Webinar Report: Reactivation of the Ocean Data and Information Network for Africa

Wednesday 24 March 2022,

Time: 14h00-16h00 EAT (11h00-13h00 UTC)

Introduction

There is a growing need for a wide range of ocean data and information in Africa - covering physical, biological, meteorological, geological, and chemical aspects of coastal and marine science. The Global Ocean Science Report, 2020 indicated that although the countries in the region surveyed regularly and collect some amount of the various data types, none has the capacity to generate adequate data for optimal management of its coastal and marine environments. Moreover, in most the countries, data collection is regularly, duplicated and existing datasets not shared, or other relevant sectors and agencies may not be aware of their existence. There is therefore need share data across countries to help mitigate the paucity of data and information.

Multiple reports and consortia have articulated the need for improved access to data and information, to facilitate better understanding and management of the marine environment in the region. More recently, in the regional decade consultations held in January 2021 in Nairobi, data was a key issue in the discussions. Specifically, five issues were raised: (i) Need for an improved focus on user driven data; (ii) Challenges in data sharing related to a lack of common platforms, or incompatible metadata and data formats (iii) Lack of standardized policies in relation to open access data; (iv) Technical capacity and resource limitations; and (v) Lack of trust between organizations to share data.

To address these challenges, the regional decade consultations and the Sixth Session of IOC Sub Commission for Africa and the Adjacent Island States (IOCAFRICA-VI), recommended the reactivation of the Ocean Data and Information Network for Africa (ODINAFRICA). The ODINAFRICA has been one of the most successful projects of the International Oceanographic Data and Information Exchange programme (IODE) of the Intergovernmental Oceanographic Commission of UNESCO (IOC). The project brings together more than 40 marine related institutions from twenty-five countries in Africa to address challenges faced in accessing data and information for coastal management, by ensuring ocean and coastal data and information generated in national, regional and global programmes are readily available to a wide range of users in an easily understandable format.
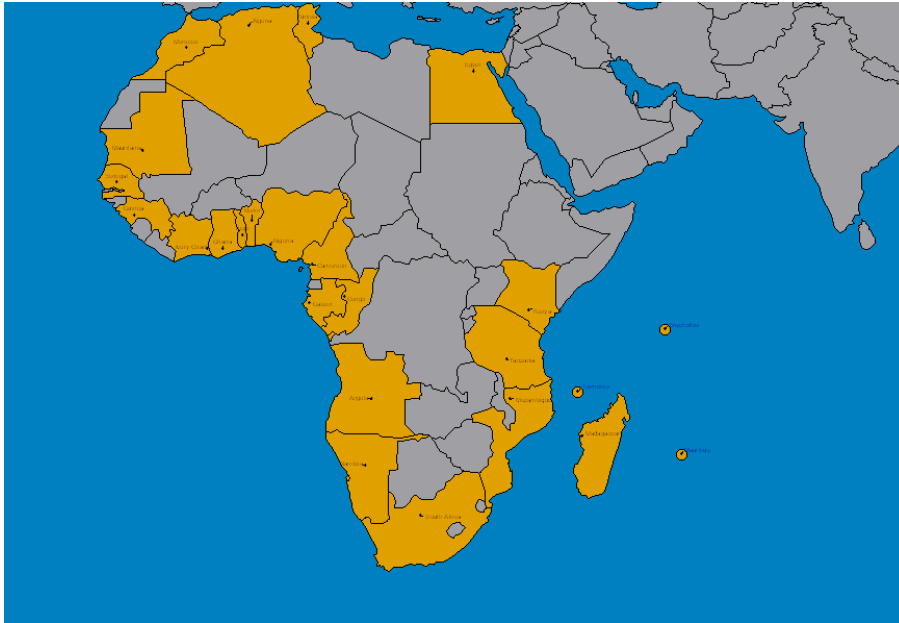
Figure 1: Member states in the ODINAFRICA network as of 2008. Between 2009 and 2013, the DR Congo & Sudan joined, Algeria & Morocco dropped out.

The reactivation initiative builds on the earlier phases of the ODINAFRICA project, which focused on the establishment and strengthening of a pan African network of National Oceanographic Data and Information Centre (NODCs) as a mechanism for application of data, information and products in marine and coastal management in Africa (read more about the evolution of ODINAFRICA here).

