Onion Market Opportunities

Market dynamics

Ministry for Primary Industries
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ECONOMIC INTELLIGENCE UNIT

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Overview

Onions are one of the most consumed vegetables and a staple ingredient in the cuisine of many cultures worldwide. Despite its humble roots, over the years, onions have proven to be a critical vegetable for many countries. Price fluctuations have sparked protests, and endangered bilateral relations. This crucial role of onions for consumers has encouraged growers, retailers, and some governments to go to extraordinary lengths to ensure a steady supply throughout the year.

The New Zealand onion industry has reported significant growth over the last two decades, driven by the export of the majority of its produce. Given the growing export success of onions, the Ministry for Primary Industries' Economic Intelligence Unit in collaboration with Onions NZ has conducted this research to identify possible new export opportunities across three markets: Indonesia, Thailand, and Vietnam.

This report aims to answer the following question:

- What are the challenges and opportunities for New Zealand onions in these selected target markets?

The results will inform Onions NZ's strategy and assist policy makers to understand opportunities for the industry. The analysis is intended to guide decisions that could position New Zealand as a leading onion producer.

Key Findings

World demand for fresh onions has seen continuous positive growth over the past decade, driven by growing population and rising per capita consumption.

The large majority of world consumption takes place in the Asia Pacific region. Among them, China and India dominate the world's consumption as well as production. However despite this, their per capita consumption has remained low over the past decade.

Indonesia, Thailand, and Vietnam could provide potential market opportunities for onions driven by their growing middle class, and urban populations.

In Vietnam and Indonesia, demand for fresh onions is expected to surge in the short-term, as more consumers have increasingly switched to cooking at home due to COVID-19 restrictions and health concerns. In Thailand, onion consumption is expected to shrink due to the closure of hotels and foodservice businesses, but it is projected to recover slowly over the next four years.

Market opportunities offered by the growing demand for onions is mitigated by low international trade and high competition.

Demand for onions is largely met by domestic production in Indonesia, Thailand and Vietnam, with imported onions accounting for a low proportion of total consumption. Despite the low market share, demand for imported onions has increased by 10%-23% (CAGR) over the past decade. This upward trend is likely to continue, due to projected growth in middle income and urban population, which will drive demand for higher quality imported products.

Traditional grocery remain the prevalent purchasing channel in Indonesia, Thailand, and Vietnam.

This creates fragmented distribution channels with a large number of small independent store owners. However, modern grocery retail stores are gaining popularity in these countries, due to the growth in their urban middle-class populations, who increasingly exhibit modern global purchasing and consumption patterns. This is expected to create opportunities for exporters, as modern grocery retailers sell products at higher prices, are more likely to supply imported fruits and vegetables, and have more efficient logistics chains.

The projected growth in demand for higher value onions is likely to be moderated by the effects of COVID-19.

In line with impacts on the world economy, the ongoing impact of COVID-19 is expected to slow economic growth in these markets. Slowing economies are likely to reduce demand for premium products as consumer purchasing power declines.

However, this may be offset by changing consumer purchasing habits due to COVID-19. As traditional markets often lack the appropriate infrastructure, interest in modern grocery channels is expected to increase in line with emerging health and food safety concerns. This presents potential market opportunities for New Zealand produce in these markets.

The global market for onions is characterised by low levels of international trade and is dominated by two leading global producers- China and India.

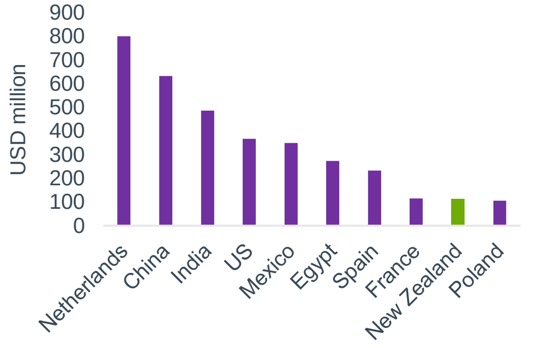
Onions are one of the most consumed vegetables in the world and an integral part of the diet in many countries. In terms of volume produced, only tomatoes and cabbages exceed bulb onions in their importance. World production of onions totalled 104 million tonnes in 2019, of which only 7% was traded internationally. China and India are the world's largest producers of onions, accounting for 47% of global production.

Onions have a significant position in the diets across all households and income groups worldwide. With a growing world population, consumption is anticipated to grow by 4% (CAGR[1]) through to 2024. China and India account for the majority of total world consumption, while the United Arab Emirates showed the highest onion consumption per capita with 25.3 kg in 2019.

However, this growing global consumption is satisfied almost exclusively by domestic production, with limited international trade. This low rate of international trade results in a highly competitive market for the world's onion exporters.

