The Counties District: land use trends and issues

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Abstract

The Counties District has traditionally been regarded as the food bowl of Auckland. Its high quality land resources, equitable climate and proximity to markets have and are still playing an important part in producing milk, vegetables and meat all year round. However, as Auckland continues to grow and people continue to want to live and pay to live in a rural environment the character and future of this food producing bowl is under threat.

Keywords: Auckland, Counties District, land use, urban expansion

Introduction

The Counties District has traditionally been regarded as the foodbowl for Auckland. A warm temperate climate and a mix of high quality soils combine to provide ideal conditions for year-round crop and pasture production. Farming systems have been developed to produce year-round fresh milk, meat and vegetables for the local market.

Being on the doorstep of Auckland, New Zealand's largest population centre, provides opportunities for markets, labour and processing. However, continual pressure from the people of Auckland to expand into, and live in, rural areas has seen a steady increase in subdivision. This has changed the district from a predominantly rural environment to one with rural and urban interests, land uses and expectations.

The Counties District

The Counties District has as its northern boundary the urban areas of Auckland. From there it extends south down the Firth of Thames to Miranda, then across to Meremere on the Waikato River and through to the west coast at Waikaretu.

As part of the Auckland Regional Council area, it is administered by three local bodies, Manukau City Council, Papakura District Council and Franklin District Council. Total rural land area is 214 923 ha.

Total population is 341 731. The main rural service town is Pukekohe, supported by Waiuku and Tuakau.

In eastern Franklin 21 886 ha of land are administered by the Auckland Regional Council and designated as a water catchment area. This, along with a similar area in the Waitakeres (north west of Auckland), provide the city's water.

BHP NZ Steel operate New Zealand's only steel making plant on the shores of the Manukau Harbour, with an iron sand extraction plant operating at the Waikato Heads.

Land resources

The New Zealand Land Resources Inventory classifies land areas according to their physical features of rock type, soil type contour, drainage, erosion and vegetative cover. From this information different land areas are given a Land Use Capability Class. There are eight classes: Class I–IV is land generally suited to cropping, horticulture and pastoral use; Class V–VII is land recommended for pastoral and forestry uses; and Class VIII land is not recommended for pastoral use.

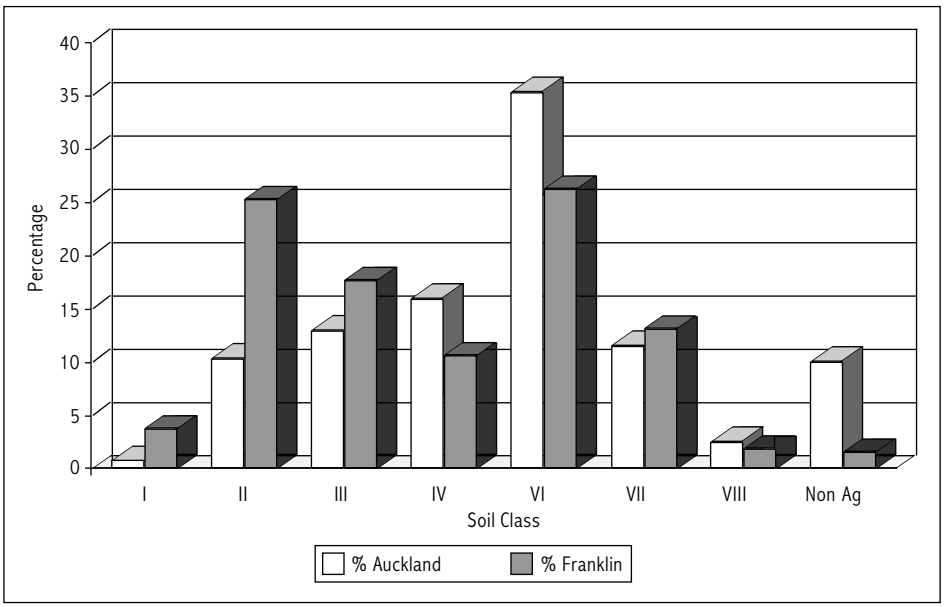
Figure 1 shows the percentage of land in each land use class within the Franklin District (the area's largest rural district) and compares this with the Auckland region.

