

Appendix 1:

Regional councils by territorial local authority

Breakdown is by territorial local authority area. These are regional council areas, shown in bold type eg **NORTHLAND**, and districts and cities. Districts that do not fall completely into one region have been indicated with an “*”.

Northland

Far North
Whangarei
Kaipara

Auckland

Rodney
North Shore City
Waitakere City
Auckland City
Manukau City
Papakura
Franklin *

Waikato

Franklin *
Thames-Coromandel
Hauraki
Waikato
Matamata-Piako
Hamilton City
Waipa
Otorohanga
South Waikato
Waitomo *
Taupo *
Rotorua *

Bay of Plenty

Taupo *
Western Bay of Plenty
Tauranga
Rotorua *
Whakatane
Kawerau
Opotiki

Gisborne

Gisborne

Hawke's Bay

Taupo *
Wairoa
Hastings
Napier City
Central Hawke's Bay
Rangitikei *

Taranaki

New Plymouth
Stratford *
South Taranaki

Manuwatu - Wanganui

Waitomo *
Taupo *
Stratford *
Ruapehu
Wanganui
Rangitikei *
Manawatu
Palmerston North City
Tararua *
Horowhenua

Wellington

Tararua *
Kapiti Coast
Porirua City
Upper Hutt City
Lower Hutt City
Wellington City
Masterton
Carterton
South Wairarapa
Opotiki