The reactivation will establish ODINAFRICA as the African regional node for Ocean Information Hub (OIH) Project - which seeks to improve discoverability and access to global oceans information, data and knowledge products for management and sustainable development. The initial focus of the OIH project will be on six thematic data fields: (i) Experts and institutions/organizations, (ii) Documents, (iii) Spatial data and maps, (iv) Ocean observation platforms, (v) Education and training opportunities, (vi) Marine related projects in the region.

The Webinar

UNESCO's IOC Sub Commission for Africa & the Adjacent Island States (IOCAFRICA) hosted this webinar on Zoom. The aim for the webinar was to deliberate on the reactivation of the Ocean Data and Information Network for Africa (ODINAFRICA) to support the development of the African regional node for Ocean Information Hub-OIH. The webinar focused on the following key areas of discussion:

✓ The status, roles, challenges and opportunities of National Oceanographic Data and Information Centre (NODCs),

✓ Progress in implementing the OIH project in Africa, specifically on addressing the six OIH project thematic areas: (i) experts and institutions/organizations, (ii) documents, (iii) Spatial data and maps, (iv) research vessels, (v) education and training opportunities, (vi) projects;

✓ The steps towards developing a joint framework for member states and institutions in the region to actively engage and contribute to the Ocean Data and Information Network for Africa;

The webinar targeted NODCs, marine-affiliated research and academic institutions as well as non-governmental institutions attended the meeting: in total, 35 attendees participated in the webinar.

Presentations

After Prof Kouadio Affian, the IOCAFRICA chairperson, made the opening statement, Mika Odido, the IOCAFRICA Coordinator, gave a detailed background of the ODINAFRICA programme. In his presentation, Mr. Odido noted that IODE was revising the current IOC data policy, taking into account the recent developments including the data and information needs during the UN Decade of Ocean Sciences for Sustainable Development.

Mr. Odido introduced the ODIN strategy, noting it focused on four elements i.e. training, equipment, seed funding for newly established data centres, provision of opportunity to work within a regional context while addressing common goals at the national level. Narrowing down to the ODINAFRICA, he outlined that the project had evolved in five phases in the past 15 years. During this time, the project has shifted from just focusing on marine information management, limited to seven Eastern Africa member states, to development, dissemination of products strengthening of network involving 25 member states.

As general recommendations based on the evolution and achievements of the ODINAFRICA project, Mr. Odido highlighted the need for collective thinking in identifying the new focus areas and direction of a reactivated ODINAFRICA network. Further, he encouraged the attendees to share ideas on coordination mechanisms that could strengthen the network, ways that the reactivated network could support the OIH project and collaborate with IOC global programmes.
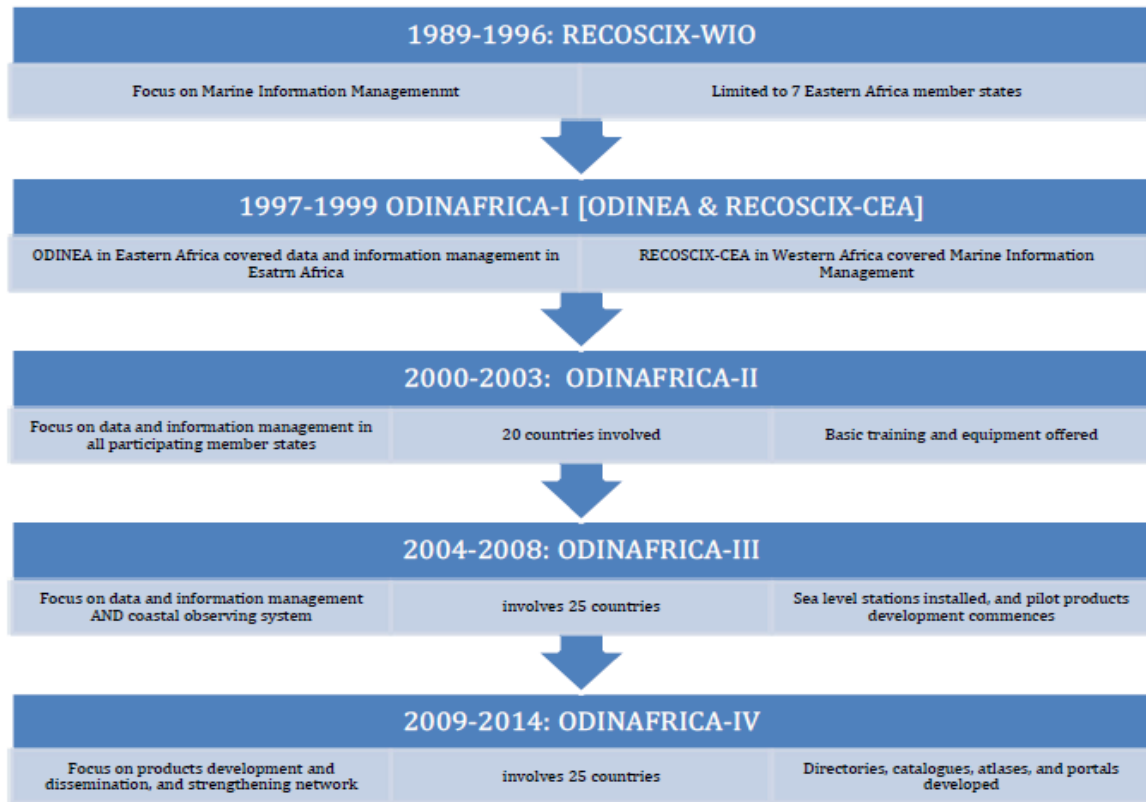
Figure 2: Evolution of the ODINAFRICA from1989 to 2014

