



United Nations
Educational, Scientific and
Cultural Organization

Organisation
des Nations Unies
pour l'éducation
la science et la culture

Organización
de las Naciones Unidas
para la Educación
la Ciencia y la Cultura

Организация
Объединенных Наций по
вопросам образования
науки и культуры

• Intergovernmental
• Oceanographic
• Commission

• Commission
• océanographique
• intergouvernementale

• Comisión
• Oceanográfica
• Intergubernamental

• Межправительственная
• океанографическая
• комиссия

Western Indian Ocean Partners meeting.

IOC's Sub Commission for Africa & the Adjacent Island States - IOCAFRICA

WORK PROGRAMME 2021-2023

Mika Odido

IOC's Sub Commission for Africa and the Adjacent Island States



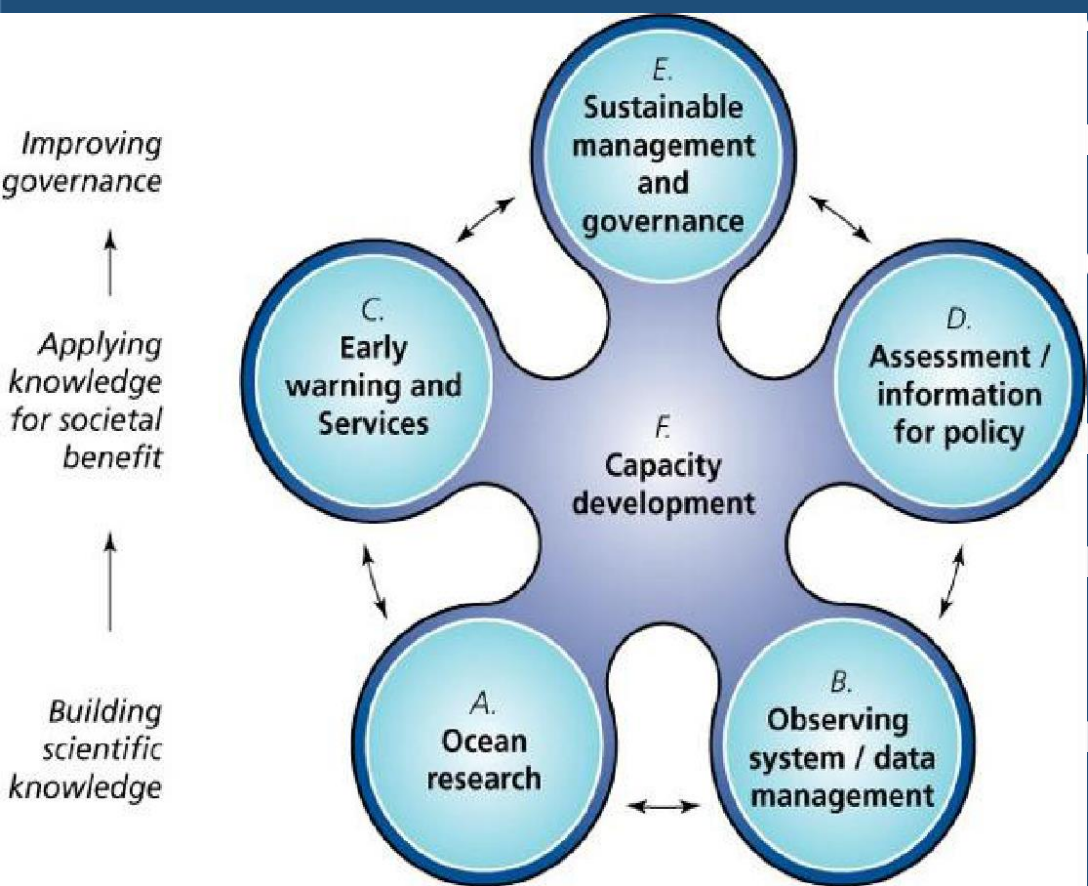
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Intergovernmental
Oceanographic
Commission

The Intergovernmental Oceanographic Commission (IOC) of UNESCO, 1960->, 150 Member States

