



Involvement of Aquatic Ecosystem in Maintenance of Ecological Balance: An Exclusive Review

Subha Ganguly

AICRP on Post Harvest Technology (ICAR), Department of Fish Processing Technology, Faculty of Fishery Sciences, West Bengal University of Animal and Fishery Sciences, 5, Budherhat Road, Chakgaria, P.O. Panchasayar, Kolkata, (WB) - India

Abstract

Corals are marine animals grouped under the class *Anthozoa* of phylum *Cnidaria* which form colonies resembling polyps of different shapes; however some of them may be identical. They are mainly predominant in the deep sea and ocean beds and secrete calcium carbonate forming hard calcareous structures to form exoskeleton.

Key-Words: Coral, Environmental, Importance

Introduction

Corals are not only the ocean bed dwellers, but also play immense role in the biosphere maintenance and in climatic and environmental ecology. Corals have significant importance for biomedical purpose also, especially in the treatment of serious human illnesses and in surgical interventions as bone implants etc.

Threat to the coral treasure from human activities

Coral reefs are under stress due to human activities and intrusion in the water shores throughout the globe. Mainly agricultural practices including excessive mining, urban runoffs causing water pollution, greenhouse gas emission around the world and increment in temperature at the seas (by 1-2°C) lead to their threatened future due to acidification and unpredictable lowering in the ocean pH causing the mass destruction of the coral reefs. Apart from the mentioned causes, making corals as food source and some tourists activities like scuba diving also is a potential threat to the coral reefs (Wilkinson, 2004; Rinkevich, 2008).

An estimation by the researchers have proved that nearly 10% of the coral population is non-existent in the current world, 60% reefs are at risk due to human infringement, particularly in the Southeast Asia and 80% reef are endangered³. A prediction foretells that by the Year 2030, nearly 50% of the world's coral reefs may be destroyed and extinct.

Use in biomedical research

Coral reefs are medicinally very important in biomedical research as they are put to use for treatment of cancer, AIDS, pain and other anomalies. These are also used in bone grafting for human orthopedic surgeries. Corals are also raised for their ornamental and colorful properties in the aquaria (Ganguly, 2013).

In recent times, the government has promulgated many rules and has passed laws by prohibiting human dwellings and establishments near sea coasts for the restoration of habitat of the corals and protection. This has also raised the concern among the human about the maintenance of coral ecology and reef protection. Also, many schemes and conservation projects have also been initiated in non-tropical countries for growing corals (Ganguly, 2013).

Conclusion

The population of coral reefs in sea beds is currently under stake from intruding unnecessary human activities, which needs to be properly constrained and regulated by imposing strict regulations from the governmental level.

* Corresponding Author

E.mail: ganguly38@gmail.com

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