

2018 New Zealand Organic Sector Market Report



Commissioned by Organics Aotearoa New Zealand



*Organic is a solution
that is profoundly simple*

ACKNOWLEDGEMENTS

The 2018 OANZ Market Report is the result of a team effort and team efforts require acknowledgement.

The project was designed by OANZ and undertaken by The AgriBusiness Group and Nielsen, supported by contributors who provided sector case studies; the organic producers, processors, service providers, exporters, retailers and certifiers who participated in the census as well as the Ministry for Primary Industries (MPI) whose information collected as part of the Official Organic Assurance Programme gave us essential data.

The report was co-ordinated and produced by Brendan Hoare, CEO of OANZ, edited by Susan Robinson-Derus of Robinson-Derus Associates and designed by Paradigm. Barbara Harford provided expert sub-editing.

Organic Aotearoa New Zealand is a registered Charitable Trust. Without our members, sponsors and supporters we would not be able to deliver our public good to New Zealand. We would therefore like to acknowledge the following contributors in alphabetical order who have ensured the success of our 2018 Market Report.

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Certified Organic Kiwifruit Growers (COKA)	Organic Winegrowers NZ
Helix Organics	Open Country Dairy Limited
Horticulture NZ	Pure Fresh Organics
Huckleberry Farms	Soil & Health Association
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The document is intentionally open source as we want the research to assist all organisations, not just organic sector participants, in charting new directions and even reframing existing perceptions. It can be found online at www.oanz.org

FROM THE OANZ CHAIR

Kia ora tatou,

I am pleased to be able to share the 2018 Organic Aotearoa New Zealand (OANZ) Market Report, which will provide information, insights, data and analysis on the state of the organic sector today, signalling the opportunities for growth in the age of the conscious consumer.

The report is a major undertaking by OANZ, the authoritative, national voice of the New Zealand organic sector, bringing together a diverse membership of leading organic producers, processors, suppliers, wholesalers, retailers, exporters, certification agencies and consumers. We are grateful for the support from the broader organic community in providing information, insights and data for this seminal report.

The organic market is the fastest growing multi-food sector in the world, driven by consumers who seek sustainable, ethical and authentic natural products that are good for them and easy on the planet.

New Zealand too is riding this wave and has the reputation, production and export capabilities to meet demand in markets hungry for organic food and other products, including emerging powerhouse markets in Asia and China.

In an era where consumers hold the power, and it is up to producers, marketers and policymakers to listen and act on the market signals, I am optimistic that we will soon have in place the necessary regulatory regime that is on par with other countries to provide the standards and confidence that New Zealand certified organic products are the real deal.

OANZ, as champions leading the lobby for a single, mandatory, national organic standard has welcomed progress being made by Government in establishing the legislative framework. It's needed and is a win-win for everyone. It will significantly enhance export opportunities, encourage investment in organic production and give consumers and customers peace of mind.

We are grateful for the support shown by Minister Damien O'Connor and MPI officials for OANZ's strategy and their understanding of the market drivers that demand that New Zealand provides customers, consumers and the community domestically and internationally with certainty and credence.

We would also like to acknowledge the Minister Damien O'Connor for hosting our launch in Parliament. We look forward to continuing to work together with the government, the sector and stakeholder communities collaboratively and co-operatively for the good of the organic sector and the good of New Zealand.

Yours sincerely,

Doug Voss
Chair

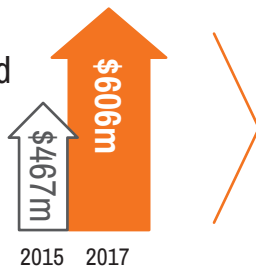


In an era where consumers hold the power, it is up to producers, marketers and policymakers to listen and act on the market signals.

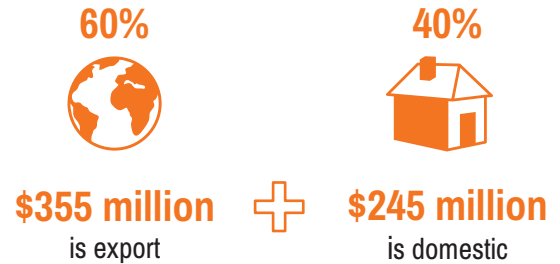
SNAPSHOT

Key changes 2015-2017

The total size of the New Zealand organic sector in 2017 is estimated at \$600 million, **up 30% or \$139 million** since 2015.



15% growth p.a.



Consumers know Organic is Good



The domestic organic market is growing **twice as fast** as conventional.



Up **8.1%** per year

against non-organic products at 4.8% per year.



Organic supermarket sales were \$216m and \$30m from **speciality stores** for the year to May (still only **2.2%** of total supermarket sales)

Close to **80%** of New Zealanders purchase organic products at least fortnightly:



51% buy organic fresh food items



35% buy packaged/dried/frozen items



20% buy organic personal care products



15% of baby products sold in NZ are certified organic

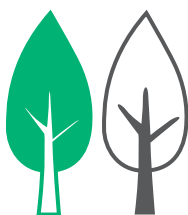


67% of respondents selected the main reason for choosing organic products 'is to **look after my own and my family's health**'



More than 67% of Kiwi consumers expect an organic product to be 'natural/chemical free' and 'pesticide/spray free', while only 50% expect the product to be 'sustainably produced'.

Just under half (48%) say they purchase organic products because they are 'concerned for the environment/sustainability'



75% of people who don't buy organic products say they would rely heavily on an organic certification mark to identify organic products.



Organic exports are booming

up 42% to \$355m



Fresh fruit and vegetables
up 26% to \$136m



Dairy, meat and wool
up 45% to \$99.5m



Wine exports
up 13% to \$46.5m



Processed foods and ingredients
up 7% to \$25.9m



Beverages (fruit juices, organic soft drinks and vinegar)
up 20% to \$12m

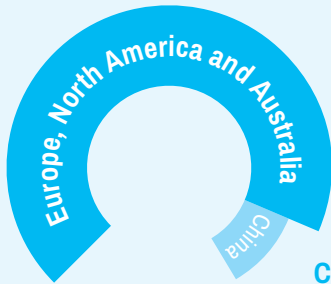


Honey exports **up from \$230,000 to \$1.4m**



Organic cosmetic and beauty products valued at \$28m,
8% of total exports

Organic export markets are stable:



Europe, North America and Australia continue to be the sector's primary export destinations, together comprising **69%** of all exports.

There has been limited growth in the value of exports to Asia, with exports to **China** staying at around **10%** of total exports.



The global market for organic food worth **EUR85b** and growing at 10.5% p.a.

Producers and Manufacturers are Listening for Good

Certified organic operations are **up 12%** to 1,118 licensees and 1,672 certified enterprises.



More than **50% of producers** say they are interested in transitioning to, or learning more about organic



up 17%

Organic land area in New Zealand has increased to 88,871 ha



Organic livestock area has **increased to 64,278 ha, up 50%**, the number of organic dairy farms is up by 10% but livestock numbers are static



Horticulture/viticulture has **decreased to 23,943 ha, down 6%**.

GOING ORGANIC IS GOOD FOR YOU, NZ AND THE PLANET

BY BRENDAN HOARE, CEO OF OANZ

At a time when humanity grapples with the complexity of global environmental, economic, social and health issues, organic continues to offer a solution that is profoundly simple.

Our approach for over 75 years has been doing what is simply good and healthy from the ground up: healthy soil > healthy food > healthy people.

We are champions of correct perseverance, and as a sector resilient, thick skinned and complex, like a delicious, organically grown grape.

The OANZ 2018 Market Report offers an in-depth analysis that incorporates a whole of market, integrated value chain and systems approach from consumer to producer.

We look at perceptions, needs and demands from a consumer and a farmer's point of view, update the key domestic and export sales and production data and how New Zealand is tracking against global trends and developments.

We also report developments, issues, challenges and opportunities in our key productive sectors – dairy, beef and lamb, wine, kiwifruit, community gardens and the emerging beauty and bodycare segment, and for the first time investigate the holistic benefits of organic production that go far beyond dollar returns in an economic study.

OANZ, as the voice of organics across New Zealand, is driven by doing what is good for the country, not in its individual parts or just for organic, but good for everyone as a whole. The result is that we have identified key trends and gathered the evidence from independent research to provide insights and information that can support a transition along the path to a sustainable, carbon free future.

It won't happen overnight. Revolution – let alone evolution – takes time, commitment and collaboration, but the transformation is happening.

The report findings tell us loud and clear that opportunity lies before us. The world wants what New Zealand has to offer.

We have momentum across multiple sectors. Organic exports are up 42% and the domestic market is booming with New Zealand's total organic market recording significant growth, up 30% since 2015.

We have the capability to grow and lead a culture change to deliver clean, green, and third party verified food that people can trust to be authentic, and is good for them, their families and the environment.

Organic is not a trend or fashion. It is a sophisticated and dedicated market segment that can sniff out a whim or off brand moment a mile away. Organic offers a choice to society to make changes for the long-term good.

The report articulates a national and global mood for change to natural, ethical, sustainable food and other daily used products. Consumers want change, so they can live their values, producers and farmers are seeking change to do what is good for the land they love, and global markets are demanding greater and greater choice as organic goes mainstream.

Importantly, there is a new-found sense of assuredness and an appetite to seek out opportunities across new and emerging market segments.

Organic continues to offer a solution that is profoundly simple.

In a world of conscious, values-driven consumers, who know what they want and expect to be able to get it, producers and manufacturers are hearing the call and aligning their values, skills and purpose to deliver authentic products while demonstrating, for all the world to see, care for the environment.

The report also clearly indicates that Kiwis want to be part of the global movement towards sustainability – economically, socially, culturally and environmentally.

We, like the rest of the planet, are better informed about our impact on the environment, more conscious and purposeful in our resolve to lightly tread on our earth and more open to being involved, in doing our bit, beyond saying no to a plastic bag at the checkout counter.

The market is telling us to grow. OANZ's job is to anchor the foundations to support growth. We're doing that by sharing knowledge, building a network of organic experts and working with government to ensure we have the fundamentals of a regulation and national standard to define organic that aligns New Zealand with international best practice.

We know that the term 'organic' is not clearly understood, that consumers, customers, retailers and producers need ongoing information to educate them on what is, and what is not, authentic organic and to help them navigate the plethora of certifications and other labels.

We believe that New Zealand can lead the world in organic innovation and quality, with a guarantee that we are who we say we are every time and so earn the credence of the marketplace at home and offshore.

We must also have courageous conversations and cooperate, collaborate and communicate with: ourselves, government, policy makers, the organic community, distributors, exporters, manufacturers, retailers, consumers and certifiers from across the board. We must work together to shape a robust and consumer-to-producer, integrated strategy that will support growth and invite wider participation.

The world of organic offers a simple and compelling solution for the greater good.

The report articulates a national and global mood for change to natural, ethical, sustainable food and other daily used products.



8 out of 10 kiwis purchase organic products at least fortnightly

Nielsen Methodology

A comprehensive analysis of the organic domestic market was undertaken by AC Nielsen. This research sought to provide insight into the following questions:

- How do consumers distinguish between organic/non-organic products? What do they understand organic to mean?
- What organic markings do they recognise? What makes them think that a product is organic?
- Are they aware of any organic brands? What are these?

The survey research was conducted on Nielsen's Omnibus Survey, which is an online survey that runs on a fortnightly basis. The survey was in field between 4-10 May 2018.

The total sample was n=1000 New Zealanders aged 15+. After fieldwork, the data was weighted by age, gender and region to ensure that the sample was representative of the New Zealand population.

The retail data was extracted from Nielsen's ScanTrack database. The data is available in this report to 20 May 2018. Annual totals are not calendar year, but rather a year back from when the data was extracted. Categories included in this analysis are chilled foods, shelf stable bakery biscuit, grocery (excluding canned & soup), beverages, snack food/confectionery, fresh foods, frozen foods, canned food & soup and baby products.

THE GROWING ORGANIC DOMESTIC MARKET: THE CONSUMER VOICE

AC Nielsen undertook comprehensive research and analysis of the organic domestic market and consumer perceptions and behaviours.

The New Zealand domestic market is estimated to be worth \$246m a year, up from \$192m or 28% over 2015 and contributing 41% to total estimated organic sector sales of \$600m annually.

Supermarket sales of \$216m dominate with specialist organic shops attracting \$30m in sales from a growing consumer market.

Knowing the consumer, their needs and desires, values and sense of purpose, is fundamental to delivering the right products at the right price through the right channel with the right messaging to grow organic sales.

UNDERSTANDING CONSUMERS' PERCEPTIONS OF ORGANICS

Key takeaways from Nielsen's survey

Organic products reach the majority of New Zealanders

The majority of shoppers (79%) purchase organic products with at least some frequency.

Organic fresh food items are purchased most frequently, with 51% of shoppers saying they purchase these items at least fortnightly.

Organic personal care and packaged/dried/frozen items are purchased less frequently, with packaged/dried/frozen goods being purchased by just over one third (35%) of shoppers at least fortnightly.

20% of shoppers purchasing organic personal care products at least fortnightly.

A majority of shoppers do not fully understand what 'organic' means

More than three quarters of shoppers expect an organic product to be 'natural/chemical free' and 'pesticide/spray free', while only half of shoppers expect the product to be 'sustainably produced'.

Health is a key motivation for purchasing organic products

The leading reason for choosing to purchase organic products is 'to protect/promote my health/the health of my family', with 67% of respondents selecting this option.

Just under half (48%), say they purchase organic products because they are 'concerned for the environment/sustainability'.

Certification marks are not relied on by the majority of current organic shoppers

People who don't buy organic products say they would rely heavily on an organic certification mark (75%) to identify organic products, if they were to purchase them in the future.

