its participation in international committees, such as the G20, to contribute to societal development. The country invests in several national Research Infrastructures (RIs), including environmental platforms emphasising ocean sciences, to support capacity building and innovation.

Collaboration across ocean regions is fostered through platforms such as the Marine Regions Forum, which offers opportunity for interactive discussions between policymakers, academic, business and civil society. Key takeaways from the 2023 Conference include the need for realistic approaches in securing funding, focusing on subsidy reform, institutional strengthening, and ensuring measurable impact outcomes. A suggested proposal for disintermediation in funding distribution highlights the importance of direct support to local initiatives.

South Africa actively engages in multilateral platforms for ocean science collaboration, including the UNEP Regional Seas Programme, All-Atlantic Ocean Research and Innovation Alliance (AAORIA), Atlantic International Research (AIR) Centre, and the Indian Ocean Rim Association (IORA). These platforms facilitate collaboration, research, and policy development.

Challenges include a lack of national expertise to access international funding, emphasising the need for bottom-up programmatic approaches and improved application alignment. Strengthening regional technical support platforms, promoting inclusive programme development, and enhancing ocean literacy are essential for sustainable development.

To overcome challenges, suggestions include greater public sector engagement, empowering communities, harmonising funding, and fostering innovation in ocean management tools. In conclusion, South Africa's strategic position offers a unique opportunity to align and harmonise activities across different organisations, accelerating knowledge exchange for positive social outcomes and contributing to global commitments like Agenda 2063, SDG 2030, and Ocean Science Decade 2030. Innovative approaches are crucial as the world progresses toward achieving these milestones.

#### Introduction

South Africa is at the nexus of ocean science in Africa due to its shores being washed by the Atlantic and Indian Oceans, as well as being the only African state with a footprint in Antarctica, and therefore the Southern Ocean. This fortunate position provides South Africa the opportunity to leverage activities undertaken by regional organisations for national benefit, leading as a knowledge broker between these platforms, and sharing the knowledge across Africa. With international commitments such as the Paris Agreement, SDG 2030, Oceans Decade 2030, and continental strategies such as the Agenda 2063, African Integrated Maritime Strategy 2050, Africa's Blue Economy Strategy, South Africa has a plethora of activities to manage and contribute to. These commitments and strategies must be supported by the best available science and innovations to positively enhance societal development. South Africa has a growing cohort of graduates that must be enabled to take advantage of the growing opportunities to contribute to international developments, create employment and improve the environment. Investment in three national environmental Research Infrastructures (RIs), hosted by the NRF-SAEON<sup>1</sup>, showcases both South Africa's commitment to supporting capacity building and enhancement in the environmental sector, and the national commitment to creating platforms for (global) science innovation. Two of these RIs are focused on the ocean environments. The oceans are considered the next 'economic frontier' for Africa, and the role of the oceans in climate change solutions is growing in importance and visibility. The development of ocean sectors in Africa is still in a nascent stage, providing opportunity that global best practice can be learnt from and applied so as to ensure sustainable use of the ocean space and ocean resources. Capitalising on South Africa's scientific reach and standing in international and regional science and science policy platforms can be an important lever in meeting national development goals.

# Collaboration across Ocean Regions

The Marine Regions Forum is an international multi sector conference focused on connecting people; strengthening regional ocean governance; co-developing solutions; providing informal and inclusive spaces<sup>2</sup>. The linking knowledge to policy; and establishment of the Marine Regions Forum was supported by Germany, and the Forum is coordinated by the Research Institute for Sustainability (RIFS), the Institute for Sustainable Development and International Relations (IDDRI) and the Think Tank for Sustainability (TMG). The inaugural conference took place in Germany in 2019, with a global focus. The second iteration of the conference took place in Tanzania in 2023, and focused on the Western Indian Ocean region. The conference provided participants with interactive break out sessions and plenary sessions (Box2 ) across four topical areas, 1) Tackling the triple planetary crisis; 2) Fostering the sustainable Blue Economy; 3) Implementing global goals at the regional level; and 4) Regional Ocean Governance. The conference provided opportunities for sharing of lessons learnt across ocean regions, including representation of the IOC-UNESCO Regional Secretariat for the Sub-commission for the Caribbean and Adjacent Regions (IOCARIBE). Several participants from South Africa attended the conference including participants from government, research institutions, NGO's and industry.

