THE USE OF SPATIAL MULTI CRITERIA ANALYSIS TO SUPPORT SUSTAINABLE TOURISM PLANNING
A Case Study in Coastal Area of Bantul Regency Yogyakarta

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2006
ABSTRACT

Parangtritis Village is one of the smallest administrative boundary in the Bantul Regency that has coast line, in which tourism is the main economic sector after farming and agriculture. The limitations on space and the vulnerable ecosystem are the first to be considered in the development of tourism. The main problems are the conflict of land space utilization among stakeholders, government and community. Therefore Spatial Multi Criteria Analysis to support sustainable tourism planning is proposed. A GIS model has already been constructed with available data. Supporting decision-making in a spatial context is implicit in the use of GIS but the analytical capability of the GIS has to be enhanced to solve the problems, where Multi Criteria Analysis comes in to play.

The objectives of this research are to access land suitability analysis purposes for tourism, paddy field, identify conflict area and to determine the best alternative land use by Multi Criteria Analysis method. Eleven land use policy alternatives were designed and evaluated to minimize conflict and to find the best alternative land use based on the production orientation and environmental conservation.

The results of this research are area suitable for tourism, about 36.33% were of highly suitable (S1), 32.88% of suitable (S2), 24.77% of marginally suitable (S3) and 6.00% of not suitable (N). The area suitable for paddy field which about 33.63% of suitable (S2), 52.47% of marginally suitable (S3), and 13.89% of not suitable (N). The conflict of interest based on land suitability are between the suitable S2 paddy field and suitable S1 tourism of about 1.42%, S2 paddy field and suitable S2 tourism of about 26.58%. The conflicts based on existing land use are the development of hotel/infrastructure in the area of sand dune, the planting vegetation in sand dune to protect paddy field. Some assessment criteria (sand dune conservation, economic development and sustainable development) were defined and submitted to determine the best alternative. The alternative 4b (sustainable development emphases on sand dune conservation) has been found to be the best alternative. The second best was alternative 3C (economic development) and the third best was alternative 5C (sustainable development emphases on tourism infrastructure development).
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A Thesis submitted for the degree of Master of Science
of Bogor Agricultural University

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY
FOR NATURAL RESOURCES MANAGEMENT
GRADUATE SCHOOL
BOGOR AGRICULTURAL UNIVERSITY
2006
Research Title : The Use of Spatial Multi Criteria Analysis to Support Sustainable Tourism Planning (A Case Study in Coastal Area of Bantul Regency Yogyakarta).

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STATEMENT

Hereby I, Jaka Suryanta, do declare that this thesis entitled “The Use of Spatial Multi Criteria Analysis to Support Sustainable Tourism Planning (A Case Study in Coastal of Bantul Regency Yogyakarta)” is my own work and has not been submitted in any form for another degree or diploma programs (course) to any University or other institution. The content of the thesis has been examined by the advising committee and the external examiner.

Bogor, December 2006

Jaka Suryanta
ACKNOWLEDGEMENTS

First of all, I would like to express my gratitude to God, who has blessing and favor me success in my studies. I pay my heartfelt love and tribute to my beloved wife, Wahyu Tjahjani and to our dear children’s Regina and Eriko for their patient and support.

I would like to express my gratitude and sincerely appreciation to the following, that contributed to my studies and success in one way or the other:

1. The Bakosurtanal Institution especially Center for Marine Resources Survey and Mapping for granting me fellowship to study in MIT Biotrop IPB Bogor Indonesia;
2. Dr. Tania June my research supervisors for all their valuable guidance and useful advise during my MSc proposal preparation and MSc thesis writing;
3. Dr. Dewayani Sutrisno, MAppSc, my research coo-supervisors for all their valuable guidance and useful advice during my MSc proposal preparation and MSc thesis writing;
4. Dr. Gatot Haryo Pramono as the external examiner of this thesis and for his positive ideas and inputs.
5. Drs. Suwahyuono, MSc, my student advisor for all his support and encouragement;
6. Special thanks go to all the members of lecturers and staff in MIT Biotrop IPB Bogor;
7. Dr. Antonius Bambang Wijanarto for his guidance and technical commands during thesis writing; and
8. Finally, I thank my fellow MSc in IT for NRM students-2003 for the wonderful student working relations we shared together. I will always appreciate all the memories and happiness we shared together in class, computer cluster and cafeteria.
CURRICULUM VITAE

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