Tasman

Tasman

Marlborough

Marlborough

West Coast

Buller

Grey

Westland

Canterbury

Kaikoura

Huranui

Waimakariri

Christchurch City

Banks Peninsula

Selwyn

Ashburton

Timaru

Mackenzie

Waimate

Waitaki *

Nelson

Nelson City

Otago

Waitaki *

Central Otago

Queenstown Lakes

Dunedin City

Clutha

Southland

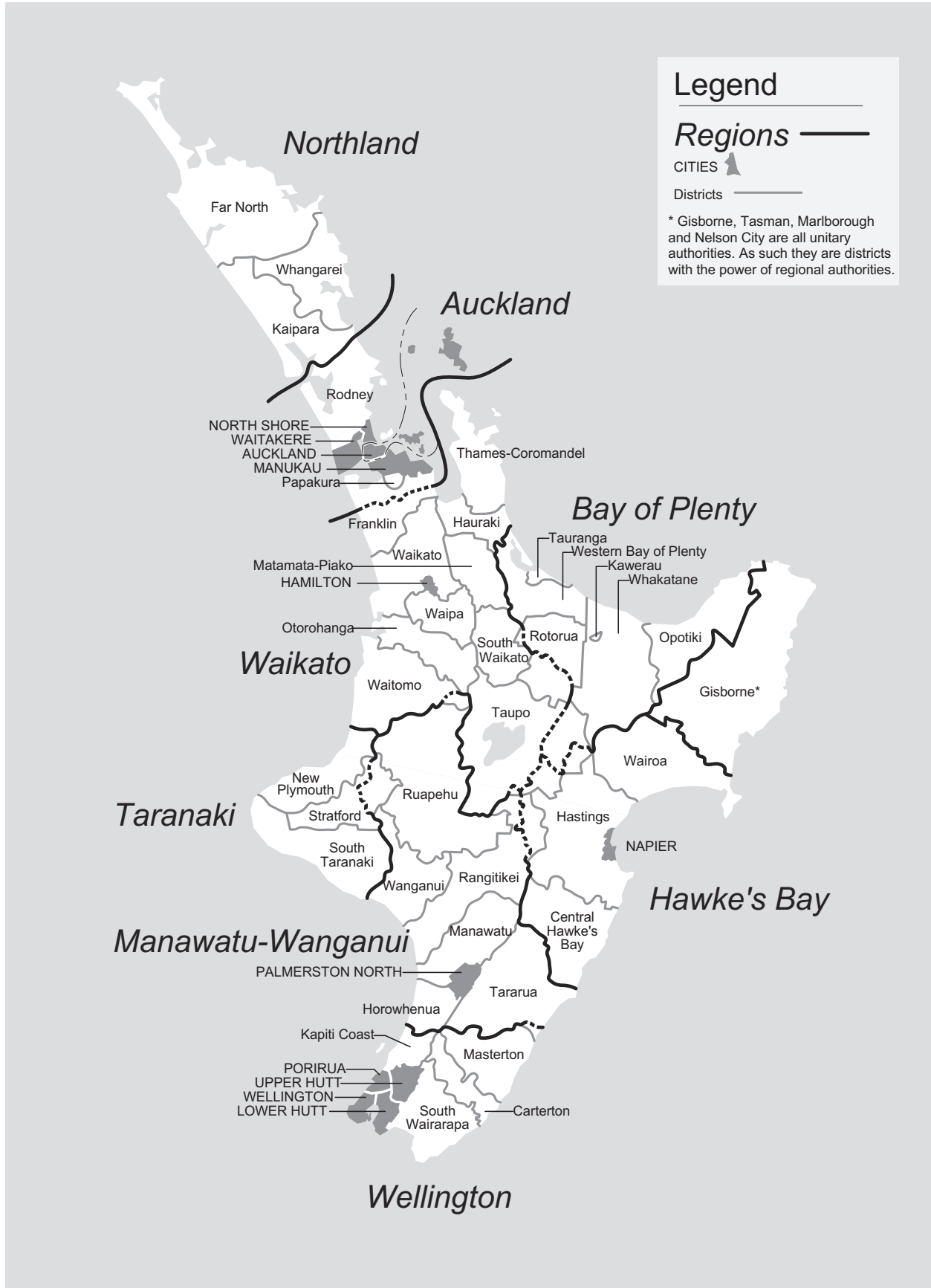
Southland

Gore

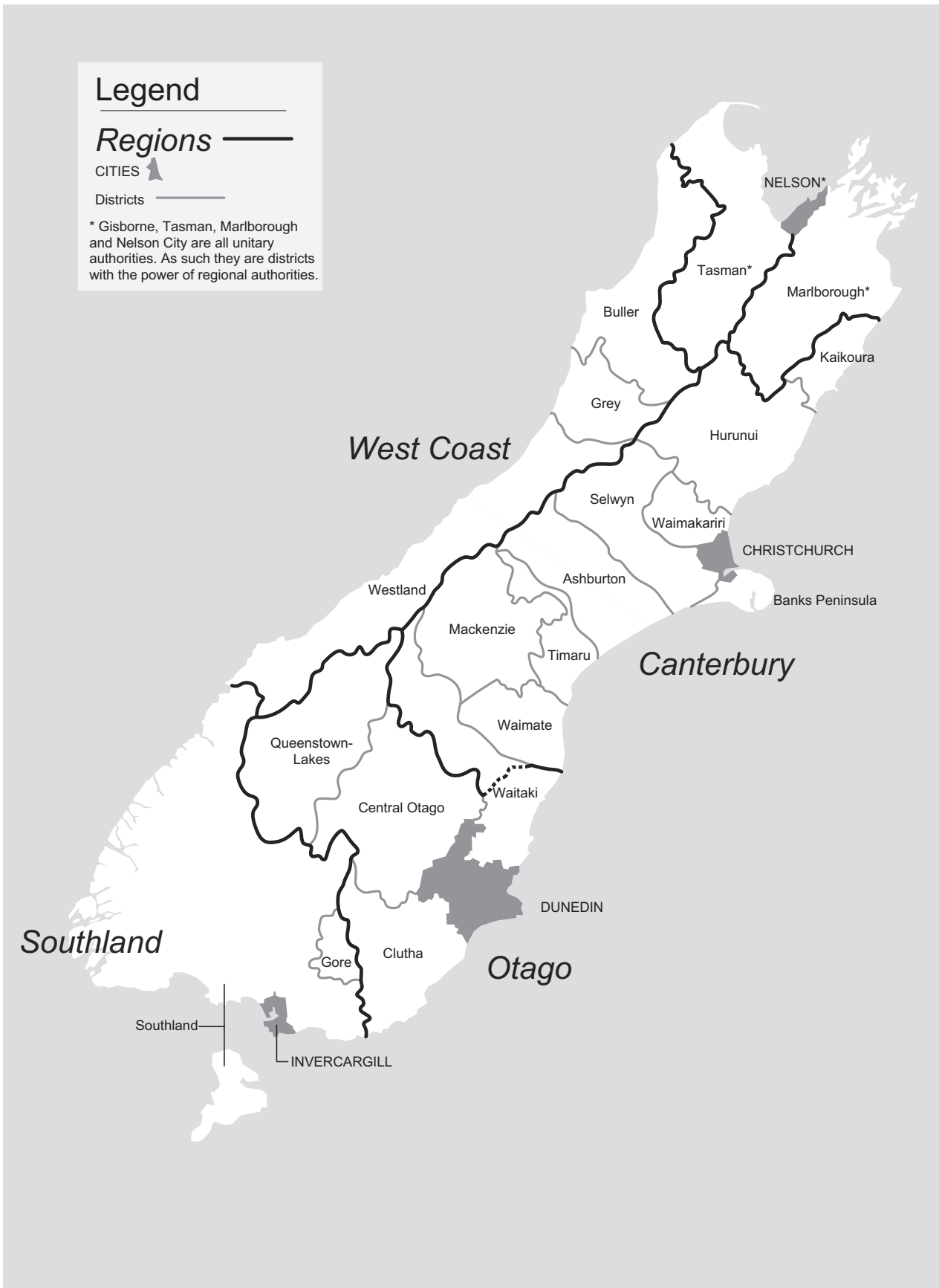
Invercargill City

Chatham Islands

Regional Councils and Local Government Boundaries - North Island



Regional Councils and Local Government Boundaries - South Island



Appendix 2:

Definitions of farm type classifications

Farm type	Definition	NZSIC
Principally dairy farming - town milk supply	The raising of cattle for town milk supply and breeding of cattle for town milk supply (including stud) so that 75 percent or more of the gross income is derived from this activity.	11111
Principally Dairy farming - factory supply	The raising of cattle for their dairy products or for breeding (including stud) and (other than for town milk supply) so that 75 percent or more of the gross income is derived from this activity.	11112
Principally sheep farming	The raising of sheep for their products or for breeding (including stud) so that 75 percent or more of the gross income is derived from this activity.	11121
Principally beef farming	The raising of cattle for their products or for breeding (including stud) so that 75 percent or more of the gross income is derived from this activity.	11131
Principally cropping	The planting and harvesting of crops so that 75 percent or more of gross income is derived from this activity.	11161
Predominantly dairy	Dairy farming (both factory supply and town milk supply), where between 51 and 74 percent of gross income is derived from this activity.	11119