For those who currently buy organic products, organic certification marks play less of a role, with only 5% spontaneously indicating that they would explicitly look for an organic certification mark to identify the product as organic.

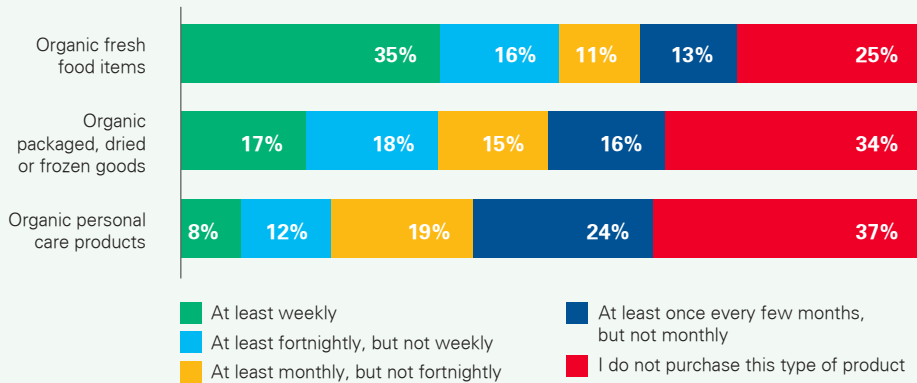
Organic sales still account for just a small amount of total grocery

2.2% of all grocery sales are organic products.

The total value of the organic supermarket sales in the past year is \$216m.

FREQUENCY OF PURCHASING ORGANIC PRODUCTS

Although the majority of shoppers purchase organic products at least once every few months (79%), only 16% of shoppers purchase organic products from all of the different organic categories. Organic fresh food is purchased most frequently, with 75% of shoppers saying they purchase organic fresh food at least once every few months.



79%
of shoppers
purchase an
organic product
at least once every
few months

21%
of shoppers do not
purchase organic
products

7%
of organic
purchasers were
able to identify
all aspects of an
organic product

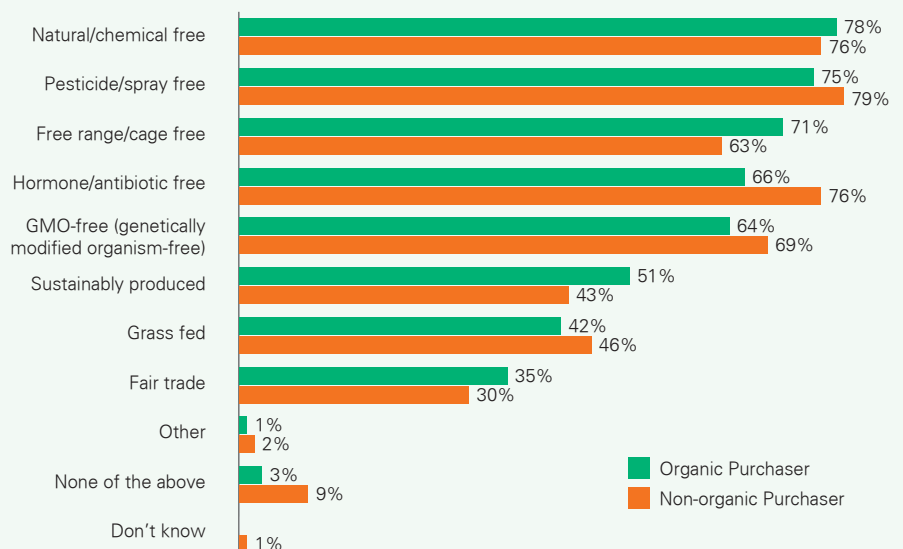
WHAT DOES ORGANIC MEAN TO CONSUMERS

Knowledge of what organic means is low

Natural/chemical free and pesticide/spray free are the top expectations of an organic product for both organic purchasers and non-organic purchasers. Knowledge was particularly low amongst non-organic purchasers, with 9% of non-organic purchasers saying none of the attributes were things they expected an organic product to be.

Knowledge of all criteria that distinguish an organic product is low, however, with only 7% of organic purchasers being able to identify all aspects of any organic product.

Expected attributes of an organic product



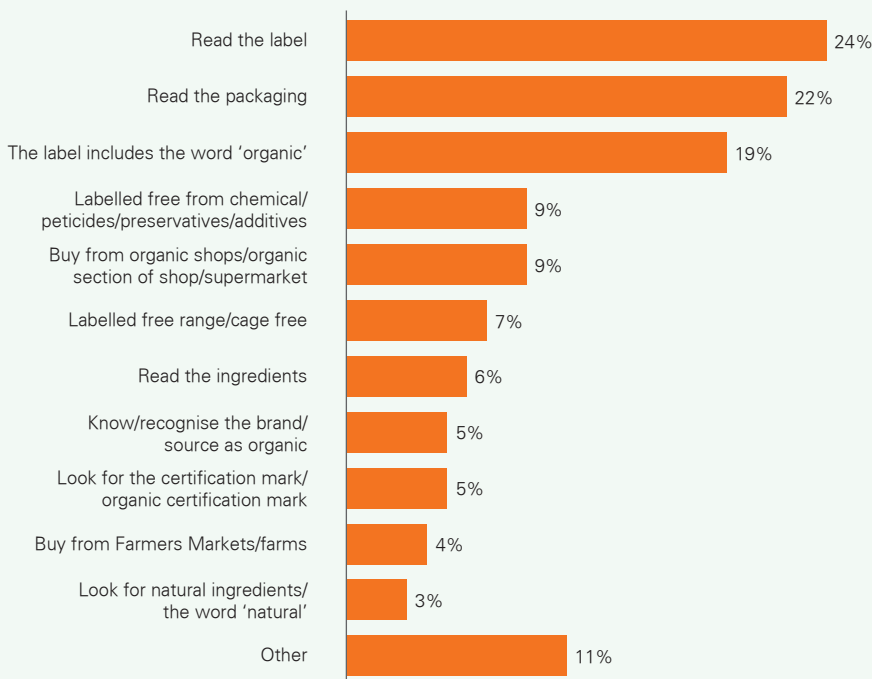
HOW SHOPPERS DETERMINE WHETHER A PRODUCT IS ORGANIC

Shoppers rely on the label/package to determine if a product is organic

A quarter of organic purchasers determine whether a product is organic by reading the product's label. If the label contains the word 'organic', this also indicates to organic purchasers that the product is organic, with 19% of organic purchasers saying they look for the word 'organic' in the label to determine if a product is organic.

Only 5% of organic purchasers would look for a certification mark to determine if a product was organic.

How you determine whether a product is organic – organic producer



5%

of organic purchasers would **rely on a certification mark** to determine if the product was organic

New Zealanders' reliance on a certification mark to determine whether a product is organic is relatively low when compared to Australia.

Only 5% of New Zealanders who purchase organics would look for a certification mark, whereas half of Australians who purchase organic products say that they would look for an organic certification mark.



67%

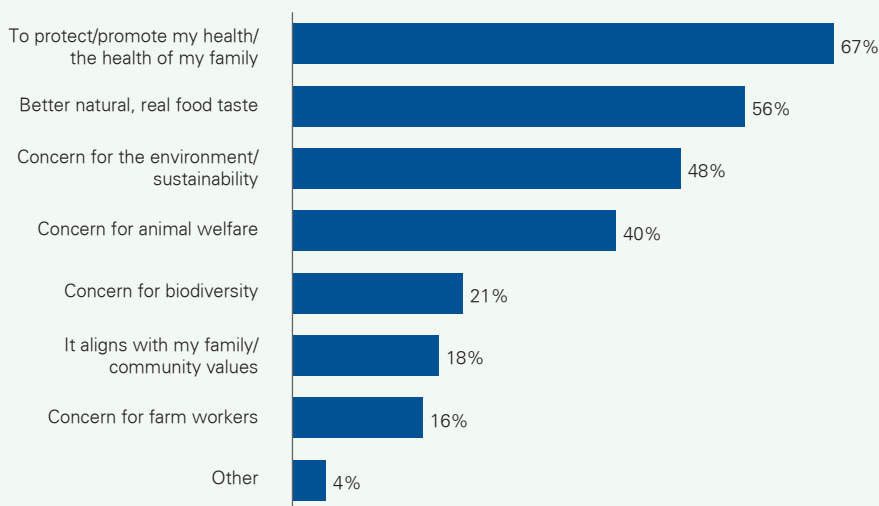
of organic shoppers purchase organic products for personal or family health reasons

New Zealanders and Australians are not different in their motivations for buying organic products. Two-thirds of Australians also indicated that they started to buy organic products for person health reasons.

HEALTH IS THE LEADING REASON TO PURCHASE ORGANICS

More than two-thirds of organic shoppers say they choose to purchase organic products to protect/promote the health of themselves or their family. Taste is also important, with more than half saying they choose to purchase organic products for the better, real food taste. Altruistic reasons for purchasing organics are less prevalent, with concern for animal welfare, biodiversity and farm workers falling lower down the list as a reason to purchase organic products.

Reasons for purchasing organic products



CERTIFICATION MARKS MATTER MORE TO SHOPPERS WHO ARE UNFAMILIAR WITH ORGANIC PRODUCTS

Three-quarters of non-organic purchasers would look for a certification mark to determine whether a product is organic. Half would look for a specific call out on the label that indicates that the product is organic. Characteristics that require the shopper to have more knowledge of organic products are less relied on, with only a quarter saying that they would look at the brand of the product and just over a third saying they would look at the ingredient list.

How you determine whether a product is organic – non-organic purchaser



75%

of non-organic purchasers would rely on certification marks to determine if a product is organic

46%

of non-organic purchasers were unable to identify any of the markings

New Zealanders awareness of NZ certification marks is on par with Australian's awareness of Australian organic certification marks. Half (49%) of Australian shoppers can recognise the AUstralian Certified Organic mark (ACO), whereas 53% of New Zealanders can recognise at least one of the NZ organic certification marks.

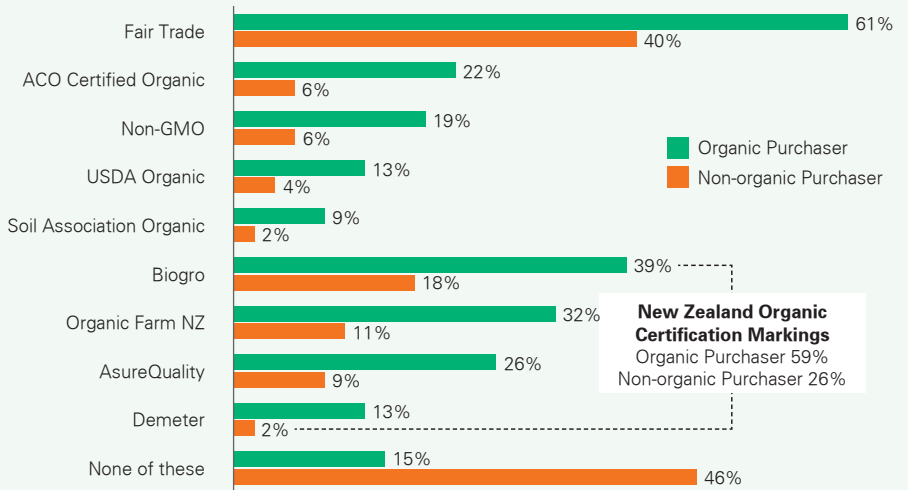
AWARENESS OF NZ ORGANIC CERTIFICATION MARKS IS MODERATE

Awareness of certification marks is particularly low among non-organic purchasers

Organic purchasers are significantly more aware of NZ organic certification marks than non-organic purchasers. Close to half of all non-organic purchasers are not aware of any certification marks.

The Fair Trade mark has the highest awareness among both organic and non-organic purchasers.

Awareness of organic certification marks

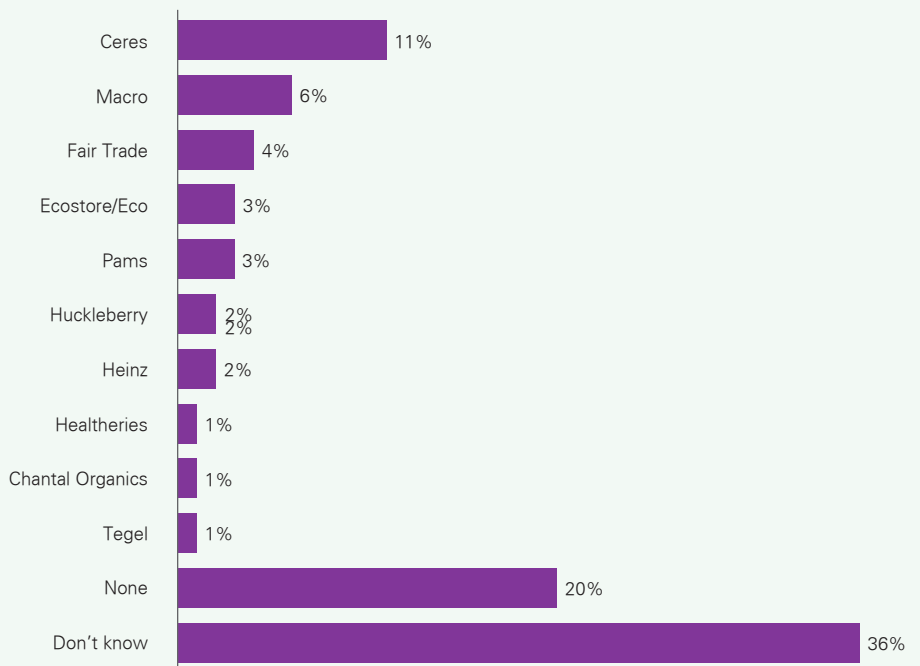


AWARENESS OF ORGANIC BRANDS IS LOW

More than half of shoppers are unable to spontaneously name a brand that sells organic products

Although a quarter of non-organic purchasers say they would rely on brand to determine if a product was organic, the vast majority of non-organic purchasers cannot spontaneously name a brand that sells organic products (45% say 'none' and 37% say 'don't know'). Of the organic brands that were named, Ceres was the brand with the most mentions. Just over one in ten (11%) shoppers identified Ceres as an organic brand.

