

Varatthaya Tawornwachiratum 2011: Evaluation of Potential, Problems and Solution on Application of Geographic Information Systems for Coastal Management: A Case Study of Si Racha District, Chon Buri Province. Master of Science (Fishery Management), Major Field: Fishery Management, Department of Fishery Management. Thesis Advisor: Assistant Professor Methee Kaewnern, Ph.D. 412 pages.

This study focuses on potential, problems and solutions of the integration of geographic information systems (GIS) for coastal management in Si Racha district, Chon Buri province. Data obtained in 2009 from results of interviews using structured questionnaire with a total of 40 organizations that involved coastal management in Si Racha district. Overview results showed that all organizations have low potentials considering on geographic information systems components. However when considered by component, it was found that most of them had moderate potential on hardware and data, and high potential on software. They have no potentials on people and methodology. Moreover, there was very less in integration of GIS for coastal management. Because 92.5 % of sample employed staffs lacked of understanding on the application of GIS and 77.5% of sample had limited support in GIS application. The results of study on organizations' opinions indicated that whenever using of GIS application and budget are supported, they would have potential and capability to apply GIS for coastal management. The results revealed that development on people in their organization to having and understanding on GIS, using GIS as a tool for spatial coastal management, and establishment of specific center in this area on gathering and screening data for integrated coastal management and planning would enhance coastal management efficiency.

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Thesis Advisor's signature