Predominantly sheep farming with beef	Sheep farming, where between 51 and 74 percent of gross income is derived from this activity and between 20 and 49 percent of gross income is derived from beef farming.	11123
Predominantly sheep farming with cropping	Sheep farming, where between 51 and 74 percent of gross income is derived from this activity and between 20 and 49 percent of gross income is derived from cropping.	11124
Predominantly sheep farming with other	Sheep farming, where between 51 and 74 percent of gross income is derived from this activity and less than 20 percent of gross income is derived from beef or cropping.	11129
Predominantly beef farming with sheep	Beef farming, where between 51 and 74 percent of gross is derived from this activity and between 20 and 49 percent of gross income is derived from sheep farming.	11133
Predominantly beef farming with other	Beef farming, where between 51 and 74 percent of gross income is derived from this activity and between 20 and 49 percent of gross income is derived from sheep.	11139
Predominantly cropping with sheep	Cropping, where between 51 and 74 percent of gross income is derived from this activity and between 20 and 49 percent of gross income is derived from sheep farming.	11162
Predominantly cropping with other	Cropping, where between 51 and 74 percent of gross income is derived from this activity and less than 20 percent of gross income is derived from sheep.	11163
Pig farming	The breeding and raising of pigs for meat or for sale. <i>See footnote (1)</i>	11148
Horses	Breeding and training. <i>See footnote (1)</i>	11142
Deer farming	The raising of deer for venison or sale, whether deer are killed on the farm, or in special slaughterhouses. <i>See footnote (1)</i>	11143

