

Special Session: Western Indian Ocean Marine Science Association

11th Scientific Symposium

University of Mauritius

5 April 2019

IORA: PROMOTING SKILLS DEVELOPMENT AND CAPACITY BUILDING IN THE INDIAN OCEAN REGION (IOR)

Prof Narnia Bohler-Muller, IORAG Chair

Associate Professor Juliet Hermes, South African Academic Group Chair

Ms Nicole Du Plessis, Project Coordinator and organiser for this event

Ms Tania Duba and Ms Marcelina Mushi, panellists

Delegates,

Ladies and Gentlemen

My gratitude goes to the organizers of this Special Session on 'Fostering Regional Engagement through Transdisciplinary Research' being held during the 11th Western Indian Ocean Marine Science Association Scientific Symposium which is being organized by the South African Chapter of the Indian Ocean Rim Association Academic Group in collaboration with the Western Indian Ocean Early Career Scientists Network.

I am sure by now you know or are aware that, IORA was established on March 7, 1997 after the vision was pronounced by Tata Nelson Mandela (our intl icon) in Mauritius with an objective to strengthen regional economic cooperation in the Indian Ocean Region (IOR).

- IORA is a group of 22 Member States and 9 Dialogue Partners, and Italy is soon to join if endorsed by our COM this Oct 2019 as our 10th Dialogue Partner. IORA is vibrant, dynamic and fastly emerging as an apex body of the Indian Ocean. The growing interest shown by the developed countries of the world to join this organization as a Dialogue Partner this proves that IORA is becoming more strategic in importance.

Let me begin by providing an overview about IORA and the potential of this region. The per capita GDP rank for each of the twenty-two nations that are members of the Indian Ocean Rim Association stands out prominently as there is a huge range in terms of size and development across the region. The Indian Ocean is bordered by states ranging from the 7th highest per capita GDP in the world (Australia) to the 188th (Madagascar). The average ranking is 104, about half-way through the 198 countries for which GDP per capita is available. IORA Member States are at different stages of their level of development – Australia is our most developed economy; India is a fast growing major economy; Mauritius is upper middle income economy, Yemen and Somalia are Least Developed Countries in IORA. The percentage of the IORA's share in the world's GDP in 2019 is 10.14%- the figure has been rising since 2014 which shows the great potential of the Indian Ocean Region.

The population of the IORA region is 2.2 billion, with India accounting for 61% of the region and the three largest countries (India, Indonesia, and Bangladesh) accounting for 80% of the region's population. 30.17% of the world's population in 2019 is found in the member states of the Indian Ocean Rim Association. The population living in the 22 member states of IORA consisting of men, women, youth have different levels of education and living standards and live in areas of economic, social and cultural diversity.

The Indian Ocean is the third largest of the world's oceanic divisions, covering 70,560,000 km². The oceans are a source of economic development includes the large territory created by the Exclusive Economic Zones (EEZ) of the Indian Ocean nations. EEZ's were authorized by the United Nations Convention on the Law of the Sea (UNCLOS), the 1982 agreement establishing the legal structure of the oceans. EEZ's may extend up to 200 nautical miles from the shoreline; within the EEZ the coastal state has exclusive rights to the resources to be found there including fisheries and minerals. The Indian Ocean EEZ's total is 26.7 million square kilometers, or about 38% of the entire Indian Ocean.

Therefore the Blue Economy was recognized as a high priority area at the 14th IORA Ministerial Meeting in Perth, Australia, on October 9, 2014. The following priority sectors have been identified, namely: Fisheries and Aquaculture; Renewable Ocean Energy; Seaports and Shipping; Offshore Hydrocarbons and Seabed Minerals; Marine Biotechnology, Research and Development; Tourism; with Ocean Knowledge Clusters and SIDS & LDC Programmes. In order to develop all these sectors, it is imperative to promote skills development and capacity building in the Indian Ocean Region. Only three nations (India, Indonesia, and Singapore have aquaculture production exceeding capture fisheries, and Indonesia clearly dominates in aquaculture, accounting for 62% of Indian Ocean Rim aquaculture. With 17,000 islands and 266,000 square kilometers devoted top aquaculture, this is not surprising.