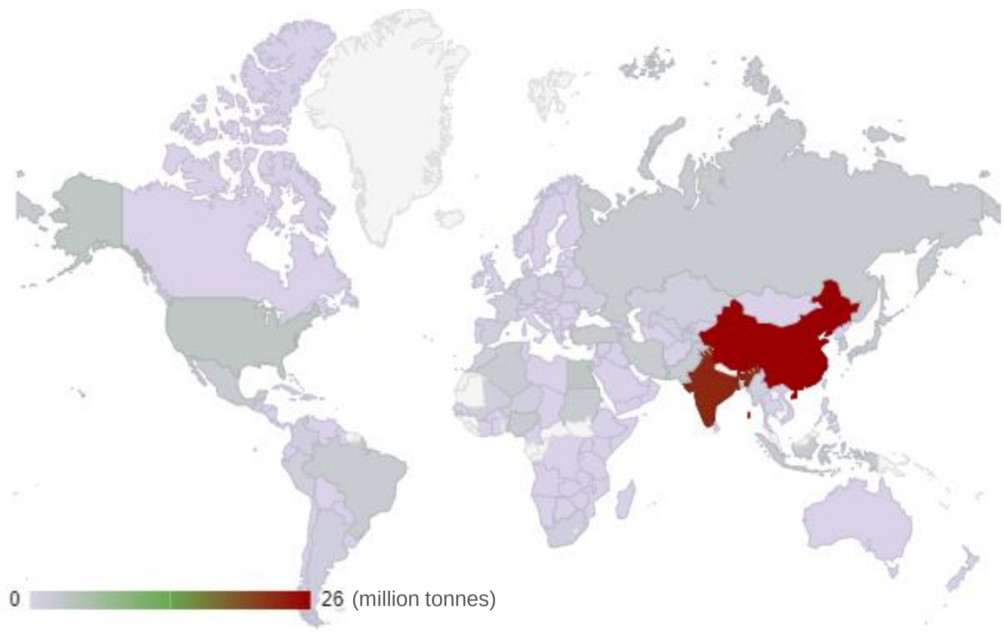
New Zealand is the world's 9th largest exporter of fresh onions, with more than 85% of production exported. It has the competitive advantage of having counter seasonal production to the northern hemisphere. However, following a sharp increase in the 1990s, New Zealand's production has remained relatively static over the past decade. New Zealand exported $NZ 173 million of fresh onions in 2019, accounting for around a 3% share of the global market.

Figure 1: Top 10 global exporters of onions[2] (2019)



Source: UN Comtrade (2020)

Figure 2: World onion[2] production volume (2019)



Source: FAO (2020)

1) Compound annual growth rate
2) HS code 70310, 71110, 71220

Rapid demographic and social changes pre-COVID-19 will drive increasing consumer spending and interest in high quality produce

The large and growing population of Indonesia, Vietnam, and Thailand provide a great consumer market for onions. These demographic trends are expected to be key drivers of future demand for fresh staple foods. In particular, growing middle incomes and increasing urbanisation are the other major forces shaping demand in these target countries. In addition, the importance of onions in Asian cuisines, and their widespread consumption across all levels of income, is also likely to strengthen this demand.

With the fastest growing economy in Southeast Asia, Vietnam's middle class is expected to account for more than half of the country's population by 2030. Indonesia's middle income class has grown by 12% annually since 2002. Thailand's middle class represented 35% of the total population in 2019, despite seeing a slow growth in its economy over the past 5 years.

In summary, the rapid demographic and social changes being experienced in these markets are likely to increase demand for high quality imported produce based on pre-COVID-19 projections.

Demand for premium products is likely to slow due to economic implications of COVID-19, but interest in immune-boosting products is expected to grow

In line with the world economy, Indonesia and Thailand have experienced a severe recession due to the impact of the COVID-19 pandemic across the world. For example, the International Monetary Fund (IMF) reported a 6.6% decline in Thailand's GDP in 2020. With increasing unemployment and declining household income, consumers are expected to focus more on affordability in their purchasing decisions.

However, early trends show that interest in healthy food has grown, as the pandemic has also elevated consumer health concerns. Consequently, although demand for premium products has declined, market forecasts suggest that sales of fresh food are expected to grow during and after the pandemic.

Vietnam and Indonesia grocery sales are projected to increase by 2% (to $US 117 billion) and 9% (to $US 53 billion) respectively in 2020 compared to 2019. This is in part driven by pandemic pressure. In particular, value sales of fresh food is projected to spike by 31% in Vietnam as a result of increased home cooking due to consumers' financial and health concerns[1].

However, Thailand's sales are projected to follow a different growth path than the other two countries, with a 18% decline expected in 2020 compared to 2019. This difference is likely to be influenced by the strong dependence of Thailand's economy on tourism, which has been the hardest hit industry in the COVID-19 crisis. Thailand's fresh food sales are expected to rebound gradually by 2024, as consumers shift their consumption habits away from eating out to cooking from home.

Figure 3: Key demographic indicators (2019)

Demographics	Indonesia	Vietnam	Thailand
GDP ($US billion)	1,119	262	543
GDP growth	5%	7%	2%
Population (million)	271	96	70
Middle class population (% of total population)	20%	13%	35%
Urbanisation (% of total population)	56%	37%	51%
Private consumption (% of total GDP)	57%	67%	49%
Free Trade Agreements with New Zealand	AANZ	AANZ CPTPP	Thailand New Zealand Closer Economic Partnership AANZ

Source: World Bank (2020)

1) Euromonitor International (2020) Coronavirus (COVID-19): Understanding the impact

Onion consumption is largely satisfied by domestic production in the target markets

Indonesia, Vietnam, and Thailand are relatively small markets for onions, with a low per capita consumption level compared to the world average. Indonesia, which has a larger per capita consumption and population, is therefore potentially a more promising market for New Zealand onion exporters than the other two.

