

Tricolour coral assemblage in Lakshadweep offers insights into climate adaptation research: CMFRI

Kochi, Aug 14 (PTI) A natural coral assemblage appearing in tricolour beneath the sea at Minicoy in Lakshadweep has sparked curiosity and offered critical insights into climate adaptation research, the ICAR-CMFRI said on Friday. The underwater image, captured by Central Marine Fisheries Research Institute (CMFRI) Research Scholar Alvin Anto during a marine mammal survey, shows two coral colonies, appearing in orange, white, and green, coming together naturally, a statement by the institute said.

The species were identified as *Lobophyllia corymbosa*, with its vibrant orange colour, and *Lobophyllia radians* in white and green colours, CMFRI said. According to CMFRI, the underwater image provides valuable insights into contrasting responses of corals to environmental stress. While one *L-radians* colony bleached after losing its symbiotic algae, its neighbouring colony remained healthy despite growing in proximity. “Though this assemblage is a symbol of India’s rich marine biodiversity, it also carries an urgent message about ocean health. It tells the stark story of resilience and vulnerability to climate stress,” CMFRI Director Dr Grinson George said.

While one colony of a coral species bleached due to rising sea temperatures, its direct neighbour of the same species remained healthy and green, this variation in thermal stress tolerance offers crucial insights for ongoing reef restoration and climate adaptation research, he said. Emphasising the urgent need to tackle these climate impacts, George highlighted measures being taken up by CMFRI towards coral reef restoration. “With the support from the Government of India, CMFRI is on a mission to rapidly scaling up the deployment of Artificial Reefs along coastal waters to revive degraded habitats, enhance coastal biodiversity, and support the livelihoods of artisanal fishers,” George said.

Simultaneously, efforts are underway to replenish depleted wild stocks of ecologically and economically vital marine species through marine fish breeding, seed production and sea ranching programmes, George said. Restoring natural habitats through artificial reefs is expected to support marine ecosystems and build a robust climate-resilient marine ecosystem, he said, adding that the coral assemblage serves as a reminder to safeguard fragile coral ecosystems in a warming world.