Capacity building and skills development in Indian Ocean Rim Association is the foundation for the development of the region. The importance of capacity development cannot be understated, and it has to be institutionalised in IORA to foster transformational management, to make practices sufficiently regular to become 'institutions', to strengthen pilot practices into regular/ core business and to conceive a vision which goes beyond an exit strategy. Key measures and structures for capacity development and skills promotion need to be set up through:

- i) Capacity self-assessment framework for sustainable development involving all relevant stakeholders: institution, public, private and societal organisation including academic research and innovation institutions;
- ii) Capacity Development Performance M&E mechanism;
- iii) Regional capacity development strategies framework as a blueprint to promote regional synergies and value added in national capacity building initiatives;
- iv) Strengthening relationships with multilateral agencies like FAO,

We need to focus on the:

- i) Integrated Coastal Zone Management (ICZM) and Environmental and Social Impact Assessment (ESIA) and monitoring.
- ii) Global Sustainability and Multilateral Environmental Agreements: World class expertise in the management and mainstreaming of these covenants in national institutional and policy frameworks; including analysis, interpretation, communication, advocacy, negotiation, awareness building skills.
- iii) Disaster Risks Management: This is to enhance the preparedness and mitigation capabilities of the public and private sector as well as the householders against climate and weather induced disasters, which are increasingly more frequent, unpredictable and harsh in the region.
- iv) Community development: National Sustainable Development is often criticised of being theoretical and locked in a top-down approach. Empowering local administrations and stakeholders to take ownership of sustainability issues and solutions is the essence of Sustainable Development. It is intended to encourage local leadership and social innovations across the key issues of socioeconomic resilience and environmental management. This requires a comprehensive and coordinated policy intervention, with skill-related policies as the cornerstone of this package.

The intervention is purposed to conduct a regional stock taking module that will look at the existing information and data architecture, including technical and human resources so as to promote mutually enriching collaborations. It will capture opportunities for sharing

expertise and experiences in the setting up of modern information architectures such as the System of Environment and Economic Accounting (SEEA). The purpose of training is to expose relevant stakeholders to strategic fund raising, new financial mechanisms and grant proposal development techniques to enable them to source funding and technical partners. It will also emphasise the knowledge and skills needed to write project proposals for specific donor agencies and to muster the funding procedures of wide range of multilateral and bilateral development and donor agencies.

IORA has been focusing on training programs in order to ensure skills development and capacity building across the region. These programmes are being organised by the member states of IORA in which the participants are invited from the other member states to apprise themselves with the latest developments in the field of six priority areas and two cross cutting focus areas of IORA from time to time. During the recent past, IORA has organised training programs namely

- Strategic Planning for Ports Singapore, 29 Jan-02 Feb 2018,
- 'IORA Workshop on Improving Knowledge for Research on Blue Carbon in the Western Indian Ocean:
Focus on Seagrass and Mangrove Ecosystems', Toliara, Madagascar, 29 April- 4 May 2019,
- 'IORA Training on Sustainable Development for Ports and Shipping in the Indian Ocean for Maritime Connectivity, Maritime Institute Malaysia (MIMA), Malaysia, 22-26 April 2019.

Further, I need not forget to add or may be point out that Digitalisation has a greater role to play in future for transforming the IORA economy as it is contributing and changing the profile of job market around the globe. The accelerated technological change is bound to make some workers redundant as well as creating new opportunities and jobs. In this context, some of the Member States of IORA namely Singapore, India, South Africa, Australia and Dialogue Partners: US, China, Korea, Germany can play a big role in providing opportunities for capacity building in these areas which are crucial for achieving higher and faster, sustainable and inclusive growth in the region. Reaping the full benefits of digitalisation will ultimately depend on the ability of each of IORA Member States to develop a set of policies that help workers adapt to these changes and develop relevant skills to thrive in digital world.

