

Impacts of climate change on coastal communities in Peninsular Malaysia

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Abstract

Climate change is changing of weather patterns related to the rise in average surface temperatures over years. It is mainly due natural and anthropogenic events, with emissions excessive amount of CO₂ and other greenhouse gases from fossil fuel combustions and other sources is the main contributor. With various known and unknown effects of this dreadful event, it will affect coastal biodiversity and ecology. In Malaysia, coastal ecosystem plays important role as feeding ground for local and migratory shorebird species, and habitat for various important bioresources. As physical effects of climate change are becoming more stringent, chemical and biological components exist in the area will be eventually altered. For instance, the tropical mangrove, corals and seagrass areas will be diminished. Stability of foodweb of the area could also be disrupted, especially those that are position at lower trophic levels, which relatively more susceptible to changes in the environment. Sediment bound pollutants could be released or bioavailable for bioaccumulation into organisms as physical properties of the environment changed. Scarcity of food items will be major concern in view of biodiversity and conservation, as well as human consumption. There is an urgent need for inter-governmental and international communities to work together collectively to mitigate the ecological effects of climate change.

Keywords: Climate change, coastal ecology, alteration, bioresources, scarcity.

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