Unprompted awareness of brands offering organic product



NEW ZEALAND ORGANIC SALES DATA

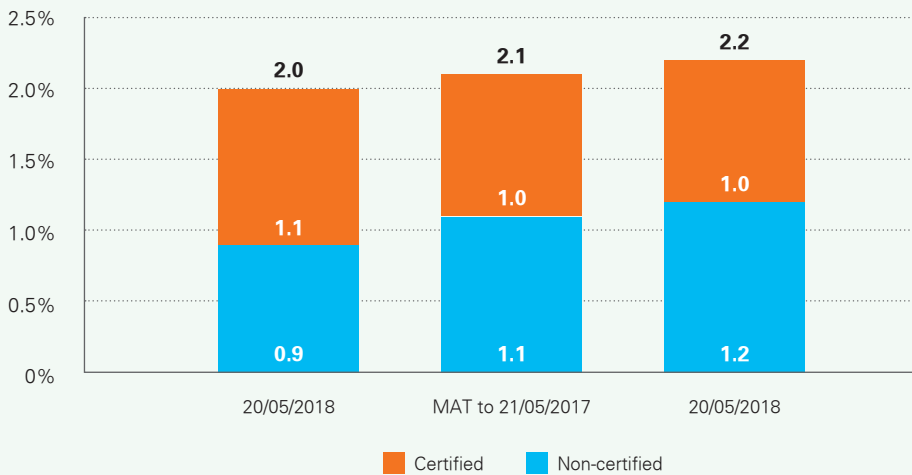
Organic products are growing steadily and more quickly than non-organic products

Annual sales of organic products through supermarkets reached \$216m million for the year to May 2018, up 8.1%

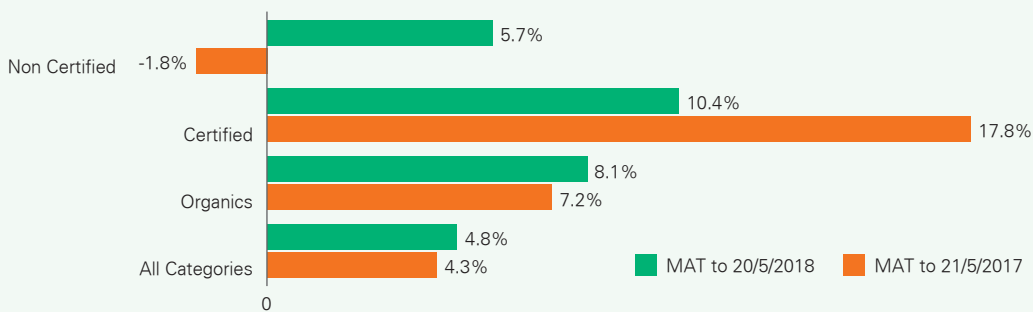
The growth was faster than the 7.2% recorded in the prior year and twice as fast as the 4.1% increase in non-organics sales.

Organic product share of all categories has grown from 0.1% for the past two years to 2.2% of sales across categories reviewed. This share has been driven by an increase in share for certified organic products.

Organics share of all categories – value



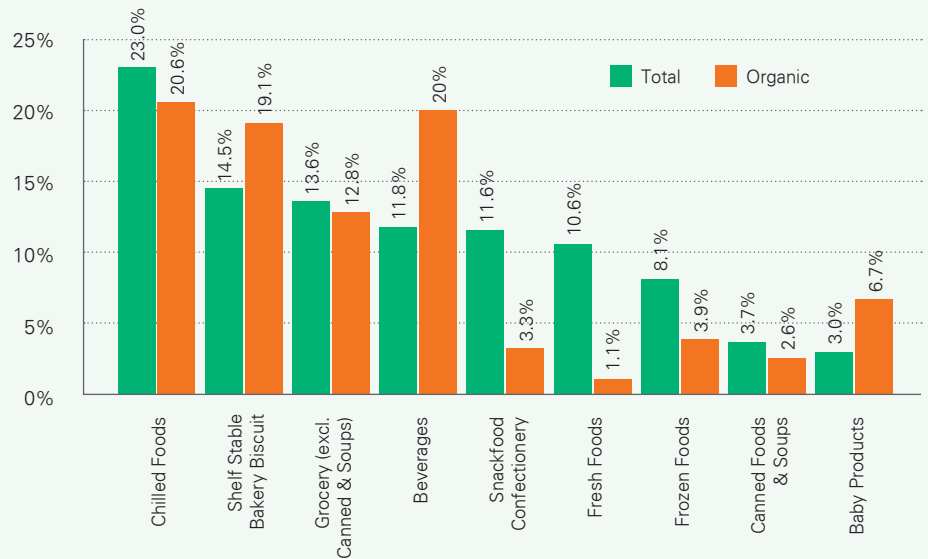
Total value growth – supermarkets



Growth of 10.4% for certified organic products was ahead of non-certified organics which recorded growth of 5.7% after slipping by 1.8% in 2017.

The unit volume picture sees similar trends with unit share of 2.0%, the lower share reflecting a higher value achieved per unit for organic products.

Category value share of total sales

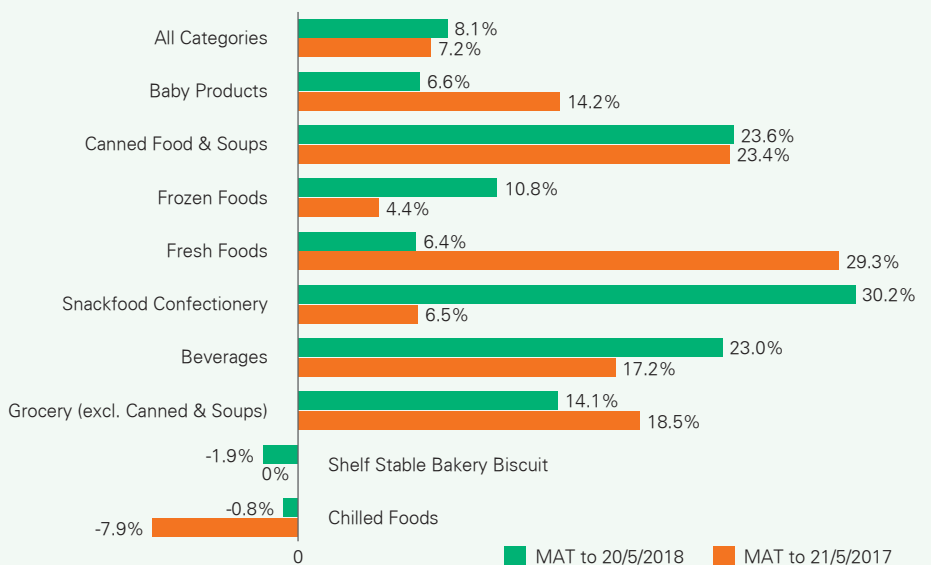


Three of the four largest categories – Chilled Foods, Shelf Stable Bakery and Biscuit, and Beverages also have the highest value share for organic products.

Grocery excluding (Canned & Soups) has a lower share. Baby (221%) and Beverages (169%) over index the most for organics.

Baby Products have a higher index for Organics versus Total Category for unit sales (777%), reflecting a relatively low value per unit for Baby Products.

Organic products category value growth



All category growth is at 8.1% for 2018, ahead of 7.2% in 2017.

Growth is slower for Fresh Foods and Baby Products, and higher for Beverages and Snack foods and Confectionery. Chilled Foods and Shelf Stable Biscuit Bakery have declined across both years.

Table 1: Trends in supermarket grocery sales of organic products¹

Year	Value sales
2018	\$216,000,000
2015	\$167,170,081
2014	\$130,106,081
2013	\$109,182,882
2012	\$67,500,000
2011	\$62,800,000

NON-SUPERMARKET SALES OF ORGANIC PRODUCTS

In addition to sales of organic products through supermarkets there are other channels where food is sold including:

- Specialist organic shops – these have been a traditional channel for the sale of organic food. Businesses such as Commonsense Organics, Ceres, Huckleberry and Chantal Organics have become large operators with increasing sales. The 2015 census estimated sales of certified organic products through this channel at \$25.7m. This market has continued to grow, probably at a similar 8% rate to organic supermarket sales, suggesting sales in 2017 of approximately \$30m.
- Farmers markets and box schemes – many suppliers to farmers markets are organic, with certification from Organic Farm NZ being especially important. There is no reliable tracking of sales through farmers markets or via box schemes so no estimate of sales through these pathways is provided.

FRAUDULENT ORGANIC CLAIMS

Fraudulent claims for products that do not have the appropriate quality, origin or production systems certification are an ongoing issue. Organic products have third-party inspection systems and other systems to address this risk. However, fraud does occur. The value of non-certified organic product is estimated by Nielsen to be at least \$104m.

New Zealand is only one of two exporting countries in the world that does not have national standards to define organics, but it is hoped that this will change with the establishment of a single, mandatory national standard and regulatory framework, currently under discussion with government.

¹ Note the figures for 2011-2015 do not include sales of fresh foods at supermarkets so comparison between the 2018 results and previous years can only provide a guide on trends between surveys

ORGANIC EXPORT MARKET IS BOOMING

Research Methodology

Organic Exporters and Processors

A list of certified organic exporters and processors was compiled from the membership of Organic Exporters of New Zealand, the New Zealand Food Safety Authority register of organic exporters, the licensee lists of organic certifiers, and internet searches.

The list included organic production chains, input and service providers, packers, processors, and exporters and some retailers and producers who may have been exporting.

Organic producers and exporters were asked to provide information regarding the value and destination markets for each of their certified organic products during the previous financial year, as well as the percentage of turnover attributable to certified organic products. The census methodology and questionnaire were designed to reproduce the methodology of the previous organic sector census.

Of the 229 processors, input and service providers, and exporters identified, 132 responded to the survey or follow-up calls. Of these responses, 12 reported no certified organic activities for the 2016-17 financial year, while 20 were removed for other reasons including not exporting.

Export value estimations for key non-respondents were made based on available data on export volume, price per unit calculations and known values from previous years.

THE MARKET FOR NEW ZEALAND ORGANIC EXPORTS HAS GROWN DRAMATICALLY IN VALUE, UP 42% TO AN ESTIMATED \$360M SINCE THE LAST SURVEY IN 2015 – THAT'S 1000% GROWTH IN 10 YEARS, ADMITTEDLY FROM A VERY LOW BASE.

Table 2: Size of the organic export market, 1997-2017

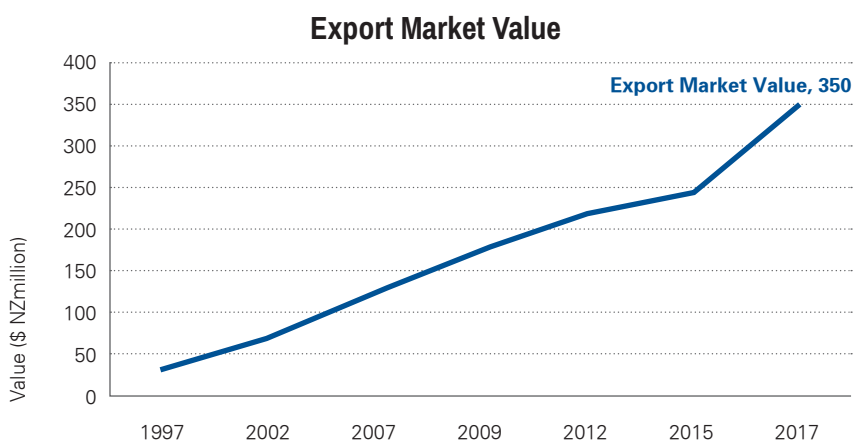
Year	Export Market Value \$million
2017*	350-360
2015*	240-250
2012	215-225
2009	170-180
2007	120-130
2002	70
1997	32

*1997 & 2002 figures from OPENZ Surveys

The 2017 export figure combines \$250m based on actual responses from the questionnaire and an estimate of \$100m based on OANZ sources, industry consultants or sector group leaders. As a result, there is a relatively strong degree of confidence in the total market estimate and its error range.



Figure 1: Size of the Organic Export Market (NZ\$) 1997-2017



Data collected during the 2017 census shows the organic export market is expanding in the value of exports and the number of active exporters, as well as seeing the emergence of new entrants like those in the organic cosmetics and beauty products.

PRODUCT CATEGORIES IN THE ORGANIC EXPORT MARKET

All categories have grown in value since 2015. Exports of wine have grown by 87%, dairy and meat exports by 45%, fresh fruit and vegetables by 26%, other beverages by 20% and processed food by 11%. Cosmetic and beauty products are a new category with previous results included in the 'other' category and it is apparent there is significant growth in export values.

Table 3: Value of organic exports by product category, 2007-2017

	2007	2009	2012	2015	2017
Fresh Fruit and Vegetables	88,360,000	85,850,000	96,860,000	108,120,000	135,910,000
Dairy	6,990,000	27,850,000	36,950,000	68,290,000	99,470,000
Meat and Wool	8,920,000	9,185,000	10,120,000		
Processed Food and Ingredients	6,120,000	20,280,000	29,350,000	25,180,000	27,975,000
Wine and Beer	3,890,000	16,960,000	10,970,000	24,740,000	46,492,000
Other Beverages			17,840,000	10,050,000	12,079,000
Honey	3,960,000	8,320,000	7,940,000	230,000	1,438,000
Cosmetic/beauty				-	28,200,000
Other	2,170,000	2,040,000	4,970,000	3,900,000	4,907,000
Total	120,410,000	170,485,000	215,000,000	240,510,000	356,471,000

**Exports
up 42%
to \$355m**

**All categories
have grown in
value since 2015.**

Opposite: Zepri Organic kiwifruit is popular in Asian markets.

