



**Benje
Patterson**
People & Places

June 2024

Baseline economic analysis of Nelson Tasman's food and beverage sector



Report commissioned by Nelson Regional
Development Agency (NRDA)

Prepared by: Benje Patterson
Benje Patterson | People & Places
www.benjepatterson.co.nz

June 2024

All work provided and services rendered are at the request of the client and intended for the client's purposes only. Benje Patterson Ltd and its employees do not accept any responsibility on any grounds whatsoever, including negligence, to any other person or organisation. While every effort is made by Benje Patterson Ltd to ensure that the information and analysis are accurate and reliable, Benje Patterson Ltd shall not be liable for any adverse consequences of the client's decisions made in reliance of any report provided by Benje Patterson Ltd. Furthermore, Benje Patterson Ltd make no representations or warranties of any kind as to whether any report provided by Benje Patterson Ltd will assist in the performance of the client's functions. Any reliance will be at your own risk.

1. Contents

| | |
|---|----|
| 2. Executive summary..... | 2 |
| 3. Baseline size and shape of food and beverage sector..... | 3 |
| 4. Food and beverage resources along the value chain..... | 5 |
| 5. The role of tourism in the food and beverage sector..... | 8 |
| 6. Challenges and opportunities..... | 10 |
| 7. Appendix: Food and beverage sector definition..... | 12 |

2. Executive summary

This report was commissioned by Nelson Regional Development Agency (NRDA). The purpose is to provide baseline economic analysis of Nelson Tasman's food and beverage sector. This baseline analysis can be used as a starting point to guide future engagement with stakeholders to better understand from them the practicalities and best ways to support a thriving food and beverage sector in Nelson Tasman.

The food and beverage sector is defined¹ as the direct economic/employment benefits associated with:

1. Growing/harvesting (paddock/orchard/ocean)
2. Processing
3. Serving (hospitality).

Following the value chain from paddock/orchard/ocean to plate captures value added by growing, processing, and serving the food and beverage items.

Key questions answered in this report include:

- What is the baseline size and shape of the food and beverage sector in Nelson Tasman?
- How are resources divided along the value chain between production, processing, and serving?
- How much food and beverage value added can be attributed to the visitor sector?
- What are some of the key risks and opportunities for future growth in the sector?

2.1. Key findings

- Nelson Tasman's food and beverage sector:
 - Provides **11,331 jobs** (19% of all jobs)
 - Generates **\$787 million of GDP²** (12.0% of all GDP)
 - Earns **\$1.2 billion of export revenue** (71% of all export revenue).
- The **most important subsector is the orchard**, which includes growing and processing of fruit, vegetables, and grain. This subsector contributes \$248 million of GDP.
- **Other major contributors** are: **The ocean** (\$222m of GDP), **The paddock** (\$140m of GDP), **Serving** in the hospitality sector (\$129m of GDP), and **Other food and beverage products** (\$48m of GDP).
- 51% of jobs are at a growing/harvesting level, with 23% associated with processing of food and beverage items, and another 26% associated with serving in hospitality establishments.
- Enjoying local food and beverages is a way for tourists to connect with destination.
 - International tourists to Nelson Tasman spent \$57 million on food and beverages at restaurants, cafes, and bars while visiting the region in 2023.
 - Additionally, a further \$16 million a year of exports may be due to ex-visitors continuing to buy Nelson Tasman food and beverage products from overseas once they return.
- The food and beverage sector has lower productivity than some other sectors. Reasons include:
 - Seasonality means equipment and labour is not always well utilised throughout the year.
 - Worker availability and skills shortages affect capacity and systems improvements.
 - Insufficient investment in innovation, and a lack of scale and access to capital.
 - An overreliance on commodity-based food systems rather than higher-value products.
- Further risks and opportunities for Nelson Tasman's food and beverage sector are in Section 6.2.

¹ A detailed definition of the sector used in the analysis can be found in the appendix.

² **Economic value add (GDP) is the economics equivalent of an accounting profit. GDP should not be confused with gross revenue/output measures (e.g. export sales), which capture sales before inputs costs have been considered.**

3. Baseline size and shape of food and beverage sector

This section gives the baseline size and shape of Nelson Tasman's food and beverage sector.

3.1. Size of Nelson Tasman's food and beverage sector

Nelson Tasman's food and beverage sector has 11,331 jobs³, ranging from growing and harvesting to further processing for end markets, as well as preparing and serving within hospitality establishments.

