
Survey on the success of mangrove restoration in Sri Lanka

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Mangrove ecosystems in Sri Lanka are decreasing at an alarming rate, regardless of the awareness on their economic uses and ecological services. Mangrove restoration received a lot of attention in Sri Lanka, particularly after the tsunami in 2004 due to their role in buffering action against tsunami. The main objective of the study was to investigate mangrove restoration success along with major prevailing stress factors and disturbances in Sri Lanka. All the lagoons and estuaries along the coastline of Sri Lanka were examined and information was gathered from visual observations and interviews with relevant parties in each site visited. *Rhizophora* sp. has mainly been used for replanting (72%) and in this study, twenty one (21) restored sites encountered. However, only two sites *i.e.* Kalpitiya and Pambala showed success rates higher than 70% and Mannar showed the third highest success rate of 33%. Post planting care was the major reason for their success. Cattle trampling (100%), browsing (100%), algal accumulation (77%), insect attacks (95%), prolonged inundations or floods (27%), infestation by barnacles (14%) were observed as common reasons for the poor success in the unsuccessful and less successful sites. Starting restoration projects with sound scientific knowledge on the autecology of the planted species and on the factors responsible for failures in previous efforts and regular maintenance of the site being restored at least during the first few years are recommended as solutions to avoid poor success rates.

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