The results from the survey highlight the changing character in the relative importance of the different categories of organic exports. Fresh fruit and vegetables have always been the largest export category and while export values continue to grow, the percentage of total exports has declined from a peak of 78% of exports in 2002 to 38% currently. Dairy and meat exports have grown since 2007 from 7% of total exports to 28%. Organic cosmetic and beauty care products make up an estimated 8% of total exports.

Table 4: Value of organic exports by product category percentage 2002-2017

	2002	2007	2009	2012	2015	2017
Fresh Fruit and Vegetables	78%	73%	50%	45%	45%	38%
Dairy	-	6%	16%	17%	28%	28%
Meat and Wool	7%	8%	6%	5%		
Processed Food and Ingredients	8%	5%	12%	14%	10%	8%
Wine and Beer	2%	3%	10%	5%	10%	13%
Other Beverages	-	-	-	8%	4%	3%
Honey	-	3%	5%	4%	0.1%	0.1%
Cosmetic/beauty					0%	8%
Other	5%	2%	1%	2%	2%	1%

GROWTH BY CATEGORY AT A GLANCE

\$136m



Fresh fruit and vegetables continue to be the highest value category with nearly \$136m in exports in 2017, up 26% in value from 2015. Kiwifruit and apples account for a substantial proportion of these exports, with smaller volumes of other crops including blueberries and cherries. Kiwifruit exports are principally managed by Zespri though there are also organic exports to Australia managed by other exporters. Organic pipfruit production is dominated by Bostock New Zealand which has over 500ha in organic pipfruit and exports approximately 90% of all organic pipfruit² from New Zealand. The value of organic vegetable exports has continued to decline with only a very small value of exports reported. This is a significant change from earlier surveys. In 2002-03 organic vegetables (mainly squash and frozen vegetables) made up 7% of exports, while fresh fruit made up 93% of exports.

\$99.5m



Dairy, meat and wool have been combined into one category and are the second largest export category with 28% of total exports in 2017, values at \$99.5m. The value of pastoral exports has grown 45% since 2015. Further details on this sector are included in the case studies on dairy, and the sheep and beef sectors, in section 5 of this report. In relation to organic dairy exports there are more exporters now active with 13 dairy companies having export capabilities. Some of these companies are only starting to develop their organic supply chains so it is anticipated that this category will continue to grow rapidly.

² www.bostock.nz/organic/



Processed foods and ingredients have increased slightly from 2015 to \$25.9m or 7% of total exports. Looking at the decrease in organic land area and feedback from processors indicates that imports of organic inputs for organic processed food production is supporting this growth. There is also a growing range of organic processed products that are exported including products such as baby food, barley and wheat grass powders, and soups.

\$25.9m



Wine exports increased to \$46.5m, 13% of total organic exports. The survey of organic certifiers identified 1,720 ha of grape vines planted, which is approximately 4.6% of the total vineyard land in New Zealand³. If export value is directly correlated to land area in viticulture, organic wine exports would be approximately \$76m, based on total wine exports of \$1.67b. The total from the survey however, is lower. This could be a result of lower export sales for organic wine in comparison to overall wine exports. A greater proportion could be marketed domestically – the survey of organic wineries identified an estimated \$28m of organic wine sold in the local market. In addition, it seems that organic grapes are sometimes used to produce wine that is then sold as conventional wine with no organic certification or label claims. This appears to be a unique feature of the organic wine sector where organic grapes are highly valued to produce the highest quality wine. There were only very small exports of organic beer recorded in the well-supported survey.

\$46.5m



The beverages category is defined as all non-alcoholic, non-dairy beverages, and is made up primarily of fruit juices, organic soft drinks and vinegar. This has shown a 20% increase in the value of exports from the 2015 census with an estimated value of \$12.1m. The low response rates from operators in this section, possibly reflecting the level of competition present, gives a lower level of confidence in this result.

\$12.1m



Organic honey exports have rebounded from the previous 2015 survey when export values declined by 97% between 2012 and 2015. Based on the latest census, the value of exports has increased from an estimated \$230,000 in 2015 to an estimate of \$1.4m in 2017.

\$1.4m



The value of certified organic cosmetic and beauty products is significant, estimated at over \$28m. This is the first time that organic cosmetic and beauty products have been reported as a separate category, acknowledging the significant growth in this sector. There are some large companies that have grown rapidly over the last few years including Trilogy Natural Products and Antipodes. There are also many smaller companies exporting organic products. The sector appears to be highly competitive and this is reflected in the low response rates to the survey, however analysis was assisted with the public reporting that some companies are required to provide. There is more information on this sector in section 5.

\$28m

The 'other' category includes eggs, aquaculture products, oil and any other products that are not included in the other categories. Aggregation of exports into this category was necessary to protect the confidentiality of market participants for products with a limited number of producers and exporters. The total value of exports in this category is estimated at \$4.9m, up 25% from 2015. It should be noted that previously this category included cosmetic and beauty products. This indicates that the production and export of some of the other products in this category are increasing.

\$4.9m

³ Based on a total grape area of 37,129 ha sourced from 2017 NZ Winegrowers Annual Report – www.nzwine.com/media/6600/nzw-annual-report-2017.pdf

VALUE OF ORGANIC EXPORTS AGAINST TOTAL EXPORTS

Organic export category value rankings differ quite significantly from total exports. Dairy, and meat and wool are the two largest categories for total export value and are second for organic. Organic fresh fruit and vegetables categories have the largest proportion of organic export value to total export value. Processed foods and ingredients and uncategorised exports cannot be compared due to potential incompatibility between census categories and export categories available from Statistics New Zealand.

Table 5: Value of organic exports by product category (percentage) 2017

	Export \$ Total	Export \$ Organic	% Organic
Fresh Fruit and Vegetables	2,909,000,000	135,910,000	4.67%
Dairy, Meat and Wool	19,633,000,000	99,470,000	0.5%
Wine	1,660,000,000	46,500,000	2.8%

PRODUCT DESTINATIONS FOR THE ORGANIC EXPORT MARKET

We tracked the value of organic exports by destination to reveal the development and change of organic markets from 2002-2017.

Europe and Japan took two-thirds of the total market value, and as the organic market evolved North America, Australia and Asian markets took the lead.

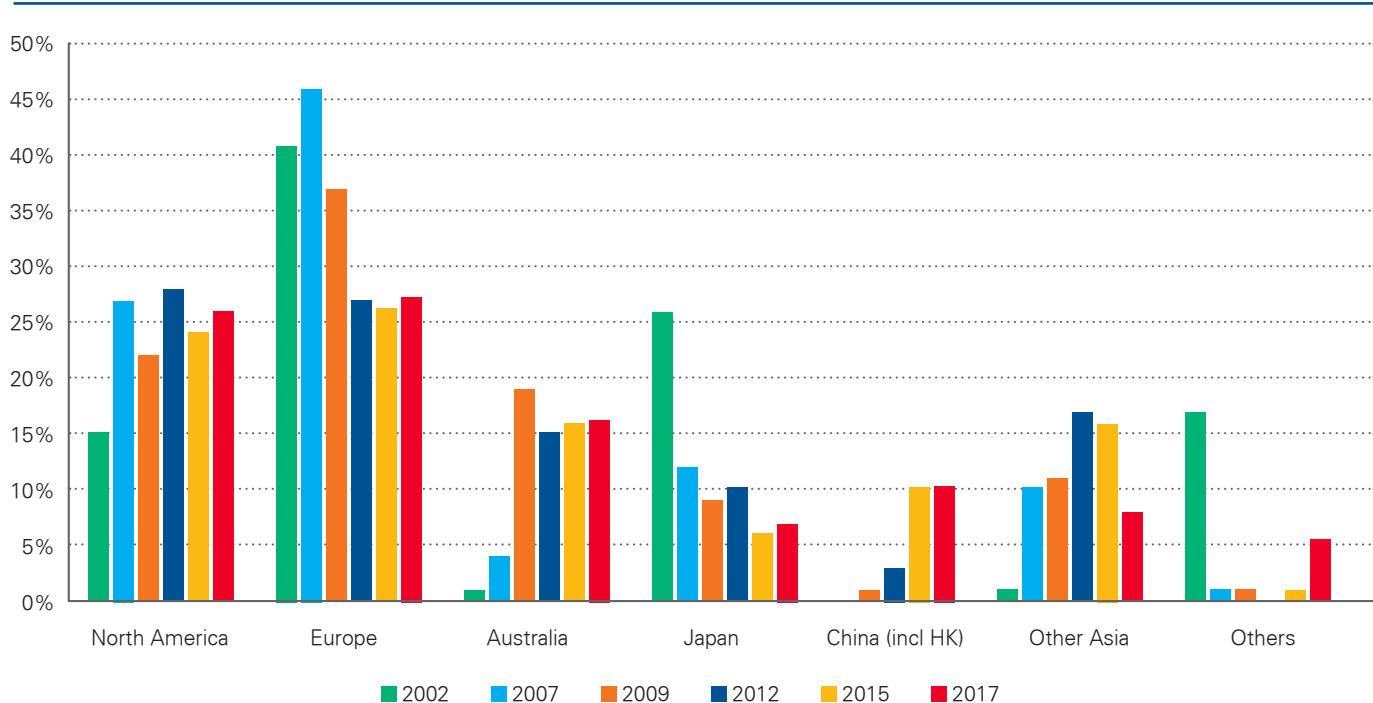
This survey does not signal many changes from the 2015 survey in relation to the destination of organic exports. There has been a slight increase in exports going to the USA at 26% of the total, while exports to Europe are stable at around 27%. Exports to Australia are also stable with 16% of organic exports destined for that market. In relation to Asia, the percentage of exports to China has remained at a similar level of total exports while the percentage exported to other Asian markets has decreased from 16% of the total to 8%. Exports to other markets have increased to 5% of the total.

Table 6: Share of organic exports by destination 2002-2017

	2002	2007	2009	2012	2015	2017
North America	15%	27%	22%	28%	24%	26%
Europe	41%	46%	37%	27%	26%	27%
Australia	1%	4%	19%	15%	16%	16%
Japan	26%	12%	9%	10%	6%	7%
China (incl HK)	-	-	1%	3%	10%	10%
Other Asia	1%	10%	11%	17%	16%	8%
Others	17%	1%	1%	0%	1%	5%

Europe, North America and Australia continue to be the sector's primary export destinations, together comprising 69% of all exports.

Figure 3: Value of organic exports by destination 2002-2017



ALIGNMENT OF RESULTS WITH OTHER DATA SOURCES

The Ministry for Primary Industries manages the Official Organic Assurance Programme (OOAP) that provides market access for New Zealand organic exports to the USA, European Union and some other markets. OOAP tracks the value of exports using this market access pathway.

For the year ending June 2017, the value of exports⁴ facilitated through OOAP was \$151.4m, an increase of 19% from the previous year. Exports to the USA were \$86.4m and \$60m went to the EU. It should be noted that while not all products are covered under the OOAP⁵, processed and unprocessed plant and animal products for human consumption are included but not products like cosmetics.

While the results from the OANZ census and MPI will not totally align they are relatively close which provides confidence in the information from the OANZ census results.

⁴ As reported in 'MPI Discussion Document Paper No 2018/09 'Would New Zealand benefit from new organic regulation?' May 2018

⁵ www.mpi.govt.nz/exporting/food/organics/steps-to-exporting/

GROWING FOR GOOD:

Growing the Organic Sector to Meet Demand

WRITTEN BY BRENDAN HOARE AND JON MANHIRE. SPECIAL THANKS TO THE FOLLOWING PEOPLE AND THEIR ORGANISATIONS:

Mike Chapman and Bobby Hal, Horticulture New Zealand

Philip Gregan, Jonathan Hamlett and Rebecca Reider, New Zealand Winegrowers

Andrew Fraser and Lee Cowan, Dairy NZ

Mark Aspin, Beef and Lamb New Zealand

Anaru Smiler, Federation of Māori Authorities (FOMA)

The growth of organic is being driven by consumers. They are seeking greater integrity, transparency and authenticity in the products they consume, as well as a closer relationship with those growing their food.

The organic market is the fastest expanding, multi-food category globally, pushing double digit global growth over the last decade and is now mainstream. The world wants safe, clean, honest food.

Progressive governments are responding to this surge in citizen demand by recognising that certified organic is a proven system of ensuring traceability from paddock to plate and providing consumer assurance.

Supporting organic through appropriate policy and regulatory regimes has environmental, wellbeing and health benefits including reducing or eliminating pesticides and harmful chemicals in the food chain, improving soil and water health, and increasing biodiversity which all help mitigate the effects of climate change.

This global trend for today's well informed, values-driven consumer to choose natural, ethical, sustainably produced food is well understood by the organic sector. We have helped shape it. Marketers know that to bridge the gap between producers and consumers their brand story must demonstrate provenance, authenticity, transparency and shared values.

SUPPORTING SUSTAINABILITY

A key role for OANZ is working with national decision makers and government to effectively raise awareness on the multiplier benefits of organics. We contribute to policy making that supports true sustainability in agriculture right across value chains and consumption at the global and national level.

This in turn will help us reach sustainable development goals (SDGs), and encourage decision makers to support solutions that are aligned to organic system approaches around the world.

In New Zealand, OANZ's foundation piece of work is the development of a national regulation and standard to provide credence to customers, consumers and communities, here and internationally, on the authenticity of organic products from New Zealand.