Collectively the 11,331 food and beverage workers support about \$787 million of economic value add (GDP⁴) in Nelson Tasman. Gross export revenue of Nelson Tasman food and beverage products is estimated at \$1.2 billion.

Figure 1 – Size of Nelson Tasman's food and beverage sector, March 2023 year



Food and beverage employment and GDP have both grown at average annual rates of 1.8%pa over the past decade. Food and beverage export revenue has grown at an average rate of 5.7%pa⁵.

Table 1 – Growth in Nelson Tasman's food and beverage sector

| Growth in Nelson Tasman's food and beverage sector over the past decade | | | |
|---|--------|----------|-------------------------|
| <i>Author estimates using data from Infometrics, March years</i> | | | |
| | 2013 | 2023 | Average annual % change |
| Nelson Tasman's F&B employment (filled jobs) | 9,486 | 11,331 | 1.8% |
| Nelson Tasman's F&B GDP (\$m, 2023 pricing) | \$660m | \$787m | 1.8% |
| Nelson Tasman's F&B export revenue (\$m) | \$693m | \$1,200m | 5.7% |

The food and beverage sector accounts for 12.0% of Nelson Tasman's total GDP⁶, which is higher than the sector's 8.7% share of New Zealand's GDP. The sector generates about one out of every \$8 of GDP in Nelson Tasman.

Employment in the food and beverage sector accounts for 19% of the 60,058 jobs in Nelson Tasman. Food and beverage exports represented 71% of the region's \$1.7 billion of goods and service exports.

³ Job estimates from Infometrics are for average filled jobs across the year.

⁴ **Recall economic value add (GDP) is the economics equivalent of an accounting profit and should not be confused with gross revenue/output measures (e.g. export sales), which capture sales before inputs costs.**

⁵ Export revenue is in nominal terms, so includes the distractionary effects of inflation. Stripping out inflation shows real export growth of 3.0%pa over the past decade – which is faster than real GDP growth of 1.8%pa.

⁶ Infometrics estimated that Nelson Tasman's total economy generated about \$6.6 billion of GDP in 2023.

3.2. Which food and beverage subsectors contribute most?

Nelson Tasman's food and beverage sector has several distinct product focusses ranging from food and beverage items that start life in an orchard, a paddock, or the ocean, through to other types of manufactured food and beverage products and cuisine served up within the hospitality sector⁷.

The **most important product subsector is the orchard**, which includes the growing and processing of fruit, vegetables, and grain into food and beverage products. This product subsector contributes \$248 million of GDP, accounts for 3,395 filled jobs, and generates \$599 million of export revenue.

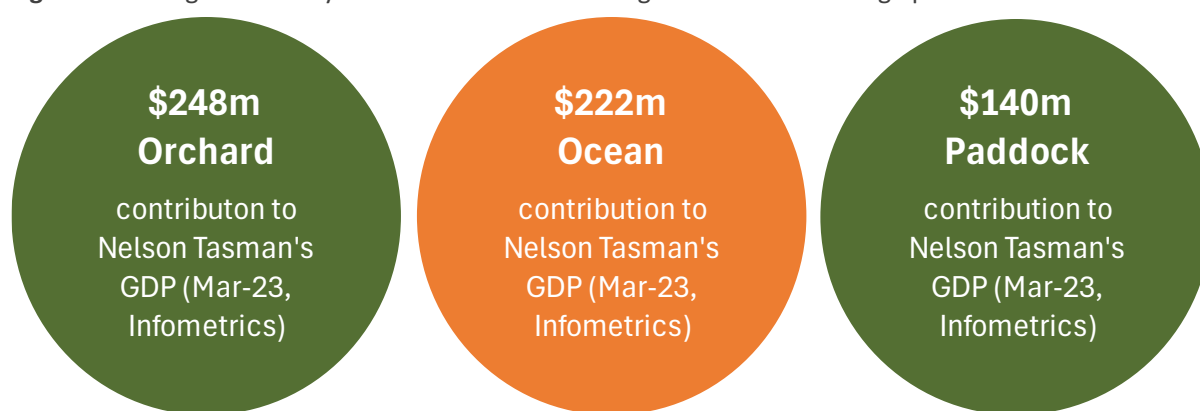
The other major food and beverage contributors are:

