ABSTRACT

PIÑOSA, DENNIS SIPOLE. University of the Philippines Visayas, March 2008. Comparative Net Benefits of Mangrove Land Use Options (Aquaculture versus Mangrove Forest Stand): A case in Guimaras Island, Philippines.

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This study compares the net benefits that can be derived from mangrove land use options - aquaculture vs mangrove forest stand in the five municipalities in Guimaras namely, San Lorenzo, Jordan, Buenavista, Nueva Valencia and Sibunag. Secondary data from the land classification maps, DENR statistics, research surveys, and records from the local government units of the five municipalities were the main sources of data and information.

Results showed that Guimaras Island had a total of 1,320.3 ha mangrove areas converted to aquaculture, consisted of 641.8 ha alienable and disposable land and 678.5 ha timberland areas. From the five municipalities, Sibunag had the largest mangrove area converted to aquaculture use amounting to 556 ha, followed by Nueva Valencia (537 ha), Jordan (100 ha), San Lorenzo (91.5 ha) and Buenavista (35.8 ha). In comparing the economic value of mangrove forest and aquaculture, calculations showed that mangrove forest can generate net income value which can be 89.18% higher compared to aquaculture. From the 1,320.3 ha total mangrove area converted, a total equivalent lost could reach 1.3 billion pesos (PhP 1,302,903,305) while only 156 million pesos of economic benefits (PhP156,685,996) can be derived from aquaculture. In totality, Guimaras island had a total of 1.1 billion pesos (PhP1,146,486,650) economic losses per year due to mangrove conversion.