IORA's Member States are facing many training challenges, especially Least Developed Countries (LDCs) and Small Island Developing States (SIDS) and some of the developing economies. Training policies need to be framed to facilitate the transitions of workers whose jobs are at high risk of being automated into new and better-quality jobs. The governments in IORA need to find the right balance between policies that foster flexibility and labour mobility and policies that ensure job stability.

The universities/research institutions and academic group(s) in IORA can play a big role in bridging emerging skills gaps. It is also imperative to increase more investment in education and training programs; as well as providing more funds because of relative increase in training costs in recent years which varies from country to country in IORA. In my view, a regional, academic and research policy needs to be formulated by the Member States to meet the future growing challenges of skill-building and capacity building in the Indian Ocean Region (IOR).

Education is important to create a quality workforce; supporting business and industry; carrying out research and promoting technologies- leading to create a “knowledge Hub”- necessary for Sustainable Development in IOR. Fostering innovations necessary for Blue Economy; Trade and Investment linking technologies with society’s needs focusing on: Sustainability principles; Environment; Climate Change; Gender equality and Inclusivity. IORA needs to work on the future of education and formulate skills project keeping in view the Agenda 2030 and successfully implementing the Blue Economy in the region. Here, the important issues are: What knowledge, skills, attitudes and values will today’s students need to thrive and share their world; and how can instructional systems develop their knowledge, skills and attitudes and values effectively in order to make them prepared for the future which they want.

In addition to this, we need to undertake steps for strengthening the capacity building base of the Indian Ocean Region which may include: Making initial education forward-looking; Enhancing the ICT Infrastructure in schools; Improving teachers’ ability to use appropriate and innovative pedagogical tools by organizing training programs/workshops from time to time; focusing on Life-long learning for all; Coordinating Policy efforts and to promote Multidimensional skills; and training youth to gain the skills required to succeed in the emerging sectors of the future. It will also be appropriate to enhance the duration of the training programs from at least three to six months for the short term; and one year for medium term and three years for long term objectives to be achieved, although, it may enhance the direct and indirect costs of organizing such training programmes. But in my opinion, it is imperative to meet the newly emerging challenges of climate change, ocean acidification, plastic pollution to keep the health of the oceans in productive state as well as for the fulfilment of Sustainable Development Goals (SDGs) by 2030 in the Indian Ocean Region which comprises of Small Island Developing States (SIDS), Least Developed Countries (LDCs), emerging economies, developing economies and developed economies.

It is my understanding that in order to find the answers to the above questions, the universities/research questions and the academicians in IORA need to can play a big role. Therefore, I do appreciate of the South African Academic Group in organizing a special session on “Fostering regional engagements through transdisciplinary research.’ I am confident that South African IORAG will come up with useful and practical recommendations to promote transdisciplinary research in the region as well as related with

skill building and capacity building in the Indian Ocean Region (IOR). In this context, the initiative undertaken by the Chair in Indian Ocean Studies (CIOS) for having a MoU with Virtual Educa which focuses on innovative projects in the fields of education and training for human development and social inclusion. I hope that this MoU will be soon materialized after receiving the feedbacks from the Member States of IORA and its approval by the CSO.

Skills are crucial to thrive in a world of work and society. Skills help bridge social divides in the access and use of digital devices. A growing number of everyday activities can be performed online. People should be able to build the skills they need to join the digital world. A good level of literacy, numeracy, and problem-solving skills in technology-rich environments is the key that allows people to unlock all the benefits of Internet use and use of Internet in diversified and complex ways rather than just for information and communication. But the countries are unequally prepared to seize the benefits of digital transformation and new emerging sectors and developments in the region. Developing a comprehensive policy package with skills-related policies may help to transform the IORA economies which may bring many opportunities for new learning and newly emerging employment potentials.

Wishing for the fruitful discussions and very productive outcomes which may be helpful in fostering regional engagement through transdisciplinary research in the Indian Ocean Region.

Thank you.