



Kariyachalli Island

[Source: DTE](#)

Tamil Nadu, under the [TNSHORE \(Tamil Nadu Sustainably Harnessing Ocean Resources\)](#) project, is working to protect the ecologically vital **Kariyachalli Island** in the [Gulf of Mannar](#), which has **shrunk by over 70%** since 1969 and may be **submerged by 2036**.

Kariyachalli Island

- **About:** Kariyachalli Island, located within the [Gulf of Mannar Marine National Park](#), is part of one of **India's four major coral reef regions** (others: **Gulf of Kutch**, **Lakshadweep**, and **Andaman & Nicobar Islands**).
 - It serves as a vital **habitat for endangered species** like [dugongs](#) (sea cows, [IUCN: Vulnerable](#)), which rely on [seagrass](#) ecosystems.
- **Threats:** The island has **lost 70%** of its **landmass since 1969**, and due to **climate change**, **30% of its coral has already bleached**.
- **Conservation:** The **TNSHORE project** plans to install **8,500 artificial reef** modules that are **trapezoidal structures** made of **ferrocement and steel** with **perforations** for **nutrient flow** along with **seagrass plantation** and **coral habitat restoration**, to help **reduce wave energy** and **stabilize the shoreline**.

Gulf of Mannar

- **About:** The **Gulf of Mannar**, an extended part of the **Laccadive Sea**, contains **21 islands** and is bordered by **Rameswaram**, **Ram Setu bridge**, and **Mannar Island**.
 - It receives rivers like the **Tambraparni** and **Aruvi**, and hosts the [Tuticorin port](#).



- **Biodiversity:** Home to the **Gulf of Mannar Marine National Park**—South Asia's first **Marine Biosphere Reserve**—it supports **corals, fishes**, and endangered species like **dugongs, whale sharks**, and **sea turtles**.
 - The gulf is noted for its **pearl banks** and **sacred chank** (a gastropod mollusk).
- **Gulf of Mannar Marine National Park:** Established in **1982**, it features **coral reefs, mangroves, mudflats, creeks, seagrass beds, seaweeds, estuaries, sandy shores, saline grasslands, marshes**, and **rocky coastlines**.

Read More: [Coral Breach in Gulf of Mannar](https://www.drishtiias.com/printpdf/kariyachalli-island)