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Smallholdings in New Zealand

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1. Introduction and Background

1.1 MAF's Study of New Zealand Smallholdings

In March of this year the Ministry of Agriculture and Forestry (MAF) released a commissioned report on New Zealand smallholdings. The report, entitled 'A Study of Smallholdings and their Owners', was prepared jointly by AgriQuality New Zealand, Lincoln University and MAF, and outlines the findings of a study undertaken in 2003/04.

Together, MAF and Statistics New Zealand run the Agricultural Statistics Programme, which produces New Zealand's Official Statistics on agriculture and forestry. However, this programme considers mainly farms identified as economically significant (i.e. with incomes over $40,000 pa), and very few smallholdings are included within its annual surveys. Further, little is known of the biosecurity and land use characteristics of New Zealand smallholdings. Hence, MAF commissioned the study in order to enhance our understanding of smallholdings (defined within the study as properties between 0.4 ha and 30 ha in area); their numbers, total areas involved, their land use and agricultural production, and levels of biosecurity awareness among those who operate them.

The study provided many insights into smallholdings and those who own or operate them, and should be of interest to policy makers and managers within the agriculture sector and related industries. However, in addition to providing new insights into smallholdings, MAF sees the study as a first step towards eventual Geospatial referencing of all farms. MAF's intent is that eventually most or all farms are recorded on a land-based register, thus providing a basis for responses to biosecurity incursions and other adverse events requiring civil defence and emergency capability, as well as supporting relevant agricultural, environmental and socio-economic analyses.

1.2 Myths and Realities of Smallholders

In New Zealand there is a prevalent stereotype about smallholders (particularly lifestyle block owners). A common view is that that they are unproductive, have low on-farm incomes, run a horse or two and a few sheep as lawn mowers, do not behave responsibly in their management of animal health, weeds and pests, sell their blocks quickly because of dissatisfaction with the work and travel involved, and are inexperienced in farm work. They are also thought of as environmentally conscious. However, the study contradicts some of these myths, while reinforcing others, such as smallholders' commitment to tree planting.

In recent years, numbers of lifestyle blocks and other smallholdings have increased dramatically as land around major urban centres has been subdivided and sold as lifestyle blocks. In response, several district and city councils have attempted to constrain the 'loss' of farmland through plans under the Resource Management Act 1991.

However, only a modest amount of research has been conducted on New Zealand smallholdings and those who live on them. In particular, until this study our knowledge of smallfarmers and lifestylers has been constrained by a lack of national survey data. In 1992 MAF undertook a study of the productivity of rural subdivisions in the western Bay of Plenty, which found that overall productivity actually increased on the land that had been subdivided there. That study is currently being repeated by the Western Bay of Plenty District Council. In recent years Lincoln University undertook a study of lifestylers around Christchurch. However, as far as we are aware, no national-level studies have been undertaken at all.

1.3 Objectives of the Study

The objectives of MAF's study were to:

i. Determine the numbers of lifestyle blocks and other smallholdings in New Zealand, the total land area involved, the rate of creation of new lifestyle blocks, turnover rates, and the lengths of time smallholders typically remain on their properties

ii. Characterise agricultural production and land use on smallholdings, and investigate owners' understanding of biosecurity and environmental issues

iii. Appraise the coverage and accuracy of the main national land-based registers that potentially could be used to develop a statistical register for lifestyle blocks and other smallholdings.

The study began with an analysis of smallholding information resident on the main property registers (the Land Information Core Record System, the Valuation Roll and AgriBase). The researchers then conducted visits to individual properties in order to assess the completeness and accuracy of smallholding information resident on. Finally, they implemented a postal survey on a random sample of 4,000 smallholders (300 or more in each Region) in order to estimate their land use and agricultural production, and assess present levels of biosecurity awareness.

