Towards Sustainable Waste Governance: An Analysis of Institutional Policy and Environmental Impact in Bantayan Island

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Abstract

This study examined the relationship between institutional arrangements, community participation, tourism pressure, and environmental conditions in addressing waste management challenges in Bantayan Island, Philippines. As a rapidly developing coastal and tourism destination, Bantayan Island faces increasing environmental concerns associated with population growth, tourism expansion, and the capacity of local governance systems to manage waste effectively. Grounded in environmental governance and sustainable development principles, the study assessed how regulatory execution mechanisms, public participation initiatives, and visitor influx dynamics influence environmental outcomes, including shoreline cleanliness, water quality, ecosystem stability, and overall ecological sustainability. A descriptive-correlational research design was employed using a quantitative approach. Data were collected through structured survey questionnaires administered to selected local government personnel, community residents, environmental stakeholders, and tourism-related enterprises. Descriptive statistics were utilized to determine the extent of implementation of institutional and environmental management practices, while inferential statistical techniques were applied to examine the relationships among governance mechanisms, community involvement, tourism activities, and environmental conditions. Findings revealed that institutional arrangements were moderately effective in addressing waste-related concerns. Regulatory implementation and local environmental initiatives were generally evident; however, significant challenges remained in inter-agency coordination, resource allocation, monitoring systems, and enforcement consistency. Community participation emerged as a critical factor in improving environmental outcomes, particularly through household waste segregation, participation in coastal clean-up programs, and community-led environmental campaigns. Conversely, increasing visitor arrivals contributed to higher waste generation rates and exerted additional pressure on existing waste management infrastructure, especially during peak tourism seasons. The study concludes that sustainable environmental management in island communities requires an integrated governance approach that combines strong institutional capacity, active stakeholder participation, and adaptive tourism management strategies. It recommends strengthening policy enforcement, enhancing multi-sectoral collaboration, expanding environmental education programs, and investing in monitoring and waste management infrastructure. The findings provide valuable insights for policymakers, local government units, and environmental managers in developing resilient, inclusive, and sustainable environmental governance systems that promote ecological integrity, community well-being, and long-term sustainable development in coastal tourism destinations.

Keywords: Waste Governance, Institutional Arrangements, Community Engagement, Tourism Pressure, Environmental Sustainability.