

CONSERVATION OF MANGROVES VS. DEVELOPMENT OF SHRIMP FARMING IN PAMBALA - CHILAW LAGOON, SRI LANKA

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Modern shrimp farming has caused many environmental and social problems, mainly by destruction of mangroves. This destruction is negative also for the industry itself, as it depends on several ecological services that the mangrove ecosystem provides to maintain production. However, this is rarely appreciated or recognised. This study was concerned with the mangroves in the area of Pambala-Kakkapalliya (07°30' N; 079°49' E) in Sri Lanka. Using an aerial photograph of 1994, a land-use map was constructed in a GIS. In May 1998 pond managers were interviewed about the functioning of their shrimp farms. An up-dated land-use map was constructed on the basis of field observation, and comparison of the two land-use maps showed that shrimp farms had expanded with about 25 ha in four years. Mainly mangrove forest (almost 13 ha) and coconut plantations (about 11 ha) had been reclaimed for shrimp farming. Official documents from the World Conservation Union (1996) suggest a conservation of the undisturbed habitats in Pambala, but the expansion of shrimp farms does not corroborate this conservation account. Foell *et al.* (1999) reported political patronage as the main cause of this adverse situation. The results are also alarming for the aquaculturists as low ration (2.5:1) of remaining mangroves to shrimp pond area suggest that the industry may experience problems with eutrophication, due to reduced waste processing capacity of the surrounding ecosystems as mangrove areas are reclaimed.

References

IUCN, 1996. Conservation Management Plan for ten selected Mangrove Sites in Northwestern Sri Lanka. World Conservation Union, Gland, Switzerland

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