- Intergovernmental body of the UN system for **ocean science, observations, data exchange, services, capacity development, and science-to-governance work**
- Functionally autonomous part of UNESCO, 150 Member States, 1960 ->



- A. Foster research to strengthen knowledge of ocean and coastal processes and human impacts upon them [Ocean research]
- B. Maintain, strengthen and integrate global ocean observing, data and information systems [Observing system / data management]
- C. Develop early warning systems, services, and preparedness to mitigate the risks of tsunamis and ocean-related hazards [Early warning and services]
- D. Support assessment and information to improve the science-policy interface [Assessment and Information for policy]
- E. Enhance ocean governance through a shared knowledge base and improved regional cooperation [Sustainable management and governance]
- F. Develop the institutional capacity in all of the functions above, as a cross-cutting function [Capacity Development]

IOCAFRICA

- Established July 2011 & officially launched May 2012.

One of the 3 Sub Commissions of IOC. The other two are WESTPAC, IOCARIBE.

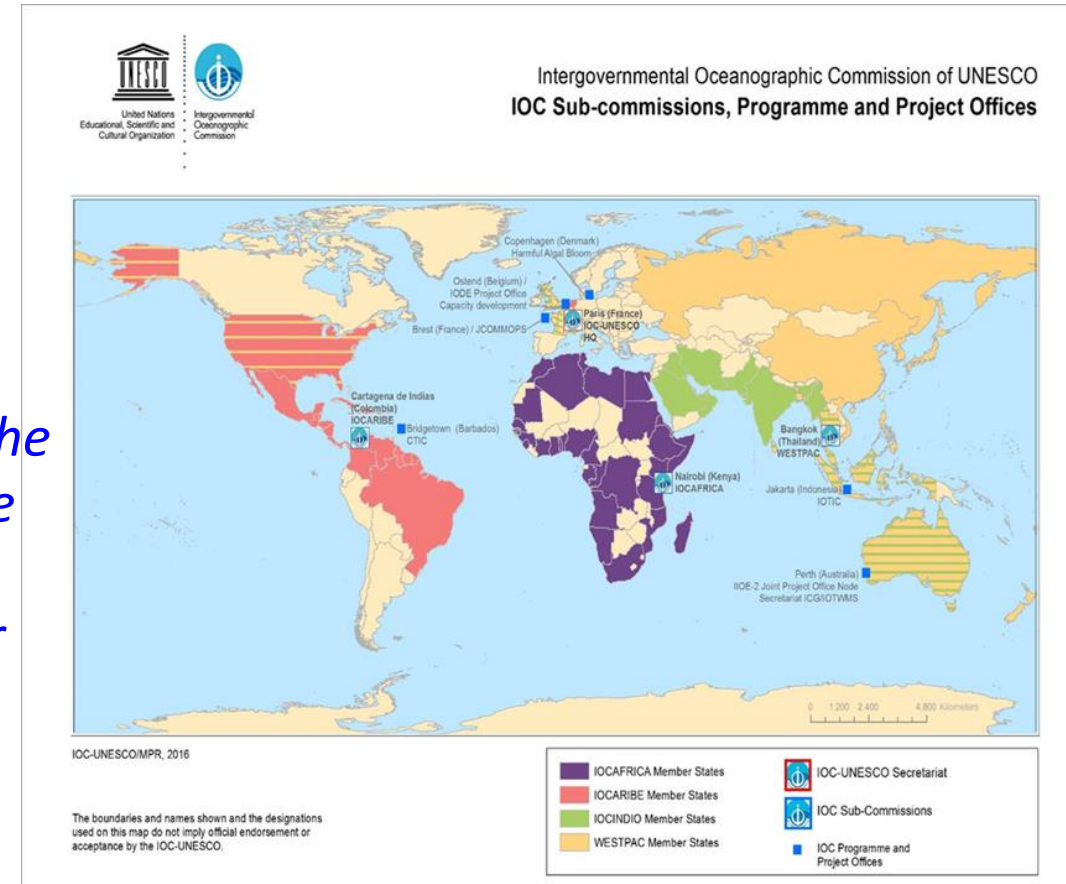
One Regional Committee: IOCINDIO

IOCAFRICA Mission: Promote regional and international cooperation for the understanding and management of the African oceans and coastal ecosystems, in order to ensure sustainable development and safety of the coastal populations, taking into account the priorities of Member States from Africa

