# cphr ehinz Environmental Health Indicators New Zealand



## Dairy Cattle Density by Region and Territorial Authority (TA)

### **HIGHLIGHTS:**

- Extensive irrigation is a necessity of dairy farming.
- In 2012, New Zealand had an average dairy cattle density of 24/km<sup>2</sup>.
- Taranaki, Waikato, Northland and Canterbury regions had the highest density of dairy cattle.
- Matamata-Piako, Waipa and Hauraki Districts were the TAs with the highest density of dairy cattle in New Zealand.

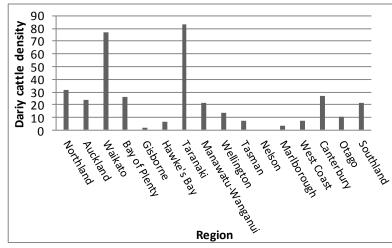
Extensive irrigation is a necessity of dairy farming. It is estimated that dairy farming requires 420 litres of water per day per hectare, as compared to 95 litres for intensive livestock and dairy support, 60 litres for lifestyle land use, and 21 litres for non-irrigated hill country (Morgan et al 2002). As a result of dairy farming, irrigation and the run-off of nitrates used to fertilise the grass, the water supply levels and quality can be affected.

In 2012, New Zealand had an average dairy cattle density of 24/km<sup>2</sup>\*. Taranaki region had the highest density (83/km<sup>2</sup>) of dairy cattle among all regions, followed by Waikato (77/km<sup>2</sup>\*), Northland (32/km<sup>2</sup>) and Canterbury (27/km<sup>2</sup>\*) regions (figure 1).

In the North Island the TAs of Matamata-Piako District (208/km²), Waipa District (180/km²\*) and Hauraki District (132/km²\*) had the greatest density of dairy cattle. In the South Island the great density of dairy cattle were in the TAs of Ashburton District (70/km²\*), Gore District (59/km²\*) and Timaru District (52/km²\*) (figure 2).

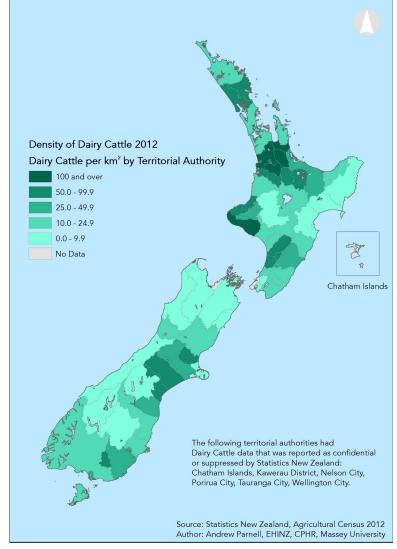
\* These figures were generated from "Annual Agricultural Production Surveys, and five-yearly Agricultural Production Census". (Statistics New Zealand, 2012)

FIGURE 1: DAIRY CATTLE PER KM<sup>2</sup> BY REGION, 2012.



Source: Statistics New Zealand (2012)

#### FIGURE 2: DAIRY CATTLE PER KM<sup>2</sup> BY TA. 2012



#### REFER

- Morgan M, Bidwell V, Bright J et al. (2002). Canterbury Strategic Water Study. Christchurch: Lincoln Environmental
- Statistics New Zealand 2012. Annual Agricultural Production Surveys, and five-yearly Agricultural Production Census

CONTACT: Fei Xu f.xu@massey.ac.nz