

The Third Phase of the Workshop Series on Effects of Climate Change on the Indian Ocean Marine Environment was held on 20-22 February 2023 Tehran, Iran.

The idea of holding a series of webinars on the impact of climate change was first, submitted in the Second Meeting of the WGBE, held on 12 April 2021, and was well noted. On 10 May 2021, the first phase of this series was covering "the Effects of Climate Changes on the Indian Ocean Marine Environment". This series consisted of an informational workshop and the key takeaway

of the first workshop was that climate change is likely to have a greater impact on the Indian Ocean region than on other areas because of its geography, population density, large low-lying areas and many coastal cities. Impacts include sea-level rise, ocean acidification, changing meteorological patterns which result in increasing severity and frequency of extreme weather events, leading to freshwater concerns and resulting in human migration. That calls for building a collective and resolute determination for a regional policy response. The first webinar was held in close cooperation with the Iranian National Institute of Oceanography and Atmospheric Science (INIOAS).

In the same vein, RCSTT sought partnership with GIZ and the working group of blue economy (WGBE) and the second workshop was co-created. The second webinar was held on November 8, 2022 in close cooperation and virtual hosting facilities of GIZ, Germany. The workshop led to compiling some tangible recommendations on how IORA could or should deal with the topic of climate change in the future.

The importance of addressing the different issues of climate change has long been recognized by the IORA Member States, which is now included in the Work Plan of the IORA Working Group on the Blue Economy (WGBE). To better understand the impacts of climate change on the marine environment, the third phase of workshop series entitled as "Effects of Climate Change on the Indian Ocean Marine Environment" was planned to be organized by the Regional Centre for Science and Technology Transfer (RCSTT) in close cooperation with the IORA Secretariat, the Working Group on Blue Economy and with collaboration of the Iranian Research Organization for Science, Research and Technology (IROST) and the Iranian National Institute for Oceanography and Atmospheric Science (INIOAS).

This workshop warmly welcomed the participants from 9 IORA Member States including Bangladesh, Iran, Mauritius, Malaysia, Maldives, South Africa, Sri Lanka, Tanzania, and Thailand, and Russia as Dialogue Partner. During the Opening Ceremony on 20 February 2023, Dr. Zamanian the Deputy Minister and the Director of IROST as the host of RCSTT, Dr. Sanjabi, the Director of RCSTT, and Dr. Mehdinia, the Scientific Secretary of the Workshop released their speeches focused on different objectives and aspects of the Workshop. Further, the IORA Secretariat's message to the Workshop was read out in the Opening Ceremony. The message put emphasis on the IORA commitment to support the ventures addressing climate change challenges and the necessity of regional/ global multidisciplinary approaches and efforts to come up with appropriate mitigation measures.

Following the Opening Ceremony, the lecturers mainly from Iran, India, Sri Lanka and South Africa covered a broad range of topics related to Climate Changes Impacts on Marine Environment in seven sessions titled as: Deoxygenation and Biogeochemical cycling, Paleoclimatic Studies, Atmospheric characteristic of the Indian Ocean, Primary Productivity and Fisheries & Climate Change and Marine Migratory Species, Sensitive marine ecosystems of the Indian Ocean, Physical Oceanography and climate change, and Marine and Coastal Adaption and Mitigation Measures for Climate Change.

In the 8th Session, the participants had the opportunity to share their respective country report on their status and strategies to control and combat the negative effects of climate change and developed specific and actionable recommendations to strengthen regional collaboration for manage the related critical issues in the region.

The Workshop was planned to enhance the knowledge of the IORA Member States and share information on the impacts of climate change on the marine environment, the capacities and skills of the participants on the sustainable management and conservation of the marine biodiversity, encourage international research partnership to invest in the conservation and restoration of blue carbon ecosystems as an important component for mitigating the effects of climate change and introduce marine and coastal adaptation and mitigation measures for climate change impacts. It was also reflective of the evolving activities of the Indian Ocean Rim Association (IORA) particularly in the field of Climate Change as an increasing area of concern.