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<sup>&</sup>lt;sup>1</sup> The Expanded Freshwater and Terrestrial Earth Observation Network (EFTEON); the South African Coastal and Marine Research Infrastructure (SMCRI); and the South African Polar Research Infrastructure (SAPRI).

<sup>&</sup>lt;sup>2</sup> Marine Regions Forum. https://www.prog-ocean.org/marine-regions-forum/. Last accessed 09-01-2024.

# Box 2: Environmental stakeholders need to be realistic to achieve financing for social and environmental goals

Key take-aways from the conference was advice for researchers and environmental practitioners to be realistic when operating within the global climate and sustainability space, especially when considering the needs of large funding institutions and government priorities.

- 1) Need to develop an understanding of how to attract funding Oftentimes researchers are naive in their understanding of how to attract funding from the large international financial institutions and investors interested in funding sustainability projects. When talking to economists the focus should be on 'price' not 'value', and how it impacts the return on investment, i.e., reduced poverty.
- Focus on subsidy reform
   Research is needed on how to reform harmful subsidies to industry for beneficial
   impact and support in sustainability practices (e.g., harmful fisheries subsidies in
   2018 amounted to USD 22.2 billion<sup>3</sup>).
- 3) Focus on institutional strengthening
  The focus on (usually individual) capacity building should be shifted to focus on
  programmes and projects that support the long-term strengthening of institutions.
  This will facilitate building institutional memory and guard against capacity (and
  partnership) loss should capacitated individuals transfer for other opportunities.
- 4) Reduce focus on development of blue/green financial institutions The focus on industries developing sustainability principles distracts from more important actions. More impactful actions must include fiduciary risk as part of environmental risk, and this must be regulated and have legal standing. Further research is needed to support the development of good models for environmental finance, and to showcase existing working models.
- 5) Financial institutions should focus on projects that incorporate measurable impact outcomes
  - Further discussion is needed between stakeholders (government, researchers and funders) on funding 'quality' vs 'quantity. There should be data and metrics to support evidence of the outcomes. The metrics should be iterative and able to change, if needed. Change must be measurable and visible, and reported on in alignment with financial reporting timeframes (e.g., quarterly reports). Funding should be made accessible and flexible, i.e., it should be made available where and when needed for the best outcomes. The difficulty in accessing funding from international financial institutions should be reduced, e.g., simplifying paperwork.
- 6) Disintermediation of the funding space

  The role of middle-men/intermediaries, often large organisations that are able to manage large projects, must be reduced and eventually ended. Funding must reach local peoples directly. Large international NGOs should train local NGOs so that they grow and develop institutional capacity, and are eventually able to successfully apply for funding and run large projects. Regional bodies should consider their purpose in the development of the countries they support. International funding institutions provide funding to countries, hence, regional science-policy bodies cannot be funding intermediaries but should provide assistance in project support and knowledge sharing.

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<sup>&</sup>lt;sup>3</sup> U. Rashid Sumaila, Naazia Ebrahim, Anna Schuhbauer, Daniel Skerritt, Yang Li, Hong Sik Kim, Tabitha Grace Mallory, Vicky W.L. Lam, Daniel Pauly. 2019. Updated estimates and analysis of global fisheries subsidies, Marine Policy, Volume 109. https://doi.org/10.1016/j.marpol.2019.103695.

# **Multilateral Platforms for Ocean Science Collaboration**

The Government of South Africa is involved in several multilateral ocean science-focused platforms, in some cases being directly involved in the development and agenda setting of the science programmes.

