

A Study of Geological Setting and Species Variation in Mangrove Ecosystem, Case Study Riverine and Estuarine Mangrove in Galle District

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The coastal transition of an ecosystem that occurs in the tropics and subtropical regions can be identified as mangrove ecosystems. The exchange of matter and energy with the adjacent marine and terrestrial ecosystems is carried out in mangrove ecosystems which are open systems. This ecosystem can be identified as a highly productive tropical ecosystem. Both flora and fauna in mangrove environments act in various ways considering their capabilities. The objective of this study is to identify the Geological Setting and Species Variation in the Mangrove Ecosystem especially in two types of mangroves riverine and Estuarine in Galle District. For this study, the data were collected through the review research related to mangrove ecosystems between the years of 1969 and 2020. All reviewed research is based on threats, uses, and many other scientific data about the mangrove environments. There are some specific results that are depicted in the literature. The quality and the performance of mangrove forests can be assets from its composition and structure. There are so many factors that affect the richness of flora and fauna like climate, sediments, quality of water, and richness vary according to the type of mangrove environments. When considering the Sri Lankan condition of mangrove environments literature shows that it has been reduced with time compared to the years of 1986-2003 and the amount of reduction is 50%. This has led to the effect on species and natural biodiversity. Mangroves of the Galle Unawatuna area are at risk, due to the overconsumption of mangroves and their resources by the humans in the area. It leads to the extinction of the flora and fauna. Hence, it is important to pay more attention to protecting the-mangrove environment in Sri Lanka.

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