Abstract

The deep sea remains one of the least explored regions of our planet, yet it plays a vital role in regulating global processes, sustaining biodiversity, and supporting human well-being. In the Indian Ocean, advancing deep-sea research is particularly important for coastal and island states, many of which are directly dependent on healthy marine ecosystems. However, significant challenges persist in establishing nationally led research programs. Limited infrastructure, restricted access to technology, and constrained funding often result in researchers from the region engaging primarily as “participants” in international cruises, rather than leading or shaping scientific agendas. This dynamic reinforces systemic imbalances in the production, ownership, and application of knowledge.

Overcoming these barriers requires new approaches that strengthen local capacity, foster equitable partnerships, and ensure that research outputs are relevant to regional and national priorities. Emerging initiatives demonstrate pathways to shift from passive participation to active leadership, including collaborative expeditions, investment in training, and frameworks for shared access to data and equipment.

The entry into force of the Agreement on Biodiversity Beyond National Jurisdiction (BBNJ) presents a timely opportunity to address these challenges. Its provisions on capacity building, technology transfer, and data sharing can help redress inequities and create conditions for meaningful participation by Indian Ocean states in deep-sea science. Harnessing this momentum offers the chance to develop a more inclusive and collaborative model of ocean exploration—one in which the region contributes not only data but also leadership to the stewardship of the global ocean commons.