Demand for onions is projected to grow between 2-4% per annum across the target markets by 2024. This will increase the volume of retail sales of onions to 1,488 thousand tonnes in Indonesia, 449 thousand tonnes in Vietnam, and 52 thousand tonnes in Thailand.

In addition, the low level of consumption of onions in these countries is currently being largely satisfied by domestic production, creating challenging market opportunities for exporters. This situation can be exacerbated at times when strong domestic production creates surpluses, like that predicted in Indonesia in 2020[1]. The affordability and availability of domestic onions acts as a significant counter to imports and is also compounded by dominance of traditional grocery retail channels.

As a result, market size for imported onions is currently relatively small. In Indonesia, the largest of the three markets, it totalled $US 74 million in 2019, while it is $US 35 million in Vietnam, and $US 36 million in Thailand.

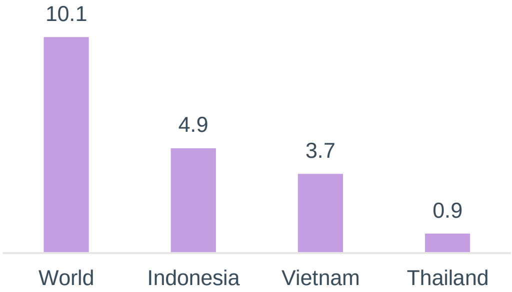
There is growing interest in imported onions with a focus on more affordable and safe produce

Thai consumers appear to be more interested in imported onions than consumers in the other two markets, based on our analysis of recent trade data. 39% of onion consumption was imported in Thailand in 2019, compared to only 8% in Indonesia and 9% in Vietnam. This high share of imported onions in Thailand is likely attributable to its large middle income population as compared to the other two countries. It is also supported by its substantial foodservice industry link with tourism.

Trends in trade indicate a fluctuating but growing interest in imported onions among consumers in all three markets. Since 2000, the value of imported onions has increased by a CAGR of 23% in Thailand, 7% in Indonesia and 17% in Vietnam[2].

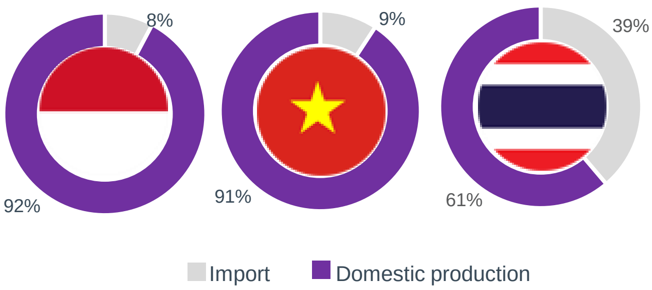
This increasing interest in imported onions combined with economic and health implications of COVID-19 may present increasing opportunities for New Zealand exporters to supply affordable and safe onions into these markets. This is mainly driven by consumer concerns over food safety and quality. However, challenges still exist in the selected markets due to weaker logistic systems, contributing to variable quality and shelf-life. Moreover, exporters may also face further pressure in Indonesia due to volatile onion imports driven by the country's horticultural import licensing system.

Figure 4: Onion per capita consumption in kg (2019)



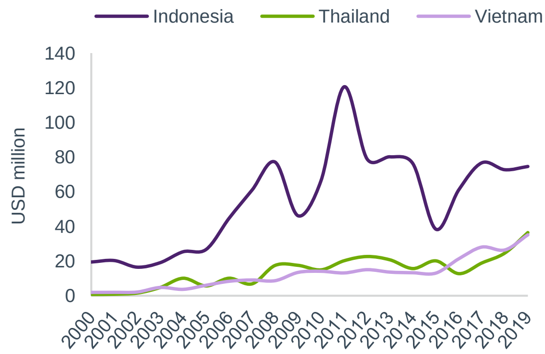
Source: Euromonitor (2020)

Figure 5: Share of imports and domestic production in onion[3] consumption volume (2018)



Source: UN Comtrade and FAO (2020)

Figure 6: Onion[3] imports by country (2000-2019)



Source: UN Comtrade (2020)

1) https://www.freshplaza.com/article/9222323/indonesian-government-expects-onion-surplus/
2) Please see Appendix 2 for more details on onion imports and productions
3) HS Codes: 70310, 71110, 71220

