Environmental Health Indicators for New Zealand

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CONTACT:

Mathangi Shanthakumar
m.shanthakumar@massey.ac.nz

DAIRY CATTLE BY REGION AND TERRITORIAL AUTHORITY (TA)

In New Zealand, livestock (ie, animals such as cattle, sheep, and deer which are farmed for agricultural purposes) has long played a very important role in the economy. However, agricultural use of the land can have a major effect on the environment, particularly from the run-off of effluent into water sources, which can affect water quality (Cromar and Fallowfield 2004). Dairy cows may also have additional effects on the environment. For example, the conversion of land to dairy farming requires a large amount of water for irrigation.

It is estimated that dairy farms require 420 litres of water per day per hectare, as compared to 95 litres for intensive livestock and dairy support, 60 litres for lifestyle land use, and 21 litres for non-irrigated hill country (Morgan et al 2002).

As a result of dairy farming, irrigation and the run-off of nitrates used to fertilise the grass may affect water supply levels and quality. Furthermore, dairy cows produce methane (CH_4), a greenhouse gas that is thought to contribute to climate change.

Figure 1 shows that over the past 20 years, there has been a considerable increase in the number of dairy cattle in the South Island. The number in the North Island declined slightly between 2002 and 2007, but increased since 2008.

Figure 2 shows that dairy farming is carried out predominantly in TA's in Northland, Waikato, Bay of Plenty, Taranaki, Mid Canterbury and Southland.

Figure 1: NUMBER OF DAIRY CATTLE BY REGIONAL COUNCIL, 2011

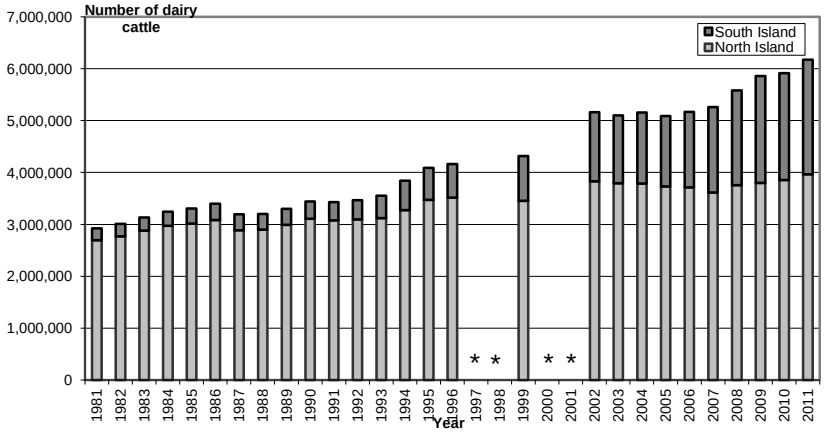
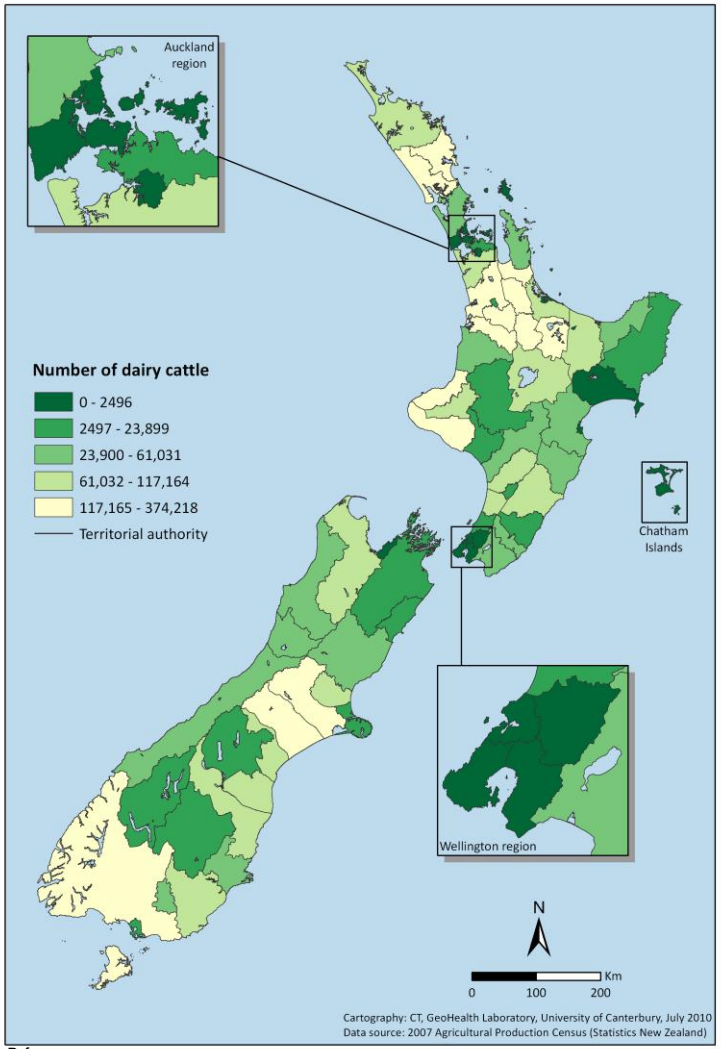


Figure 2: NUMBER OF DAIRY CATTLE, BY TA. 2007



References

- Statistics New Zealand 2011b. Annual Agricultural Production Surveys, and five-yearly Agricultural Production Census.