

Status of Coral Reefs of the World 2020

By IASToppers | 2021-09-11 17:15:00



Status of Coral Reefs of the World: 2020

A report titled **Status of Coral Reefs of the World: 2020**, prepared by the Global Coral Reef Monitoring Network, along with the Australian government was released recently.



[Ref: Down To Earth]

Highlights of the study:

- Coral reefs have suffered terribly in the past three decades. Yet, **they are resilient and would be able to withstand** challenges posed by a warming world.
- Reducing local pressures on coral reefs to maintain their resilience would be critical in the years to come. Monitoring data collected in the field was also essential to understand the status of the trends in coral reef condition.
- Ongoing investment in the **development of methodological approaches, new technologies, capability and capacity** that expands geographic coverage and enhances the quality, accessibility and interoperability of data is essential.

Facts provided under the report:

- 1998 coral bleaching event killed eight per cent of the world's coral.
- Subsequent events between 2009 and 2018 killed 14 per cent of the world's coral.
- Most declines in global coral cover were associated with either **rapid increase in sea surface temperature (SST)** anomaly or sustained **high SST anomaly**.
- There was **20 per cent more algae on the world's coral reefs** in 2019 than in 2010. The increase in the amount of algae, was associated with **declines in the amount of hard coral**.
- Since 2010, almost all regions had exhibited a decline in average coral cover.
- **Increases in global coral cover between 2002 and 2009** and in **2019** offered hope. It showed

that coral reefs globally remained resilient and could recover if conditions permitted.

- Coral reefs in **east Asia**, which has 30 per cent of the world's coral reefs, had more coral on average in 2019 than they did in 1983. This, despite the area being affected by large-scale coral bleaching events during the last decade.
- This showed that high coral cover and diversity might confer **a degree of natural resistance** to elevated sea surface temperatures.

Coral Reef:

- Coral reefs are **large underwater structures** composed of the **skeletons of colonial marine invertebrates** called coral.
- Other species of corals that are not involved in reef building are known as “**soft**” corals.
- Naturally, the **dominant organisms in coral reefs are corals**. Corals consist of both algae (**zooanthellae**) and **tissues of animal polyp**.
- Since reef waters tend to be **nutritionally poor**, corals obtain nutrients through the algae via photosynthesis and also by extending tentacles to obtain plankton from the water.
- The coral species that build reefs are known as **hermatypic**, or “**hard**,” corals because they extract calcium carbonate from seawater to create a hard, durable exoskeleton that protects their soft, sac-like bodies.
- Also, several species of microorganisms, invertebrates, fishes, sea urchins, octopuses, and sea stars are found.
- Coral reefs are often found in **warm, clear, shallow water** where there's plenty of sunlight to nurture the algae that the coral relies on for food.
- They can be found as **barriers along continents** (e.g., the Great Barrier Reef off Australia), fringing islands, and atolls.
- Coral reefs are the primary habitat for more than 4000 species of fish, 700 species of coral and thousands of other plants and animals.

Distribution:

- Corals are found all over the world's oceans.
- The biggest coral reefs are found in the clear, shallow waters of the **tropics and subtropics**.
- The largest of these coral reef systems, **the Great Barrier Reef in Australia**, is more than 1,500 miles long (2,400 kilometers).

Global Coral Reef Monitoring Network (GCRMN):

- The Global Coral Reef Monitoring Network (GCRMN) was established to support the International Coral Reef Initiative (ICRI)'s **Call to Action and Framework for Action** in 1995.
- The GCRMN **worked through regional networks**, comprising a variety of institutions.

Aim:

- Strengthening the provision of the best available scientific information and communication on the

status and trends of coral reef ecosystems, for their conservation and management.

Mandates:

- Initially the primary task is of reporting on the condition of the world's coral reefs in the context of the development of the ICRI 'Call to Action'.
 - Since then, GCRMN has produced a range of global, regional and thematic reports on coral reef status and trends.
- Tracking and reporting on coral reef status and trends is needed to understand the extent and rate of change, and to inform appropriate responses.
- **Preparation of regional periodic assessments** which draw on monitoring, research and other data.
- Establishment of regional GCRMN committees which are linked to existing Regional Seas mechanisms.
- Provide coral reef data, aggregating from national to regional levels, and then to a global level.