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Experts bat for integrating traditional knowledge with scientific tech to boost fisheries

Marine experts are of the view that integrating traditional knowledge of fishermen with scientific technology, including satellite modelling and remote sensing can offer localised weather warnings and monsoon forecasts. This directly benefits the fishing community and enhances safety at sea. According to them, traditional fishermen can read the subtle signs of the sea and sky making them capable of predicting climate patterns and fish availability. They presented their views at a stakeholder workshop held at ICAR-Central Marine Fisheries Research Institute on Thursday. The meet was attended by experts in fisheries, aquaculture and ports, community members and industrial players.The workshop was jointly organised by Ocean Centres India in collaboration with UN Global Compact Network India and CMFRI.

For generations, fishermen have relied on their deep understanding of the sea by observing wind direction, ocean currents and phenomenon such as sea swelling to predict weather and locate fish, said A Biju Kumar, Vice Chancellor of Kerala University of Fisheries and Ocean Studies (KUFOS) who inaugurated the workshop. Combining this knowledge with modern science could also be used for the art of boat building. Kerala's *"Khalasis"* are globally renowned for their traditional expertise in constructing the legendary *"uru"* boats without modern blueprints or machinery. Their techniques, passed down through generations, could be studied and documented to create a new, hybrid approach to maritime engineering, Biju Kumar said.

The meet identified illegal, unreported and unregulated (IUU) fishing as a grave threat to India's marine resources. Highlighting role of technology in combating this menace, he suggested that innovative solutions could help monitor fishing activities and ensure the long-term health of fish stocks.The stakeholders felt the need for a holistic and participatory approach to deal with climate change which, according to them, significantly weakened monsoon dynamics leading to high temperatures and a disruption in the process of upwelling. Engaging the community and drawing on their collective participation would be the best way to develop effective and sustainable solution for the challenges in the sector in the face of climate crisis, they suggested.