Ms. Lucy Scott, the Project Manager of the Ocean InfoHub Project, introduced the OIH project as a new, global initiative, aimed at improving access to marine and coastal data and information. She emphasized that the objective of the OIH was not to develop a new or centralised system, but to develop interoperability between existing information systems, thus improving the flow of information to end users. She further outlined that the OIH project had supported the development of the Ocean Data and Information System Architecture (ODIS-Arch), reusing common data exchange conventions, such as schema.org, to allow existing and emerging ocean data and information systems, from any stakeholder, to begin interoperating with one another and solutions such as OIH.

Additional presentations were made on the regional OIH project implementation in Africa. The presentations covered the following topics: (I) Envisioned structure and properties of the ODINAFRICA regional node, (II) Portal on training opportunities and; (III) the African Coastal and Marine Atlases.

Discussions and Way Forward

Following the presentations, the following issues formed the basis of the discussion session:

I.   *Leveraging on existing activities as flagship projects for ODINAFRICA*
Mr. Harrison Ong'anda, from Kenya Marine Research Institute, proposed that going forward, it was necessary to pick on existing projects as the flagship projects for the revamped ODINAFRICA. Singling out the African Marine and Coastal Atlas, which despite some challenges, had a centralized database, he stated, "NODCs need to become actively engaged in the flagship project and contribute directly to the ongoing national and regional Marine Spatial Planning (MSP) initiatives in their respective countries."
Anja Kreiner, seconded the proposal and further suggested that Member states who have embarked on the MSP process take the lead in further developing ACMA to be a MSP spatial data portal.
Dr. Virasami added that future ODINAFRICA activities should be aligned towards addressing the 10 Ocean Decade Challenges for collective impact. In addition, he emphasized that the revitalized ODINAFRICA would be beneficial to user communities, e.g. Member States in fulfilling their reporting requirements for the Sustainable Development Goals (particularly goals 4, 9, 14 and 17).
 Finally, the attendees proposed that ODINAFRICA capacity development initiatives be undertaken in partnership with the recently established Regional Training Centers (RTCs), under the Ocean Teacher Global Academy programme.

II.   *Drawing Lessons from the past ODINAFRICA phases*
There were several success stories as well as few incidences of failure in past phases of ODINAFRICA that the revitalized network could learn from. For instance, although the project enabled member states to establish data centres and equipped them with crucial infrastructure for data management, most of equipment broke down, and member states / institutions were not able to repair/ maintain/ replace them. This in turn affected data collection and data usage. The attendees agreed it would be best to include a sustainability plan in future projects.