# **UNEP Regional Seas Programme**

# Abidjan Convention

The Abidjan Convention (formally known as the Convention for Co-operation in the Protection and development of the Marine and Coastal Environment of the West and Central African Region) was signed by contracting parties in 1981 noting the '...need for co-operation...to ensure sustainable, environmentally-sound development through a co-ordinated and comprehensive approach' and the '...need for a carefully planned research, monitoring and assessment programme in view of the scarcity of scientific information on marine pollution...'<sup>4</sup>. South Africa became a contracting party to the convention in 2002<sup>5</sup>.

#### Nairobi Convention

The Nairobi Convention (formally known as the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean) was signed by contracting parties in 1985 and noted the '...economic and social value of the marine and coastal environment' and the need to '...ensure that resource development will be in harmony with the maintenance of the environmental quality of the region...' 6. South Africa became a contracting party to the convention in 2003.

The Nairobi Convention led the establishment of the Forum of Academic and Research Institutions in the Western Indian Ocean (FARI), which is hosted by the Western Indian Ocean Marine Science Association (WIOMSA), a well established and supported NGO focused on strengthening marine science and marine policy capacity in the WIO region. It has also established the Western Indian Ocean Science to Policy Platform. The Nairobi Convention is developing an Ocean Governance Strategy for the Western Indian Ocean, for which the first draft will be finalised by mid-2024.

#### All-Atlantic Ocean All-Atlantic Ocean Research and Innovation Alliance (AAORIA)

AAORIA was established in 2022 through the signing of the Washington statement<sup>7</sup> and built on the success of the AANChOR programme, established through the signing of the Belem<sup>8</sup> and Galway<sup>9</sup> statements. South Africa is an active participant in AAORIA and hosted the High-level Forum Meeting in 2023. The focus of AAORIA is on climate variability, ocean resources, ocean observation, ocean technology, emerging pollutants, and polar research.

<sup>&</sup>lt;sup>4</sup> UNEP. 1981. Convention for Co-operation in the Protection and development of the Marine and Coastal Environment of the West and Central African Region.

<sup>&</sup>lt;sup>5</sup> Convention for Co-operation in the Protection and Development of the Marine and Coastal Environment of the West and Central African Region.

https://www.ecolex.org/details/treaty/convention-for-co-operation-in-the-protection-and-development-of-the-marine-and-coastal-environment-of-the-west-and-central-african-region-tre-000547/?. Last accessed 08-01-2024.

<sup>&</sup>lt;sup>6</sup> UNEP. 2010. The Amended Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean (Amended Nairobi Convention).

<sup>&</sup>lt;sup>7</sup> Signed by Argentina, Brazil, Canada, Cape Verde, the European Union, Morocco, South Africa, and the United States.

<sup>&</sup>lt;sup>8</sup> Signed by the European Union, Brazil and South Africa in 2017.

<sup>&</sup>lt;sup>9</sup> Signed by the European Union, Canada and the United States of America in 2013.

# Atlantic International Research (AIR) Centre

The AIR Centre<sup>10</sup> was envisioned as an international collaborative framework to address basin-scale and local opportunities and challenges. The establishment of the Centre was led by the Government of Portugal, and the Association for the Development of the AIR Centre was legally formed in April 2018 as a non-profit association under Portuguese law.

South Africa is represented at the AIR Centre by the national Department of Science and Innovation, and participates in the Generally Assembly.

The focus for the AIR Centre is on science, technology, and innovation, with a strong emphasis on technology sharing and catalysing collaboration in Atlantic Ocean states.

#### Indian Ocean Rim Association (IORA)

IORA is an intergovernmental organisation, established in 1997, focused on regional development with an emphasis on ocean-related actions. South Africa is a founding member of IORA. While most interactions are between the member governments, there are opportunities for academic and business collaboration, and IORA has a bi-annual Indian Ocean Dialogue to facilitate discussion between all social spheres. IORA has held three high-level Blue Economy Ministerial Conferences; the 9th Indian Ocean Dialogue (hosted by Tanzania in 2023) was held under the theme "Innovation in Blue Economy and its Role in GDP".

