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Transformation of mangrove forest intrinsic values from traditional to contemporary

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Abstract

The transformation from ethno-botany uses of mangrove forests (food, medicine, and utilities) to scientific studies of mangroves, like application of Phyto-technology is looking for prospective evolution. This chapter scrutinises the inherent value of mangrove forests from another perspective, especially ethnoscience, ethnobotany, phytotechnology, and ecological aspects. Apart from rendering ecological value, like coastal safeguard, mangrove forests facilitate administration of timber as well as non-timber yields, food, aesthetic and recreational approval. Furthermore, this research work highlights the perspectives of local publics to espouse and acclimate to their surroundings as a natural means in day-to-day life, which will signify the community, ethos, and belief along with environmental circumstance. For years, conventional knowledge of mangroves has been dissected. Mangroves comprise a unique ecosystem that acts as a boundary between land and the sea; hence, mangroves have immense potential as environmental monitors by indicating the levels of certain heavy elements polluting the mangrove environment. Critical properties for environmental indicators include plants located in the community, enough abundance, and sufficient dominance to affect the habitat adequately. This natural occurrence can also be utilised to evaluate the past or to forecast prospective status of the environment. Information about ecological factors can be beneficial tools to ascertain the quality of water and soil, kinds of toxins, the existence of specific metal or mineral as well as universal climate changes. A difficulty in formulating and implementing ecological metrics is identifying the

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most potent agents that help monitor the required ecosystem. Presently, we use plants to evaluate environmental situations and state in order to have warning signals or act as yardsticks for determining climate trends and variations in ecological aspects. The concurrent use of such indicators with landscape ecology is presently complex yet promising. Landscape ecological aspects emphasise mutual interactions between anthropogenic activity and spatial use. Considering this factor, tight integration with ecology is expected to improve landscape functioning, approaches and create an enhanced systematic understanding of the correlations between plants, humans, patterns, and metrics or indicators. Such applications have two-sided use because anthropogenic impact on the environment might be changed due to landscape state monitoring or evaluation to determine structural characteristics, constituents, and functions of natural or artificial environments comprising community populations, landscape trends, disturbance phenomena, and other aspects. © 2020 Nova Science Publishers, Inc.

Author keywords

Ecological indicators; Ethnobotany; Landscape ecology; Mangrove ; Phytotechnology

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