2. Analysis Of The Main Property Registers

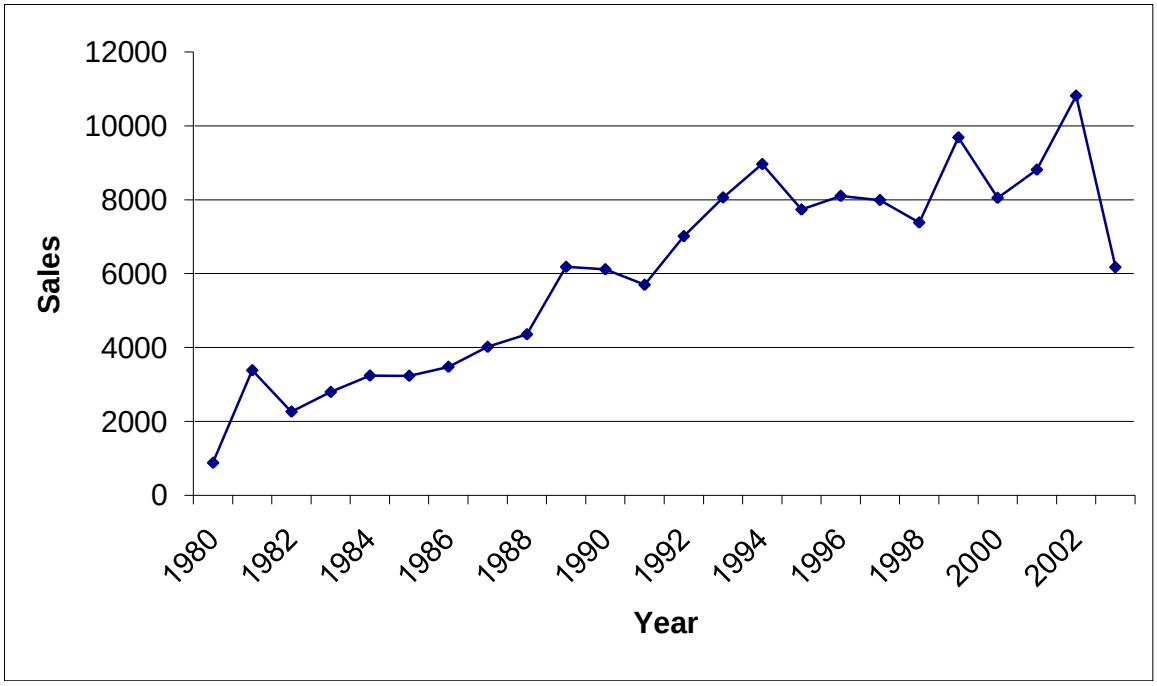
2.1 Information from the Valuation Roll

In 2004 the Valuation Roll (a property register managed by Quotable Value New Zealand) held records on some 139,868 properties classified (according to Quotable Values definitions) as lifestyle blocks, totalling over 753,020 ha, or about 5% of New Zealand's total agricultural land. The mean block size was 5.53 ha.

Approximately 6,800 new lifestyle blocks are registered on the Valuation Roll annually, and over 37,600 ha are converted to lifestyle blocks annually. This area is roughly equivalent to 250 dairy farms, 240 deer farms or 230 beef farms. The study did not attempt to identify the prior use of the land now in smallholdings, but it is of interest that the Agricultural Statistics programme shows that New Zealand's aggregate production continues to increase, despite the indicated move to lifestyle blocks.

Analysis of sales data showed that the annual number of sales of lifestyle blocks has been rising steadily since 1980 (see Figure 1), peaking at 10,814 sales in 2002.

