

# GARLIC PRODUCTION

NEW ZEALAND CURRENTLY HAS LIMITED PRODUCTION OF GARLIC, WITH AROUND 1200 TONS PRODUCED ANNUALLY AND ONLY AN ESTIMATED AREA OF 200HA DEDICATED TO GARLIC PRODUCTION.

Based on these figures the average yield is significantly less than the global average yield. Therefore, there is an opportunity to markedly increase yields.

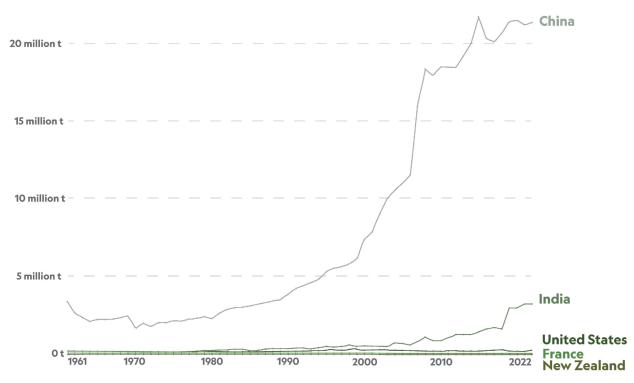
Most of our domestic production is from Marlborough with some diversification to irrigated land in Canterbury. Production in Manawatū may be suited to the fertile silt loams on river flats and could form part of a crop rotation or as a crop in a pasture renewal system. While garlic could be planted on areas that may flood there would be significant risk of soil erosion if flooding occurred as garlic has a shallow root system and limited ground cover. Rainfall pattern in the region varies little from month to month.

Thus, as garlic is harvested before mid-summer, with consistent integration into a farm system, there could be adequate moisture without irrigation.

The more coastal areas of our region receive only 900mm of rain per year so irrigation would probably be beneficial in most years on the lighter soils.

There are a number of cultivars of both softneck and hardneck garlic available in New Zealand, however limited evaluation has been undertaken of cultivar performance and there are limited supplies of many varieties. Given accessibility issues of many garlic varieties, printanor garlic is a major commercial cultivar that may be suited to the region. New Zealand can take inspiration from the work undertaken by **Australia Garlic**, which has identified cultivars by region to provide fresh garlic through the shoulder seasons and year round. As a result, Australian garlic competes effectively in market with imported garlic, as well as providing a range of processed products from poorer quality cloves. Similar work may be useful to select cultivars suited to the Manawatū region to supply garlic into the early pre-Christmas or late season window in New Zealand.

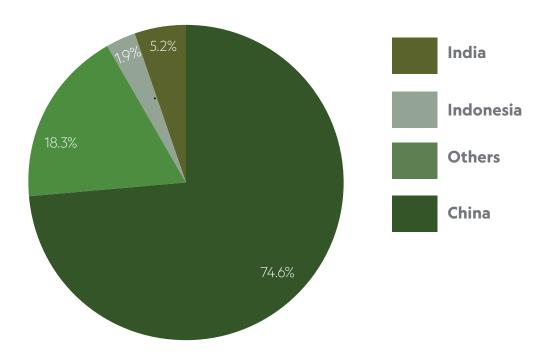
### **GARLIC PRODUCTION 1961 TO 2022**



**UN Food and Agriculture Organization (FAO)** 

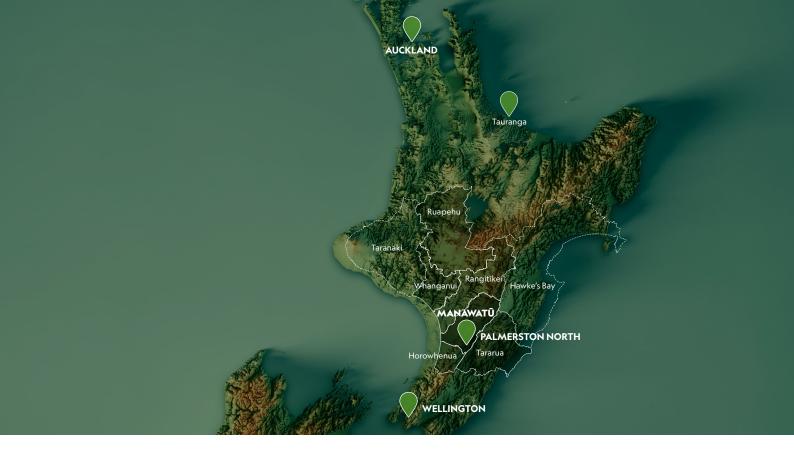
### MARKET VOLUME OF PRODUCTION

(% OF MILLION TONNE)