Significant points are:

- 57% of the Franklin District is Class I–IV land. Within the whole of the Auckland Region Class I–IV land represents only 40% of the rural land.
- 24 000 ha, or 30% of land, are within Class I–II.
- Of this, 3000 ha is Class I land. This is one of the largest continuous areas of Class I land in the country. By definition, this Class I land has, if managed correctly, virtually unlimited potential for the growing of horticultural crops. In addition much of this land has a micro-climate that is frost free, making it desirable for year-round crop production.

Most Class I, II and III land is of volcanic origin. Firstly, there are the water-sorted volcanic ash soils which have accumulated on old marine terraces and occur around the shores of the Manukau Harbour. These

Figure 1 Percentage of land in each land use class within the Franklin District (the area's largest rural district), compared with that within the Auckland Region.



are soils with some structural limitations. They are generally not suited to intensive cultivation and cropping but are ideally suited to intensive pasture production.

The second group of volcanic soils are from airfall volcanic ash plus the weathering of volcanic rock. These soils occur in significant areas of the western Franklin District. They are strongly structured soils that will withstand intensive cultivation and a wide variety of uses. These soils cover the bulk of the vegetable growing area.

Soils in the eastern and southern parts of the District are predominantly soils derived from sedimentary rock. Generally these are soils in Class IV and above.

The soils in the low-lying areas, particularly around the Waikato River and its lower catchment, are a mixture of peat and alluvium. Here drainage can be a problem and because of they are low lying water tables are high, making them areas of reliable summer production.

The strip of land down the west coast consists of sands and sandy loam soils. These areas are particularly useful as winter grazing blocks.

Pasture production varies from around 11 000 kg DM/ha on the summer-dry sandy loam soils, to 15 000 kg DM/ha on the districts peaty loam soils.

Climate

The district has a warm temperature climate that favours the year-round production of both pastoral and horticultural produce.

Pukekohe records an average annual rainfall of 1355 mm/year, fairly evenly spread, with summer rainfall of 80 mm/month and winter 130 mm/month. Mean daily maximum temperature in February is 26°C and mean minimum daily temperature in July is 6°C. The prevailing wind is from the south west.

Infrastructure

The Counties District is right on the doorstep of New Zealand's largest population centre. Auckland region's population of almost 1.1 million (29.3% of the total New Zealand population) creates a continuing and increasing demand for horticultural, meat and dairy produce.

This population base provides a pool of labour available to work in the horticultural and agricultural industries.

Processing and marketing outlets have been developed to cater for this local market and these form an important component of the local communities.

Direct road, rail, air and sea transport links to both local and export markets means quicker market access for fresh and perishable produce.

Land use

Table 1 Rural land use (ha)

	1991	1995	% change
Grazing, arable fodder and fallow	185 947	177 341	−5
Horticulture	9295	10 003	+7.5
Forestry	4347	11 624	+167
Other land	23,572	15 955	−32
Total area	223 161	214 923	−4

The figures in Table 1 show that the total rural land area has decreased by 8200 ha (4%) since 1991.

The predominant land use is pastoral farming, at 82% of the total rural land area. This pastoral land area has been declining over the years as movement takes place to alternatives such as horticulture, forestry and urban uses. The speed of these changes has in the past been governed by economic returns from pastoral farming, pressure from urban areas to expand and the desire of urban dwellers to move to the country.

Stock numbers

Table 2 Stock numbers

	1991	1995	% change
Total dairy cattle	144 043	143 439	static
Total beef cattle	160 042	155 520	−3
Total sheep	501 186	380 926	− 24
Total deer	19 990	15 477	− 22

Dairy

Dairy cattle numbers are relatively static. Dairy conversions, and increasing cow numbers on existing farms compensate for those numbers lost as farms move out of dairying.

The local dairy industry is an integrated system involving the production of fresh milk and milk products for the local market and the production of milk products for export.

The fresh milk sector of the industry is the most significant, as its success has depended on it capitalising on the District's unique features of soil, climate and proximity to the market place.

This sector of the industry has traditionally been known as the town milk industry, in which farmers were under contract to supply fresh milk for 365 days a year. In 1987 it was announced that the producer side of the industry was to be deregulated, subsidies removed, payments for town milk quotas stopped and from August 1990 all dairy farmers to be paid under the standard milksolids payment. To meet the year-round liquid milk requirements, local dairy companies introduced incentive payments, above the standard milksolids payment, to suppliers for specified contract volumes of milk produced over the May, June and July periods.