Competition has intensified across all markets for imported onions

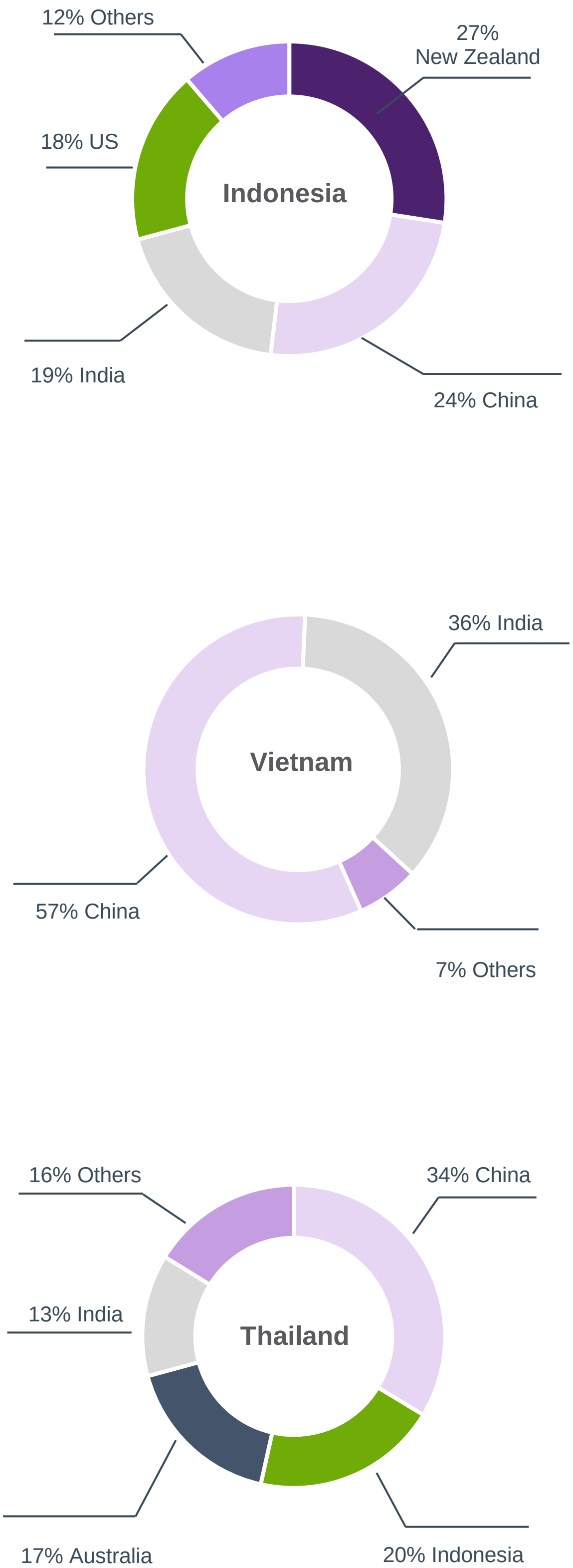
In the three selected countries, the small market for imported onions is highly concentrated. However, New Zealand has managed to gradually acquire a significant share of the market in Indonesia over the past decade. As a result, it is now the largest onion exporter to that country, with a 27% share of the market. In an environment of strong competition from India and China, this has been achieved via industry's collaborative efforts to overcome non-tariff requirements and to capitalise on favourable tariff settings within ASEAN-Australia-New Zealand free trade agreement (AANZFTA). These efforts were supported by strong domestic demand and higher relative purchasing power of Indonesian consumers compared to other potential Asian markets.

By contrast, the market share of New Zealand onions in Vietnam and Thailand is limited at present. The Vietnamese market for onions is largely dominated by India and China, which together accounted for 93% of the total market in 2019.

While Thailand has been a difficult market due to the historic presence of high tariffs, New Zealand exporters are likely to see growing opportunities in the future, as imports became free of tariffs for New Zealand in 2020, under the Thailand New Zealand Closer Economic Partnership Agreement (TNZCEP). However, this market is still relatively concentrated with 71% of onions imported from three suppliers including China, Indonesia, and Australia.

This high market concentration and the low export prices offered by competitors, combined with consumers' price sensitivity, are expected to create strong barriers for New Zealand exporters seeking to sell onions in each of these markets.

Figure 7: Competitive landscape for imported onions[1] (2019)



Source: UN Comtrade (2020)

1) HS Codes: 70310, 71110, 71220

Promising growth in modern grocery retail channels exists across all three target markets

The structure of grocery retail channels is an important contributing factor in the identified market trends across these markets, and is closely associated with the market potential for New Zealand exporters.

Modern grocery retail channels (e.g. supermarkets, hypermarkets, and convenience stores) offer more opportunity for exporters compared to traditional channels (e.g. wet markets and farmers' markets). Convenience stores have the largest share of the modern grocery retail sales in Indonesia and Thailand, whereas supermarkets dominate the modern grocery retail channels in Vietnam[1].

These modern channels are more likely to offer higher quality products at higher prices, targeting urban consumers with a higher disposable income.

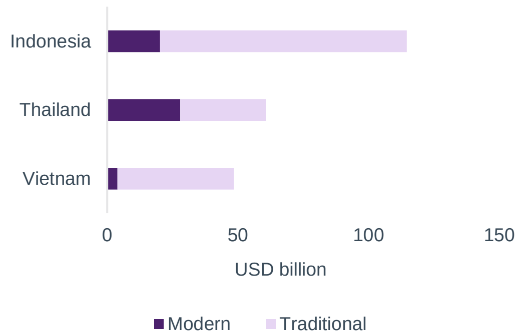
Exporters are therefore expected to face more challenges in Indonesia and Vietnam where the dominance of traditional grocery retail channels create a more fragmented distribution network. The level of market penetration by modern grocery retail channels is characterised as moderate to low in Indonesia, with 18% market share in 2019, while modern grocery retail channels represent only 8% of Vietnam's total market share.

However, despite this the outlook remains positive, with total modern grocery value sales revenues expected to increase in Vietnam and Indonesia over the next four years. Millions of consumers with more disposable income and greater concern for food safety are increasingly expected to turn to modern retail channels for their food purchases.

In comparison, as Thailand's large share of middle-income urban population has increased, modern grocery channels have developed rapidly in Thailand, acquiring 46% of this growing market in 2019.

In the short term therefore, the growth in modern grocery channels is likely to be amplified by emerging consumer concerns around health and food safety driven by the spread of COVID-19. Given their products are perceived to have higher quality and food safety than most competitors, this is likely to create more opportunities for New Zealand exporters.