OANZ, as the sector's peak organisation, works collaboratively with other national representative groups to support the growth and mainstreaming of organics as well as reaching out to consumers in a bottom up approach. We must effectively communicate and share information with a wide community of stakeholders.

Our focus for the last four years has been on the following organisations.

- Horticulture New Zealand – the industry body representing all horticultural producers.
- New Zealand Winegrowers – the industry organisation representing all grape growers and wineries.
- Dairy NZ – the industry organisation representing all dairy farmers.
- Beef and Lamb New Zealand – the industry organisation representing all sheep and beef farmers.
- Federation of Māori Authorities (FOMA) – the organisation representing 150 major Māori Authorities with approximately \$11b in assets.
- Horticulture New Zealand and Organic Winegrowers New Zealand (an incorporated society working in partnership with New Zealand Winegrowers) are active members of OANZ.



Niki Boon captures the vineyard at work.

PRODUCER SURVEY

Knowing the consumer demand nationally and globally, OANZ worked with these sector agencies to undertake a survey to develop a clearer picture of:

- the level of interest and understanding of organic from farmers and growers
- their level of interest in conversion to organic production
- an analysis of the drivers and constraints supporting these intentions.

These agencies organised a survey of their members and requested responses to the following common questions:

- What is your current production system – certified organic, organic without certification, conventional?
- Main drivers for going organic?
- What are the constraints to transitioning to organic production?
- What are the main reasons that you are not interested in organic production?

Similar questions were asked in the export survey on the production and marketing of organic products and by research company, Nielsen on consumer perceptions.

It is important to note that the survey is high level and is indicative, but not in-depth. It was agreed by all industry bodies that it was timely for everyone to learn more and gain sharper insights about the level of interest in organic

The organic market is the fastest expanding, multi-food category globally, pushing double digit global growth over the last decade and is now mainstream. The world wants safe, clean, honest food.

from producers and farmers – and analyse how their intentions aligned with consumer demands and desires.

RESULTS

The industry agencies, in partnership with OANZ, organised the scope of the survey and were responsible for inviting their members to participate in the questionnaire. It was agreed to keep the survey comparatively short to ensure an adequate level of response.

The survey response rates were low but on par, or above, normal member survey response rates, according to the industry sectors. The results are indicative only but do provide some insights into intentions and identify issues in relation to producers in these sectors.

Table 7: Survey response rates

Sector	Total number of producers survey sent to	Survey Responses	Response rate
Horticulture Growers	2600	324	12%
Wine (Grape Growers and wineries)	1403	100	7%
Dairy farmers	11748	80	1%
Sheep and Beef farmers	12500	83	0.67%
Federation of Māori Authorities	174	14	14.3%

The highest response rate came from FOMA, followed by horticulture growers and those involved in the wine industry rather than pastoral farmers, possibly reflecting the greater level of current organic activity in these sectors.

Chris Denniston from Springvale Orchard in Central Otago with his cherry crop. At Christmas time you can eat them just about anywhere in the world, he says.



Table 8: Response by size of operating unit

Sector	Industry Av size		Survey Response Analysis				
Horticulture		Operation size (Ha)	0-50 Ha	51-100	101-500	501+	
		% of respondents	86%	6%	6%	2%	
Dairy	414 cows	Herd size (Cow No)	0-200	201-350	351-500	501-750	751+
		% of respondents	21%	27%	16%	24%	12%
Sheep & Beef	252 Ha+	Farm Size (ha)	0-50 ha	51-100 ha	10-300 ha	301-1,000 ha	1,001 ha +
			14%	14%	18%	36%	19%

Table 9: Survey responses and current production system

Survey	Certified Organic	Organic but not certified	Considering going Organic	Not considering organic but lessening non-organic inputs	No interest in going organic
Horticulture	12.4%	8.1%	8.4%	34.4%	36.8%
Wine (by Ha of Respondents)	50.0%	10.0%	15.0%	NA	25.0%
Dairy	13.2%	6.6%	10.5%	26.3%	43.4%
Beef and Lamb	2.4%	6.0%	73.5%	NA	18.1%
FOMA	0.0%	7.14%	71.43%	NA	21.43%

Unsurprisingly, certified organic producers or those interested in organic production responded in greater numbers than the industry average. This, coupled with the generally low response rates, means that caution should be applied in extrapolating the results too broadly.

INTEREST HIGH IN ORGANIC

The survey does highlight that a lot of producers within the mainstream farming community have a real interest in organic.

More than 50% of respondents across each of the four surveys said they were either interested in gaining full organic certification or transitioning towards organic. While no FOMA members who responded were certified organic, 78% were either self-claimed organic or considering aspects of organic management or going organic.

Each of the surveys asked participants what their main reasons were for transitioning or wanting to transition to organic production and to rank them from 1 to 5 with 1 being the most frequent response.

More than 50% of respondents said they were either interested in gaining full organic certification or transitioning towards organic.

Table 10: Ranking of main reasons for going organic

Survey	It is better for the environment	It aligns with my/family/business values	To obtain premiums	It is better for stock/product health/quality	Help meet regulatory demands	Reflects an intent to protect human health	Other
Horticulture	1	2	3	NA	4		5
Wine	1	NA	5	3	4	2	
Dairy	2	1	4	3	5		
Beef and Lamb	2	1	3	NA	4		5
FOMA	1	2	0	NA	3		

“It was better for the environment” was the main motivation from FOMA, horticulture and wine industry respondents, while alignment with personal/family/business values was cited as the main motivator for pastoral farmers. All respondents had the environment and personal values as the primary driver for change. It was interesting to note that access to price premiums was of lower importance as was certification to meet regulatory demands for environmental integrity. Comments in the wine survey detailed a relationship between organic production methods and wine quality.

BUREAUCRACY A DETERRENT

The ranking of constraints to transitioning to organics showed differences between producers. Bureaucracy, including certification, was ranked as the most significant constraint by pastoral farmers and was ranked relatively high by the wine and horticultural producers. Limited market demand for organic products was ranked by all sectors at a comparatively low level. Technical constraints were identified as the main deterrent by wine industry respondents, with weed, pest and disease control commented on as being especially challenging using organic management. Information and the lack of access to finance were key issues for FOMA’s members which highlights the need for culturally appropriate communication and technology transfer strategies.

Table 11: Ranking of constraints to transitioning to organic

Survey	Bureaucracy	Finance – lack of capital	Returns	More work	Supply of organic inputs	Not enough information	Limited market demand	Technical constraint, eg. pest & disease
Horticulture	2		1	3	4	5	6	
Wine	3		2				6	1
Dairy	1		4	2	3	5	6	
Beef and Lamb	1		4		5	2		
FOMA		2			3	1		4

Respondents’ reasons for not wanting to move into organic production show some variation between sectors though a key reason cited is the belief that organic products are neither superior, nor that organic farming systems, are more sustainable. Possibly linked with this response, is the belief that their current farming practices are most suitable for their operation.

A lack of suitable management strategies under organic management was especially important for organic sheep and beef farmers with risks associated with animal welfare, weed (gorse, thistles) and internal parasites highlighted as barriers.

Table 12: Reasons for being not interested in organics

Survey	Don't believe organic products are superior or the system is more sustainable	Believe my current farming practices are the best for my operation	Think it would be less profitable	Don't think there will be a lasting premium for organic products or premiums are too low	Less management options, eg. animal health weed and pest control
Horticulture	2	1	3	5	4
Dairy	1	3	4	5	2
Beef and Lamb	2	5	3	4	1

Kelvin and Alex Hicks from Willowmere Organics in Hororata, Canterbury during summer shearing of their organic lambs.



EXPORT SURVEY RESULTS

In relation to the export survey, respondents were asked to identify what they saw as the key constraint to the growth of their organic business. Only 36 responses were provided, however they do provide an insight into the priority constraint areas.

Table 13: Export survey – what is the key constraint to the growth of your organic business?

Constraint	% of respondents
Constraints in the supply of raw materials	25%
Bureaucracy, eg. certification	22%
Returns, eg. the level of profits available	19%
Adequate markets for your products	14%
Other	11%
Finance, eg. capital to fund growth	8%
Total	100%

Nigel and Jane Bowen grow organic pumpkins and garlic.



There was some variation in constraints across sectors. Those respondents working with organic horticultural and processed products identified raw material supply as the main constraint. Organic wine respondents identified bureaucracy as the main constraint, followed by the financial returns available. Other key constraints suggested were:

- Access to skilled workers
- Labelling requirements in markets – non-equivalence and differing organic standards
- Unwillingness to pursue growth
- Lack of financial support from the government.

The census also asked respondents ‘*How positive do you feel about the opportunities for your organic business for the future?*’ and asked them to provide a score between 0 (pessimistic) and 100 (optimistic), with 50 as neutral. There were 34 respondents and the average score was 68%. There was no significant variation between the sectors and their average scores.

ALIGNING PRODUCTION WITH CONSUMER DEMAND

The results of this work indicate that there is real interest across New Zealand’s farming community to either become certified organic, transition towards organic or utilise some organic production techniques and practices. OANZ believes this is an approach that is good for the whole of New Zealand and meets international market opportunities, driven by consumer demand.

It makes good sense to align production with consumer demands and preferences that the food they buy and consume is sustainably grown, environmentally kind to the planet and is in line with their social and personal values.

OANZ plans to undertake in-depth consumer research to understand international consumer perceptions of New Zealand certified organic products to inform future developments and identify export opportunities.

Meeting the demand and growing the organic sector will require a multi-sector, bottom up and top down approach with appropriate policy in place and strategic investment from national and regional governments.

OANZ is working constructively with Government and industry leaders to advocate and provide evidence-based strategies and recommendations to develop and establish a robust policy environment to support organic growth domestically and internationally. We are grateful for the willingness of the sectors to collaborate on this important work.

We also have work to do to provide professional development and extension services to the organic sector participants as well as play a role in education and outreach to consumers and retailers to provide the information they need to better recognise genuine organic product.

It makes good sense to align production with consumer demands and preferences.

ORGANIC WINS

Good Sense Choice Organic Wine of the Year Winner

"There's a beauty in not knowing how hard things will be sometimes," says Pete Chapman, viticulturalist at award-winning, family-owned and run Terrace Edge winery at Waitara, North Canterbury.

A spontaneous decision to purchase the former sheep farm in 2000 and convert it into a vineyard and olive grove has been a winner.

Terrace Edge won the "Riedel Vineyard of the Year" award at the New Zealand Organic Wine Awards in early May 2018 and also won Champion Pinot Gris and Syrah.

Organic wineries tend to be smaller and focused on quality, so we are stoked because there were some really good producers in there," Chapman said. "North Canterbury has a number of organic producers like ourselves, so we're just so pleased to see others doing well in the awards as well."

Pete Chapman, hands-on viticulturalist.





Catriona and Mark White in the orchard they love.

Organic Kiwifruit Growers take out Supreme Award

Guardians, protectors and conservers, Opotiki organic kiwifruit growers Mark and Catriona White, have been crowned National Ambassadors for Sustainable Farming and Growing and the Supreme Winners of the 2018 Ballance Farm Environment Awards.

This is the first time a kiwifruit grower has taken out the supreme award, and the judges said that it reflected the Whites' energy, passion and respect for the principles of kaitiakitanga or guardianship.

Ten years ago, the Whites moved from the city in search of a better life and bought a bare block of land near Opotiki in the Bay of Plenty. Their work and passion has transformed a 7.5 ha section of a former organic dairy farm into the Coastal Kiwis Orchard it is today.

Using evidence-based science and technology in their business and orchard and demonstrating a broad global market understanding and a real energy to be agents of change, they run a successful BioGro certified organic business.

The orchard grows 3.2 ha of Zespri Organic Green kiwifruit, producing in 2017 a total of 24,000 trays of Kiwistart fruit. Zespri Organic SunGold (G3) is currently grown on 2.65 ha producing 38,500 trays. This production was achieved in a challenging growing year which included various cyclones and a very wet and windy autumn. Recently developed blocks of SunGold have come into production this season.

"Our business is built around Oranga Nuku, Oranga Kai, Oranga Tāngata, Oranga Taiao – healthy soil, healthy food, healthy people and healthy environment," says Mark White.

CASE STUDIES: INNOVATION AT WORK



Organic Wine in New Zealand: Great Wine is in Our Nature

By Rebecca Reider, Organic Winegrowers New Zealand
Co-ordinator

The New Zealand organic wine sector continues to solidify its reputation as a source of premium quality wines. Many of the country's top wine producers are now certified organic.

The sector remains comparatively small in terms of land area covered. Only 4.6% of grapevine area in New Zealand was certified organic in 2017. However, a large number of companies are involved. Over 10% of the country's wineries, 72 out of 677 wineries, now hold organic certification.

Strikingly, the organic wine sector is punching well above its weight in terms of accolades for the wines produced.

For example, Air New Zealand annually releases a list of the country's top fine wines. Out of the 67 wines selected for the Fine Wines of New Zealand 2018 list, 29.7% of the wines were certified organic.

A similar outcome unfolded at New Zealand Winegrowers' annual trade tasting in Europe in 2018. Event organisers asked a panel of 15 Masters of Wine and Master Sommeliers, who had all recently visited New Zealand, to list their favourite New Zealand wines. Of the final 16 wines chosen to represent the industry's top quality and diversity, six of the wines were organic.

These results have become typical in the New Zealand wine industry. Although less than 5% of the nation's vineyard area is organic, curated lists of top New Zealand wines routinely feature 30% or more organic content.

GREAT WINE IN OUR NATURE

Why are organic production wines achieving the accolades? The answer is likely rooted in both the nature of organic practices, and the nature of the wineries that are now choosing these practices.