Our World in Data

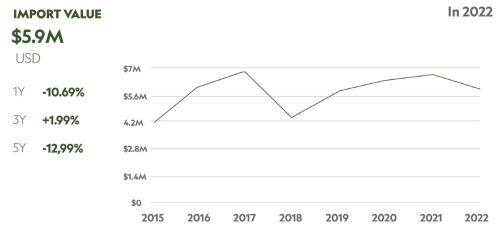




### **NEW ZEALAND**

### IN NEW ZEALAND ABOUT 90% OF GARLIC PRODUCED IS CONSUMED DOMESTICALLY WITH SOME EXPORTS OF GARLIC AND BLACK GARLIC.

New Zealand imported approximately NZ\$8.9m of garlic (3800t) in the 2022-23 year (Fresh Facts 2023), with 81% of these imports coming from China. New Zealand's exports of garlic by comparison is approximately \$1.63 million NZD, all to the Pacific Islands. Garlic was the largest, in value and volume, fresh vegetable import to New Zealand.



Garlic import value (Tridge.com)

There may be opportunity to supply garlic to the New Zealand food service market. **Longridge Garlic**, based in Taranaki, currently source imported garlic which is peeled, washed and bagged and sold to the food service industry.

There is increased demand by end consumers for New Zealand produce and suppliers to this industry have indicated interest in sourcing local product. Longridge are aiming to grow their market share in New Zealand. Additionally, there may also be an opportunity to sell peeled individual cloves in the domestic retail market.

There are a number of black garlic producers, primarily targeting the artisan market. The value add from Black garlic is slightly more than double that of garlic bulbs.

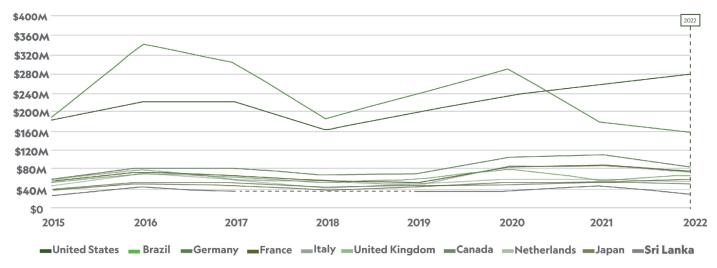


### INTERNATIONAL

#### THE GLOBAL MARKET FOR GARLIC INCREASED BY AN AVERAGE OF 3.4% BETWEEN 2007 AND 2015.

China is the largest exporter of garlic (\$3b NZD) followed by Spain (\$650m NZD). In 2018 exports of garlic from China to the US dropped by nearly half due to geopolitical influences and other countries have started to fill that gap. The US increased imports of garlic from Spain from \$36.6m NZD in 2018 to \$106.6m NZD in 2022.

# TRENDS OF TOP 10 IMPORTERS TOP 10 IMPORTERS OF FRESH GARLIC FROM 2015 TO 2022.

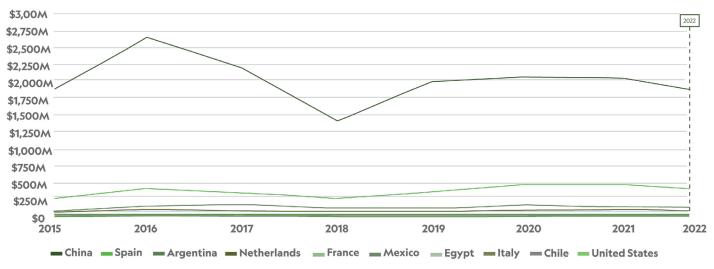


**Garlic import trends (Tridge.com)** 

A number of Pacific countries are importers of garlic. The largest importers of Chinese garlic in recent years were Indonesia, Vietnam and Malaysia with imports into Asia Pacific countries estimated to be \$50m NZD in 2020.

