

# Projections indicate nitrogen fertiliser use has plateaued

Use of nitrogen fertiliser from the early 1990s has supported the growth in export revenue from agriculture.

Recent policies and economics in New Zealand have reduced the use of nitrogen fertiliser while maintaining this growth in revenue.

The Ministry for Primary Industry's <u>Situation and Outlook for Primary Industries</u>, predicts continued increase in export revenue<sup>1</sup>. Ministry for the Environment's <u>Fourth Biennial Report under the United Nations Convention for Climate</u> <u>Change</u> predicts a steady decline in nitrogen fertiliser use out to 2035<sup>2</sup>.



## Greater efficiencies introduced to maintain productivity

Nitrogen fertiliser is essential for production. Without it many crops will fail. Maintaining soil fertility has meant a focus on good management practices plus measures to increase efficiency of nitrogen use. For example:

- documented and audited farm management practices
- the 4Rs of nutrient stewardship: right product, right rate, right time, right place
- more targeted application of nutrients and the use of nutrient budgeting tools like Overseer
- adoption of new technologies enabling precision agriculture and variable rate application
- increased water and nutrient efficiency on irrigated land
- better recycling of nutrient sources, such as use of effluent
- an increase in the use of enhanced efficiency fertiliser products such as coated urea.





The industry has promoted the use of enhanced fertiliser products such as urea coated with urease inhibitor, as it reduces the atmospheric emissions associated with nitrogen fertiliser products. More importantly, by retaining more nitrogen in the soil, farmers and growers can expect to reduce the amount of nitrogen fertiliser they apply, yet achieve the same production benefit. Under average conditions it might be assumed farmers can reduce their application by 10% using coated fertilisers and achieve the same result as an uncoated product.

### The value of nitrogen fertiliser to the New Zealand economy

In 2019, FANZ commissioned a study to analyse the costs to the primary sector both associated with removing nitrogen fertiliser or using a substitute. For pastoral farms, this included use of supplementary feed to replace grass grown with nitrogen fertiliser.

The research findings demonstrate that not using nitrogen fertiliser would result in a drop of \$19.8 billion gross output to the New Zealand economy and a drop in GDP of \$6.7 billion.



Read the full research findings in our report: The Value of Nitrogen Fertiliser to the New Zealand Economy

### For more information

Visit the Fertiliser Association of New Zealand website or email us at info@fertiliser.org.nz

#### References

- I. The full report can be read on the Ministry for Primary Industry's website: Situation and Outlook for Primary Industries, March 2020
- 2. The full report can be read on the Ministry for the Environment's website: <u>New Zealand's Fourth Biennial Report under the United Nations</u> Framework Convention on Climate Change.