Characterization of Coastal Solid Waste: Basis for the Development of Waste Collector

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Abstract : The study wants to establish the data on the characteristics of coastal solid waste in main Island of Masbate as a model for technology interventions. The research utilized the Google Maps to measure the coastal length and Fishbowl Method for area identification. The solid wastes gathered were classified as residual, non-biodegradable, recyclable wastes, and special wastes, based on the waste analysis and characterization manual of Philippine Environmental Governance Project. The wastes were evaluated by weight in kg., dimension in cm., and characteristics as floating or non-floating. Based on the dimension of coastal solid waste, the biodegradable, recyclable, residual and special waste have the average of 40.95 cm., 16.25 cm., 31.37 cm., and 0.725cm. respectively. The waste in the coastal areas is dominated by biodegradable, followed by residual, then recyclable and special wastes with the data of 0.566 kg/m, 0.533 kg/m, 0.114 kg/m and .0007 kg/m respectively. The 97.15% of solid wastes collected is characterized as "floating", where in the sources are the nearest rivers and waterways and/or the nearest populated areas adjacent to the island. This accumulation of solid wastes can be minimized and controlled by utilizing a floating equipment.

Keywords : solid waste, coastal waste, waste characterization, waste collector

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