- *IOCAFRICA-I: 2-3 May 2012, Nairobi, Kenya*
- *IOCAFRICA-II: 3-4 April 2013, Cape Town, South Africa*
- *IOCAFRICA-III: 14-15 April 2015, Nairobi, Kenya*
- *IOCAFRICA-IV: 6-8 March 2017, Alexandria, Egypt*
- *IOCAFRICA-V: 25-27 March 2019, Nairobi, Kenya*
- *IOCAFRICA-VI: 13-15 April 2021, online*

✓ Review implementation of approved work plans

✓ Develop work plans for subsequent inter sessional periods for consideration by IOC Governing Bodies (IOC Assembly and Executive Council)



Location of IOCAFRICA Secretariat
UNESCO Regional Office for Eastern Africa
UN Offices in Nairobi, Kenya



Sixth Session of IOC's Sub Commission for Africa and the Adjacent Island States (IOCAFRICA-V)



Dates: 13-15 April 2021, Venue: Online

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IOCAFRICA-VI Recommendations:

1. Establishment of Regional Planning Group for the UN Decade of Ocean Science for Sustainable Development.
2. Extension of the mandate of the IOCAFRICA Strategic Planning Group
3. Strengthening Collaboration with the African Union Commission.
4. IOCAFRICA work programme for 2021-2023.

Adopted by the 31st Session of the IOC Assembly meeting online 14-25 June 2021.

IOCAFRICA Officers 2021-2023

- IOCAFRICA CHAIR: Prof Kouadio Affian (Cote d'Ivoire)
- IOCAFRICA VICE CHAIR GROUP A: Dr Zacharie Sohou (Benin)
- **IOCAFRICA VICE CHAIR GROUP B: Ms Candida Ines Sete (Mozambique)**
- IOCAFRICA VICE CHAIR GROUP C: Dr Suzan Mohamed ELGHARABAWY (Egypt)

IOCAFRICA WORK PROGRAMME 2021-2023

- **Ocean Observations and Data and Information Management:** reinforcing ocean observations; optimizing the sharing, exchange and common utilization of marine equipment, including joint research cruises and expeditions; reactivation of ODINAFRICA network and portals to provide access to ocean data and information from Africa, further development of coastal and marine atlases and the African register of marine species
- **Capacity Development for Marine Science and Technology and Ocean Literacy:** comprehensive survey of capacities available; development of portal on training facilities and opportunities in the region; organization of training activities using OTGA regional centres, UNESCO Chairs and Centres of Excellence; ocean literacy and awareness activities, and supporting the regional kick-Off Conference for the UN Decade of Ocean Sciences for Sustainable Development.
- **Capacity Development for Marine Science and Technology and Ocean Literacy:** Assessment of marine and coastal ecosystems in Africa; Vulnerability and adaptation of Africa's marine and coastal ecosystems to climate change ; Building capacity for ocean acidification research and observation and detection and early warning for HAB ; Survey of and assessment of marine pollution; Marine Spatial Planning; Preparation of policy briefs on relevant goals of Agenda 2063, 2030 and the Ocean Decade (2021-2030)

Ocean Observations and Data and Information Management

Activity 1.1: **Reinforce the existing ocean observations systems** around coastal and deep sea areas of Africa including SIDS members states (including use of new technologies)

Activity 1.2: Increase collaboration and cooperation between Member States to optimise the sharing, exchange **and common utilization of marine equipment amongst Member States** particularly on joint research cruises and expeditions.

Activity 1.3: **Revitalizing GOOS-Africa** and review the functions to serve the needs of the African ocean observations systems

Activity 1.4.: Continue the development of the **regional node for the Ocean Information Hub**, and the reactivation of the ODINAFRICA network and portal to provide information about and access to ocean data from African oceans and coastal areas (including satellite and drone observations)

Activity 1.5: Further development of the **African Coastal and Marine Atlas**, in collaboration with the Caribbean Marine Atlas.:

Activity 1.6: Mobilization of marine biodiversity data for inclusion in the **African Register of Marine Species and AfrOBIS** (including strengthening of the African OBIS nodes in Kenya, Senegal and South Africa).



