

Integrative space-based oceanography key to unlocking blue economy: Former ISRO chief



Kochi, Nov 4 Former ISRO Chairman Dr S. Somanath has called for embedding space-based oceanography into India's marine research framework to unlock the full potential of the blue economy and enhance the welfare of coastal communities.

He said India must “conquer the oceans through technology, innovation, and coordinated research,” much like it did in space exploration. Inaugurating the fourth edition of the International Symposium on Marine Ecosystems (MECOS-4) at the ICAR–Central Marine Fisheries Research Institute (CMFRI) here on Tuesday, Dr Somanath said the time was ripe for India to develop an integrated ocean observation programme using advanced satellites, sensors, and artificial intelligence. “A series of ocean observation satellites is under consideration, which will usher in a new era in marine ecosystem monitoring,” he said.

The former ISRO chief noted that the absence of hyperspectral sensors limits India's ability to monitor ocean health and resource distribution effectively. “We need more deep-sea sensors, buoys, and unmanned aerial vehicles to improve real-time data coverage,” he said, adding that advanced data integration and analytics are crucial for sustainable ocean governance.

Dr Somanath emphasised that merging ocean science with digital tools such as AI and machine learning would strengthen predictive models, enabling better management of marine resources. He urged for a national framework to link research institutions, startups, and technology firms under a unified ocean mission. Presiding over the event, ICAR Deputy Director-General Dr J. K. Jena said ocean research would be a vital driver of India's long-term food and economic security. C. S. R. Ram, Joint Secretary, Ministry of External Affairs, said that maritime cooperation was among India's top strategic priorities for ensuring trade, connectivity, and security across the Indo-Pacific.

Meanwhile, the Marine Biological Association of India conferred the Dr S. Jones Memorial Award on noted marine scientist Dr G. Gopakumar for his pioneering work in mariculture, including breakthroughs in cobia and silver pompano breeding that helped popularise cage fish farming and improve coastal livelihoods.