



INTISARI

Wilayah kepesisiran Buti secara ekologi berperan penting dalam mendukung kehidupan masyarakat yang menetap di wilayah tersebut. Namun dinamika yang terjadi di wilayah kepesisiran Buti dapat menjadi faktor pendorong timbulnya permasalahan salah satunya adalah erosi pantai. Fenomena erosi ini terjadi akibat dari dampak dari perkembangan wilayah pantai, aktivitas masyarakat baik secara ekonomi maupun non ekonomi.

Penelitian ini bertujuan (a) mengkaji karakteristik wilayah kepesisiran Buti di Kabupaten Merauke; (b) menganalisis pengaruh erosi pantai terhadap kerusakan lingkungan di wilayah kepesisiran Buti Kabupaten Merauke; dan (c) merumuskan strategi pengendalian kerusakan lingkungan akibat erosi pantai di wilayah kepesisiran Buti Kabupaten Merauke. Penelitian ini menggunakan data primer dan didukung dengan data sekunder. Pengumpulan data secara sampling ditentukan berdasarkan wilayah masing-masing pantai. Responden untuk wawancara dengan menggunakan metode *purposive sampling*. Perubahan garis pantai dianalisis menggunakan *Digital shoreline analysis system* (DSAS). Strategi pengendalian kerusakan lingkungan akibat erosi pantai dianalisis melalui pendekatan matrix dalam siklus ICMP (*Integrated Catchment Management Plan*) berdasarkan aspek permasalahan lingkungan.

Hasil penelitian menunjukkan karakteristik wilayah kepesisiran Buti berdasarkan sembilan zonasi memiliki tipologi pengendapan darat dengan bentuk lahan dataran aluvial dan rataan pasang surut serta relief dominan datar dengan penggunaan lahan yaitu pemukiman, pariwisata, budidaya dan mata pencaharian masyarakat. Berdasarkan uji statistika Uji statistika *Independent Samples T-Test* diperoleh adanya pengaruh erosi pantai terhadap kerusakan lingkungan pada zona LS1, B1, P1, dan P3 dengan masing-masing nilai t_{hitung} sebesar 2,393, 2,287, 2,198 dan 2,234. Nilai *Sig.* yang diperoleh sebesar 0,03, 0,03, 0,04, dan 0,04 lebih kecil dibandingkan *Sig.* 0,05 sehingga dapat dikatakan bahwa terdapat pengaruh yang signifikan antara erosi pantai terhadap kerusakan lingkungan. Strategi pengendalian kerusakan lingkungan akibat erosi pantai di wilayah kepesisiran Buti didasarkan pada tingkat erosi dan kerusakan serta permasalahan di masing-masing zonasi yang disusun berdasarkan isu prioritas aspek strategi pengelolaan yaitu pembangunan infrastruktur ramah lingkungan, pembangunan jalur khusus sebagai area gelanggang kapal ikan, peningkatan pengetahuan dan wawasan mengenai musim penanaman mangrove, pengembangan nilai tradisional masyarakat adat, pemberian alternatif lapangan kerja, sosialisasi dan konsultasi publik antara pemerintah daerah, instansi terkait dan masyarakat adat, pembangunan dan perbaikan struktur pemecah ombak yang sesuai dengan tipologi wilayah kepesisiran.

Keywords: Wilayah Kepesisiran, Erosi Pantai, Kerusakan Lingkungan, Strategi Pengelolaan Lingkungan



ABSTRACT

Buti's coastal area is ecologically significant in maintaining the lives of the communities that reside there in Indonesia. However, the dynamics occurring in Buti's coastal area can work as a driving factor for the creation of problems, one of which is coastal erosion. This erosion issue is caused by both economic and non-economic factors such as coastal area development and community activities.

This research aims to (a) examine the characteristics of the coastal area of Buti in Samkai Village, Merauke Regency; (b) analyze the impact of coastal erosion on environmental damage in the coastal area of Buti, Samkai Village, Merauke Regency; (c) formulate strategies for controlling environmental damage due to coastal erosion in the coastal area of Buti, Samkai Village, Merauke Regency. This research uses primary data and is supported by secondary data. Data collection through sampling is determined based on the area of each beach. Respondents for the interviews were selected using the purposive sampling method. Coastline changes are analyzed using the Digital Shoreline Analysis System (DSAS). The strategy for controlling environmental damage due to coastal erosion is analyzed through a matrix approach in the ICMP (Integrated Catchment Management Plan) cycle based on environmental issue aspects.

The study's findings reveal the characteristics of the Buti coastal area, which is divided into nine zones and has a terrestrial sedimentation typology with alluvial plains and tidal flats, as well as a predominantly flat relief with land use for settlement, tourism, cultivation, and community livelihoods. Based on statistical testing. The independent samples t-test statistical test indicated that coastal erosion had an impact on environmental damage in the LS1, B1, P1, and P3 zones, with t-values of 2.393, 2.287, 2.198, and 2.234. The Sig. values found were 0.03, 0.03, 0.04, and 0.04, all less than Sig. 0.05, showing that coastal erosion has a considerable impact on environmental degradation. The strategy for controlling environmental damage due to coastal erosion in the Buti coastal area is based on the level of erosion and damage as well as the issues in each zonation, which are organized according to priority issues in the management strategy aspects, namely the development of environmentally friendly infrastructure, the construction of special routes as fishery vessel areas, and the enhancement of knowledge and awareness regarding the mangrove planting season.

Keywords: Coastal Regions, Coastal Erosion, Ecological Degradation, Environmental Management Approaches.