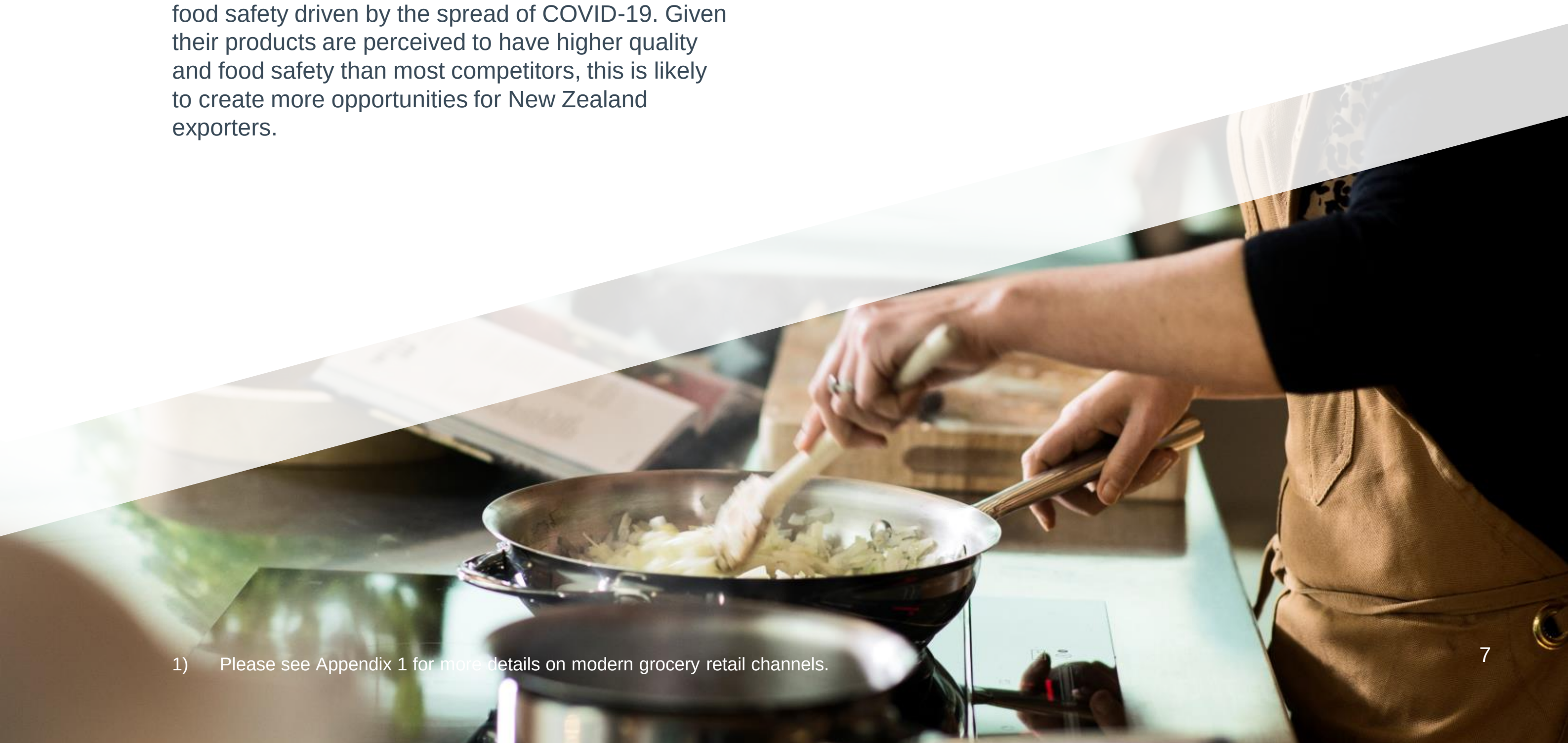
Figure 8: Grocery retail channels revenues (2019)



Source: Euromonitor (2020)

Figure 9: Modern grocery retail channel revenues (2019)

Source: Euromonitor (2020)



1) Please see Appendix 1 for more details on modern grocery retail channels.

Organic onions are gaining popularity in Thailand

Popular onion product attributes and claims differ across the selected markets due to the differences in consumers' purchasing habits and preferences.

Our analysis of online hypermarket products[1] in Indonesia showed that fresh onions are occasionally branded with country of origin labelling to differentiate from local produce. Large size, round shape, and health benefits are the most common claims used for brown onions.

A similar review in Thailand indicated that fresh onions are generally unbranded, with no country of origin, but they were at times differentiated between imported and local products.

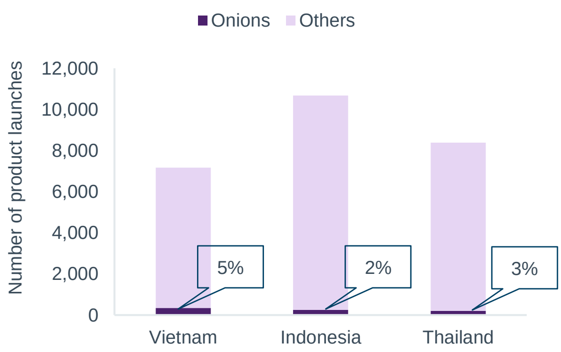
In particular, in line with the growing popularity of organic vegetables (with 8.5% growth per annum forecast from 2019-2024)[2], demand for organic onions is expected to grow in Thailand. This presents potential market opportunities for New Zealand exporters seeking to differentiate themselves in this market. However, sales of organic onions are unlikely to overtake mainstream produce in the short-term given their higher prices and the limited diversity of organic products.