- **The ocean**, which includes fishing and aquaculture and processing of this seafood. The subsector generates \$222 million of GDP, accounts for 2,717 jobs, and \$294 million of export revenue.
- **The paddock**, which includes livestock farming and food products derived thereof. The subsector generates \$140 million of GDP, accounts for 1,550 jobs, and \$167 million of export revenue.
- **Serving**, which captures food and beverages prepared at restaurants, cafes, and bars. Hospitality contributes \$129 million to GDP, employs 2,916 people, and generates \$57 million of exports⁸.
- **Other food and beverage products**, which captures a range of other manufactured food and beverage items, adds \$48 million to GDP, employs 753 people, and earns \$83 million of exports.

Table 2

| GDP, jobs, and exports supported by each food and beverage subsector in Nelson Tasman | | | |
|--|------------------|---------------|----------------------|
| GDP (\$m), filled jobs, & exports (\$m), March 2023 year, author estimates using data from Infometrics | | | |
| F&B product subsectors | GDP (\$ million) | Filled jobs | Exports (\$ million) |
| Orchard (fruit, vegetable, grain) | \$248m | 3,395 | \$599m |
| Ocean | \$222m | 2,717 | \$294m |
| Paddock | \$140m | 1,550 | \$167m |
| Serving (hospitality) | \$129m | 2,916 | \$57m |
| Other F&B products | \$48m | 753 | \$83m |
| Total F&B sector | \$787m | 11,331 | \$1,200m |

Figure 2 – GDP generated by Nelson Tasman's three largest food and beverage product subsectors



⁷ The definitions of what is included within each of these subsectors is outlined in the appendix.

⁸ Hospitality exports capture spending at restaurants, cafes, and bars by tourists (covered more in Section 5).

4. Food and beverage resources along the value chain

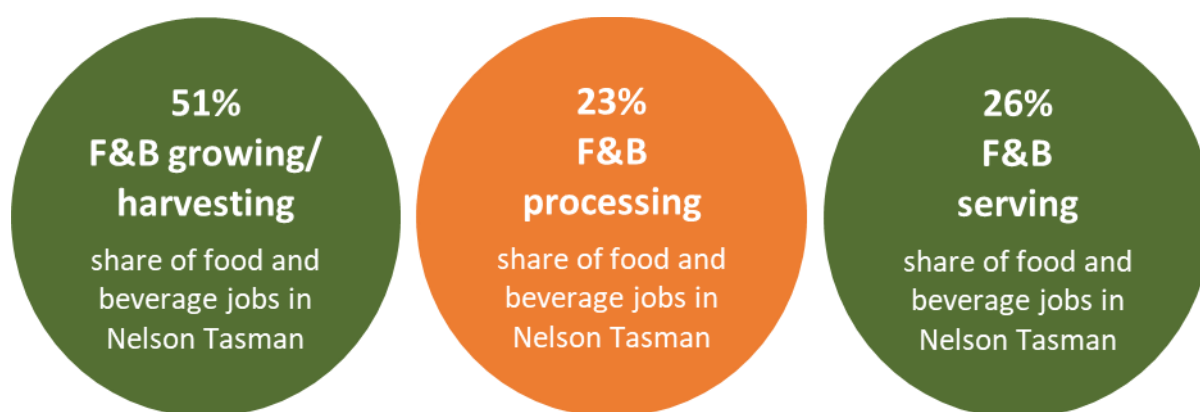
This section considers how resourcing is divided along the food and beverage value chain (e.g. between growing/harvesting, processing, and serving).

4.1. How are resources divided along the value chain?

It is interesting to consider how resourcing is focussed along different parts of the food and beverage value chain from growing/harvesting, through to processing products for end markets, and preparing and serving food and beverages in hospitality establishments.

Of the 11,331 food and beverage jobs in Nelson Tasman, 51% (5,760 jobs) are at a growing/harvesting level, with 23% (2,655 jobs) associated with processing of food and beverage items for end markets, and another 26% (2,916 jobs) associated with serving in hospitality establishments.

Figure 3 – Allocation of employment along the food and beverage value chain in Nelson Tasman



4.2. How does the value chain compare to elsewhere?

A high share of Nelson Tasman’s food and beverage sector resources focus on the production end of the sector (growing/harvesting and processing) compared to serving in hospitality than is the case nationally. This fits the region’s export focus and relatively small local population compared to our biggest cities.

