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Summary

Coral reefs are one of the most productive ecosystems of the world. Reefs provide food and shelter to approximately 1 billion species worldwide. They provide economic benefits to the near shore community. Reef related tourism is the biggest growing sector and sole income option for some tropical countries. For example, Reef tourism earns approximately 1 billion US $ per year to Great Barrier Reef tourism alone. Reefs grow in warm, clear waters of tropical and subtropical areas of the globe. They grow from the building material made up of skeletal deposits of millions of tiny coelenterate organisms – the corals. Their growth and sustainability is dependent on the narrow physico-chemical environmental parameters. And the limitation of its growth is due to presence of the symbiotic algae, zooxanthellae, living inside the cells of coral polyps. Coral losses zooxanthellae in the condition of stress, and later on leads to death if conditions don't change back to normal.

Although coral reefs are present on the earth from many centuries, and records of tabulate, a rugosa corals, are found even from Cambrian period, the recent environmental conditions are giving them a hard time to sustain. They are important ecological, geological and economical ecosystem and need to protect them from rapid degradation is essential. Human activities like increased temperature, nutrients, sedimentation, diseases, pollution, oil spills, and other competitive organisms are causing severe damage to