Similarly, interest in organic vegetables is also a small emerging trend in Vietnam and Indonesia[2].

Onions have only limited use as ingredients in new and innovative product launches

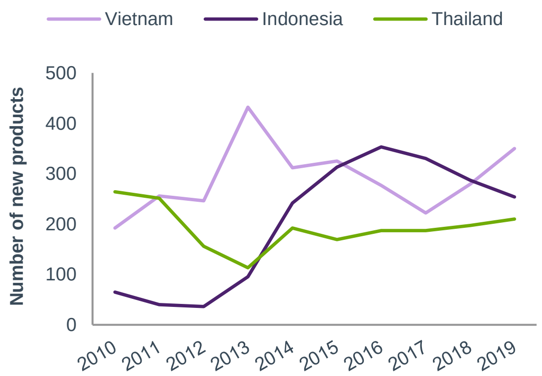
Onions are not the most popular ingredient in new and innovative product launches within Indonesia, Vietnam, and Thailand. The number of new product launches which contained onions as an ingredient accounted for less than 5% of the total across these three markets between 2010 and 2019. Within these new product launches, onions tend to be mainly used as an ingredient in instant noodles, grain-based snacks, seasoning, and fish products.

Figure 10: New product launches with onions listed as an ingredient vs. other products (2019)



Source: Mintel (2020)

Figure 11: New product launches with onion as an ingredient (2010-2019)



Source: Mintel (2020)

Pink onions

Onion premiumisation is on the rise and can take many forms, including organic, ready-to-use, plastic-free packaging, health claims and colour. Pink onions are a new variety making waves across Europe and the UK. It is marketed as a gourmet onion due to its unusual blush and sweet taste. Its premium status has also been reinforced by a marketing tie with Cancer Research UK's anti-breast cancer campaign, which has been using the 'pink ribbon' as its emblem.

The pink onion has been promoted by growers such as Daniel Cadiou in France, and Stourgarden in the UK. It has been mainly exported to Europe with recent expansion into the North American market as well. The pink onions from Stourgarden were first introduced by the grocery retailer Tesco in 2012 at a price of £1.30 for a pack of three[3].

1) Vietnam is not included in this section given the content of online hypermarket websites was not provided in English.
2) Global Organic Trade Guide (2020)
3) Euromonitor International (2013) Onions – an upmarket vegetable!
4) Photograph of Rosanna Pink Onions. (n.d.). https://thepinkonioncompany.wordpress.com/2014/12/30/rosanna-pink-onions/

Current market dynamics signal growing opportunities for New Zealand onions in Indonesia and Thailand, while more challenges are expected in Vietnam

With its larger population and higher onion per capita consumption, Indonesia is expected to show stronger demand for New Zealand onions than Thailand and Vietnam. Its large growing economy with rising middle income population will continue to drive demand for imported premium onions. While competition is intensive across all three markets, the significant penetration of modern grocery retail channels in Indonesia will help to facilitate New Zealand exporters' access to their target consumers.

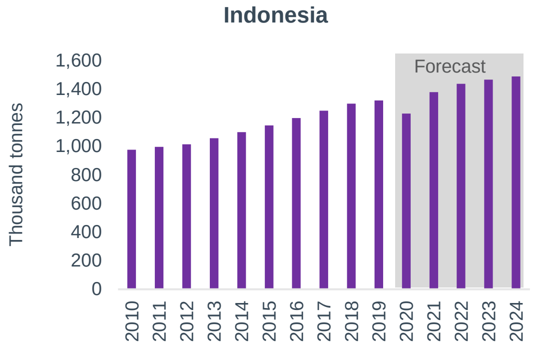
Despite offering the smallest market size among the three selected markets, market opportunities are growing for New Zealand grown onions in Thailand. Its sustained economic growth has shifted a large share of population from poverty to middle income over the past two decades, creating a significant demand for imported products. Of the three markets, Thailand has the largest revenue in modern grocery retail channels, offering a significant opportunity for New Zealand exporters to reach consumers that seek premium products.

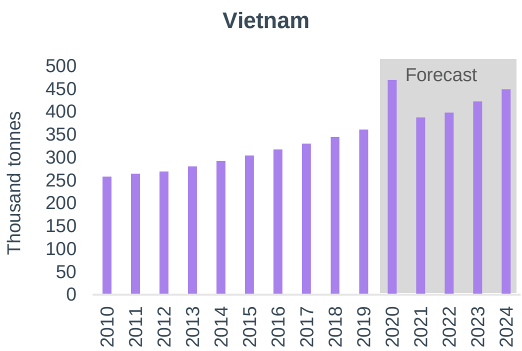
In contrast, with a relatively small demand for imported onions, Vietnam offers more limited short-term market opportunities for New Zealand onion exporters due to its high market concentration, small middle income population, and fragmented distribution channels. However, Vietnam's fast economic growth creates a positive outlook in medium-term, as demand for premium products is likely to increase alongside its growing middle income population.

