Scientific Cooperation & Capacity Development for Ocean Governance: WIOMSA Experience

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General overview of networks in WIO region
WIOOMSA as more than a network
Science to Policy Dialogue
Regional Scientific Networks

- Aims and Activities
- Membership
- Institutional Structures

Types of Regional Scientific Networks
- Regional Research Associations
- Regional Research Organizations
- Regional Research Centres
- Regional Research Networks
- Regional Programmes/Projects
Functions of scientific networks

- Research production
- Networking
- Co-operation, contacts, and a viable research community
- Publication
- Information, documentation and library facilities
- Research grants and scholarship
- Training and education
- Advocacy
Main Focus of Network

Mainly Action

Knowledge for Action

Mainly Knowledge

Formal

Informal

Research Centres

Research Organizations

Associations

Research networks
Different types of research networks

- Research Networks – Western Indian Ocean Mangrove Network Western Indian Ocean Seagrass Network (WIOSN))
- Regional Research Associations – WIOMSA
- Regional Research Organizations - Council for the Development of Social Science Research in Africa (CODESRIA)
- Regional Research Centres - Consultative Group of International Agricultural Research (CGIAR)
- Regional Programmes/Projects - AfriMAQUA research network
- Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C)?
- Forum of Academic and Research Institutions (FARI)?
Background

Established in 1993
Registered in 1994 in Zanzibar and 2014 in South Africa
Initially funded by SAREC via IOC/UNESCO as a pilot
In 2000 WIOMSA submitted its first proposal directly to SAREC.
The Motivation for a Regional Organization - WIOMSA

Many of the challenges common across the WIO region –
- Opportunity for cost & resource sharing
- Potential to partner in problem solving
- Combined voice to managers and donors

Many of the required processes & mechanisms optimally conducted at multiple scales including regional:
- Capacity building
- Awareness building & information dissemination
- Networking & partnership development
- Advocacy for science & research.
The Challenges?

- Absence of a common, regional vision - no mutual and agreed research and management priorities
- Absence of collaborative or joint research initiatives to overcome capacity & resource issues.
- Poor communication amongst scientists and between science and management organisations.
- Sharing of resources, information, experiences & capacity very limited.
- Limited interdisciplinary or multidisciplinary research. (biophysical, socioeconomic, governance)
The Challenges?

- Great need to transfer the knowledge generated into decision-making, demonstration, and behavioral change;
- The absence of a regional forum to promote regular interactions between scientists and decision-makers;
- Limited science-based management and decision-making – capacity and credibility issues.
- An insufficient knowledge-base to meet decision-making needs.
2. WIOMSA established to...

- Forum for addressing the regional issues efficiently;
- Means for generating knowledge whilst building capacity;
- The basis for developing collaborations & partnerships;
- Mechanisms to promote the relationship between science and management and improving decision-making processes;
- Opportunities for upscaling and enhancing outcomes and impacts;
- Mobilizing more resources for the region.
Evolution of WIOOMSA

1993
- Formation
  - Funds through IOC/UNESCO
  - Part-time staff
  - Hosted at IMS
  - MARG Programme initiated
  - Newsbriefs
  - The First Scientific Symposium held

2000
- Expansion
  - Direct funding
  - Competitive Grant Programme initiated
  - WIO Journal of Marine Science
  - Book Series
  - Special issues of Journals
  - MOU with UNEP & WCS
  - Strategic Plan

2006
- Consolidation
  - Commissioned Research Grant
  - Resource Mobilization Strategy
  - New membership fee system
  - Professional development

2012
- Sustainable Organization
  - Establishment & capitalization of Trust Fund
  - Implementation of OA
Networks & partnerships

- Hosting of technical and practitioners' networks
  - Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C)
  - Forum of Academic and Research Institutions (FARI)
  - Group of Experts in Marine Litter and Microplastics

- Networks within WIOMSA
  - Women in Marine Science (WiMS)
  - Western Indian Ocean Early Career Scientists Network (WIO-ECSN)
  - WIO Marine Protected Areas Network (WIOMPAN)
Convention Structure and COP decisions

Conference of Parties (COP) Decisions

Science-Policy Interface

Global Programs & Conventions

Nairobi Convention Secretariat

Governments
Forum of Focal Points

Regional working groups & task forces

Supporting partners

National Taskforces & National collaborating institutions
Evolution of the Science to Policy Interface for Nairobi Convention

1\textsuperscript{st} COP - 1985

4\textsuperscript{th} COP – 2004
FARI established

5\textsuperscript{th} COP – 2007
WIO-C established

Phase I

7\textsuperscript{th} COP – 2012
Science to Policy Engagements

8\textsuperscript{th} COP - 2015
Establishment of a Platform for Science to Policy Dialogue

Phase II

9\textsuperscript{th} COP – 2018

Phase III
Science to policy/user interface – Multidimensional structure

Science and other knowledge systems & their translation
- Peer-reviewed technical reports & scientific assessments
- Science-policy briefs

Science to Policy/User Interface
- Processes
- Deliverables

Policy and decision-making processes/actions
- Advice in support of policy development
- COP decisions
A value chain
Innovation, observations, data management, forecasts / science & assessment, societal benefit
Adapted from G7 Think Piece on Ocean Observations

1. Societal benefit from actionable information that influences policy, individual and business decisions
2. Forecasts, early warnings, marine services
   - Ocean forecast systems
3. Global and regional assessments
   - Scientific analysis, indicators
4. Data assembly & dissemination, analyses, syntheses, and information products
5. Global and regional sustained ocean observing systems
6. Ocean research and technology innovation
Weight of Evidence approach…

Advise and Guide Policy and Management Decisions

Too slow for effective Management decisions

Limited Peer Review (1-3 Specialists?)

Too unreliable for effective Management decisions

Limited or No Peer Review

Fast-Track decision-making supported by expert opinion

Extensive Peer Review (multi-sectoral)

Traditional approach

95% confidence required
Very reliable but data demanding
Often based on long term studies (too long to wait)

Precautionary approach

No confidence limits
Managers / policy makers reluctant to base decisions on ‘supposition’

Weight-of-Evidence approach for Adaptation measures?

Provides an indication of trends
Enables faster action
Allows adaptive management
Prioritises issues for further study
Indicators and modelling used as tools

Scientific research

Few, detailed studies

Large body of work
Some concluding remarks …

- The science to policy platform is not about the scientists and the policy makers. Mobilise the other key stakeholders including the private sector in a coherent way.
- Build capacity for science communication.
- Development of spatial data infrastructure.
- How do we contribute to the work of the Group of Experts on MSP.
- WIO Regional Ocean Governance Strategy…
- How do we have regular and sustained interactions which are important for building trust and fostering effective dialogues?
THANK YOU FOR YOUR ATTENTION

For more information: www.wiomsa.org