

SWEETCORN

MANAWATŪ CROPS //
UNLOCKING LAND
DIVERSIFICATION
OPPORTUNITIES

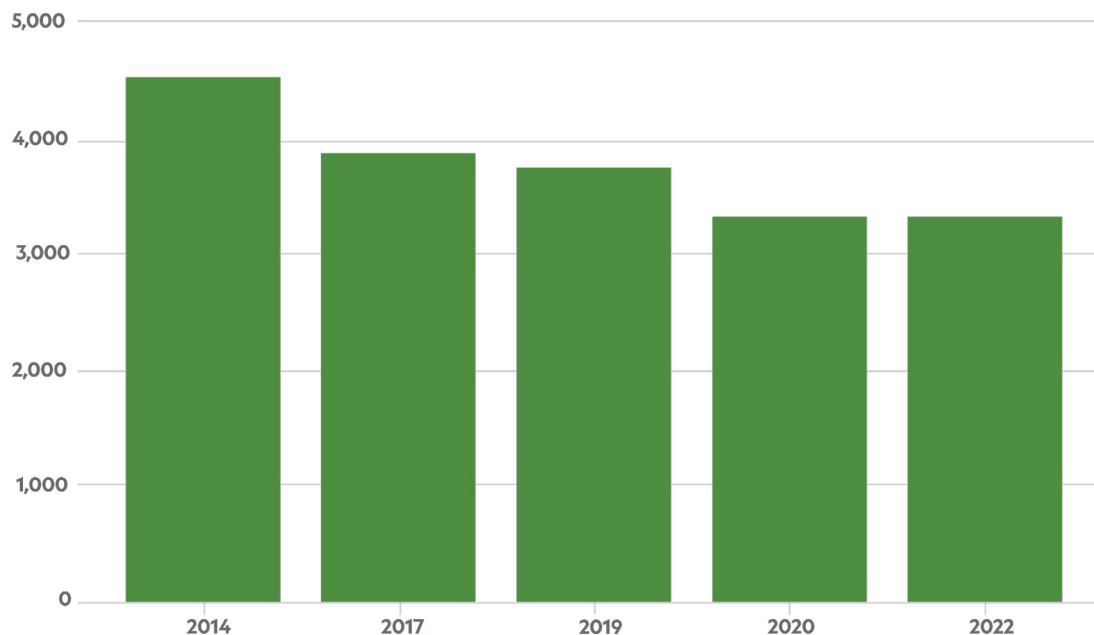
IDEAS
FOR
GROWING
NEW
BUSINESS

SWEETCORN PRODUCTION

IN 2023, NEW ZEALAND'S PRODUCED AROUND 77,000T OF PROCESSED SWEETCORN AT AN EXPORT VALUE OF \$26.5 MILLION (NZD).

Of the total land area of 3,300ha currently dedicated to sweetcorn production in New Zealand, the Manawatū-Whanganui region only contributes approximately 60ha. In the past, there was a larger amount of sweetcorn produced in the Manawatū region, focused on the processed market.