Figure 1: Annual Sales of Lifestyle Blocks as Recorded on the Valuation Roll

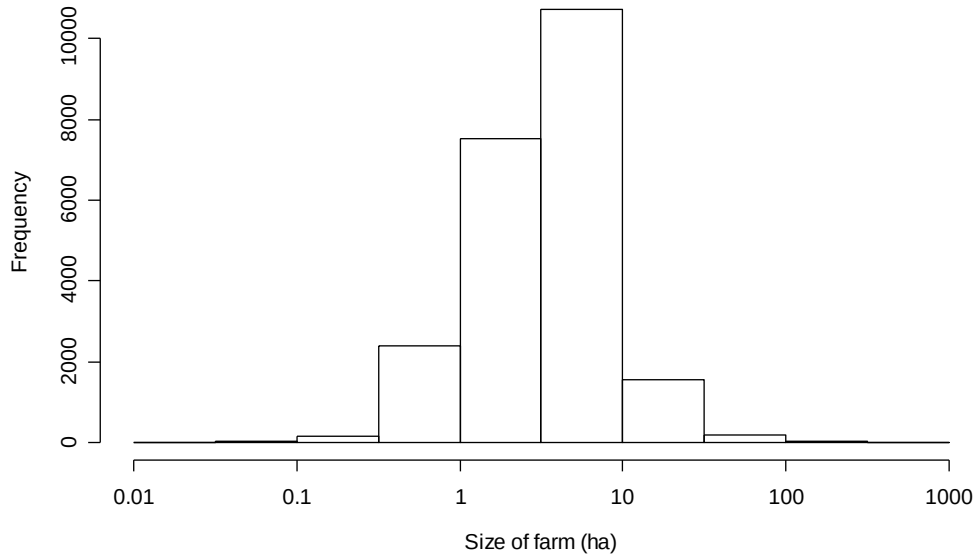


Analysis of time between sales (where multiple sales dates were recorded for individual lifestyle blocks since 1980) showed that the mean length of time between sales for lifestyle blocks with dwellings was 4.92 years, while the mean length of time between sales for lifestyle blocks without dwellings was 3.69 years.

2.2 Information from AgriBase

For comparison, in August 2004 some 22,687 farms, classified with a predominant farm type 'LIF' (lifestyle farming), were recorded in AgriBase (AgriBase is a land-based register of farms managed by AgriQuality New Zealand that has excellent coverage of livestock farms, but less complete coverage of some other farm types). The mean size was 4.97 ha (see Figure 2). Some 95 percent of these farms were between 0.44 and 19 ha in area. In all, AgriBase held records on some 60,213 properties, either categorised as LIF or up to 35 ha in area, involving a total of 539,506 ha of land. Figure 2 below gives the size distribution of LIF farms recorded in AgriBase.

Figure 2: Distribution of LIF Farm Sizes as Recorded in AgriBase



3. Findings of the Questionnaire Survey

3.1 Block Size and Ownership Tenure

Respondents self-identified from five distinct types provided within the questionnaire (lifestyler, hobby farmer, small farmer, farmer, horticulturalist/grower) that engage in different levels of agricultural production. Thus, when comparing information from the Valuation Roll and AgriBase, it must be remembered that each uses somewhat different definitions and classifications, and that the survey is based on self-identification on the part of respondents.

The average size of the smallholdings included within the survey was 8.50 ha. Smallholdings varied in size according to type. Lifestyle blocks (averaging 5.20 ha, slightly larger than the average lifestyle block as recorded on the Valuation Roll) were of roughly similar size to hobby farms (averaging 6.31 ha). However, the lifestyle blocks and hobby farms were of smaller area than the small farms and the horticulturalist/grower blocks.

The average length of time for which the smallholders had lived on their blocks was just over 12 years. Those respondents who considered themselves farmers (averaging approximately 20 years) had lived on their properties significantly longer than those considering themselves either lifestylers, hobby farmers and smallfarmers. There was no meaningful difference in length of stay between the lifestyler, hobby farmer, smallfarmer and horticulturalist/grower. Over 70% of owners had previous farming experience. However, proportionately fewer lifestylers had farming experience than had other smallholders.

3.2 Land Use and Production

Table 1 below gives the animal land uses, stock numbers and production value for the smallholdings included within the survey.

Table 1: Land Use and Production Value – Livestock

Livestock	Stock Numbers		Land Area (ha)		Gross Income ($)		Production Value ($)		Organic
	n	Avg.	n	Avg.	n	Avg.	n	Avg.	n
Dairy	35	45	33	9.09	4	15,033	7	5,656	10
Grazing - beef	274	32	225	6.67	10	6,289	56	4,099	11
Grazing - sheep	353	138	191	5.25	11	3,543	59	909	0
Tussock or danthonia			256	6.65	0				0
Calf rearing	49	171	164	5.81	0	2,613	72	1,952	1
Deer	54	334	70	5.80	1	21,910	43	850	22
Goat	40	245	23	6.44	22	4,070	16	5,091	2
Horses	57	112	41	2.95	2	4,576	13	635	2
Poultry	43	1,070	10	4.53	2	12,740	13	927	1
Pigs	15	208	6	8.00	1	425	3	300	4

Table 1 shows that grazing was the main livestock land use, and beef and sheep grazing was undertaken on many of the smallholdings, beef grazing having a higher average production value than sheep grazing. Deer and goat holdings had the largest stock numbers, while deer and dairy holdings had the highest average gross incomes.