- ✓ Survey of status of Ocean Observations and proposals for strengthening Ocean and Coastal observations along the Africa Coasts (finalizing)
- ✓ Operational Oceanography: Reactivation of GOOs Africa (meetings Abidjan, Cote d'Ivoire, Dec 2019, and online June 2021).
- ✓ Events to mark World Tsunami Awareness Day on 5 November 2020 for African with UNDRRR, and for Nigeria with NIOMR and national commission for UNESCO.
- ✓ Publication of tsunami awareness manual to Kiswahili with UNDRR
- ✓ Development of the regional node for the Ocean Information Hub: regional stakeholders meeting, bilateral consultation with partners and engaging experts to work on the technical development of the regional portal
- ✓ Development and Update of Directories and Databases: Experts and institutions/organizations, Documents & Best Practices, Spatial data and maps, Research vessels, Education and training opportunities, marine related Projects
- ✓ Redevelopment of the portal for the Ocean Data and Information Network for Africa to serve as the IOCAFRICA contribution to the Ocean Information Hub (www.odinafrica.org)



- ✓ Interoperability projects with IUCN, CORDIO, WIOMSA, UNEP (Abidjan, Nairobi Conventions), IGAD, UNECA, AUC (GMES). Thematic technical teams established.



Ocean Sciences and Application to Management

Activity 3.1: Assessment of **marine and coastal ecosystems in Africa: their diversity, their ecological functionality and their biological production** .

Activity 3.2: Assessment of the **vulnerability and adaptation of Africa's marine and coastal ecosystems to climate change** taking into account regional ecosystems including coastal erosion, review of availability of long time series ocean and climate data and identification of data gaps that need to be addressed.

Activity 3.3. Implementation of IOCAFRICA project on building capacity for **ocean acidification research and observation and detection and early warning for Harmful Algal Blooms**.

Activity 3.4. Survey of and assessment of **marine pollution related parameters** (including micro and macro plastics, oxygen depletion etc.) including the development of technologies or processes for waste reduction and ecosystem recovery.

Activity 3.5. Support Member States in use of **Marine Spatial Planning** in balancing the requirements of different industries and sectors such as shipping, marine tourism and fisheries production.

Activity 3.6: Preparation of **policy briefs and advocacy** on relevant goals of Agenda 2063, 2030 and the Ocean Decade (2021–2030), working with regional institutions and networks (e.g. FARI, RAFISMER & COMHAFAT programmes in some of the countries)..



- ✓ Ongoing preparation of policy briefs on climate change adaptation in coastal zones focusing on (i) Sea Level Rise and implications, (ii) Marine Ecosystems and Dependent Communities, (iii) Extremes, Abrupt Changes and Managing Risks and (iv) Climate Change & Ocean Economy
- ✓ Climate Change and productivity in the Canary Current Eastern Boundary Current upwelling system
- ✓ Regional framework on responding to transboundary impacts of climate change in the Western Indian Ocean Islands (with other UN agencies thro UNCTs)
- ✓ Seaweed Sargassum workshops: Collaboration with UNEP and IOCARIBE on development of Sargassum Information Hub
- ✓ Harmful Algal Bloom & Ocean Acidification projects.
- ✓ Global Bathymetric Chart of the Oceans (Seabed2030), Regional workshop on Sea Floor Mapping in Africa with Seabed2030.
- ✓ National marine spatial workshops (including environmental pressures that impact on MSP and decision support tools) in Cameroun, Cape Verde, Gabon, Ghana, Kenya, Madagascar, Mauritius, Morocco, Mozambique, and Tanzania. **Comoros in Sep2021**
- ✓ Regional MSP workshops for Western Indian Ocean and Gulf of Guinea regions.



Capacity Development for Marine Science and Technology

Activity 2.1: Undertake **comprehensive survey of capacities available for marine science and technology** in the region (including human resources and facilities/equipment), building on previous surveys.