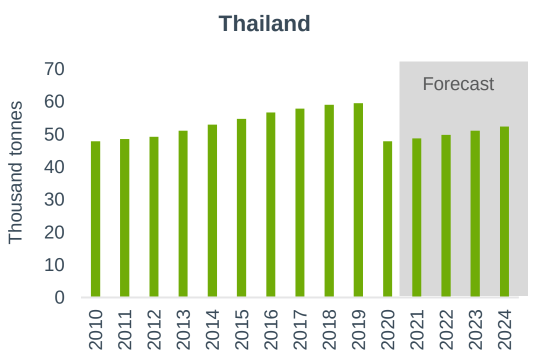
Figure 12: Comparison of market factors across the three target markets

Market factors	Indonesia	Vietnam	Thailand
Population	Largest	Medium	Smallest
Economic growth	Medium	Largest	Smallest
Middle income population	Largest	Smallest	Medium
Onion market	Largest	Medium	Smallest
Imported onion market	Largest	Smallest	Medium
Competition	Lowest	Highest	Medium
Ease of access to target consumers	Medium	Hardest	Easiest

Figure 12: Onion retail volume sales (2010-2024)







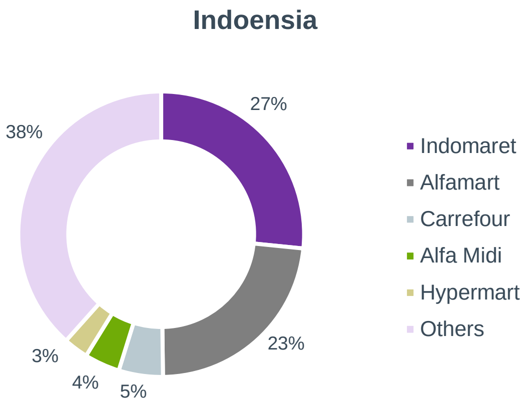
Source: Euromonitor (2020)

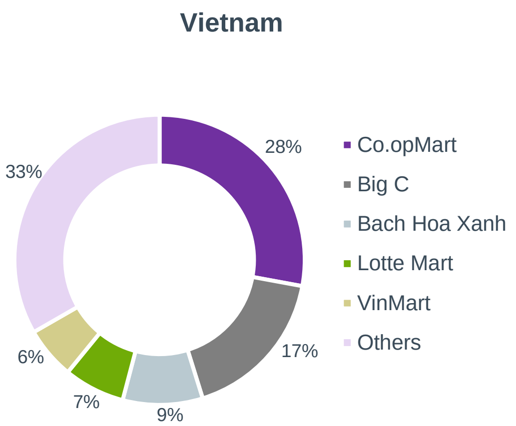
Figure 13: Per capita consumption of onions - top 10 countries (2019)

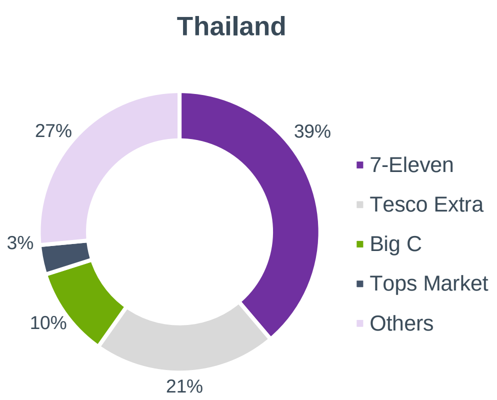
Country	Per capita consumption (kg)
United Arab Emirates	25.3
Albania	24.5
Hungary	23.4
South Korea	23.2
Tunisia	22.4
Greece	21.6
Sri Lanka	20.4
Morocco	20.2
Algeria	19.7
Cabo Verde	19.5

Source: Euromonitor (2020)

Figure 14: Modern retail grocery channel market share by brand (2019)

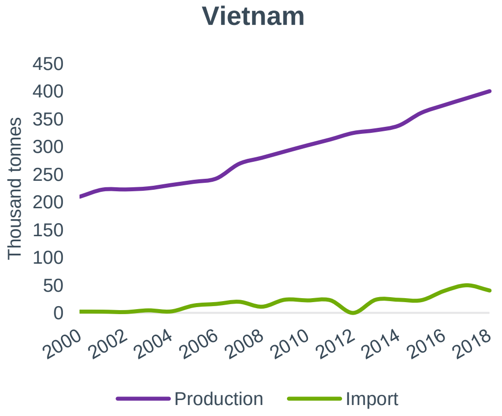


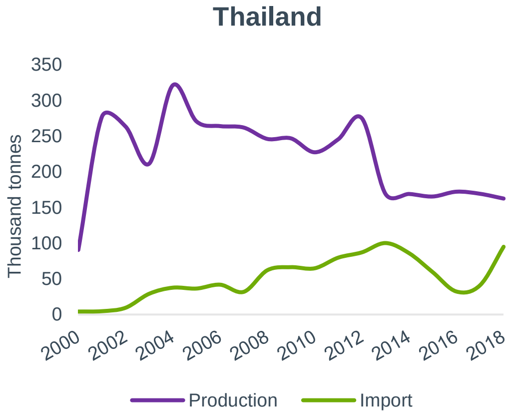




Source: Euromonitor (2020)

Figure 15: Domestic onion[1] production and imports (2000-2018)





Source: FAO, UN Comtrade (2020)

Figure 16: Major processors of vegetables in Vietnam (2019)