Just 26% of employment in Nelson Tasman’s food and beverage sector sits within the serving (hospitality) part of the value chain, compared to a 40% share across New Zealand.

Table 3

| Food and beverage jobs along different parts of the value chain | | | | |
|---|---------------|-------------|----------------|-------------|
| <i>Filled jobs, March 2023 year, Author estimates from Infometrics data</i> | | | | |
| | Nelson Tasman | | New Zealand | |
| | Filled jobs | Share (%) | Filled jobs | Share (%) |
| Growing/harvesting | 5,760 | 51% | 130,279 | 36% |
| Processing | 2,655 | 23% | 84,562 | 24% |
| Serving | 2,916 | 26% | 142,936 | 40% |
| Total F&B jobs | 11,331 | 100% | 357,777 | 100% |

From an economic value add (GDP) perspective, 84% (\$658 million) of GDP in Nelson Tasman’s food and beverage sector comes from growing/harvesting and processing food and beverage products, which is higher than the 80% share which such processes represent of food and beverage GDP nationally.

Table 4

| Food and beverage GDP generated along different parts of the value chain | | | | |
|--|---------------|-------------|------------------|-------------|
| GDP (\$m, 2023 pricing), March 2023 year, Author estimates from Infometrics data | | | | |
| | Nelson Tasman | | New Zealand | |
| | GDP (\$m) | Share (%) | GDP (\$m) | Share (%) |
| Growing/harvesting | \$371m | 47% | \$16,059m | 49% |
| Processing | \$287m | 36% | \$10,289m | 31% |
| Serving | \$129m | 16% | \$6,492m | 20% |
| Total F&B GDP | \$787m | 100% | \$32,840m | 100% |

Despite serving (hospitality) representing a relatively low share of Nelson Tasman’s overall food and beverage economic impact, it is important to bear in mind that there are also other associated benefits that accrue above and beyond the \$129 million of direct GDP generated by hospitality.

A wonderful hospitality experience can create a connection with a food and beverage product that the customer seeks to recreate at home. In the local context, this can mean that Nelson Tasman residents might be more inclined in future to purchase local food and beverage products from the supermarket, while visitors may continue to buy Nelson Tasman products after their holiday has ended. Research presented in Section 5 highlights that tens of millions of dollars of export sales of Nelson Tasman food and beverage products can be attributed to purchases by ex-visitors to the region once they return home.

4.3. How productive is the food and beverage sector?

Productivity emphasises using resources more effectively. With higher productivity we get more output from a given level of input. Put simply, productivity is about making people ‘work smarter’ rather than ‘work harder’.

Productivity has been measured by how much GDP is generated for each labour resource (eg. per job) to be comparable to productivity metrics for other parts of the local economy. Bear in mind though that food and beverage productivity, can be influenced by a variety of factors including technology, access to capital, climate, land, and water – so the findings in this report should be supplemented with further analysis of these factors among others.

Nelson Tasman’s food and beverage sector generated \$69,473 of GDP per job⁹ in 2023. This is lower than the rest of the local economy, with GDP per job across the Nelson Tasman economy as a whole sitting at \$109,227.

The observation of lower food and beverage productivity is also echoed across the rest of New Zealand – GDP per job across the New Zealand food and beverage sector is \$91,789 compared to GDP per job of \$137,020 across the entire New Zealand economy.

⁹ Jobs are measured as average annualised employment across the year to mitigate the effects of seasonality. In practical terms, this means a job that appears in only one quarter of the year would account for 0.25 jobs.

There are several reasons for lower productivity outcomes in the food and beverage sector, including¹⁰:

- Highly seasonal growing, harvesting, and processing cycles mean that equipment and labour is not always well utilised throughout the year.
- Constrained worker availability and key skills shortages affect capacity and system improvement. The workforce is aging and so these challenges are unlikely to get better.
- Insufficient investment in innovation, and a lack of scale and access to capital for growth.
- Overreliance on a commodity-based food system rather than one that is more responsive to consumer and market demands for higher-value products and emerging foods.

