

Assessment of environmental and economic impacts of mangrove deforestation in Vidataltivu lagoon, Sri Lanka

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Mangroves are unique plants that grow in specific topographic locations under special conditions. Most mangrove ecosystems are under threat because of human interventions. Since Sri Lanka is an island, the mangrove extent is high compared to other countries in the world. The study was aimed at assessing the environmental impact of mangrove deforestation, the effect of mangrove destruction on the economic status of local residents and the degree of awareness about mangroves in the nearby community. The researched location in Vidataltivu has optimal conditions for mangrove ecosystems along with fresh waterfronts entering the sea water. The area selected had 600 families and 90% of them were fishermen. A questionnaire survey was conducted using the stratified random sampling technique for 50 fishermen from Vidataltivu. According to the study 93% of the people had awareness on the damages, causes, human interaction, species diversity and the importance of mangroves to the economy of the community. 36% of the fishermen engaged in fishing for their freedom, 24% of them do not have any alternatives. However, the research has shown that the displacement of people from other parts of the Northern Province had increased the population in this area resulting in excessive consumption of mangroves for various needs. The younger generation (40%) of Vidataltivu has the awareness, but the feel of responsibility is absent as 25% people do not bother about the environment. Ninety two percent people have the basic awareness about mangroves but they do not want to take responsibility. The analysis of data shows a lack of passion for prevention of mangrove destruction. Ninety percent of the people stated that the destruction of mangroves cause a problem to the ecosystem and 92% people also acknowledge that mangrove destruction is one of the major reasons for why the quantity of species has gone down. They also believe that if the mangroves were not destroyed, they must have had a better yield in their fishing nets. However, contradictorily and surprisingly, 78% of them do not want to feel that they were responsible, and are still causing the destruction of most of these mangroves. Therefore, in conclusion this research makes several suggestions such as enabling community participation on mangrove protection and restoration, encouraging youngsters in the area as well as identifying leaders and focus groups within the peripheral community to be trained and motivated towards environmental protection together with enforcement of self-awareness. Eventually, this will lead to a protected mangrove ecosystem in Vidataltivu lagoon in future.

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