



How do you see the impacts of COVID19 on both coastal and lagoonal environment/ecosystem especially for developing nations with inadequate infrastructure and poor governance to handle it?

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Significance

- The lagoonal environment has been a sink for many contaminants, and it attempts to filter the anthropogenic stress reaching the marine eco-system.
- The freshwater ecosystem in the recent days are affected by tourism, inland sewage, industrial waste, etc., affecting the biota.
- Since, the ecosystems are interconnected, as that of other cycles migration of pathogens/contaminants is noted.

Positive and negative impacts

Negative

- **Shut-downs of fisheries** effects the economy, studies have reported the **increased health risks** for fishers, processors and communities, small-scale fishers, coastal fishing communities
- Coastal region are **densely populated** and host megacities, most of the industrial developments are along the coasts, a **lot of low-paid work** in the hospitality sector are worst hit.
- **Extreme climatic conditions flood**: "Cyclone Amphan" destroyed the homes and livelihoods: cyclone shelters, community buildings and schools. These centres served to house the immigrant populations, undergoing mandatory quarantine processes after traveling from different states and overseas, during the lockdown periods
- **Wastewater surveillance is lacking** to monitor the contaminated fresh groundwater and the surface water bodies.
- **Livelihood of the coastal community**, dependent on tourism industry was one among the hard hit by the pandemic.

Positive

- **Reduction of anthropogenic stress** due to tourism.
- **Improvement of quality** in surface waters due to the decrease in the industrial discharge

Related studies in the current book

- **Sivakumar et al...** have also revealed that the [marine flora and the reef ecosystem](#) had a significant impact during this pandemic period ([India](#)). The chapter also highlights that the [mangrove habitats can act as alternate refuges](#) for corals during climate threats, particularly increasing seawater temperature, high levels of solar radiation, and ocean acidification.
- **Guadalupe et al....** have also recorded that the COVID-19 has registered an [incipient evidence of trophic recovery](#) in the Tampamachoco lagoonal ([Mexico](#)), environment.
- **Damasa et al.....** has identified the [improvement in water quality](#) and [increase in fish population after the lockdown period](#). This study has provided a sign of positive development in the environmental condition due to the Bayanihan Acts ([Philippine government](#)) to fight COVID-19, [mainly due to reduction in the tourist and anthropogenic activities](#).



Lesson

- Nature requires a refreshing time.