IORA adopted the IORA Indo-Pacific Outlook in 2022 which strives to create greater collaboration between countries of the Indo-Pacific Region, the IORA Secretariat has signed an MoU with the Secretariat for the Association of Southeast Asian Nations (ASEAN) in 2023, and there is potential for an MoU with the Pacific Island Forum.

# Challenges, Needs and the Way Forward

The lack of national expertise to access international funding instruments across Africa is a major impediment to development. Outsourcing to consultants, whether regional organisations or international NGOs, with the expertise and capacity to manage projects, may provide access to finance, but risks losing the local perspectives and buy-in which would lead to genuinely beneficial outcomes. Absorption capacity<sup>11</sup> is also a constraint as there are few national/local organisations that can manage large funding grants. Even South Africa, with its politically driven and supported science programmes, has struggled to scale its involvement in international marine science programmes.

What is needed are bottom-up programmatic approaches to funding that are multi-country and multi-year, instead of individual projects that may struggle to continue implementation (or build on outcomes) once the funding and project has ended.

Donors should also assist the funding process by improving application alignment, or harmonisation, which are a big challenge in completing applications for different funding instruments (e.g., each funder has different regulations which may limit sourcing funding across different funding instruments, such as the Green Climate Fund).

Donors should be encouraged to share information on projects to avoid duplication, and be willing to build on past and existing projects/programmes that have shown to have positive

<sup>&</sup>lt;sup>10</sup> AIR Centre. <a href="https://www.aircentre.org/">https://www.aircentre.org/</a>. Last accessed 09-01-2024.

<sup>&</sup>lt;sup>11</sup> The amount of aid (inclusive of funding and technical assistance) a country or organisation can use productively, beyond which there will be limited returns on the investment. Adler, J.H. 1965. Absorptive Capacity: The concept and its determinants. Brookings Staff Paper. The Brookings Institution Washington DC.

outcomes, i.e., it must be understood that long term support is needed to achieve long term impact.

Regional technical support platforms must be strengthened<sup>12</sup>, and collaboration and sharing of expertise across these platforms should be encouraged and facilitated. The adoption of inclusive programme development should be accelerated (e.g., co-designed and transdisciplinary). Ocean literacy programmes must be developed and targeted across different levels and spheres of society; this should include long term information management infrastructures to ensure information retention and ongoing outreach activities. Greater public sector engagement is needed to support development of sustainable ocean activities - the local human capacity, government structures and funding should match the high-level political commitments and aspirations.

There should be a focus on programmes which empower people/communities so that there is a direct beneficial impact on communities.

Funding bodies should consider harmonising funding for particular groups or regions to create more long term programmes (including monitoring and evaluation) and sustainable funding sources.

Ocean stakeholders need to act innovatively in creating new tools for ocean (environmental) management, and being inclusive and transparent (informing and involving all relevant stakeholders) to assist in balancing power relations.

Those responsible for ocean management and ocean space/resource use must be part of the solutions; this should include science and policy conferences making more effort in inviting and including the private sector (whether from established sectors or ocean entrepreneurs) to share their perspectives.

#### Conclusion

South Africa's fortunate geographic position allows it the opportunity to participate in various multilateral regional and international organisations, and conferences, which are focused on the oceans, and access to international funding instruments. Government and academia should use the opportunity to promote harmonisation of activities across these different organisations and platforms, both to limit overstretching the human and funding capacities, and to ensure that knowledge exchange and best practices are accelerated for tangible positive social outcomes. This would assist countries of the African continent in achieving Agenda 2063, and other development goals. As the world starts nearing the mid-way point towards the SDG 2030 and Ocean Decade 2030, new ways of thinking need to be considered and implemented to achieve global commitments.

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<sup>&</sup>lt;sup>12</sup> e.g., the African Union specialised technical offices such as the Interafrican Bureau for Animal Resources, African Group of Negotiators Expert Support, Abidjan Convention, Nairobi Convention/WIOMSA Western Indian Ocean Science to Policy Platform, UN Economic Commission for Africa.