

Rural Land Use and Land Tenure: observations and implications for Māori

Land use decisions produce a wide range of impacts and effects. These may be environmentally positive – the classic example is forestry’s contribution to carbon sequestration. More typically, however, land-use impacts are viewed as negative. Various agricultural uses are often blamed for their role in non-point source water pollution, greenhouse gas emissions, biodiversity loss and deteriorating ecosystem health.

But rural land-use decisions also contribute to economic outcomes such as employment and rural income distribution and contribute to aesthetic and cultural values.

In this study, the impact of how land tenure, land quality, and location influence land-use decisions was assessed. While the study was undertaken to understand how New Zealand’s greenhouse gas emission profile is impacted by farmer’s land-use decisions, there are some interesting observations around Māori land tenure, and land development opportunities.

The land-use model looked at four land-use options:

- Dairy farming
- Sheep and beef farming
- Plantation forestry
- Scrub

The factors considered in relation to the potential land use choices were land quality, location relative to population centres and commercial ports, and type of land tenure.



Data from the study confirmed prior expectations regarding the effect of land quality, location and tenure on land-use decisions: in general, intensive cultivation is more attractive in close proximity to markets, and on high-quality land that is not subject to Māori land tenure.

www.climatecloud.co.nz

The challenges of Māori Land Tenure

The historical impact of the Treaty of Waitangi in 1940 on land tenure persists through to the present. The Te Ture Whenua Māori Act 1993 (also called the Māori Land Act 1993) aims to ensure the retention of Māori owned land within the Māori community. Meeting this objective has required imposing legal restrictions and protections that do not apply to general land.

Today about 6% of New Zealand's total land area is classified as Māori land, and almost all of this is owned by the descendants of the original owners. This land tends to have an increasing number of multiple owners as each generation inherits the land from the previous generation. Multiple ownership carries with it a burden of high administration costs and diminishing economic returns as the number of owners per land parcel increases.

More than half of all Māori freehold land is controlled by incorporations or trusts, while a significant proportion of the land has no formal administration structure. Most owners don't live on their land or earn their livelihoods from it. Decision making is difficult and typically leads to a conservative, risk-averse attitude to land development. By enlarge, Māori freehold land is poor quality, with 80 percent classified as non-arable and is remote from markets.

The historical confiscation of Māori land focused on high-quality land; as a consequence, a large fraction of land under Māori freehold tenure today is of poor quality. Around 80 percent of it is classified as non-arable and 30 percent is landlocked (and far from urban centres), reducing the options available for its use. Māori freehold land enterprises tend to perform at a level well below comparable general land enterprises, and the difficulties faced by Māori freehold landowners in administering their land interests have been recognised by the government as an impediment to the development of the land.

Various programmes and mechanisms to assist Māori landowners in overcoming barriers to development are proposed from time to time (e.g. Ministry of Agriculture and Forestry, 2011). The degree to which the tenure system contributes to the underdevelopment of Māori freehold land is an important question – it is clear that some of the underdevelopment is simply due to poor land quality and remoteness.

Some environmental policies that affect land use could unintentionally penalise Māori owners because the current development of their land does not necessarily reflect its potential. It has been recognised, for example, that the deforestation rules associated with the ETS will further constrain the development options of large areas of Māori freehold land. The existing nutrient caps in the Lake Taupo and Lake Rotorua regions also significantly impact owners of Māori freehold land.

The Observations

Māori land was distinguished from general private land because of differences in the ability to develop the land and maximise profit. However, the possibility that profit maximisation is not the main factor for Māori land-use decisions, was acknowledged.

The model that was developed appeared to provide an effective methodology for accounting for land quality, location and land tenure on multiple rural land-use.