Company name	Product	Rank
Vietnam National Vegetable, Fruit and Agricultural Product Corporation., Jsc	Vegetables	1
Dalat GAP company	Vegetables	2
VinEco Agricultural Investment, Development and Productions LLC.	Vegetables	3

Source: Euromonitor (2020)

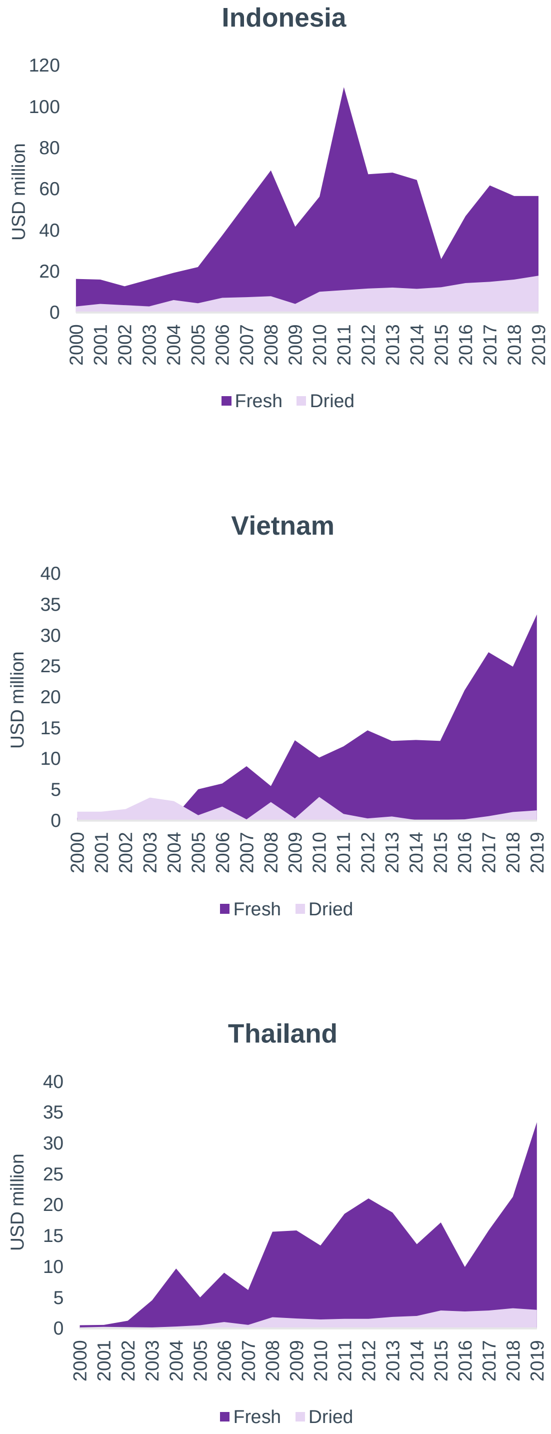
Figure 17: Major processors of vegetables in Thailand (2019)

Company name	Product type	Rank
Siam Fresh Enterprise	Vegetables	1
Natural and Premium Food	Organic Vegetables	2
Royal Project Foundation	Organic Vegetables	3

Source: Euromonitor (2020)

1) HS Codes: 70310, 71110, 71220

Figure 18: Fresh and dried onion[1] imports (2000-2019)



Source: UN Comtrade (2020)

1) HS Codes: 70310, 71220

Figure 19: Top exporters FOB prices of fresh onions[1] $US/kg (2010-2019)

Indonesia

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
New Zealand	0.36	0.41	0.38	0.52	0.60	0.50	0.62	0.62	0.67	0.62
China	0.43	0.43	0.45	0.47	0.54	0.56	0.57	0.56	0.69	0.62
India	0.40	0.41	0.39	0.60	0.36	0.29	0.26	0.30	0.30	0.62
Netherlands	0.44	0.39	0.37	0.46	0.47	0.48	0.49	0.49	0.62	0.62
Australia	0.52	0.56	0.51	0.52	0.48	N/A	0.64	0.67	0.75	0.62

Vietnam

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
New Zealand	N/A	N/A	N/A	N/A	0.55	N/A	N/A	0.55	0.63	0.62
China	0.48	0.53	N/A	0.55	0.55	0.56	0.53	0.55	0.63	0.62
India	0.48	0.53	N/A	0.55	0.55	0.56	0.53	0.55	0.63	0.62
Korea	N/A	0.53	N/A	N/A	0.55	0.56	0.53	0.55	0.63	0.62
Myanmar	N/A	N/A	N/A	0.55	0.55	0.56	0.53	0.55	0.63	0.62
Malaysia	N/A	N/A	N/A	0.55	0.55	N/A	N/A	N/A	0.63	0.62

Thailand

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Indonesia	0.31	0.41	0.49	0.69	0.69	0.92	0.94	1.44	1.30	1.49
Australia	1.57	2.50	2.91	2.89	1.12	0.47	0.65	0.76	0.76	0.63
India	0.11	0.11	0.10	0.10	0.09	0.20	0.31	0.34	0.17	0.46
Myanmar	0.27	0.28	0.41	0.38	0.23	0.21	0.26	0.30	0.32	0.47
China	0.14	0.20	0.23	0.17	0.14	0.26	0.33	0.26	0.16	0.26
Netherlands	0.18	0.16	0.13	0.10	0.12	0.19	0.32	0.34	0.27	0.15

Source: UN Comtrade (2020)

1) HS Codes: 70310

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