Activity 2.2: Development of a **portal on training facilities and opportunities in the region**, and facilitate the strengthening of the linkages and collaboration between ocean programmes in universities and research institutions

Activity 2.3: Organize and **support training courses and workshops**, using regional training centres (Ocean Teacher Global Academy RTCs, UNESCO Chairs and Centres of Excellence) on priority topics identified by IOCAFRICA.

Activity 2.4: Organization of the **Kick-Off Conference for the UN Decade of Ocean Science for Sustainable Development (Egypt2021)**, and activities to mark World Ocean Day and African Day of Seas and Oceans.

Activity 2.5: Maintenance of the IOCAFRICA websites as a source of information of the Sub-Commissions programmes and other relevant information

Activity 2.6: Organize activities to **improve ocean literacy/awareness**



IOC

Capacity Development for Marine Science and Technology

- ✓ Designation of Regional Training Centres for the new phase of the Ocean Teacher Academy programme: University of Ghana, Eduardo Mondlane University (Mozambique) and the Kenya Marine and Fisheries Research Institute to host the regional training centres.
- ✓ Regional training courses on wide range of topics: Fundamentals of data and information management, Marine GIS, Marine Spatial Planning, Ocean modeling,
- ✓ Shipboard training and surveys (SA Agulhas II and RV Mtafiti)
- ✓ Preparation of materials for online training for the regional training course: Oceanography Training Manual for the Western Indian Ocean
- ✓ Development of a portal on training opportunities in Africa
- ✓ Capacity assessment, based on the updated OceanExperts database (with more than 1,000 records from Africa) and focusing on the following: (i) statistics on nationality, gender, qualifications, fields of specialization, (ii) identification of gaps in capacity, (iii) identification of capacity development needs and available facilities & infrastructure in the region.



The UN Decade of Ocean Science for Sustainable Development (2021-2030)

Decade's Vision

*To provide the knowledge system
needed for policy and action to
achieve a global ocean supporting
sustainable development by 2030
and beyond*



Proposal for an International
Decade of Ocean Science for
Sustainable Development
(2021-2030)





GENERAL ASSEMBLY OF THE UNITED NATIONS

Omnibus Resolution for Oceans and the law of the sea (A/RES/72/73)

The UNGA decided (Para. 292) to proclaim *the United Nations Decade of Ocean Science for Sustainable Development for the 10-year period beginning on 1 January 2021, within existing structures and available resources, and called upon the Intergovernmental Oceanographic Commission of UNESCO to prepare an implementation plan for the Decade in consultation with Member States, specialized agencies, funds, programmes and bodies of the United Nations, as well as other intergovernmental organizations, non-governmental organizations and relevant stakeholders.*

Decade Implementation Plan adopted by UNGA in December 2020

UN-OCEANS

An interagency collaboration mechanism on ocean and coastal issues within the UN system





DECADE OUTCOMES

1. A clean ocean where sources of pollution are identified and reduced or removed.
2. A healthy and resilient ocean where marine ecosystems are understood, protected, restored and managed.
3. A productive ocean supporting sustainable food supply and a sustainable ocean economy.
4. A predicted ocean where society understands and can respond to changing ocean conditions.
5. A safe ocean where life and livelihoods are protected from ocean-related hazards.
6. An accessible ocean with open and equitable access to data, information and technology and innovation.
7. An inspiring and engaging ocean where society understands and values the ocean in relation to human wellbeing and sustainable development.



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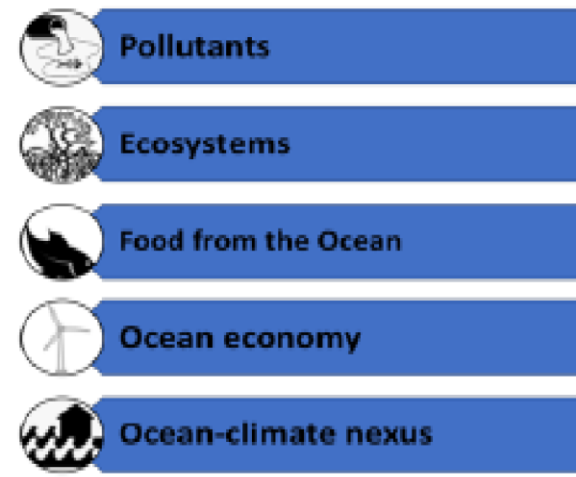
- A clean ocean
- A healthy and resilient ocean
- A productive ocean
- A predicted ocean
- A safe ocean
- An accessible ocean
- An inspiring and engaging ocean



