

Research Article

The total economic valuation based on several resources and livestock contributions to determine the management strategy in Bunaken National Marine Park, North Sulawesi, Indonesia

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ABSTRACT

The estimation of total economic valuation and environmental damages analysis can be used to analyze the tourism impacts. This study aimed to estimate the total economic value and damage, the management design, and analyze the degradation level of coral reef habitat in Bunaken National Park, North Sulawesi, Indonesia. The research was conducted in Bunaken National Park of North Sulawesi, including 5 major islands: Bunaken, Mantehage, Nain, Siladen, and Manado Tua Islands. The water quality measurement was observed on 4 different sites, based on the environmental condition. The variables measured including turbidity, water temperature, salinity, pH, oil and fat. Total economic value and economic value of ecosystem service analysis were also determined. The study showed that the total valuation of several resources was estimated to be Rp. 57.99 trillion, and the low contribution of the livestock sector is Rp. 1.6 billion, with the natural forest resources, indicated the high economic values. The current trend of increasing the growth area prior to the damaged area indicating successful maintainability. The damages are mainly caused by poverty and not strictly regulated policy and need to be reformulated to find the best fit management in Bunaken National Park.

Key words: Damage, economic value, management strategy, Bunaken National Park