SWEETCORN HARVESTED IN NEW ZEALAND JUNE, 2014 - 2022, HECTARES HARVESTED

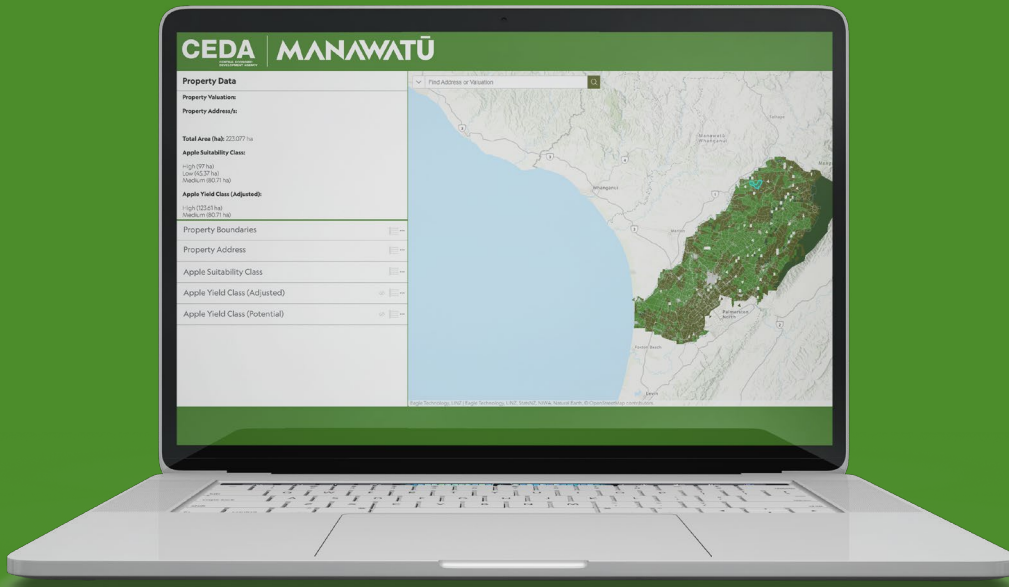


Stats NZ

THE AVERAGE YIELD OVER A SIX-YEAR PERIOD FOR SWEETCORN HYBRIDS FOR PROCESSING IN MANAWATŪ WAS 17T PER HECTARE,

fluctuating from 14-19t, which is similar to the region of Tairāwhiti-Gisborne, and 3-4t per hectare higher than the Hawke's Bay (Brooking & Macpherson 1986). When evaluating hybrids with different season length, it was found that a shorter season hybrid (116 days) with a similar yield may be more suited to the region. While the longer season hybrids (130 days sowing to harvest) were high yielding, there is risk of frost damage.

Note: All currency was converted to NZD on 15/08/24 unless stated otherwise.



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SWEETCORN HAS BEEN GROWN IN MANAWATŪ FOR PROCESSING IN THE PAST AND SOILS AND CLIMATE ARE WELL SUITED TO ACHIEVING BOTH GOOD YIELD AND GOOD QUALITY.

Sweetcorn is deep rooting and may be able to withstand some moisture stress and provide adequate yields without irrigation. However, farmers will need to evaluate each season in the event of moisture deficits such as droughts, as this will mean irrigation may be required to consistently achieve good yields and quality.

Although sweetcorn is grown in Manawātū, evaluation of hybrids suited for fresh consumption may be required to select hybrids best suited to the region and market. Farmers in the region may need to collaborate with growers in other regions to improve resilience of supply to the market over a longer harvest window.

ACCESSING THE SWEETCORN MARKET

There may be opportunity to supply the early to mid-season local and domestic market from a few select warm sites

There could be potential to target the late season market particularly if good storage practices could be used to extend shelf life

There could be the potential to export fresh sweetcorn to some key markets

Sweetcorn could be grown for processing if a suitable processor is identified



NEW ZEALAND

THE MAJORITY OF THE PROCESSING IS FREEZING, BOTH FOR COBS AND KERNELS, FOLLOWED BY CANNED WHOLE KERNEL AND CREAMED STYLE CORN, CORN POWDER AND COBS PACKED IN POUCHES.

The main export markets for frozen sweetcorn are, Australia at \$8.1m NZD, Japan at \$7m NZD and Kuwait at \$3.1m NZD. New Zealand also imports sweetcorn (NZ\$4.8m in 2021-22 and \$0.15m in the 2022-23 year) predominantly from Thailand and Australia. Leaderbrand supplies over half of New Zealand’s fresh sweetcorn from farms in Tairāwhiti-Gisborne. There could be opportunities to supply either outside of their harvest window or to provide greater resilience in case of climate events as well as export potential for sweetcorn in sachets to the Asia Pacific region.

Sweetcorn processing is undertaken by a few companies in New Zealand. Cedenco produces a sweetcorn powder from Tairāwhiti-Gisborne grown sweetcorn which is available as an ingredient in 20kg bags. Talleys and McCains process both frozen cobs and kernels while Heinz Watties brands have a range of products containing sweetcorn.