Table 5 – Comparing food and beverage productivity

| Food and beverage sector productivity (GDP/job) generated along different parts of the value chain | | | | |
|---|----------------------|------------------------------|---------------------|------------------------------|
| <i>Productivity (GDP per job, 2023 pricing), March 2023 year, Author estimates from Infometrics data</i> | | | | |
| | Nelson Tasman | | New Zealand | |
| | Productivity | Share of F&B jobs | Productivity | Share of F&B jobs |
| Growing/harvesting | \$64,427 | 51% | \$123,268 | 36% |
| Processing | \$107,985 | 23% | \$121,674 | 24% |
| Serving | \$44,376 | 26% | \$45,418 | 40% |
| Total F&B productivity | \$69,473 | 100% | \$91,789 | 100% |

If we consider specifically why Nelson Tasman’s food and beverage sector has lower productivity than the sector nationwide, this appears to primarily be because of a high concentration of jobs within growing and harvesting at lower GDP per job than the national average. Some 51% of Nelson Tasman’s food and beverage jobs are in growing/harvesting compared to 36% nationally, and the productivity of these jobs is \$64,427 of GDP per job compared to \$123,268 nationally. Productivity within processing and serving parts of the food and beverage value chain in Nelson Tasman are much closer to the national average.

If productivity within the growing and harvesting side of Nelson Tasman’s food and beverage sector lifted to the New Zealand average then this would close the region’s productivity gap with the rest of New Zealand. It would take average productivity across Nelson Tasman’s entire food and beverage sector to almost \$100,000 of GDP per job, which would generate more than \$300 million of additional GDP a year.

Achieving a transformational lift in growing and harvesting productivity is easier said than done given such a high concentration of resources in Nelson Tasman are in the growing of fruit, vegetables, and other crops, which are more labour intensive than livestock farming systems which are more dominant elsewhere. Nevertheless, there are significant labour-saving opportunities to lift orchard productivities, in areas such as technology (i.e. automation and agritech) and efficient planting systems. There are also ways of improving yields in other ways, such as breeding and genetics, higher value crop selections, and water storage investments to protect irrigation availability (e.g. the Waimea Dam).

The Waimea Dam is only just being commissioned and so has not yet delivered measurable economic returns. But analysis by the NZIER¹¹ (Waimea Dam Economic Assessment) has projected that the Waimea Dam alone could deliver more than \$50 to \$100 million of additional GDP each year to the region once fully operational as a result of improving water availability in dry years. Some of the gains will occur because of improved harvests, while other gains would occur because of anticipated large-scale plantings to apples, grapes, berries, and kiwifruit. Some of these crops can offer high returns in consumer markets.

¹⁰ A comprehensive roundup of productivity challenges for the sector is found in the Food and Beverage Draft Industry Transformation Plan, available here: <https://tinyurl.com/3t93rrtf>

¹¹ See: NZIER, Waimea Dam Assessment, available here: <https://tinyurl.com/5n9x64rc>

5. The role of tourism in the food and beverage sector

This section introduces the role of the visitor economy as part of Nelson Tasman's food and beverage sector. It includes an overview of spending on food and beverage by visitors while they are in the region, as well as the legacy effects which positive food and beverage experiences can have on ex-visitors' purchases of Nelson Tasman's food and beverage exports once they return home.

5.1. Spending on food and beverage by tourists in region

We all know that wining and dining is a key part of a holiday experience. Enjoying local food and beverages is a way for tourists to connect with the culture and way of life of a destination.

International tourists to Nelson Tasman spent \$57 million on food and beverages at restaurants, cafes, and bars while visiting the region in 2023. This spending by international tourists in Nelson Tasman's hospitality sector represents a service-based export for the region's food and beverage sector. This \$57 million of food and beverage service exports represents almost 5% of total food and beverage exports (across both goods and services).

In addition to international visitors, domestic travellers from other parts of New Zealand spent \$79 million on food and beverage serving during holidays to Nelson Tasman in 2023. Although spending by domestic travellers in Nelson Tasman does not represent additional export earnings into New Zealand, it does still support local economic activity and employment in the region. To put \$79 million of domestic travellers' hospitality spend in perspective, this would generate \$36 million of GDP in Nelson Tasman (out of \$129 million of total hospitality GDP) and support 820 jobs¹².

It is estimated that the \$136 million of domestic and international visitor spending on hospitality in Nelson Tasman generates \$63 million of GDP and supports 1,414 jobs. The activity supported by this visitor spending on hospitality represents half of hospitality GDP and employment in the region.

