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A Critical Assessment of Watershed Management in Indonesia

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2005

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A thesis presented in partial
fulfillment of the requirements for the degree of
Master of Applied Science
in
Natural Resource Management
at Massey University, Palmerston North,
New Zealand.

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2005

ABSTRACT

To address many environmental problems in Indonesia, the Ministry of Forestry created a planning system and developed guidelines to manage the watersheds in the country. Today, the environmental problems are still continuing, calling for improvement of watershed management. This study reviewed international guidelines, selected case studies of other countries' experiences, and the watershed management guidelines in Indonesia, then compared and contrasted the result of these reviews and made recommendations in order to improve watershed management and planning in Indonesia. The international guidelines published by ASEAN, FAO, ESCAP, UNEP, and ADB offered several frameworks of watershed management from various perspectives. The comparisons between these frameworks/perspectives and the Indonesian guidelines gave an opportunity to make an assessment and opened up the possibility of improving the existing framework and practice in Indonesia. The international guidelines provided some input on the importance of monitoring and evaluation in the management process, emphasised the need for adequate data for planning, and advocated an iterative process in planning. The assessment of the Indonesian guidelines and practice of water treatment management and planning: (1) proved ineffective, as demonstrated by the inconsistency and discontinuity of development, (2) was based on poor quantity and quality of data, (3) provided inadequate legal background, and (4) was implemented by an inadequate infrastructure. These problems created gaps that can be filled with recommended best practices learned from other developing countries (the Philippines, Malaysia, Thailand, and India). These recommendations include: (1) Establishment of an adequate national information system of watersheds and their management, (2) Improvement of the planning system, to be consistent with the planning hierarchy and to be iterative, (3) Promotion of collaboration and partnerships by the government, (4) Strengthening of the legal system as the foundation of effective watershed management and planning, and (5) Encouragement and strengthening of public participation in watershed management and planning.

ACKNOWLEDGEMENTS

I would like to express my gratitude to my chief supervisor, Dr. Ian Valentine, for his continual guidance, words of wisdom, help and encouragement throughout this research. I also would like to thank my co-supervisor, Dr. John D. Holland, for his support and counsel, and for being a good friend of mine during my study in the last two years.

Many contact people from my home country contributed data and information for this research. I wish to acknowledge Dr.Ir. Syaiful Rachman, MSc., Dr.Ir. Syaiful Anwar, MSc., Ir. Saleh Suaidy, Ir. Sigit Widyasmoro, MP, Ir. Oliva Suko, and Drs. C. Kukuh Sutoto who provided me with a variety of material from their agencies. Special thanks for Ir. C. Nugroho S. Priyono and all of my work-mates in WMTS Surakarta, who assisted me in data collection and always sent such long-distance support. I also grateful to Mr. Mike Tuohy, Endang Savitri, Tiara Parahita and Kanya Pandya who brought the research material from Indonesia to Palmerston North.

I acknowledge financial support received from the New Zealand Ministry of Foreign Affairs and Trade (MFAT) through the NZAID Study Awards Scholarship. For the support during my study, I would like to thank Sylvia Hooker, Sue Flynn, and the team of the International Student's Office (ISO) at Massey University. My thanks extended to Denise Stewart, Rae Gendall and Bruce White who has given technical assistance during the research and writing process. I also wish to extend my sincere thanks to Paul and Dianne Stock, Ruth and Robert Thompson, Togar Simatupang and Ellen Fowles for their constructive reading, valuable feedback and lovely friendship. I am grateful to my big family at Grace City Church, Palmerston North. I should also thank my Indonesian friends here in New Zealand, for their help during my stay in this beautiful country.

My heartfelt thanks to my parents, who made great sacrifices in supporting my education, and for my family who always remind me that God will never fail. My special thanks must go to my husband, Tjahyo Budhi Setyawan, and my one and only son, Tegar Setyo Kristiatmojo for being my cheerleaders during my struggle in pursuing this study. And all in all, thanks to the Almighty God, for His goodness and faithfulness that endures forever. Praise the Lord!

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