Farm Type	Definition	NZSIC
Goat farming	The breeding and raising of goats for milk, meat and <i>See footnote (1)</i>	11144
Small animal breeding	The breeding and raising of dogs and cats for sale and the breeding and raising of stoats, opossums etc for fur. <i>See footnote (1)</i>	11147
Mixed livestock farming	Two or more types of livestock farming so that cumulatively 51 percent or more of gross income is derived from the activities, but provided that no one activity contributed more than 51 percent to gross income. <i>See footnote(1)</i>	11141
Broiler chicken production	The raising of chickens for meat. <i>See footnote (1)</i>	11145
Other poultry	The raising of poultry (other than for boiler production) for eggs and for meat (includes turkeys, ducks, etc). <i>See footnote (1)</i>	11146
Citrus orchards	Commercial citrus fruit eg; grapefruit, lemons and oranges. <i>See footnote (1)</i>	11171
Pip fruit orchards	Growing pip fruit eg; apples, pears. <i>See footnote (1)</i>	11172
Stone fruit orchards	Growing stone fruit eg; apricots, plums. <i>See footnote (1)</i>	11173
Kiwifruit orchards	Growing kiwifruit <i>See footnote (1)</i>	11174
Berry fruit growing	Growing berry fruit for sale. <i>See footnote (1)</i>	11175
Grape growing	Growing grapes for the table or wine-making. <i>See footnote (1)</i>	11176
other fruit	Growing fruit not elsewhere classified. <i>See footnote (1)</i>	11179
Vegetable growing	Growing vegetables (including tomatoes). <i>See footnote (1)</i>	11151
Mushroom growing	Growing mushrooms for sale (includes packing them). <i>See footnote (1)</i>	11154
Tobacco and hops	Growing tobacco, including drying etc, when undertaken on the farm or growing hops, drying and preparing them for sale. <i>See footnote (1)</i>	11152
Flower growing	Growing flowers including orchids for the market. <i>See footnote (1)</i>	11153
Nurseries	Rearing young plants for sale as such. <i>See footnote (1)</i>	11155
Bee keeping	Keeping bees for honey production. <i>See footnote (1)</i>	11197
Plantations	Exotic timber plantations. <i>See footnote (1)</i>	12100
Other farming	Farming not otherwise defined in classes shown above.	11199
Idle land	A farm potentially unusable for agriculture, horticulture or exotic forestry, of which no part has been used for any of these activities during the year under survey.	11198
Research/education etc	An agricultural land use that is not classified as farming or agricultural contracting or forestry eg; research orchards, educational prison farms.	Various

(1) Where more than 50 percent of gross income is derived from the specified activity

Appendix 3:

Concepts, Definitions and Caveats Relating to the Agriculture Survey

Sample error

In 1995 there are some changes made to the survey and how the estimation process works. We can now produce sample errors for every estimate. The sample error is a measure of the uncertainty in an estimate which is obtained from a sample survey rather than a census. The estimates are accompanied by their sample errors. These are based on 95% confidence limits.

Example: An estimate of 200 has a relative sample error of 3%. This implies that there is a 95% chance that the true population value lies within the range 194 to 206 (i.e. $200 - (3 \times 200 / 100)$ to $200 + (3 \times 200 / 100)$).