In 2022

IMPORT VALUE

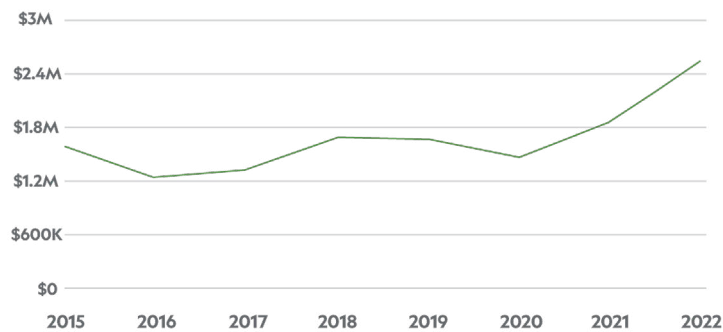
\$2.6M

USD

1Y **+37.12%**

3Y **+53.15%**

5Y **+92.03%**



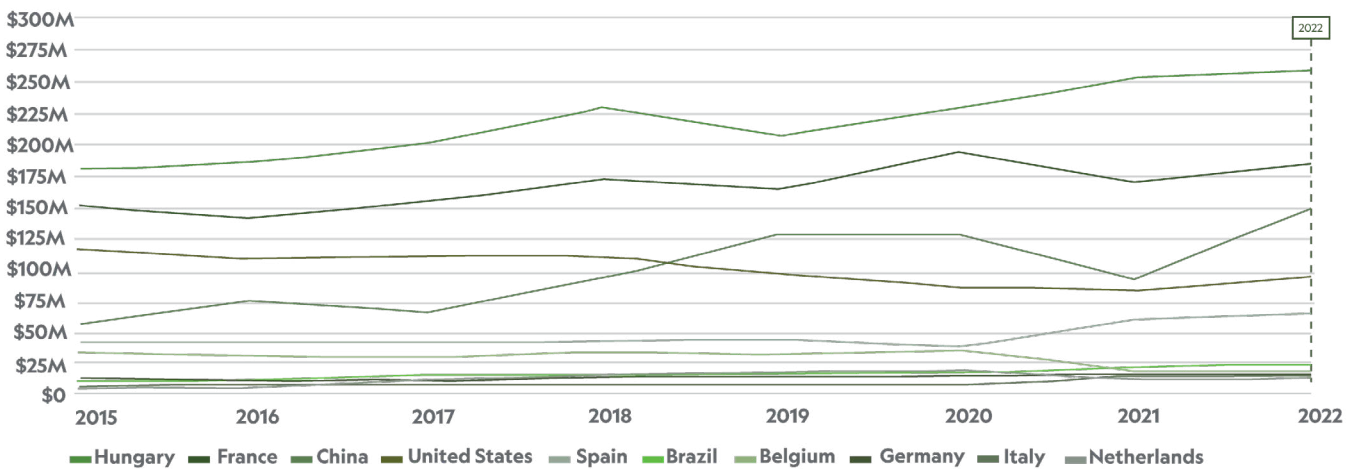
Value Added Sweet Corn - Import (tridge.com)

INTERNATIONAL

THE GLOBAL MARKET CAN BE BROKEN DOWN INTO FRESH, FROZEN, PREPARED OR PRESERVED.

