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Institutions of Sustainability: An Analysis of Mangrove Ecosystem of Kerala, India

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Abstract

Mangroves are salt tolerant plants in saline coastal tropical and subtropical regions of the world. They are rich ecosystems, provide various natural products and perform various environmental functions. In spite of all these benefits, mangrove ecosystems are being destroyed all over the world especially in Asian countries. The major cause of destruction was attributed to intensive shrimp farming and aquaculture practices being taken up in coastal areas. Experiences have proved that the presence of mangrove ecosystems on coastline save lives and property during natural hazards such as cyclones, storm surges and erosion (MSSRF report). This paper tried to analyse mangrove ecosystem from an institutional dimension using Institutions of Sustainability (IoS) frame work which was developed by Hagedorn et al emphasising on different actors, transactions, property rights, governance structures etc. related to mangrove ecosystem. The results indicate that, untapped potential of mangrove ecosystem is not fully understood by the local community and are trying to exploit maximum in spite of visible governance structure. Still there exist loop holes to exploit this ecosystem such as converting existing system first to rice field and in later period covert to real estate areas. People are thinking about the present benefit than the future one since the legal property right rests with private ownership. Hence, property rights have to be viewed in following dimensions: **i)** Over exploitation and pollution of the Mangrove ecosystem **ii)** private land use pattern property right **iii)** property rights in forest or special ecosystem preservation areas in order to protect this precious species from exploitation. The IoS frame work proved to be very useful for analysing the institutions existing in the mangrove ecosystem of Kerala, results can be used to identify the different actors and transactions and can think how they can be efficiently and effectively used in future to make mangrove ecosystem more sustainable by framing suitable environmental policies. This paper in detail discuss about the mangrove ecosystem and how the Institutions of Sustainability frame work can be used to explain it.

Keywords: IoS frame work, Kerala-India , mangrove ecosystem, sustainability