Many organic grape growers report that organic production results in thicker skinned fruit, often with smaller berry sizes, and winemakers say anecdotally that these organic grapes generate more complex flavours. There is a belief among many growers that organic practices allow the grapes and resulting wine to reflect terroir more optimally, the constellation of natural factors such as soils and climate which make each vineyard site unique. A comment from one recently converted organic winemaker is typical: "We believe there's a greater sense of place shining through in these wines."

The association between organic practices and vineyard site expression has led grower organisation, Organic Winegrowers New Zealand to adopt the tagline "Great Wine is in Our Nature."

Yields obtained on organic vineyards reflect this quest for quality rather than quantity. New Zealand winegrowers include a continuum, ranging from growers aiming for maximum yields, to more premium producers who aim for lower yields in order to obtain higher quality fruit.

The organic wine sector is punching well above its weight in terms of accolades for the wines produced.

Opposite: Organic vineyards such as Clos Henri manage undervine weeds through cultivation, rather than using chemical herbicide sprays.

We believe there's a greater sense of place shining through in these wines.

A recent survey of approximately two dozen organic vineyard blocks in Marlborough confirmed that some organic growers are intentionally thinning their Sauvignon Blanc grapes to yields as low as 10 tonne/ha to obtain higher quality grapes – such intentionally low yields are uncommon amongst non-organic growers.

Yields for organic growers in the survey, not counting those aggressively thinning their fruit, averaged 14.3 tonne/ha over five years for Sauvignon Blanc. All Marlborough organic Pinot Noir growers in the survey were thinning their Pinot Noir grapes either moderately or heavily, with intentionally modest harvests averaging 6.1 tonne/ha over five years⁶.

Many organic growers and winemakers who pursue organic production do so at least in part because they wish to make high quality wine.

In the broad wine industry survey undertaken for this report, the pursuit of a high-quality product was perceived as one of the top three reasons for going organic. Out of 100 producers surveyed, 32 ranked protecting the environment as a top reason to go organic; 31 ranked protecting human health as a top reason to go organic; and 23 ranked “to produce a higher quality product” as a top reason to go organic. A significant majority of those responding “to produce a higher quality product” were already certified organic or using organic practices.

It is also worth noting that there are significant regional variations in the uptake of organic winegrowing across New Zealand. Marlborough, the country's largest region, has only 3.8% of its vineyard land under organic certification, a statistic influenced by large new non-organic plantings. However, smaller regions with a greater focus on artisanal production have higher percentages of organic vineyards area, including Central Otago (16.7% organic), Nelson (8.9% organic), North Canterbury (7.9%) and Wairarapa (7.4%).

INDUSTRY STRUCTURE: ORGANIC GRAPES VS. ORGANIC WINE

The relationship between organic grape production and organic wine production is not entirely straightforward. Data obtained by OANZ suggests that a significant fraction of certified organic grapes in New Zealand are still being made into non-certified organic wine. There are several reasons for this, which are reported anecdotally by wine industry staff:

- Organic production for some producers is a choice driven by viticultural or winemaking preferences, rather than by a desire to have an organic label on the bottle.
- Some large wineries have converted large areas of their own vineyards to organic production, but some of those grapes may be blended with non-organic grapes for particular wine blends or may end up in brands which do not yet have organic lines. In some cases where organic conversion has been driven by vineyard and winery staff, marketing teams have not yet become motivated to market the wine as organic. This sometimes reflects a gap in philosophies between viticulture/winemaking teams and corporate marketing departments.
- Some organic wineries do not proclaim their organic status in certain markets. For example, under US organic winemaking rules, most New Zealand organic wines can only be labelled “made with organic grapes”

⁶ Bart Arnst, personal communication.

rather than labelled as “organic wine”; some New Zealand wineries therefore choose not to mention their organic status at all.

- Some organic grape producers sell their grapes to non-organic wineries which pay a premium for the high quality of the fruit, however these buyer wineries may not themselves hold organic certification.

As a result, in separating organic grape and wine production, it is important to note that the figures for organic wine exports obtained in this OANZ Market Report *do not* reflect the full economic value of the New Zealand organic winegrape industry. Because the quantity of organic grapes going into non-organic or non-labelled organic wine is unknown, it is difficult to estimate the true total value of organic grape and wine production.

Prices for organic grapes in the New Zealand marketplace reflect the association between organic production and high-quality fruit. In the 2017-18 growing season, there was a shortage of organic fruit on the grape market, with many wineries seeking to buy more organic fruit than they were able to obtain. Some organic grape growers reported in 2018 that wineries paid prices 10 to 20% higher than average prices for conventional fruit. The price premiums being paid are in some cases based on grape quality rather than solely on organic status. This is reflected in the fact that some wineries pay more for organic fruit, but then use it to produce wines which are not certified organic.

Fraser and Lindsay McLachlan inspect organic compost at Peregrine Vineyard, Central Otago.





Harvesting organic grapes at Hans Herzog Estate, Marlborough.

PROSPECTS FOR FUTURE GROWTH

The New Zealand organic wine industry has been in a somewhat steady state for the last few years, in terms of land area and the number of producers involved. The sector occupies a lower share of New Zealand's total vineyard area than it previously has (4.6% in 2017 vs. 5.78% in 2015). However, this is due in large part to an explosion in new plantings of non-organic grapes. In 2017, there were 37,129 ha planted in winegrapes nationwide, compared to 35,463 ha in 2015⁷.

Still, many non-organic winegrowers continue to express an interest in learning organic techniques. The Organic and Biodynamic Winegrowing Conference, a biennial New Zealand industry event, attracted over 300 delegates in 2017, including staff from numerous non-organic companies – afterwards, 52% of non-organic attendees said the conference made it more likely they would become organic.

⁷ New Zealand Winegrowers Annual Report 2017.

Organic Winegrowers New Zealand, an incorporated society that promotes and supports organic wine production, has 180 members. Approximately half of the grower and winery members are not yet certified organic but are interested in learning about organic methods.

Undoubtedly, there are technical hurdles to converting to organic production. Undervine weeding is one of the most significant technical challenges for new organic growers, as this involves a new set of ecological considerations for the vineyard manager, as well as a major investment in new machinery or the engagement of a contractor for weeding.

However, numerous grape growers have shown that the technical challenges involved in organic production are surmountable. At this point, structural considerations in the industry may be the biggest hurdles to further growth in the organic sector. These include:

SUPPORT FOR ORGANIC GRAPE GROWERS

The tenuous nature of the contract grapegrowing economy may pose a barrier to organic conversions by growers who do not produce their own wines. The New Zealand wine industry is divided between wineries that may grow some or all of their own grapes, and grape growers who sell their grapes to wineries.

There are currently 677 wineries and 726 non-winery growers. However, the majority of organic winegrape production in New Zealand is currently undertaken by wineries, rather than by growers selling their grapes on the open market. It may be perceived as riskier for an independent grape grower to convert to organic production without having an assured buyer and guaranteed price waiting at the end of the three-year organic conversion process. Could wineries incentivise and support their contract growers to convert to organic production? Without such support, is it realistic to expect more contract growers to become organic?

Navigating the organic market. By all accounts, the organic wine market worldwide continues to grow. For example, in the US, sales of imported organic wine grew an average of 12.75% annually from 2013 to 2016⁸. However, wine marketers in New Zealand may not fully grasp the scale of this opportunity. Organic vineyard conversions in New Zealand have often been driven by viticulturists and winemakers pursuing organic practices, rather than by marketing departments seeking to meet an organic market niche. More market research and marketing support may be needed in order to help New Zealand wine producers understand and maximise the organic market opportunity. This conundrum is reflected in the fact that while some New Zealand wineries cannot get enough organic grapes, others have organic grapes which they are not making into organic wine.

Overseas competition. New Zealand producers currently report a warm market reception for their organic wines overseas. Meanwhile, however, organic viticulture continues to increase in area worldwide. Global organic grape production grew steadily from 217,953 ha in 2010 to almost 380,000 ha in 2018, including both winegrapes and table grapes⁹. Viticulturists and winemakers from South America have visited New Zealand in recent years to learn organic techniques.

As organic wine production grows worldwide, there may be more competition in the marketplace, particularly from producers in countries with lower labour costs who can sell wine at lower price points. Protecting and enhancing New Zealand's reputation as a high quality organic wine producer is therefore important to the future of New Zealand's position in global organic wine markets.

Many non-organic winegrowers continue to express an interest in learning organic techniques.

⁸ Statista, 2018. "Sales growth of imported and domestic organic wine in the United States from 2013 to 2016."

⁹ FIBL & IFOAM, 2018. *The World of Organic Agriculture: Statistics & Emerging Trends 2017*.



Organic Kiwifruit: An Important and Valuable Niche

Prepared by Alice Moore, Global Marketing Manager – Organics and Zespri Communications

The kiwifruit industry achieved a record-breaking result with earnings of \$2.4b in the 2017/18 season, with Organic kiwifruit representing around 3.6% of total sales value. After emerging from the impact of Psa, the industry is in a period of strong growth with global sales expected to grow to \$4.5b by 2025.

Organics plays an important role as a premium niche within the Zespri portfolio, offering consumers a natural choice to suit their lifestyle and an alternative to conventional products. Organic sales around the world are underpinned by a broad consumer desire for healthy, nutritious, safe and good tasting foods.

Meeting demand for organic fresh produce presents a significant opportunity, with sales growing globally year on year driven by a combination of retailer preferences, and consumer demand. Demand for organic kiwifruit is growing and demand now significantly exceeds supply.

This strong demand is supported by deep connections with our markets, and as a top five global produce brand and kiwifruit category leader, Zespri has built long-term relationships with partners in 59 countries. The core markets for Zespri Organic are North America, Europe and Japan which account for over 80 percent of global sales by volume. Sales into China, Taiwan, and South East Asia are expected to grow steadily from a small base.

ZESPRI SUNGOLD SHINES

A focus over the next five years is to seize the organic opportunity in the fantastic success of proprietary variety Zespri SunGold. Consumer demand for SunGold is strong around the world and this will fuel the industry’s growth.

To help meet demand, Zespri plans to release 50ha of Organic SunGold licence each year from 2018, for greenfields development, subject to annual review. This has the potential to boost supply by around 2.5m trays each year once vines reach full production. The first 50ha released under a closed tender bid in March this year was fully allocated, with initial production from these developments expected in 2021-22.

POSITIVE FUTURE

The future for Zespri Organic kiwifruit is positive with strong demand and good per tray premiums, and average net orchard returns comparable to if not higher than conventional.

Table 14: Recently modelled net orchard returns (NOR*) for green and organic green kiwifruit. Data sourced from Zespri 5-year outlook documents.

	2015/16		2016/17	
	GREEN	ORGANIC GREEN	GREEN	ORGANIC GREEN
Top 25% NOR	>=\$34,800/ha	>=\$35,300/ha	>=\$33,300/ha	>=\$38,500/ha
Average NOR	\$22,709/ha	\$22,534/ha	\$21,655/ha	\$26,727/ha
Lower 25% NOR	<=\$9,700/ha	<=\$14,100/ha	<=\$9,500/ha	\$15,100/ha

*NOR is the average amount received for each orchard or part orchard after Zespri, post-harvest and on-orchard costs are deducted.

Organics plays an important role as a premium niche within Zespri.

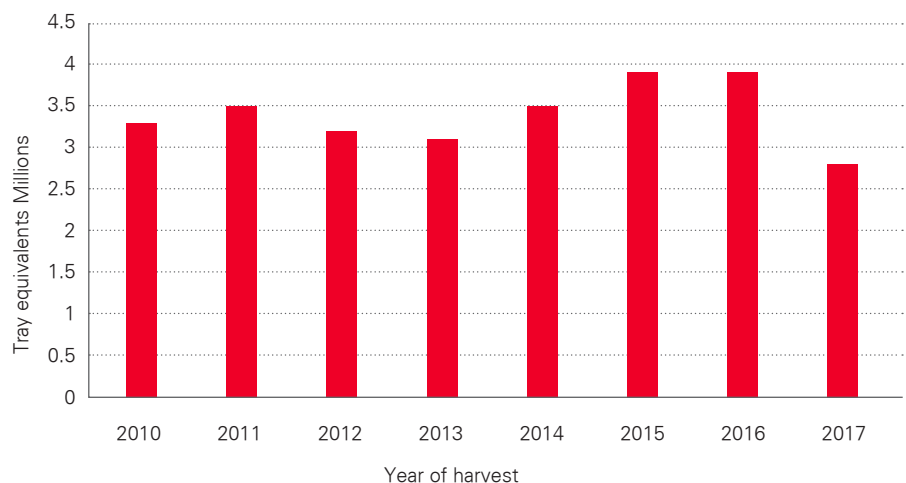
Opposite: Jeff and Shirley Roderick “premium on a premium”.

We believe being organic gives us differentiation to support a premium return.

“Our challenge is to continue to lift our performance by staying focused on improving the execution of our brand-led, consumer-focused strategy, supported by excellence in marketing and strong, connected partnerships with growers, suppliers, distributors and retail partners,” Zespri CEO Dan Mathieson says.

In recent years, volumes of Organic Green have fluctuated between 3 and 4 million trays (Figure 4). A particularly poor growing season in 2017/18 produced just 2.8 million trays, however, volumes are expected to recover to 3.5 million trays for the 2018/19 season. The premium Organic SunGold category continues to develop with a forecast volume for the 2018/19 season of 840,000 trays.

Figure 4: Volumes sold of Zespri organic green kiwifruit. Data sourced from 2016/17 Zespri annual review and kiwiflier (Feb 2018).



A GROWER'S PERSPECTIVE

Jeff and Shirley Roderick have been growing kiwifruit organically for 30 years on land originally purchased by Jeff's grandfather in 1936. His grandfather's land was converted from a dairy farm to a kiwifruit orchard by Jeff, his father and brother in 1980.