5.2. Food and beverage exports to ex-visitors once home

Tourism is not just about the experience a visitor has while in New Zealand, the visit can forever change the person. When you return home, you often look to nostalgically recreate memories from that holiday. For example, in the Nelson Tasman context this may mean that following a particularly memorable feast of kai moana, washed down by a local beer or wine, the visitor may get back to their home country and buy those same Nelson Tasman products from their local supermarket.

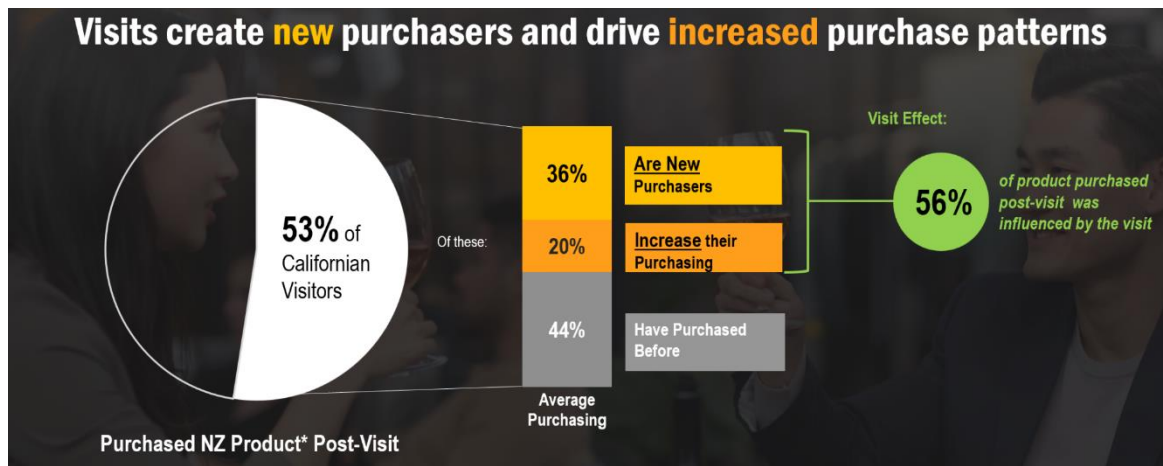
Market research by OnePicture¹³ has shown that one in two visitors (53%) to New Zealand from California become regular buyers of our exports. This finding is consistent with other international research¹⁴.

¹² GDP and employment supported by visitor spending have been estimated with multipliers from Infometrics.

¹³ OnePicture's research on post-visit consumption patterns of Californian visitors to New Zealand is available here: <https://www.benjepatterson.co.nz/could-exporting-to-ex-visitors-be-nzs-next-billion-dollar-industry/>.

¹⁴ For example, evidence quoted in the ANZ New Zealand Food and Agri Tourism report (available here: <https://www.mpi.govt.nz/dmsdocument/31068-New-Zealand-Food-and-Agri-Tourism-Report>) showed that over 60% of travellers purchase food and drinks at home they first encountered on a trip.

Figure 4 – Post-visit consumption patterns of Californian visitors to New Zealand, OnePicture research



The visit effect on post-visit purchase rates of New Zealand’s exports is strongest for some of Nelson Tasman’s key food and beverage products.

Figure 5 – Post visit purchase rates of New Zealand goods by Californian visitors, OnePicture research



It is estimated that \$600 million of New Zealand’s exports each year can be attributed to increased purchases by past visitors. And all this, incidentally through the course of visitors having enjoyed their holiday rather than by design – what if in future through intentionally curating visitor food and beverage experiences with an eye to post-visit consumption we could turn that \$600 million into \$1 to \$2 billion?

If post-visit purchases by international visitors to Nelson Tasman follow similar patterns to elsewhere, then \$16 million a year of Nelson Tasman’s food and beverage exports may be due to purchases by ex-visitors from overseas.

The estimate above does not consider post-visit purchases by domestic travellers once they return home. Even conservatively assuming that domestic visitors have similar post-visit purchase rates to international travellers would imply \$22 million of additional revenue each year from domestic travellers continuing to buy Nelson Tasman food and beverage once they return home. Post-visit purchase rates by domestic visitors are likely to be higher due to the relative ease of distributing food and beverages domestically.

6. Challenges and opportunities

This section summarises some of the economic challenges and opportunities, as well as other long-term megatrends that are likely to shape the future of the food and beverage sector in Nelson Tasman.