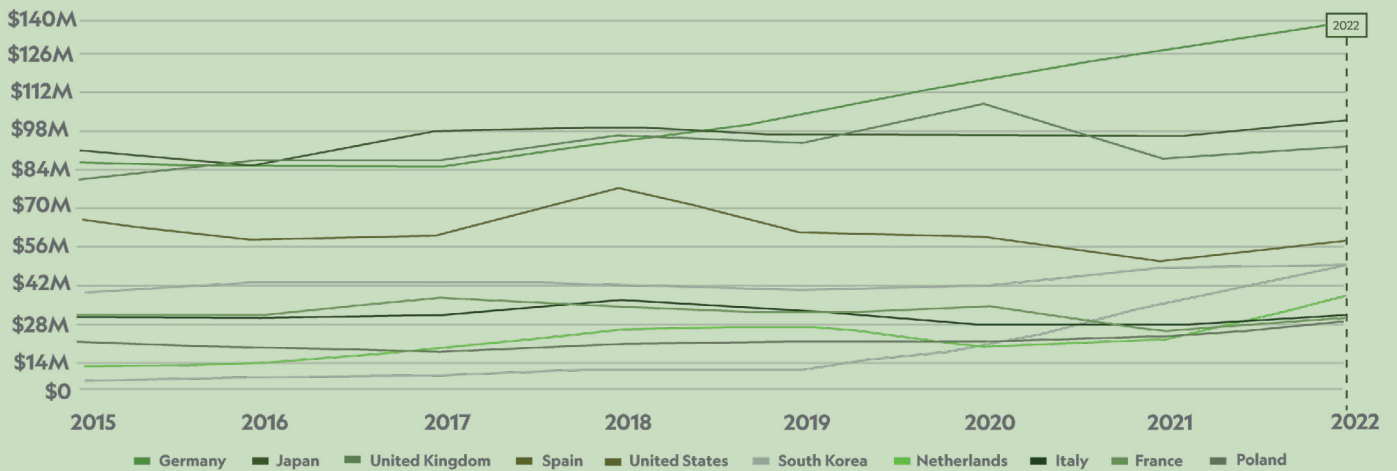
The global sweetcorn market is expected to grow at a compound annual growth rate (CAGR) of 5.3% from 2021 to 2026. The larger exporters are Hungary, France and China. Larger importers are Germany, Japan and the United Kingdom.

TRENDS OF TOP 10 EXPORTERS OF VALUE ADDED SWEETCORN FROM 2015 TO 2022



Value Added Sweet Corn - Export (tridge.com)

TRENDS OF TOP 10 IMPORTERS OF VALUE ADDED SWEETCORN FROM 2015 TO 2022



Value Added Sweet Corn - Import (tridge.com)



SWEETCORN INFRASTRUCTURE

INFRASTRUCTURE REQUIRED FOR THE GROWING OF SWEETCORN IS SIMILAR TO SOME OTHER CROPS.

However, to maintain quality through harvest, storage and transport requires some specialist equipment. Harvest could be done by hand or hand assisted with a moving gantry for high quality or smaller volumes otherwise a specialist harvester would be required.

Sweetcorn is highly perishable as it has a high rate of respiration, which can lead to the conversion of sugar into starch, thus reducing quality. Cob sweetness and tenderness can be lost very quickly. The respiration rate of sweetcorn is about eight times faster at field temperatures than at 0°C.

Loss of sugar is about four times as rapid at 10°C as at 0°C. To prevent loss of sweetness, it is important to cool sweetcorn quickly after harvest. There are several cooling methods available depending on operation size and transport time including: hydrocooling, package icing, vacuum cooling, and forced air cooling. Hydrocooling is the most common. Cooling using forced air and cool storage may be possible in some cool stores as forced air is commonly used in kiwifruit cool stores.

To maintain quality, sweetcorn should be cool stored immediately after post-harvest cooling and for the shortest time possible, with a maximum of two weeks including transit time. Sweetcorn is not sensitive to chilling, and it should be stored as cool as possible (0 to 2°C) without freezing at a high relative humidity (95% to 98%) to reduce moisture loss and kernel denting. A cool chain should be used for transport from cool store to the customer.

Most of the on farm work is mechanised unless hand labour is used for harvest. The timing of harvest could mean labour is used across harvest of other crops and pruning of kiwifruit.



SWEETCORN OPPORTUNITIES IN MANAWATŪ

- >> Produce sweetcorn for supply into the local and domestic market and partner with other farmers in other regions with later planting dates to provide supply over a longer season.
- >> Produce sweetcorn for export to some key Asia Pacific nations such as Japan and Australia.
- >> Produce sweetcorn for processing.
- >> Sweetcorn can fit into a farm system either in a pasture renewal or in a long term cropping system. As a deep rooting crop that requires nitrogen input it can utilise nitrogen available after the pasture phase or other crops.
- >> Fresh corn packing and storage could utilise a centralised, possibly toll based, packing and storage facility along with other vegetable crops.
- >> Labour required for harvest may be when other seasonal labour in the region is not at peak or labour could be spread across the year with a long term crop system.



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