

Planning for Environmental and Social Sustainability in Coastal Areas: A Case of Alappad

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Abstract : Coastal ecosystems across the world are facing a lot of challenges due to natural phenomena as well as from uncontrolled human interventions. Here, Alappad, a coastal island situated in Kerala, India is undergoing significant damage and is gradually losing its environmental and social sustainability. The area is blessed with very rare and precious black mineral sand deposits. Sand mining for these minerals started in 1911 and is still continuing. But, unfortunately all the problems that Alappad faces now, have its root on mining of this mineral sand. The land area is continuously diminishing due to sea erosion. The mining has also caused displacement of people and environmental degradation. Marine life also is getting affected by mining on beach and pollution. The inhabitants are fishermen who are largely dependent on the eco-system for a living. So loss of environmental sustainability subsequently affects social sustainability too. Now the damage has reached a point beyond which our actions may not be able to make any impact. This was one of the most affected areas of the 2004 tsunami and the environmental degradation has further increased the vulnerability. So this study focuses on understanding the concerns related to the resource utilization, environment and the indigenous community staying there, and on formulating suitable strategies to restore the sustainability of the area. An extensive study was conducted on site, to find out the physical, social, and economical characteristics of the area. A focus group discussion with the inhabitants shed light on different issues they face in their day-to-day life. The analysis of all these data, led to the formation of a new development vision for the area which focuses on environmental restoration and socio-economic development while allowing controlled exploitation of resources. A participatory approach is formulated which enables these three aspects through community based programs.

Keywords : Community development, Disaster resilience, Ecological restoration, Environmental sustainability, Social-environmental planning, Social Sustainability

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