Table 2 gives the plant land uses and value of production for the surveyed smallholdings.

Table 2: Land Use and Production Value – Plants

Plants	Land Area (ha)		Gross Income ($)		Production Value ($)		Organic
	n	Avg.	n	Avg.	n	Avg.	n
Crops (grain, seed and fodder)	19	3.37	8	5,173	3	4,156	0
Flowers – open air	15	2.43	11	2,693	1	150	0
Glasshouse/greenhouse/ tunnelhouse	11	0.64	7	11,613	2	22,571	
Market garden/vegetables	14	5.76	8	91,072	4	403	0
Fruit (pip, berry, kiwifruit, citrus, etc.)	63	4.65	45	198,082	12	5,900	1
Vineyards	42	6.16	40	158,028	3	472	0
Nursery	16	4.75	11	752,413	0		1
Tree crops	4	7.53	2	1,600	2	5,000	0
Other plants	14	4.86	2	4,500	14	338	12

Table 2 shows that fruit growing and vineyards were the main plant land use. Vineyards and fruit growing had high average gross incomes, though by far the highest average gross income derived from nursery crops. Table 3 gives the land uses and value of production for other land uses.

Table 3: Land Use and Production Value – Other Land Uses

Activity	Land Area (ha)		Gross Income ($)		Organic
Tourism	3	5.33	1	60,000	0
Mature native bush	5	4.20	0		3
Native scrub and regenerating native bush	12	4.08	0		0
Business activity, not farming, horticulture or tourism	1	5.00	1	20,000	0
All other land	8	3.25	3	5,900	0

Table 3 suggests that tourism is rare among the smallholding sector, whereas a common perception is that many lifestylers earn additional income through farmstays.

3.3 Reasons for Owning Smallholdings

Smallholders tended to attach roughly equal weight to land use and lifestyle as reasons for owning smallholdings. Smallholders identified overwhelmingly with the rural environment, rather than urban. In general, smallholders were satisfied with their smallholding lifestyle, although some 16% were not satisfied.

Respondents cited a variety of reasons for, and disadvantages of, living on a smallholding. Smallholders value peace and quiet, space and privacy, and clean air. However, unexpected costs and problems with local authorities were common disadvantages. The survey found that many smallholders are involved in country life through membership of rural organisations.

3.4 Employment among Smallholders

Only a small number were engaged in paid employment on their smallholdings, but on these farms their average working hours approached full-time employment. Some 87% of respondents reported off-farm income, while 45% of respondents and 37% of respondents' partners were employed fulltime off-farm. Over 40 percent of them were earning more than $40,000 per annum. More than half had GST registration, almost two thirds of these registered solely for their smallholdings. Overall, most smallholdings are engaged in agricultural production, but in general this production does not solely support their households.

3.5 Farm Management

Most smallholders comply with the regulatory framework for the control of Tb and other diseases. In general, smallholders engage in the management of diseases pests and weeds, and are aware of biosecurity issues and practices. Most would take appropriate action to alert the relevant authorities about incursions of exotic diseases, pests or weeds. The survey found that most smallholders intend to plant trees for landscaping or commercial purposes, but that a much lower proportion of smallholders use, or intend to use, organic methods than other farmers and growers.

4. Further Work

The study was the first of its kind in addressing smallholdings nationwide, contradicting some common perceptions of smallholders, while reinforcing others. It yielded many useful insights into New Zealand smallholdings and provided a first step to future work, including:

1. Improved estimates of national agricultural production and land use through inclusion of smallholdings within the Agricultural Statistics Programme or through separate surveys
2. Improved information to District and City Councils for rural planning
3. Inclusion of smallholdings on land-based registers for biosecurity, civil defence and other purposes.