The grades outlining the quality of the estimates expressed in terms of sample error are:

G	Good	: 0	≤	sample error	≤	15%
F	Fair	: 15%	<	sample error	≤	25%
P	Poor	: 25%	<	sample error	≤	40%
V	Very poor	: sample error	>	40%		

Combined error

The combined error for each estimate combines three different kinds of errors to give one overall indicator of quality. The combined error takes into account the:

- 1) Sample error
- 2) Imputation level (the percent of the total estimate that is imputed)¹.
- 3) Level of instability (the percent of the total estimate that has come from sampled strata with two or less surveyed farms).

The combined error is found by:

$$\sqrt{(\text{sample error}^2 + \text{imputation}^2 + \text{instability}^2)}$$

The combined error quality codes are defined as:

G	Good	: 0%	≤	combined error	≤	15%
F	Fair	: 15%	<	combined error	≤	25%
P	Poor	: 25%	<	combined error	≤	40%
V	Very poor	: 40%	<	combined error		

The combined errors designated as "Very Poor" have been suppressed. However these figures may be available on request.

Notes on the data supplied

The following tables have been supplied:

StdTable	Estimated data for all cells that are not confidential and have a combined error less than 40 percent. Confidential cells are indicated with a '.c' and cells with combined error of more than 40 percent are indicated with a '..s'
SampErr	Sample error for cell
QltyGde	Dual quality grade ie Sample error / Combined Error

Regional data

Data from 1990 has been analysed on the basis of the new territorial local government areas. These relate to the reorganised local government boundaries that became effective in November 1989.

¹ Imputation is a process by which non-responding farms have a value assigned, based on either previous year's data, or on the mean value of similar farms.

The reorganisation involved a two tier system of districts or cities, and regional authorities. This replaced the previous counties and local government regions. The majority of the 75 districts and cities (also known as territorial local authorities or TLA'S) are located within one of the 14 regional councils. However, 11 districts and cities fall within more than one regional council. From 1990 to 1992 for regionally analysed tables, the affected district or city is included within the region in which it is predominantly located. Data from 1993 onwards is using true Regional Councils.

Time series caveat

For those who use time series it is important to note that some degree of discontinuity was introduced as a result of the change in the basis of the population definition. From the 1994 census only those persons or businesses deemed to be engaged in a farming or forestry activity that were registered for GST are included in the population for the Agriculture Production Survey. This has resulted in a 15 percent net decline in the number of farms in the population to around 69,400 farms and forestry units compared with the nearly 81,200 recorded in the 1993 survey year.

Caveat for agriculture employment data

The employment results from the 1993 to 1995 Agriculture Production Survey should be interpreted with caution. It is considered that the estimates for February may be understated. These show employment levels for permanent paid farm workers below those recorded for June. This is inconsistent with the patterns from earlier years which indicate that more permanent paid farm workers are employed in February than in June.

To a lesser degree there is also considered to be some under recording of June employment numbers.

The employment question in the 1996 Agriculture Production Survey was redesigned. As a consequence, employment results for 1996 are only

available for the June reference month. It should also be noted that casual workers were not collected separately for 1996. As a result, they have been incorporated under the 'full time' or 'part time' categories.

Confidentiality rules

Employment:

Employment data from 1980 onwards is *Random Rounded* for confidentiality purposes. This is done by applying *Graduated Random Rounding*.

Under the random rounding process, all table cell values including row and column totals are rounded as follows:

- Randomly rounded either up or down:

0	remains as 0
1 to 19	rounded up or down to a multiple of 3
20 to 99	rounded up or down to a multiple of 5
100 and above	rounded up or down to a multiple of 10

Commodities and farm counts of commodities:

A commodity is a variable or linecode, for example "Total Sheep". Such data and farms counts of, are subject to confidentiality in the form of the *3-Rule*.

The *3-Rule* states that if a figure is made up of 3 or less *Enterprises* or farms, then the figure is suppressed. Such figures are replaced with a "...c", to indicate that the figure is confidential. Other figures not normally confidential can be suppressed as a result of *Consequential Suppression*, to ensure that confidential data cannot be derived.

Farms by areas and/or farm types:

No confidentiality rules are applied to numbers of farms by Regional Councils, Territorial Authorities, or Farm Types.