

## CMFRI's research on India's marine biodiversity showcased at UN global meet

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Research findings of the ICAR-Central Marine Fisheries Research Institute (CMFRI) were showcased as India's commitment to conserving its marine ecosystems at a United Nations meet held at Seoul, South Korea to discuss the Global Biodiversity Framework.

Conservation of mangroves and coral reef ecosystems, identification of marine protected areas and promotion of sustainable marine fishing were emphasised as India's foremost national priorities at the Sustainable Ocean Initiative (SOI) workshop.

The meeting was organised to discuss means and approaches to accelerate the implementation of the Kunming-Montreal Global Biodiversity Framework (KMGBF) of the UN Convention on Biological Diversity (CBD). The SOI is a global platform that aims to build partnerships and enhance capacity to achieve the global goals and targets on marine and coastal biodiversity

India's report presented at the meeting highlighted CMFRI's efforts in developing a framework for the estimation of the conservation value of ecologically sensitive areas (ESAs) with an aim to reduce threats to marine biodiversity. As part of this, a total area of area of 34,127.20 sq. km has been mapped as ESAs, including habitats of mangroves (5,590 sq.km), coral reefs (1,439), seagrass(518), salt marsh(600), sand dunes (325), mudflats (3,558), etc., the report said.

Shubhadeep Ghosh, Assistant Director General of Indian Council of Agricultural Research (ICAR), New Delhi and Grinson George, Principal Scientist and Head of Marine Biodiversity and Environment Management Division of the ICAR-CMFRI presented the country's report that included national priorities and targets for conservation of the marine biodiversity

### **Reef restoration**

The report referred to CMFRI's research in developing a deep learning-enabled image recognition model to classify the underwater images of corals as a means to achieve the target of restoring ocean ecosystems.

In connection with this, restoration of coral reefs has been undertaken through transplantation in the Gulf of Mannar, the Gulf of Kutch and Lakshadweep regions, said Grinson George. Attempts by CMFRI to map the spatial distribution of aquatic invasive species in the Northern Indian Ocean region through predictive modelling also found a place in the report.

### **Mariculture**

The report suggested mariculture as a highly prospective sustainable farming practice in India's coastal waters. "Introduction of Integrated Multi trophic Aquaculture (IMTA), a novel practice of cage fish farming combined with seaweed cultivation, has helped increase the yield of seaweeds by 122 per cent", Grinson George said.

Shubhadeep Ghosh emphasised the importance of tailoring management measures for resource conservation to specific regions, taking into account the unique socio-economic contexts of each region. He also underscored the crucial need to strike a balance between conserving resources and utilizing them effectively, saying that equal attention must be given to protect the interests of the stakeholders and the resources themselves. "What is urgently required is a participatory and inclusive approach that actively engages all stakeholders. This is essential to maintain a delicate balance between conservation and utilisation", Ghosh said.