



# New Zealand's arable industry:

The backbone of food and farming in New Zealand for over 150 years.

## Introduction

New Zealand's \$2.1 billion arable industry is the quiet achiever behind many of our nation's every day essential products.

Our locally grown grains form an important part of many New Zealander's diets and, while many of the products made by arable crops are easily identifiable such as the bread, beer and oils on supermarket shelves, the industry is also critical to the success of our \$20 billion livestock industry as the source of seed for pastures and grain and silage for complementary animal feed.

Because it is smaller than that of many other grain growing countries, the New Zealand arable industry is able to adopt new crops, systems and production methods relatively quickly in response to market signals. This flexibility and our constant search for innovative crop management systems ensures the future of the local arable industry as a significant contributor to our local economy.

## NZ growers produce:



**60%**  
of the world's  
radish seed.



**50%**  
of the world's  
white clover  
seed.



**40%**  
of the world's  
carrot seed.



**800,000**  
tonnes of grain  
each year.



**85,000**  
tonnes of  
herbage and  
vegetable  
seeds.



**11,310**  
workers  
employed each  
year.

## National contribution:

# 180,000

hectares are in production.

This contribution is spread across the regions: Arable crops are produced on 180,000 hectares of land around New Zealand with the bulk of production centred in the Canterbury region, Southland, Manawatu, Hawke's Bay, Wairarapa and Waikato.

# \$800 million

Approximate annual sales of arable products in New Zealand

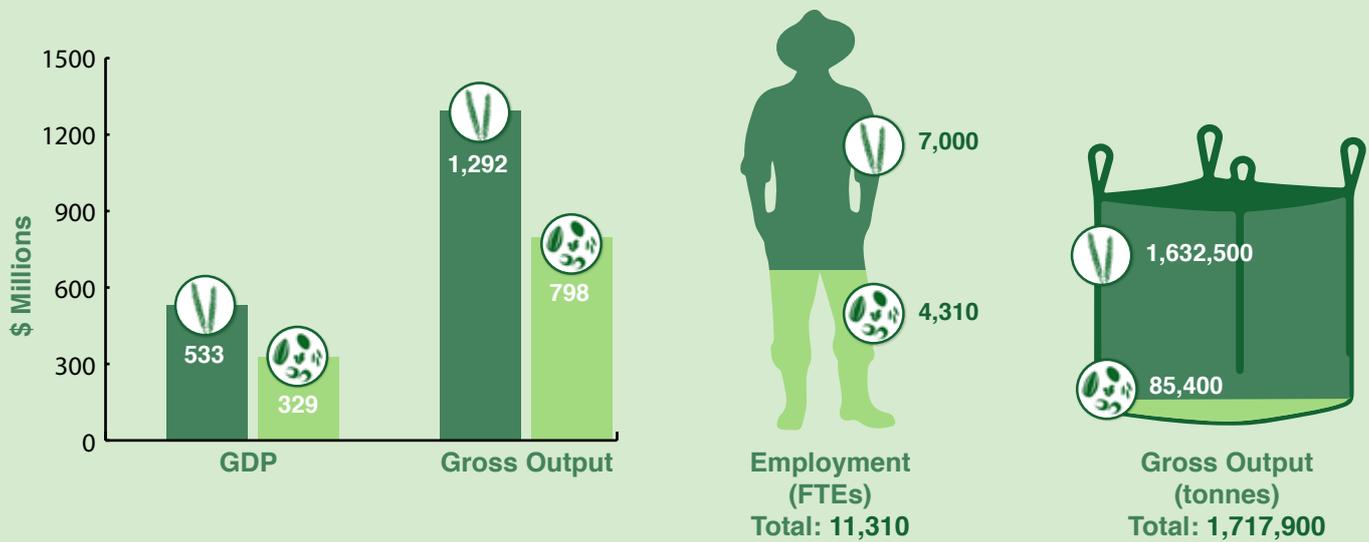
# \$260 million

Export sales each year.

# \$2.1 billion

Annual direct and indirect spending associated with the industry

The arable sector also underpins New Zealand's \$20 billion livestock industry providing seed for their pasture, grain and silage for supplementary animal feed and land for winter grazing and/or finishing.



**\$260 million**

Arable exports



Grain production



Seed production

Arable Food Industry Council - Arable Production 2018 Economic Impact Report (BERL)

## Highly productive land-use

New Zealand's arable growers are the most productive in the world, holding the world yield records for both wheat and barley. They are able to produce such high yields due to our favourable climate (rainfall, temperature), good soils, high performing cultivars, effective use of irrigation and extremely skilled growers. New Zealand arable systems are unique in that they generally include livestock. This 'pastoral' phase of the rotation contributes to weed, pest and disease control, as well as nutrient management and soil quality.

Arable crops are generally grown on flat land or gentle slopes and require good soils with high fertility. This is high-value land so returns must also be high to justify investment. Arable farming is diverse, resilient, sustainable and profitable. The gross margin for key grain crops is approx. \$1500-2000/ha and for key seed crops is \$2,000-4,000/ha, making this an attractive land use option for many regions of New Zealand where high-value horticulture is not feasible and intensive dairying is environmentally challenging.

## Sustainability

Arable cropping has a low environmental footprint. It contributes less than one percent of New Zealand's greenhouse gas emissions. New Zealand's arable soils have high carbon content (3-5 percent) with more than 70 percent of arable farms in New Zealand, exceeding the recommended national standards for soil quality (carbon content, aggregate stability). This makes our arable industry a top performer by international environmental standards.

Irrigation is a valuable management tool for arable growers, allowing them to maximise their yields and grow a broader range of crops over a longer time period. It also helps keep crops healthy and resilient to biotic and abiotic stress factors. The use of sensor and application technologies means that growers only apply water when and where it is needed for optimum crop growth.

Arable growers use synthetic inputs responsibly. Pesticides are only applied when necessary and under strict, internationally accepted, guidelines. For example, in New Zealand, neonicotinoids are used as a seed treatment and are not applied as foliar applications during the growing season, as occurs in other countries. This means that they pose little risk to foraging bees.

Similarly, growers use a range of plant and soil monitoring tools to make sure that they only apply the amount of fertilisers that the plants need for optimum growth, thereby minimizing the risk of leaching into waterways.