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**Sustainable Land Use on the East Coast -
A case study of land use change in the
Upper-Hikuwai Catchment**

A thesis presented in partial fulfilment of the requirements

for the degree

of Master of Philosophy in Development Studies at Massey University

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1996

Abstract

This thesis explores the principles of sustainability and applies them to the issue of land use on severely erosion-prone hill country in the East Coast region of the North Island of New Zealand. Sustainability is found to require a biophysical bottom line, implying a need for planning to establish threshold levels of protection for particular classes of land. The study uses a locally developed system of land classification which takes into account the physical causes and remedies of soil erosion as the basis for such a plan. This sets the biophysical bottom line to which land use and management must seek to conform, but above which, remain flexible, according to other societal objectives such as equity or efficiency. The history of land use change, and the policy response to the issue is reviewed for the region, and compared with this plan. The plan is then applied to one catchment subject to severe soil erosion, and where changes in land use are in process and the changes assessed and compared with the attitudes of the landowners and the context in which they have made their decisions. It was found that considerable progress had been made recently towards greater compliance with this plan and toward a pattern of land use more diverse and more consistent with the varying physical capacity of the area. This has been particularly facilitated by assistance from central and local government between 1988 and 1993. The study concludes, however, by highlighting the degree of favour shown to forestry interests over those of farming interests in current method of public support for erosion control. The study anticipates the eventual blanket afforestation of the catchment under this scheme.

Acknowledgments

No research is ever a product of the labours of one person. It rests on the cooperation, support and encouragement of a host of people.

My gratitude goes firstly to the people of Tokomaru Bay and the Upper-Hikurangi Catchment who so willingly shared their experiences and choices with me. Their generosity and interest were perhaps the most important element and the highlight of the study.

Essential too, was the immense support received from Bob Miller, Trevor Freeman, Paul Williams and staff of the Conservation Division of the Gisborne District Council. Their assistance, advice and generous supply of information and planning documents provided the foundation to my work.

I owe much to my Heads of Department, Croz Walsh, Brian Ponter and John Overton who have all fostered the development of a vibrant and enquiring environment at the Institute of Development Studies. Each have provided much needed direction at crucial stages of this work.

To Anton Meister who supervised this project from its inception, belongs the credit for wading through ponderous drafts and distilling from them the crux of an argument.

To my flatmates in Palmerston North and Wellington, to all the past and present staff and students of Development Studies, and to my colleagues at Caritas Aotearoa New Zealand, who all gave freely and generously the moral support and caffeine needed to see this project to its conclusion, I offer my sincerest gratitude.

Finally and most importantly to my family who, throughout their own trials of recent years, have been unceasing in their steady support for my efforts and who, as always, have bolstered my efforts with regular parcels of greatly welcomed Gisborne fruit and vegetables.

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