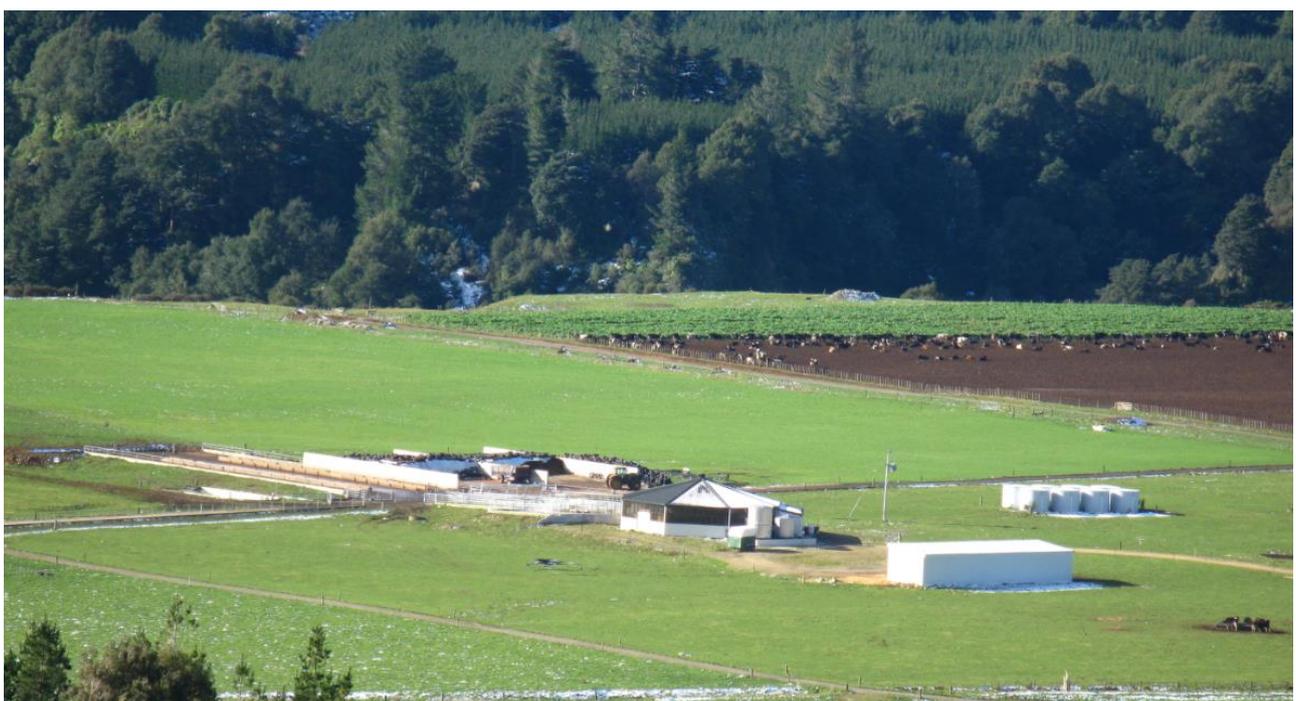
Usefully, this study also contributes to discussions around the potential development of Māori freehold land, and its results support anecdotal evidence for the importance of tenure in determining land-use decisions.

It provides evidence that Māori freehold land is underdeveloped relative to general land, even after taking into account differences in land quality and location, Table 1. Applying the factors of land quality, productivity and location, the study indicated 49,232 ha of Maori freehold land offered the potential for dairy farming. By contrast, the data indicated that only 17,200 ha is identified as currently being used for dairy. Similarly, the 190,400 ha of land used for sheep or beef farming represented only 60% of the potential land area that met the criteria for this land-use. In contrast, around 40% of land covered in scrub was suited to more productive and profitable land-use activity such as forestry, sheep or beef or even dairy.

Table 1. Aggregate land-use outcomes on Māori freehold land (2010)

Land use	Actual area (ha)	Apparent potential area (ha)	Difference (%) between potential and actual area
Dairy	17,200	49,232	186
Sheep or beef	190,400	323,867	70
Forestry	113,175	98,258	-13
Scrub	389,275	238,694	-39

The results in Table 1 suggest that the current land-tenure system reduces the aggregate shares of dairying and sheep and beef farming accruing to Māori. If all Māori freehold land were general land, additional land area could be expected to be in dairy use.



Using this approach, it is also possible to calculate the environmental implications of Māori land tenure. In this example, rough calculations suggest that it leads to an approximate reduction of over 1 million tonnes of carbon dioxide equivalent emissions per year within the sample land area. At a carbon price of NZ\$25 per tonne, the estimated reduction in emissions could save New Zealand around \$27 million in emission liabilities annually. However, that benefit accrues to New Zealand as a nation, while the economic and social implications of less productive land-use has more direct implications for the owners of Māori land.

These findings are relevant for policy-makers because they could have important equity implications.

Further information

The full technical report; Tímár, L. (2011) Rural Land Use and Land Tenure in New Zealand. Motu Working Paper 11-13. Motu Economic and Public Policy Research is available at www.motu.org.nz/publications/detail/rural_land_use_and_land_tenure_in_new_zealand

The following articles provide further information around Māori land tenure:

Māori Landownership and Land Management in New Zealand. Kingi T. 2008. In *Making Land Work, Volume 2: Case Studies on Customary Land and Development in the Pacific*, Canberra: Australian Agency for International Developments, pp 129-51. http://aid.dfat.gov.au/Publications/Documents/MLW_VolumeTwo_Bookmarked.pdf

Māori Agribusiness in New Zealand: A Study of the Māori Freehold Land Resource. Ministry of Agriculture and Forestry. March 2011., Wellington. Available at <http://www.mpi.govt.nz/news-resources/publications>

Maori Land Administration: Client Service Performance of the Maori Land Court Unit and the Maori Trustee, Report of the Controller and Auditor-General, Audit Office. 2004. Wellington.

Disclaimer June 2014

