



## Partnership Meeting on Oceanographic Research and Data Collection in the Western Indian Ocean Region

KMFRI, Mombasa, Kenya

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### I. Background

Oceans and seas play a key role in supporting socio-economic growth and development across different sectors, as well as in regulating climate patterns. The Western Indian Ocean (WIO) region is characterized by a diverse range of species and ecosystems and ranks as the world's second richest marine biodiversity hotspot. The region is endowed with coastal forests, mangroves, salt marshes, seagrass beds, coral reefs, and pelagic and deep-sea habitats—all of which support high biodiversity and productive waters, which in turn support economies and livelihoods. Over 60 million people in the WIO region live within 100km of the coast, with over one million working in the fisheries sector. Livelihoods of coastal communities in the region have been evolving due to population increases, infrastructural development and climate change.

In recent years, the region has seen dramatic and often poorly understood reductions in key fisheries, due to the combined effects of climate change, overfishing and degradations of key marine ecosystems. Understanding and managing WIO marine resources and the impacts of current and future changes requires implementation of an ecosystem-based approach built on the best available scientific information, local knowledge and socio-economic information.

The institutions managing oceanographic data and scientific research in the WIO region should facilitate networks, collaboration and partnerships to ensure that the best available scientific and local knowledge is shared and incorporated in planning and policy development at the national and regional level. The WIO region is comprised of ten countries: Comoros, France (Réunion), Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa and Tanzania. All are Contracting Parties to the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the WIO. There are national institutions in each of these countries as well as regional organisations mandated to conduct research on coastal and marine resources and provide expert advice to the respective government(s) on policy development and planning. These include:

The **Kenya Marine and Fisheries Research Institute (KMFRI)**, a state corporation established in 1979 by the Science and Technology Act, Cap 250 of the Laws of Kenya, which has since been repealed by the Science, Technology and Innovation Act No. 28 of 2013. Act No. 28 recognized KMFRI as a national research institution under section 56, fourth schedule. KMFRI has a mandate to undertake research in "marine and freshwater fisheries, aquaculture, environmental and ecological studies, and marine research including chemical and physical oceanography", in

order to provide scientific data and information for the sustainable exploitation, management and conservation of Kenya's fisheries and other aquatic resources, and contribute to National strategies of food security, poverty alleviation, clean environment and creation of employment, as provided for under Vision 2030.

The **Institute of Marine Sciences (IMS)**, which was established in 1978 with the mandate to conduct research and offer postgraduate and undergraduate training and consultancy services in all aspects of marine sciences. Its objective is to promote and enhance excellence in marine sciences and technology, as well as to enhance regional collaboration and networking in marine sciences research and development, technology and training.

**Tanzania Fisheries Research Institute (TAFIRI)**, which was established by the Act of Parliament No. 6 of 1980 to promote, conduct, and co-ordinate fisheries research in Tanzania.

**Western Indian Ocean Marine Science Association (WIOMSA)**, which was established as a regional, non-profit membership organization in 1993 and registered in Zanzibar, Tanzania in 1994 as a non-governmental organization. The organization is dedicated to promoting the educational, scientific and technological development of all aspects of marine sciences throughout the WIO region with a view toward sustaining the use and conservation of its marine resources. WIOMSA has a particular interest in linking the knowledge that emerges from research to the management and governance issues that affect marine and coastal ecosystems in the region.

The French **Research Institute for Development** (Institut de Recherche pour le Développement, or IRD) is a French science and technology establishment under the joint supervision of the French Ministries of Higher Education and Research and Foreign Affairs. The IRD institute has three main missions: research on world development, overseas consultancy, and training. It conducts scientific programs contributing to the sustainable development of the countries of the South, with an emphasis on the relationship between man and the environment.

**Southwest Indian Ocean Fisheries Commission (SWIOFC)** was established in 2004 by Resolution 1/127 of the FAO Council under Article VI 1 of the FAO Constitution. The SWIOFC is a member of the Regional Fishery Body Secretariats Network. Its main objective is to promote the sustainable utilization of the living marine resources of the Southwest Indian Ocean region and to address common problems of fisheries management and development faced by the Members of SWIOFC, without prejudice to the sovereign rights of coastal States. It promotes the application of the provisions of the FAO Code of Conduct on Responsible Fisheries, including the precautionary approach and the ecosystem approach to fisheries management.