DECADE CHALLENGES (1)



1. **Understand and map land and sea-based sources of pollutants and contaminants** and their potential impacts on human health and ocean ecosystems, and develop solutions to mitigate or remove them.
2. **Understand the effects of multiple stressors on ocean ecosystems**, and develop solutions to protect, monitor, manage and restore ecosystems and their biodiversity under changing environmental conditions, including climate.
3. Generate knowledge, support innovation, and develop solutions to optimise the **role of the ocean to contribute to sustainably feeding the world's population** under changing environmental and social conditions.
4. Generate knowledge, support innovation, and develop solutions to contribute to **equitable and sustainable development of the ocean economy** under changing environmental and social conditions.
5. Enhance **understanding of the ocean-climate nexus** and use this understanding to generate solutions to mitigate, adapt and **build resilience to the effects of climate change**, and to improve services including improved predictions and forecasts for weather, climate, and the ocean.

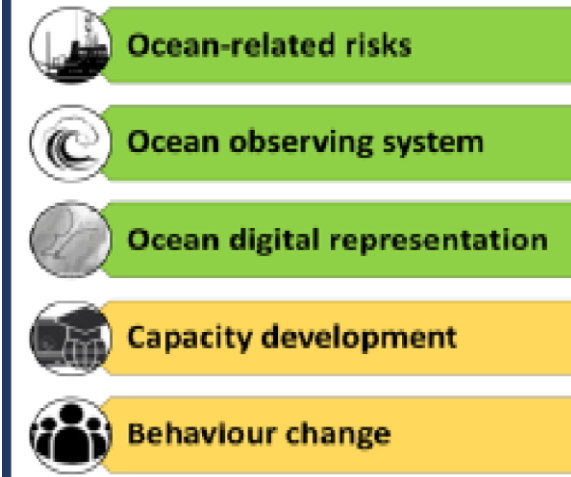




DECADE CHALLENGES (2)



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- Expand **multi-hazard warning systems for all biological, geophysical, and weather and climate related ocean hazards**, and mainstream community preparedness and resilience.
- Ensure a **sustainable ocean observing system** that delivers timely data and information accessible to all users on the state of the ocean across all ocean basins.
- Develop a **comprehensive digital representation of the ocean, including a dynamic ocean map**, through multi-stakeholder collaboration that provides free and open access to explore, discover, and visualize past, current, and future ocean conditions.
- Ensure **comprehensive capacity development and equitable access to data, information**, knowledge and technology across all aspects of ocean science and for all stakeholders regardless of geography, gender, culture, or age.
- Ensure that the **multiple values of the ocean for human wellbeing**, culture, and sustainable development are recognized and widely understood, and identify and overcome barriers to the behaviour change that is required for a **step change in humanity's relationship with the ocean**.



Regional Consultations on the UN Decade of Ocean Science for Sustainable Development (2021-2030) for Africa and the Adjacent Island States

27-29 January 2020, Nairobi, Kenya.

Registered: More than 140 participants from 30 countries

Collaboration with UNEP, WIOMSA, GIZ, CORDIO, SCOR

PLENARY DISCUSSIONS ON CROSS CUTTING ISSUES LED BY PANELS OF EXPERTS

- Panel 1: Setting a regional vision for the Decade
- Panel 2: Innovative models to mobilise resources and create partnerships
- Panel 3: Capacity development and transfer of marine technology
- Panel 4: Communications and ocean literacy

WORKING GROUPS: IDENTIFIED KEY ISSUES FOR THE REGION FOR EACH DECADE OUTCOME.