III.   *Assessment of the current status of the National Oceanographic Data and Information Centres*
NODCs were central to the successful implementation of the initial phases of ODINAFRICA . Noting this, participants agreed that it is important to conduct a detailed inventory of NODCs, as well as other centres that would be potentially suitable to implement the activities of ODINAFRICA, in order to ascertain both their human and infrastructural capacities.

IV.   *Revision and update of the mailing lists*

The IOCAFRICA coordinator stated that we currently have six mailing lists (all ODINAFRICA contacts, Data Managers, Information Managers, Coastal and Marine Atlas, Marine Biodiversity, Director of Institutions).
Dr.Karim Hilmi proposed that the lists would require updating.

V. *Setting up of a working group to guide the revitalization of ODINAFRICA*
The IOC coordinator requested that a small working group be formed, that will deliberate further based on the discussions and move forward with developing a comprehensive strategy for the reactivation of ODINAFRICA. In total, seven experts volunteered to be members of a working group. The experts are:
- ✓ Harrison Ong'ada
- ✓ Jeff Mckenna
- ✓ Angora Aman
- ✓ Zachary Sohou
- ✓ Karim Hilmi
- ✓ Tinah Martin
- ✓ Regina Folorunsho

The experts will work together with IOCAFRICA officers and with the help of the IOCAFRICA secretariat to propose flagship projects and requisite structures that will promote coordination and ownership of ODINAFRICA, both at the national and regional levels. They will further propose thematic areas that the network will focus on.

VI. *Financing the new ODINAFRICA phase*
Previous phases of ODINAFRICA were funded by funded by the Government of Flanders, Kingdom of Belgium, which is also funding the ongoing OIH project. The IOCAFRICA coordinator stated that they have not yet identified a funder for the new initiative. He however encouraged the participants to outline what type of activities they would like the proposed initiative to undertake. This will in turn inform on the type of funding required as well as the potential funders to be approached.

Conclusions

Since its inception in 1989, ODINAFRICA has evolved through five phases - striving to ensure that ocean and coastal data and information generated in national, regional and global programmes are readily available to a wide range of users in an easily understandable format. The last phase of the project, ODINAFRICA IV, focused on the establishment and strengthening of a pan African network of National Oceanographic Data and Information Centre (NODCs) as a mechanism for application of data, information and products in marine and coastal management in Africa.

Building on the presentations and discussions in the webinar session, the proposed next phase of ODINAFRICA is envisioned to contribute to the OIH project as a regional and multi-thematic node

that will improve online access to and synthesis of existing regional and national data, information and knowledge resources, including existing clearinghouse mechanisms. More importantly, ODINAFRICA will help meet the knowledge needs of national and regional requirements for sourcing marine data and information, as well as to assist countries in their reporting requirements for the Sustainable Development Goals (particularly goals 4, 9, 14 and 17), contribute to key aims of the UN Decade of Ocean Science for Sustainable Development.

Important Links and Further Reading

  I.   The Ocean InfoHub (OIH) Project.
 II.   Evolution of ODINAFRICA
III.   UN Decade of Ocean Science for Sustainable Development
 IV.   Global Ocean Science Report, 2020
  V.   Regional Training Centers (RTCs)
 VI.   Ocean Teacher Global Academy

Annex 1: Webinar Programme

Time	Activity
14h00-14h30	**Session 1: SETTING THE STAGE**
	▪ Welcoming remarks (**Prof Kouadio Affian**)
	▪ Overview of the Ocean Data and Information Network for Africa: Achievements and Challenges (**Mika Odido**)
	▪ Introduction to the Ocean Info Hub Project (**Lucy Scott**)
	Discussions
14h30-15h00	**Session 2: REGIONAL IMPLEMENTATION OF OIH IN AFRICA**
	▪ Development of relevant databases: Ocean Observation platforms, marine related projects, institutions/experts databases, documents & best practises, etc. (**Chris Kinuthia**)
	▪ Portal on training opportunities (**Julia Obuya**)
	▪ the African Coastal and Marine Atlases (**Mika Odido**)
	Discussions
15h00-15h30	**Session 3: MOVING FORWARD**
	▪ Discussions – What should a reactivated ODINAFRICA focus on? **Lucy Scott**
	▪ Linkages with other IOC programmes (**Mika Odido**)
	▪ Coordination structures and mechanisms
	▪ Closing (**Dr Karim Hilmi**)