Jeff and Shirley raised their three daughters on the 16ha orchard in Te Puke, with half producing Organic Green, and half producing Organic SunGold. They are surrounded by native New Zealand forest and native birds as well as other organic kiwifruit orchards.

“We chose to grow organically for lifestyle reasons and for the health of our children who grew up on the orchard. The business model also had to stack up, and we believe being organic gives us differentiation to support a premium return,” says Shirley.

Jeff and Shirley host many international visitors on their orchard and enjoy sharing their passion for organic kiwifruit with customers and media from around the world. They also act as regular overseas ambassadors for Zespri, visiting stores and talking to consumers about their product.

“We take pride in the fact that our fruit is sustainably grown in an organic environment, and we enjoy sharing that”.

From a financial perspective, Jeff and Shirley say their decision to grow organically has been a good one.

“Organic SunGold receives a \$2 per tray premium over conventional. Organic Hayward returns are also substantially higher, so we are getting a premium on a premium,” says Jeff.

ABOUT ZESPRI

Consumers at the heart of our strategy

Zespri’s purpose is to deliver long-term value for growers and shareholders by helping more consumers lead healthy and delicious lives. We do this by marketing the world’s leading portfolio of kiwifruit 12 months of the year.

The success of the Zespri brand is built on a consumer driven philosophy, with relentless quality systems which ensure the fruit is consistently delicious, safe and top quality. Zespri invests over \$140 million in offshore marketing including organics, to drive consumer awareness of the Zespri brand, driving demand ahead of supply to support continued strong returns.

Innovation

Innovation is key to driving growth, with over \$35 million a year invested, including in Zespri’s joint new varieties breeding and evaluation programme with Plant and Food. It is the largest and most advanced kiwifruit breeding programme in the world involving no fewer than 70,000 kiwifruit varieties.





Organic Dairy: Poised to Grow

Prepared by Rick Carmont of the Organic Exporters Association

This review of the organic dairy sector was prepared through discussions with industry representatives as well as an internet search for references on organic dairy production in New Zealand and overseas.

New Zealand is well placed to provide discerning consumers with an expanding range of organic dairy products to meet their tastes, preferences and demands for safe, natural and authentic food in rapidly growing markets, particularly in Asia and China.

The global organic dairy market is currently estimated to be worth about US\$17b with a compound annual growth rate (CAGR) of 8% during 2009 to 2016. By 2022¹⁰ the sector is projected to be worth US\$25b the value of organic milk powder being an important contributor.

While dairy consumption in mature markets in the USA, UK and Europe is slowing, sales of organic dairy products are rising, but it is China which holds the greatest potential for New Zealand exporters.

The China market for organic dairy products is still small, just 1-2% of total milk sales, but it is set to grow rapidly, and competition will be intense, not just from multinationals but Chinese investors establishing vertically integrated supply chains from source to shelf.

Standard milk rather than added value products currently makes up 95% of organic dairy sales, but Chinese consumers are looking for new format products with organic packaged food and beverages consumption increasing 10.4% between 2015 and 2018.

The market for organic infant formula is projected to increase significantly over the next 10 years and New Zealand has a competitive advantage and strong reputation as a preferred source in the hearts and minds of caregivers.

According to a recent report, nearly 60% of Chinese mothers think that products from Australia or New Zealand are better than those from other milk sources, while less than a fifth associate Chinese milk with a premium image¹¹.

NEW ZEALAND

The New Zealand organic dairy sector is continuing to grow and diversify with more producers, processors and exporters on the scene.

It was the mid 1990s when the Kiwi Dairy Cooperative set up the first commercial organic dairy and organic milk brand, followed by Fonterra in 2002 which expanded the range of ingredients sourced from just 17 organic farms¹².

Today there are an estimated 42,000 cows under organic management in New Zealand¹³, producing about 170 million litres of organic milk each year¹⁴ which is encouraging. Australia's organic milk pool is estimated to be only 40 million litres per annum, less than a quarter of New Zealand's output¹⁵.

Global Organic Dairy

\$17b
growing to
\$25b by 2022

10 www.prnewswire.com/news-releases/25-billion-organic-dairy-market-global-industry-trends-share-size-growth-opportunity-and-forecast-2017-2022-300561484.html

11 www.foodbev.com/news/organic-milk-powder-market-will-surpass-3bn-valuation-by-2027-91171/

12 Dominion 2002

13 Live Bio 2018

14 www.dairynz.co.nz/news/ 27 Nov 2017

15 SBS News 26 March 2018

It's about being local and consumers knowing exactly where it comes from.

Fonterra, Open Country Dairy, Organic Dairy Hub and Marphona Farms which operates Green Valley Dairies¹⁶ are the four main suppliers of organic milk.

Currently, at least 13 organic dairy processors have export capabilities, including Amrita Nutrition, Bodco, Canary Butter, Fonterra, GMP Dairy, Green Valley Dairies, Envictus, JML Sales, Kawerau Dairy Company (in 2019), NZ Pure Dairy Products Limited, Oceania Dairy, Open Country Dairy and Yashili New Zealand Dairy Co Ltd¹⁷.

Organic infant formula, made by New Zealand and Australian processors, has become an increasingly important product in the export and domestic mix of organic dairy. The market for organic infant formula in Australasia was valued at \$240 million in 2017¹⁸.

ORGANIC DAIRY SUPPLIERS

Fonterra established its organic programme in 2002 following three years of research¹⁹ and the sector grew strongly. At its peak in 2011, there were 127 dairy farms supplying Fonterra with organic milk and a reported 29,000 cows under organic management²⁰. That was the largest organic dairy herd in the world after the EU and US.

Fonterra had a review and changed its organic policy in the same year. This opened the door to fresh commercial opportunities for new players to fill the supply vacuum. The Organic Dairy Hub Cooperative (Dairy Hub) which is now the third largest supplier of organic milk in New Zealand was incorporated in 2015²¹.

Hub supplier, Waikato organic dairy farmer, Ged Goode who runs 680 organic milk-producing cows on his 800 ha farms²² says the aim is “to produce the tastiest, healthiest milk in the world”.

Fonterra too is successfully growing its organic milk pool again, forging international alliances and developing new products to meet the next generation of customers and consumers. Recent innovations include the launch in late 2016 of a new range of premium UHT products in China. The “Upline” range featured two UHT (ultra-heat treated) milk products: “LiveUp” – a high-protein milk with 50 per cent more protein than standard UHT and “NaturalUp” – made from certified fresh organic New Zealand milk²³.

A second innovation during the past year was the launch of organic, single farm milk under the Kapiti brand. The Flipp Organic Farm in Oroua Downs, Manawatu, was chosen to supply the milk for the product, not only because of its organic certification, but because the farm could meet demand.

“It’s about being able to tell the story, a single farm story,” says Fonterra’s Global Business Manager for Organics, Craig Deadman. “It’s about being local and consumers knowing exactly where it comes from.”

In addition to these product innovations, Fonterra has now changed the way it pays organic farmers, moving to an independent organic milk price linked to market returns²⁴.

OPEN COUNTRY DAIRY

Open Country Dairy has also seen the potential for New Zealand origin organic dairy and is developing an organic dairy capability with the aim of selling organic milk powder products, sourced from its South Island operations, later in 2018.

16 Live Bio 2018

17 Live Bio 2018 & www.foodsafety.govt.nz/registers-lists/organic-exporters-register/index.htm

18 SBS News 26 March 2018

19 Dominion 2002

20 Dominion August 2011

21 app.companiesoffice.govt.nz/companies/app/ui/pages/companies/5655248

22 NZ Farmer 20 March 2018

23 Herald Dec 2016

24 NZ Farmer May 2016



The Vosper family.

The company is preparing for international expansion by participating in trade shows, including exhibiting at the New Zealand Pavilion at the largest Asian organic trade show, BioFach China.

“It’s important that we reach out to our existing customer base, tell our story and introduce them to our latest range of organic ingredients as well as participating in organic centric events like BioFach China,” said Open Country’s Market Manager, Joe Clark.

MARPHONA FARMS

Marphona Farms began as a family business in 1983 with the conversion of some tough land just over the Bombay hills in Mangatawhiri.

Forward thinking by the Pulman family over 20 years ago has seen continued conversion of land to organic and today Marphona Farm is the largest organic dairy producer in Australasia. Marphona’s herd has the same number of cows as 12 average North Island farms²⁵.

It also operates its processing enterprise, Green Valley Dairies from the same site.

²⁵ www.gvd.co.nz/marphona-farm/about-the-farm/

Right from day one, Biofarm has tried to operate outside the square and judging by how busy we are, it is proving successful.

CLEARWATER

Another organic dairy company is Clearwaters Organic Dairy Co, established by Bryan and Jackie Clearwater.

The main farm and factory are located in a very beautiful location at Peel Forest in South Canterbury.

The farm was converted into an organic dairy farm in 1999 and since then the Clearwaters have been committed to enhancing the soil and farms natural capital following organic principles. Their work has included the re-establishment of native vegetation to protect the stream that runs through the farm.

The Clearwaters produce yoghurt in a factory on the farm with their award winning Clearwater's Cream Top Yoghurt and other products distributed throughout New Zealand.

KAWERAU DAIRY

Kawerau Dairy is a collaboration between 11 Māori entities and a family-owned Japanese business, Imanaka.

The company plans to create high-end, conventional and organic milk powders and milk protein concentrate products for New Zealand and the world.

The dairy plant is to be based around two small flexible drying platforms that will be developed in two phases.

Phase One is being designed and built to specification to produce specialty, high value cow and organic cow milk products (primarily Milk Protein Concentrate) (MPC) and Organic Milk Powders. Milk Protein Isolates (MPI) could also be a consideration. It is understood to have an organic dairy design capacity of around 10 million litres per year.

Phase Two is planned to be non-cow. The plant is expected to start producing products for sale early 2019 and will initially source milk from existing players²⁶.

BIOFARM PRODUCTS

In addition to the efficient large processors in New Zealand, there is a growing trend toward craft organic milk. Like craft beers, craft milk can prove to be a very successful model delivering commercial returns and a high level of satisfaction for the owner operators.

Biofarm Products Ltd, owned and operated by Cathy and Jamie Tait-Jamieson, is one of the first and most successful craft organic milk and yogurt operations in New Zealand.

"We're a company with a difference and very proud of that," says Cathy Tait-Jamieson.

"Right from day one, Biofarm has tried to operate outside the square and judging by how busy we are, it is proving successful."

Certified organic since 1986, Biofarm is the second oldest commercial organic farm still operating. It was the first company in New Zealand to supply organic dairy products to mainstream supermarkets²⁷.

Biofarm also utilises the Hua Parakore label, a growing system that ensures the food grown is of the highest purity according to Māori customs and practice¹³.

²⁶ poutama.co.nz/projects/poutama-dairy/

²⁷ biofarm.co.nz/about/

JERSEY GIRL ORGANICS

The Vosper family has been farming on Cleavedale farm in the Waikato for five generations. Three years ago, they started Jersey Girl Organics.

They sell their organic milk direct to customers through specialist stores, farmer markets and custom vending machines at Gate Pa and Mt Maunganui in Tauranga.

Their 250 pedigree Jersey cows each have a name and their comfort and well-being is paramount.

“We love the land we live on, the animals that share it with us and take pride in producing a top-quality milk in a way that honours natural processes,” says Mary Vosper, who owns the operation with her brother John Vosper, sister-in-law Liz Mackay and John and Liz’s son, Michael Vosper²⁸.

ORGANIC DAIRY AND PRODUCERS GROUP

Supporting organic dairy farmers is the Organic Dairy and Pastoral Group (ODPG), which was established 12 years ago.

ODPG is the national representative body for certified organic livestock and cropping farms across New Zealand. Its 200 plus members come from all parts of the country, from regional organic groups, organic input providers and retailers of organic product.

“With the low density of organic farms in New Zealand and the wide geographic distribution, there is a lot to be gained from combining resources to provide a network that supports organic farmers and the growth of the organic sector,” Chairman, Steve Erickson says.

28 jerseygirlorganics.co.nz/





Organic Sheep and Beef Sector: Drive for Real Food

Prepared by Rick Carmont of the Organic Exporters Association

This review of the organic sheep and beef sector was prepared through discussions with industry stakeholders as well as an internet search for references on organic meat production and consumption in New Zealand and overseas.

GLOBAL ORGANIC MEAT TRENDS

World processed organic beef consumption was forecast to have a value of over US\$6.7b in 2017. By 2027, the global market for processed organic beef is expected to almost double to US\$12b, a CAGR of 6.7%. By that date processed organic beef is projected to make up 75% of sales with the other 25% from fresh meat sales²⁹. Europe with a projected 30% of sales and North America with 40% of the sales are the big drivers of this significant growth for natural, real food.

The organic sheepmeat market is significantly smaller and no global figures have been sourced.

USA – US\$819m worth of meat was sold in 2017, up 8.5% over the previous year and a 10.4% increase in the volume sold. This was compared with conventional meat sales of US\$41.7b which decreased by 3% in 2017. Consumers are looking for the real deal with 29% of surveyed shoppers wanting to see more organic meat available³⁰. This suggests the market offers significant future growth potential for organic beef and lamb.

A significant driver for the growth in organic meat consumption is its enhanced nutritional value such as the higher levels of omega-3³¹. It is believed that the high grazing and forage-based diets prescribed under organic farming standards may be the main reason for differences in the fatty acid profiles.

China – is the largest meat producer in the world – and the largest consumer. In 2016, it imported US\$10.3b of meat, or 9% of the total global trade. In 2016, 149,000 tonnes of organic meat were sold in China with a compound annual growth rate in retail sales of 8% from 2012 and 2016³². The demand for organic meat is projected to continue to grow which is good news for New Zealand.