6.1. Megatrends that may affect food and beverage sector

Megatrends relevant to Nelson Tasman's food and beverage sector include, but are not limited to¹⁵:

1. **Preference for localised production**
 - Increasing trade barriers: Pressure on free trade due to rising trend of nationalism in some countries, as well as sustainability and food safety concerns.
 - Focus on domestic resilience: Emphasis on building domestic production, stockpiling, export bans, and market access requirements in response to shocks to recent global supply chains.
 - ➔ **Expectation: Increased demand for locally produced food.**
2. **Shifting consumer-supplier relationships**
 - Direct to consumer: Growth in subscription/gifting models and influencer-driven sales.
 - AI/Internet of things: Bots may make purchases (e.g. an empty fridge restocking itself).
 - Shift to major food produces: Most of food is processed by a few large global companies.
 - Technology can soften borders: Technology can enable easier flows of goods and money.
 - ➔ **Expectation: More demand for direct-to-consumer services.**
3. **Technology Disruption**
 - Future foods: Increased demand for plant-based proteins and algal products.
 - Wider Technologies: Use of AI, IoT, big data, VR, blockchain, and smart/remote farming.
 - Biotechnology: Advances in cellular agriculture, genomics, GM, synthetic biology.
 - ➔ **Expectation: Increasing acceptance of new technologies and productivity gains.**
4. **Shifts in Economic Power**
 - Emerging Markets: Emerging markets account for a large share of global growth.
 - Surge in autocracies: Increase in global output within "mostly unfree" economies.
 - ➔ **Expectation: More demand from non-traditional markets with state-based influence.**
5. **Concern about food safety and biosecurity**
 - New disease exposure: Higher risks due to mobility, climate change, and species crossover.
 - Illegal acts: Challenges from food fraud, contamination, and sabotage.
 - ➔ **Expectation: Growing demand for assurance within food production and supply chains.**
6. **Overlaps between food and health**
 - Ageing population: Focusing on ways to improve health as people age.
 - Shift in health systems: Increased focus on health improvement and disease prevention.
 - Precision technologies: Development of individually targeted nutrition.
 - ➔ **Expectation: Increasing interest in individualised health and nutritional solutions.**
7. **Environmental impact of food production**
 - Climate Impacts: Risks to food production, especially in vulnerable regions.
 - Global food waste: Food waste is growing rapidly which adds to environmental impacts.
 - Flexitarianism: Reduction in meat intake replaced by alternative proteins.
 - Energy demand: Rising demand for electrification and decarbonisation.
 - ➔ **Expectation: Rise of conscious consumerism, and regenerative and circular processes.**

¹⁵ These megatrends have been adapted from Ministry for Primary Industries, The Future of Aotearoa New Zealand's Food Sector, available here: <https://tinyurl.com/5c23hcmx>.

6.2. Challenges and opportunities for Nelson Tasman’s food and beverage sector

The table below summarises some of the challenges and opportunities for Nelson Tasman identified throughout the data presented in this report and drawn from relevant megatrends. These challenges and opportunities are a starting point that can be further cross-checked and validated with stakeholders¹⁶.

Table 6 – Summary of opportunities and challenges for Nelson Tasman’s food and beverage sector

| Challenges | Opportunities |
|--|---|
| <ul style="list-style-type: none"> • Natural hazards (eg. flooding, sea level rise) as a result of climate change. • Highly seasonal growing, harvesting, and processing cycles mean that equipment is not always well utilised throughout the year. Coordination of resources is a challenge but could lift returns on investment. • Constrained worker availability and key skills shortages affect capacity and system improvement. The workforce is aging and so these challenges are unlikely to get better. • Insufficient investment in innovation, and a lack of scale and access to capital for growth. • Overreliance on a commodity-based food system rather than one that is more responsive to consumer and market demands for higher-value products and emerging foods. • There is an increased concern among consumers regarding environmental impacts and traditional food production models. However, only a niche group is willing to pay a premium for sustainability claims. • Pressure on free trade due to rising trend of nationalism and an increased focus by partners on building domestic production. • More demand from non-traditional markets, and in markets with more state-based influence. • Increased concentration of global food production among large global companies. • Competition for land will rise between land users (eg. highly productive land for horticulture, industrial, and housing). Balancing conflicting demands requires being efficient with greenfield developments and being creative about the use of infill. | <ul style="list-style-type: none"> • Nelson Tasman’s horticultural focus aligns to more prominence of conscious consumerism, which is expected to favour growth in plant-based rather than animal proteins. • The Waimea Dam is anticipated to support additional plantings and higher-yielding crops due to more assurity over water availability. NZIER has quantified the opportunity at \$50 to \$100m a year to GDP. • Labour constraints can be mitigated with investment into automation. Some of this is about raising awareness of what is available, while access to capital is also important. • Fostering transferable skills and lifelong learning will support adopting automation. • Investment in research, including ways of improving growing efficiency and resilience, as well as designing new high-value food and beverage products from land and ocean resources. Improving value add margins can help offset commodity price swings. • More emphasis on developing health and nutritional claims for food and beverage products. • The visitor economy should strengthen its linkages to the food and beverage sector and act as a ‘shop front’ for the region and to directly connect with consumers. • Deepening understandings of emerging markets and putting effort into building the region’s reputation with them. • Supporting electrification initiatives to improve efficiency and enable decarbonisation. • The region can further build on New Zealand’s reputation as a safe and trusted provider of quality food that is the foundation of its trade. |

