

ECONOMIC ASSESSMENT OF TOTAL ECONOMIC VALUE OF THE
MANGROVE ECOSYSTEM IN REKAWA

By

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Abstract

The Rekawa mangrove ecosystem has been destructively over-exploited by peripheral communities in the recent past. However, the level of extractions from this ecosystem has gone down due to Government and non-Government interventions. As a result, the mangrove vegetation has started natural regeneration. A sound management plan is required at this stage to ensure the sustainability of the ecosystem. There are two management options available for the sustainable management of this ecosystem. In Management Option 1, sustainable extractions from mangrove vegetation are allowed (call conservation), while this vegetation is preserved in the Option 2. However, sustainable lagoon fishery is allowed in both management options.

The concept of 'total economic value' has been adopted to evaluate these two management options. The hypothesis tested in this study was that Management Option 1 would offer the highest total economic value to the ecosystem. Apart from evaluating these management alternatives, the attitude of peripheral communities on the conservation of this ecosystem and the usefulness of different species for different uses was also evaluated. Information on these matters would also be useful in preparing a better management plan.

The results of this study reveal that there was no significant difference between the total economic values of these two management alternatives even though Management Option 1 reported the highest total economic value. As far as the attitude of people to conservation of this ecosystem is concerned, the majority have mentioned that it is a

nationally important task. According to the majority of residents in Rekawa, mangrove species such as Weraniya (*Lumnitzera racemosa*) and Path kadol (*Bruguiera sexangula*) can be considered as the most useful mangrove species in Rekawa. The results of this study can be used to prepare a sound management plan that ensures the sustainability of the ecosystem with higher economic gains.