

Coastal Management: Case Study Mud-Crab, *Scylla serrata* and Mangrove Resources Management in Kotania Bay, Seram Barat, Central Maluku–Indonesia

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The Studies on management of the mud-crab and mangrove resources, *Scylla serrata* were carried out in August, 1998 and May until July, 1999. The change of the mangrove area was analyzed using multi-temporal data of Landsat-5 TM satellite and field surveys. The study on management areas were divided into three regions. The utilization of mangrove trees in the region I has not reached its optimum level yet (under sustain-yield). In the region II, the exploitation of crabs can be extended but limited only for the crabs with carapace length more than 15 cm, on the other hand the mangrove trees have been over-exploited. In the region III, both mangrove trees and crabs have heavily been over-exploited. The strategic plan management in region I used Strength-Opportunity (SO) and Strength-Threat (ST) strategies. Utilization strategy of mangrove trees should be done as the present condition when the study was conducted or the mangrove should not be cut at all to maintain as a reservation. Three strategies in region II are Strength-Threat (ST), Strength-Opportunity (SO) and Weakness-Opportunity (WO) strategies. Utilization of mangrove trees can be extended, but limited only for trees more than 30 cm diameter and mangrove crabs are limited for the carapace length more than 15 cm. In the region III, only Weakness-Opportunity (WO) can be used. The stress of this strategy are monitoring, prohibition of both resources and to activate a traditional rule ('SASI'). It is a prohibition of taking certain marine resources in the certain times. The activities or programs of mangrove resources management are discussed in this papers.