Prior to export from New Zealand, the potential opportunities will require further due diligence research by farmers. Information is needed on the quality requirements, price, shipping and logistics and, as there is significant potential for insects to be present on garlic, the biosecurity requirements for each country.

# TRENDS OF TOP 10 EXPORTERS TOP 10 EXPORTERS OF FRESH GARLIC FROM 2015 TO 2022.

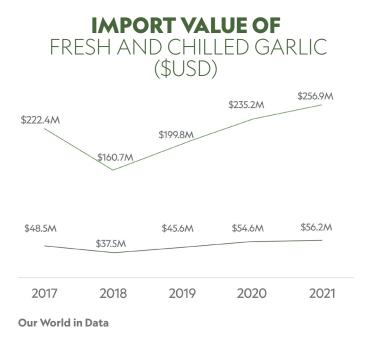


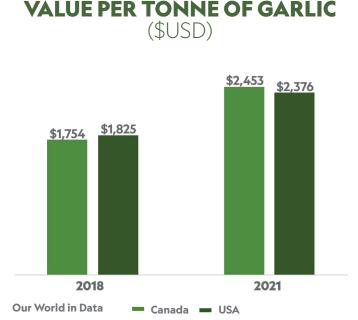
Garlic export trends (Tridge.com)

Some countries also specify no contaminant soil on garlic. Biosecurity risks could be reduced, and the value of the product increased by further processing garlic into peeled cloves prior to export.

The major challenge is expected to be how to produce and export garlic economically. This is an opportunity to speak directly to logistics specialists to understand operational requirements and expenses. While tariffs on Chinese garlic into the US, first introduced under President Trump administration, made export to the US look attractive it is worth noting that the price advantage has narrowed.

As evidenced in the below graphs, the import value and value per tonne has increased markedly in the US and Canada in recent years. This trend looks set to continue as the compound annual growth rate (CAGR) for garlic in the US is 1.6%







### GARLIC INFRASTRUCTURE

Growing garlic requires similar infrastructure to many other crops that require a good seedbed and often on slightly raised beds.

There will be a need for cultivation, planting, spraying, harvesting and packing equipment, transport systems to stores for both short term curing and longer-term storage and then transport to either domestic or export market. Manawatū is already well established as a key **distribution hub, Te Utanganui** which could be leveraged.

Specialist machinery is widely available around the world for planting, harvesting, and packing. Land owners interested in pursuing garlic production will need to engage in cost-benefit analysis prior to investing in this specialist technology. It is also necessary to cure garlic in a dark, dry, cool place and then to store it under similar conditions.

Processing requires specialist equipment related to the finished product, such as fresh peeled cloves, powders or black garlic paste.



# GARLIC OPPORTUNITIES IN MANAWATŪ

- >> There may be potential to supply fresh garlic to the local region and to the wider North Island. Discussions with a major Marlborough garlic producer indicate interest in producing garlic in the North Island to supply fresh market to market for North Island customers.
- >> There may also be potential to supply garlic to Longridge Garlic in Taranaki for food services and pre-packaged to supermarkets.
- >> With over 70% of New Zealand garlic imported, often with an inferior product from a taste perspective, there could be significant opportunity for New Zealand to grow a large proportion of the 3800t of currently imported garlic.
- >> The range of garlic varieties in New Zealand should be evaluated in Manawatū to identify those cultivars that are best suited to extend the market season, for example early season or long storage cultivars.
- >> These domestic supply plantings could be used as proof of concept from both a production and an economic perspective to increase confidence to expand into export into countries such as Malaysia, Vietnam or the US following further research.
- >> Garlic can fit well into a farm system either in a pasture renewal or in a long term cropping system.
- >> 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.





ManawatuNZ.co.nz/land-diversification



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