The district now has 570 suppliers, of which 235 have contracts to supply winter milk. Farming systems and management practices have been adopted to suit the climatic and soil features of the different areas within the district. For example, those farms on the free-draining soils calve cows from March to June. On the wetter poorer-draining soils calving starts in August–September, while most specialist winter milk farms calve a proportion of their herds in autumn and the balance in spring. This allows fresh milk to be sourced close to the processing facilities and market place all year round.

The range in soil types and pasture growth rates mean a range in production levels. Table 3 outlines the District's dairy production levels.

Table 3 Dairy production in Counties District

	Average	Range
kg milksolids/cow	263	238–383
kg milksolids/ha	626	542–1062
Cows/ha	2.36	2.26–3.14

Sheep and beef

After a static period through the 1980s beef numbers reached a peak in the early 1990s, the result of a period of good returns and an increase in the number of beef run on lifestyle blocks. Subdivision through the late 1980s resulted in the creation of a significant number of small blocks, which were formed as lifestyle units carrying mainly beef animals. Since the early 1990s beef numbers have declined mainly because of poorer returns, and on many units they have been replaced with dairy grazers.

As in other regions, sheep numbers have declined steadily since the mid 1980s. The removal of SMPs, declining returns, high disease risks, particularly facial eczema, and high labour requirements have all played their part.

The present sheep and beef industry is centred around finishing stock for the local and export markets. Economic fluctuations have seen a move away from breeding ewes and cows into more store stock purchased for finishing. These stock are sourced from outside the district or from the dairy herds.

Other livestock

Deer form a small part of the district livestock industry and are confined to the smaller units and part-time enterprises.

An equine industry centred around the Auckland District accounts for around 25–30% of the New Zealand industry. It is concentrated on training facilities at Pukekohe, Ardmore–Takanini, Avondale and Kumeu.

The Karaka Bloodstock Selling Complex holds most of the thoroughbred and standard bred auction sales in New Zealand, selling weanlings, yearlings broodmares and horses in training. Auckland stud farms represent around 18% of the horses catalogued at the yearling sales.

In general horse farming, whether training or agistment, tends to be close to the urban area as this is where most of the horse owners live.

Horticulture

The district is renowned for its outdoor vegetable production which is centred on the Class I, II and III soils around Pukekohe, Bombay and Pukekawa (Table 4). These vegetables are grown year round and provide 30% of New Zealand's fresh vegetable requirements. Of particular significance are onions, potatoes, brassicas (cabbage and cauli), lettuce, spinach and celery. These are very intensive enterprises, much of the land having been continuously cropped for over 40 years.

The total area of outdoor vegetables has remained relatively stable over the past decade. However, within this total, the area of onions and potatoes is starting to decline as some of the larger enterprises move part of their operation into the Waikato where land prices are lower. The area of green crops is expanding with consumer demand and the development of fast food outlets, for example, coleslaw for KFC.

The protected cropping industry has grown from around 90 ha in 1990 to 170 ha in 1994. This has been driven by the desire to produce high value crops from small sites. Protected cropping enterprises tend to be located close to the market and labour sources. The main locations are Mangere and Drury.

Table 4 Horticultural land use (ha)

Crop		Area
Outdoor vegetables		8700
Indoor	- tomatoes	65
	- vegetables	25
Flowers		66
Other Crops		14
Kiwifruit		646
Other fruit crops		1113

Lifestyle blocks

Pressures and desires from the urban dweller, together with the willingness of farmers to achieve capital gain from their land have seen an unprecedented demand for rural land in the district since the mid 1980s. So great was this demand that over the period 1983–1990, 2442 new lots were subdivided in Franklin District alone, 78% of which were less than 8 ha. This affected around 12 000 ha, 80% of which was in pastoral farming.

This subdivision was driven by a number of issues that included trends in horticultural and agricultural markets, changes in subdivision regulations, desire for rural lifestyle living and pressure from urban sprawl and development. Most subdivision used the horticultural provisions of the district plan as a means for the subdivision rather than a genuine intention for horticultural use.

Today around 54% of lots in the District are less than 4 ha, with only 18% above 20 ha.

This subdivision has contributed to a change from a predominantly rural district to a district with a mix of rural and urban interests, land uses and expectations. Productive land has been lost, land use flexibility reduced and the viability of traditional pastoral systems threatened.

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