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

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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.

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