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RECOMMENDATIONS



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- 1. Harnessing the demographic dividend** by empowering the huge pool of youthful population. The focus should be on getting them into ocean sciences through **focussed ocean literacy programmes, supporting skills development and mentoring** to enable them fit in the job market and creating new opportunities for employment.
- The Decade should **catalyse research** in the following fields: marine renewable energy and deep ocean water applications; bioprospecting, biotechnology and pharmaceuticals; mariculture and offshore aquaculture; climate change impacts and the oceans-climate nexus; baseline monitoring of essential ocean variables; mapping ecosystems and habitats; **and linking the research results to societal applications.**
- Improving the quality and quantity of research outputs.** Scientists and institutions should think beyond producing publications to **transforming lives through innovation and robust application of ocean science.**
- Ocean research in the region should be **strengthened through stronger integration of sciences, greater investment in ocean observing systems and improved science-policy interface.** New partnerships should be developed, supported by a new ocean-climate finance, and improved ocean literacy and education to modify social norms and behavior...
- Establishment of **university-based ocean innovation incubator hubs, supported by the private sector,** to serve as a conduit to transform research results to action via technological development that is adapted to regional and local contexts and led by African researchers.



Regional Gap Analysis (with WIOMSA)



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Develop a participatory, succinct statement of the priority needs for Africa under the Ocean Decade and identify the key barriers, opportunities and actions to meet those needs.

- Identify the current state of knowledge and data in ocean science, transdisciplinary research as well as existing infrastructures, networks, partnerships and resources in the region.
- Identify the knowledge gaps, scientific priorities, potential baselines and capacity-development needs in the region in order to achieve the Ocean Decade challenges.
- Elaborate recommendations to co-design regional initiatives, identify opportunities to develop capacity development initiatives as well as opportunities of partnerships and resource mobilization in the region.



AFRICA & ADJACENT ISLAND STATES



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- Establishment of Regional Decade Implementation Committee (UNEP (Abidjan & Nairobi Conventions), Benguela Current Commission, WIOMSA and CORDIO)
- Series of virtual regional workshops for each of the Decade Outcomes (September-November 2021).
- **13-15 December 2021**, Alexandria, Egypt (hybrid format): Kick-off Conference of the UN Decade of Ocean Science for Sustainable Development for Africa and the Adjacent Island States

provide a forum to take stock of status of ocean science and technology in the region, deliberate on how ocean sciences in Africa should be supported and focused on delivering the required societal outcomes, and seek interest and commitment of the oceanographic community to embark on a number of directions of research which are critical for ocean sustainable management.



GLOBAL LEVEL

- First Call for Action circulated in October 2020 (over 240 submissions received)
- Decade Alliance (Brave New Ocean) virtual event on 3 February 2021
- IOC Executive Council requested the Executive Planning Group to act as Interim Decade Advisory Board
- Global launch in June 2021 (virtual)
- Call for Nominations to the Decade Advisory Board
 - ❑ 15 expert members drawn from government, private sector, philanthropy, civil society, and the scientific community (Serving in in their individual capacity)
 - ❑ Permanent seat for UN Legal Counsel/DOALOS
 - ❑ Permanent seat for IOC as Decade Coordinator
 - ❑ Three more seats will be reserved for UN Agencies and will be identified through consultations via UN-Oceans.



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The call for nominations will be open until 15 September 2021 at 23.59h CEST



DECADE ADVISORY BOARD

- Multi-stakeholder advisory body that will assist the IOC Secretariat in performing its function as coordinator of the Decade.
- DAB will report both to the IOC Governing Bodies and the IOC Executive Secretary and advise the IOC Governing Bodies on strategic elements of the Decade implementation:
 - ✓ Reviews of the Decade progress in moving towards the Decade societal outcomes
 - ✓ Research work in the domains of Decade challenges
 - ✓ Identifying gaps and opportunities
 - ✓ Advising on data stewardship strategies
 - ✓ Development of resource mobilization strategies
 - ✓ Supporting the development of a monitoring and evaluation framework of the Decade.

The Board will also provide advice and operational support to the IOC Executive Secretary to facilitate the endorsement process of Decade Actions, specifically at the programme level.



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