The **World Wide Fund for Nature (WWF)** is an international non-governmental organization founded in 1961, working to conserve nature and reduce the most pressing threats to the

diversity of life on earth. Working in more than 100 countries, WWF is the world's largest conservation organization, supporting around 1,300 conservation and environmental projects.

**SOLSTICE-WIO** is a four-year collaborative project funded by the UK Global Challenges Research Fund (GCRF). Launched in October 2017, it brings together recent advances in marine technologies, local knowledge and research expertise to address challenges facing the Western Indian Ocean region in a cost-effective way via state-of-the-art technology transfer, collaborative environmental and socio-economic research and hands-on training. The project addresses three sustainable development challenges facing developing countries, i.e. secure and resilient food systems, resilience and action on short-term environmental shocks; and long-term environmental change and reduction in poverty and inequality

Keen on promoting scientific research in the WIO region, at the 4<sup>th</sup> Conference of Parties, the Contracting Parties to the Nairobi Convention directed its Secretariat—in collaboration with other organizations—to establish a regional network of academic and research institutions to enhance cooperation and facilitate information-sharing. The network would also coordinate and facilitate identification of opportunities for collaborative research. Subsequently, the Contracting Parties adopted decisions to strengthen the collaboration of scientists and policymakers through the Forum for Academic and Research Institutions (FARI), some of which are captured hereunder:

1. **Decision CP7/17:** To request the Secretariat to hold and encourage partners to support regular science to policy dialogues to provide continuous interaction between scientists, civil society, policy and decision makers, and the private sector.
2. **Decision CP8/12.1:** To urge Contracting Parties to promote a science to policy interface in order to enhance informed decision making;
3. **Decision CP8/12.2.** To agree to establish a dialogue platform to strengthen the links between science, policy and action and to mandate the forum of the Heads of National Academic and Research Institutions to act as the technical and advisory body of the platform;
4. **Decision CP.9/12.1:** To urge Contracting Parties to promote a science to policy interface by holding regular dialogues between scientists and policymakers to exchange science-based information and to support the development of appropriate policies and innovative solutions to the task of addressing current and emerging threats to the coastal and marine environment in the Western Indian Ocean.

The Nairobi Convention is implementing the Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reforms (WIO LME SAPPHIRE) project as part of its work programme. The overall objectives of the WIO LME SAPPHIRE project is to achieve effective long-term ecosystem management in the WIO large marine ecosystems, in line with the Strategic Action Programme as endorsed by the participating countries.

The SAPPHIRE project will build the technical and institutional capacity of national institutions. It will also facilitate collaboration with other regional institutions to deliver scientific results to management and policy makers for adaptive management decision-making. In addition, the project will support the collection of scientific and local data in the WIO region and ensure it is routinely archived in national data centres, where it can be retrieved for long-term environmental change studies.

The work will build on the previous activities completed under the Agulhas and Somali Current Large Marine Ecosystems (ASCLME) project. This project established a data and information management system which ensured that project data was a) tracked and monitored until the publication stage of the report; and b) archived in national data centres for the ongoing benefit of countries.

## **II. Purpose and Objectives of the meeting**

The overall objective of the meeting is to discuss the status of Oceanographic Research and Data Collection in the WIO Region. Specific objectives will be to:

- Identify key priorities of participating countries in enhancing their capacity in utilization, management and ownership of oceanographic data and scientific research findings in the WIO
- Discuss the partnership related to scientific research and data collection in the WIO region, specifically KMFRI's planned research in the North Kenya banks and that of IMS's in Tanzania's Pemba Channel.
- Identify a possible collaboration and partnership modality with the national research institutions on a data and information-sharing and archiving system

## **III. Expected Outputs**

- Area of collaboration and partnership established between KMFRI, IMS and other partners working in WIO region
- KMFRI and IMS proposals enriched and way forward agreed
- Gaps identified and national capacity building interventions planned to enhance utilization, management and ownership of oceanographic data and scientific research findings in the region
- Based on recommendation from Science to Policy Workshop in May, roadmap developed for reviving and strengthening national data centers