¹⁶ Further, more detailed assessments of food and beverage sector challenges and opportunities can be found in The Future of Aotearoa New Zealand’s Food Sector, available here: <https://tinyurl.com/5c23hcmx>, and the Food and Beverage Draft Industry Transformation Plan, available here: <https://tinyurl.com/3t93rrtf>.

7. Appendix: Food and beverage sector definition

The food and beverage sector definition captures growing/harvesting (farm/orchard/ocean), processing, and serving (plate). The ANZSIC Level 4 industries in this definition are summarised in the table below.

| Food and beverage sector definition | | |
|--|--|--|
| <i>ANZSIC Level 4 industries included in the food and beverage sector definition used in this report</i> | | |
| Subsector | Grow/harvest | Process |
| Orchard | <ul style="list-style-type: none"> • Mushroom growing • Vegetable growing (under cover) • Vegetable growing (outdoors) • Grape growing • Kiwifruit growing • Berry fruit growing • Apple and pear growing • Stone fruit growing • Citrus fruit growing • Olive growing • Other fruit and tree nut growing • Other grain growing • Other crop growing n.e.c. | <ul style="list-style-type: none"> • Fruit and vegetable processing • Oil and fat manufacturing • Grain mill product manufacturing • Potato, corn and other crisp manufacturing • Soft drink, cordial and syrup manufacturing • Beer manufacturing • Spirit manufacturing • Wine and other alcoholic beverage manufacturing |
| Ocean | <ul style="list-style-type: none"> • Longline and rack (offshore) aquaculture • Caged (offshore) aquaculture • Onshore aquaculture • Rock lobster and crab potting • Prawn fishing • Line fishing • Fish trawling, seining and netting • Other fishing | <ul style="list-style-type: none"> • Seafood processing |
| Paddock | <ul style="list-style-type: none"> • Sheep farming (specialised) • Beef cattle farming (specialised) • Beef cattle feedlots (specialised) • Sheep-beef cattle farming • Grain-sheep or grain-beef cattle farming • Dairy cattle farming • Poultry farming (meat) • Poultry farming (eggs) • Deer farming • Pig farming • Beekeeping • Other livestock farming n.e.c. | <ul style="list-style-type: none"> • Meat processing • Poultry processing • Cured meat and smallgoods manufacturing • Milk and cream processing • Ice cream manufacturing • Cheese and other dairy product manufacturing |
| Other F&B | <ul style="list-style-type: none"> • Other agriculture and fishing support services • Shearing services | <ul style="list-style-type: none"> • Cereal, pasta and baking mix manufacturing • Bread manufacturing (factory based) • Cake and pastry manufacturing (factory based) • Biscuit manufacturing (factory based) • Bakery product manufacturing (non-factory based) • Sugar manufacturing • Confectionery manufacturing • Other food product manufacturing n.e.c. |
| | Serving | |
| Serve | <ul style="list-style-type: none"> • Cafes and restaurants • Takeaway food services • Catering services • Pubs, taverns and bars • Clubs (hospitality) | |

Food and beverage retailing is excluded as this step is more about distributing products that have already been processed and prepared and includes a mix of local and imported food and beverage products that cannot easily be separated out for local analysis of value added to local food and beverage products.



**Benje
Patterson**
People & Places