Europe – the sale of organic meat as a percentage of total meat sales varies between countries with Ireland (8%), Austria (4%) and Switzerland (4%) while the UK (1.4%) and Germany (2.5%) are relatively lower (IFOAM 2018).

Australia – organic red meat export sales of over A\$418m make up an estimated 58% of total Australian organic exports in 2017³³.

A potential competitor to organic meat sales is the emergence of plant based 'meat' products. In 2018, the market for these new foods was estimated at US\$4.6b and projections indicate sales will push US\$6.3b by 2023³⁴. In some markets, the sales of these products are significant. In Belgium, for example, 24.6% of meat substitution products sold are organic³⁵ which still provides an opportunity to supply of organic raw materials for these products.

Processed
Organic beef
market
2017

US\$6.7b
2027
US\$12b

29 www.reportlinker.com/p05094940/Organic-Beef-Meat-Market-Global-Industry-Analysis-and-Opportunity-Assessment.html

30 www.meatconference.com/sites/default/files/books/Power_of_meat_2018.pdf

31 www.cambridge.org/core/journals/british-journal-of-nutrition/article/composition-differences-between-organic-and-conventional-meat-a-systematic-literature-review-and-metaanalysis/B333BC0DD4B23193DDFA2273649AE0EE

32 www.agr.gc.ca/eng/industry-markets-and-trade/international-agri-food-market-intelligence/asia/market-intelligence/sector-trend-analysis-meat-trends-in-china/?id=1517496585604

33 Australian Organics Report 2018 austorganic.com/ao-market-report/

34 www.prnewswire.com/news-releases/the-meat-substitutes-market-is-projected-to-grow-at-a-cagr-of-68-300597230.html

35 gain.fas.usda.gov/Recent%20GAIN%20Publications/EU%20Organic%20Boom%20Brings%20Opportunities%20for%20U.S.%20Exporters_Berlin_Germany_2-6-2018.pdf

There is a growing domestic market for organic meat.

30% of prime organic NZ meat goes to conventional markets.

For some markets, a consumer preference to purchase locally grown meat can also create competition for imported organic meat products like those from New Zealand.

NEW ZEALAND SITUATION

New Zealand's organic beef and lamb market peaked around five years ago when ANZCO, Silver Fern Farms and Alliance were all processing organic lambs.

In 2013 it was reported that the big three players processed more than 80,000 units of organic lambs and an additional 2,000 units of organic beef³⁶. That has since slipped. Around 65,000 organic lambs and 4,000 organic beef units were reportedly processed in New Zealand in 2017, but there are now signs of steady growth³⁷.

Today ANZCO, Alliance, Blue Sky Meats and First Light (for organic Venison)³⁸ are all processing organic meat, along with several niche or boutique players like Harmony Meats.

There are about 110 farms in New Zealand breeding organic sheep and beef. Organic Farm Systems New Zealand Principal, Glenn Mead says these farms are supplemented by about 30 mixed cropping and lamb fattening/dairy grazing farms. In addition, there are another 50 organic dairy farms which meet US organic certification standards.

Organic Futures Aotearoa South Island Logistics Manager, Neville Parkinson says 10 years ago export opportunities were limited.

"The only export market for organic meat from New Zealand was for prime lamb cuts going to UK supermarkets and there were no organic markets for lesser value cuts, beef, cull cows or sheep," he said. "The big exporting meat companies were also finding it difficult to source consistent quality and reliable continuity of supply for organic product."

It's a different picture today in terms of availability of supply and product range.

Organic meat processing plants in New Zealand can either be single chain or multi chain where organic and conventional meats are mixed downstream. Organic offal can be sourced from single chain plants. Lambs are processed between 10-26 weeks old and are sourced in a staged manner to deliver uninterrupted, fresh supply, year-round.

Key operators include:

ANZCO

ANZCO processes sheep and beef and markets beef and lamb products to more than 80 countries around the world. It has total sales of NZ\$1.45b³⁹. ANZCO had made a significant investment in building relationships domestically and internationally to develop its organic supply chains including having four⁴⁰ of its processing facilities certified for organic processing and export.

ANZCO has a strategic relationship with the giant, member-only retail and wholesale group, Costco. Headquartered in Seattle, Washington, and with a global network of retail stores, it is the largest organic retailer in the world with annual certified organic sales exceeding US\$4 billion⁴¹.

"Costco and ANZCO have invested and fostered a strong working relationship over many years," says ANZCO Sales Executive, Lynsey McQuinn.

Costco executives have visited New Zealand many times to meet ANZCO organic farmers and see for themselves the paddock to plate production system at point of origin. In addition, ANZCO have long established relationships with leading supermarket chains in the United Kingdom including Waitrose.

36 www.organicradenz.com/foreign-buyer-information.html 2013

37 Live Bio 2018 & Organic Futures Joint Research

38 Live Bio 2018

39 www.anzcofoods.com

40 Live Bio 2018 & www.foodsafety.govt.nz/registers-lists/organic-exporters-register/index.htm

41 BMO Capital Markets May 2105

Alliance Group

Alliance Group is a farmer co-operative meat company established in 1948 with a current turnover of NZ\$1.53b. It has 8 processing plants and produces and markets 1,600 meat and co-products products⁴². The company was an early adopter of organic lamb processing and continues to process organic lambs today. Like the rest of the industry the volume processed is down on the peak of 2013.

Alliance operates the Pure South Brand with the UK one of its key markets for organic lamb. Alliance is one of only two companies registered with MPI to export organic meat under the Official Organic Assurance Programme⁴³.

“Alliance Group continues to investigate organic opportunities throughout the world, particularly into the added value space which is a strategic focus,” says Export Sales Manager, John Rabbit.

Farmer to market operators

In addition to export initiatives there is a growing domestic market for organic meat. One of the pioneers in organic livestock production is the Gow Family at Mangapiri Downs Farm in Western Southland who have been certified BioGro since 1989⁴⁴. This 469 Ha farm through Mountain Valley Organic Meats has been marketing organic meat directly to restaurants and shops. They have in the past also exported. There are other organic farmers marketing organic meat directly such as Milmore Downs⁴⁵ as well as specialist wholesalers and retailers such as Neat Meats and Harmony⁴⁶.

Organic Futures Aotearoa

This company has emerged as a co-ordinator of a traditionally fragmented organic supply chains and has been undertaking a key role in the development of the organic sheep and beef supply chains. The company was set up in 2009 by two South Island organic pastoral farmers, Maurice Hellewell and Neville Parkinson to match and link up producers, processors and markets with available organic meat supply.

“As farmers we identified that there was an absence of a dedicated platform that could be self-funding and could make a difference from ‘paddock to plate’ for the sheep and beef sector,” said Logistics and Administration Manager, Maurice Hellewell. Working with ANZCO, Silver Fern Farms, Harmony and Alliance meat companies, Organic Futures identified genuine organic markets for increasing amounts of organic beef, organic cull animals and lesser value cuts.

“Our beef is predominantly Angus and Hereford, selected for its quality and availability 12 months of the year,” Hellewell said. “The cattle are grazed on pastures that are rich in herbs to produce healthy, lean and tender meat.” Currently Organic Futures supports around 50 certified organic sheep and beef farmers, located mainly in the South Island where most of the organic product is grown. This is up from 30 suppliers five years ago.

More recently, the company has expanded into the North Island where most of the organic dairy cull cows are managed and with growing availability of secure, quality supply is expecting exponential export growth into established markets.

“The US is a big market for us but most stock comes from organic cull cows in the North Island,” says North Island Logistic Manager, Ian Atkinson. “To meet USDA organic rules, cows must be born into an organic management regime unlike the three-year transition for organic milk.

FUTURE

Each year the availability of certified organic supply is increasing and with an estimated one-third of the prime organic meat produced in New Zealand still going to conventional markets, there are plenty of opportunity for brand marketing and promotion.



42 www.alliance.co.nz

43 NBR 7 Feb 2014

44 www.organic-rams.co.nz/mountain-valley-organic-meats/

45 www.milmoredowns.co.nz/shop_online/beef_lamb/

46 www.harmony.co.nz



Local and Community Gardens

Prepared by Dr Matt Morris, Sustainability Advisor,
University of Canterbury Sustainability Office

The community organic sector has continued to evolve over the last few years. It is no longer enough to talk simply about community, school and marae gardens as today there are urban farms, food hubs or nodes, and food forests.

The community sector is clearly punching above its weight and delivering far more value to the community than its funding levels would suggest.

COMMUNITY GARDENS

Despite the increase in interest in community gardens, and all of their purported benefits, there is still no single point of truth relating to community garden statistics in New Zealand.

A recent survey found there are 152 community gardens across the country, but there are no doubt more. Almost half (48 per cent) of those accounted for are in the Auckland region, and in this area, at least, numbers have grown dramatically in the past decade. In 2009 there were 20 community gardens in Auckland.⁴⁷

Table 15: New Zealand community gardens 2018

North Island	No	South Island	No
Northland	3 ⁴⁸	Nelson	2
Auckland	73 ⁴⁹	Hokitika	2
Tauranga	3	Canterbury	27 ⁵⁰
Hastings	1	Queenstown	1
Taupo	1	Dunedin	13 ⁵¹
Kapiti	7 ⁵²	Mataura	1
Wellington	16 ⁵³	Invercargill	1
		Riverton	1
Total	104		48

Gardens4Health (G4H) currently supports 73 community gardens across the Auckland Isthmus, a 265 per cent increase in nine years. There are other community garden projects in the area not supported by Gardens4Health, but we do not know how many.

VOLUNTEERS WORK FOR WELLBEING

Not including school children, around 2300 people are engaged in these 73 community gardens on a weekly basis in Auckland. Richard Main, who coordinates the Gardens4Health programme, estimates that they all work 1.5 hours per week. Valued at the minimum wage, this would amount to \$2.96m worth of labour per annum.⁵⁴

If we assume a similar situation across other known community gardens in the country, this contribution looks more like \$6.16m. However, we do know

Today there are urban farms, food hubs or nodes, and food forests.

47 Richard Main, pers. comm.

48 organicediblegarden.co.nz/northland/

49 Garden4Health gardens only. Richard Main, pers. comm.

50 www.coga.org.nz/garden-directory/ (27 listed, though website states there are 29)

51 sustainableliving.org.nz/council/15/dunedin

52 www.kapiticoast.govt.nz/Our-District/on-to-it/community-garden-parties/

53 wellington.govt.nz/services/community-and-culture/community-gardens

54 Based on the 2018 adult minimum wage of \$16.50 p/h

Community gardens are taking a social or micro enterprise approach to overcome the shortfalls in funding.

from other research that many volunteers work more than 1.5 hours per week.⁵⁵ There are 25 paid staff working in community gardens in Auckland, mostly on 5-10 hours per week. In general, volunteers coordinate these gardens.

Individual community gardens may also be catering to more people.

Okeover Community Garden at the University of Canterbury has seen a 369 per cent increase in participation between 2010 and 2017 (inclusive)⁵⁶ and New Brighton Community Garden, also in Christchurch, has experienced a 77 per cent increase in volunteers since 2015.⁵⁷

Community education workshops are scheduled weekly and monthly by Auckland community gardens. Gardens4Health delivered 155 garden workshops, training sessions and events, and 109 composting practical sessions in the 2017 calendar year.

There is anecdotal evidence of a range of health improvements of participants, but again further research is needed to understand this.

FUNDING

A variety of funders support community garden initiatives, but it is not possible at this stage to get a sense of how much funding is going into this sector.

“Grants come from local and central government, NGOs and the private sector. Whatever the amount, it is not enough to meet demand,” says Gardens4Health’s, Richard Main.



55 In Christchurch, for example, the \$ value of volunteer labour in community gardens was put at \$1.5m in 2016 using 2013 data. See 2016 New Zealand Organic Market Report, p.54. www.gefree.org.nz/assets/pdf/OAN-ZMarket-Report2016FINALlow.pdf. New Brighton Community Gardens in Christchurch estimates their volunteers each work four hours per week – this amounts to a startling 37,239.02 hours of work, or \$614,443.83 of labour for this one garden alone. Client Numbers, 2017, New Brighton Community Gardens

56 UC Sustainability Office Attendance Stats, 2009-2017, UC Sustainability Office

57 Client Numbers, 2015 & 2017, New Brighton Community Gardens



“Community gardens are taking a social or micro enterprise approach to overcome the shortfalls in funding and sponsorship. They are being savvy, re-purposing resources that are free and exchanged and selling produce at farmers’ markets, supplying food banks, and having green exchange tables.”

There is still insufficient data from community gardens (or other community food projects) about harvest weights. The University of Canterbury continues to be one of the few community gardens in New Zealand rigorously collecting information, recording around 600kg of produce harvested per annum.⁵⁸

URBAN FARMING

Commercial or semi-commercial urban farms may be small but have a growing importance in New Zealand.

Cultivate Christchurch is one urban farming initiative that takes the form of a social enterprise. The organisation’s primary aim is to “support young people from doing not much to successfully engaging with employment, training and education”.

Bailey Peryman, one of Cultivate’s founders, says that many of the young people they work with were “at the bottom of the heap in the too hard basket” for many agencies, “but with Cultivate they can and do stay and see positive change”.

He says the government calculates the saving to the taxpayer of such interventions at \$130,000 per young person – even if the government does not fund Cultivate for this service.

Cultivate works with 6-8 of these young people per year at a deep level – in other words an economic contribution of between \$780,000 and \$1.04 million per annum.

⁵⁸ UC Sustainability Report 2017, www.canterbury.ac.nz/media/documents/reports/2017-annual-sustainability-report.pdf

Food forests are being established to provide food.

In addition, they have around 500 engagements per annum with preschool, high school, university and international students, work experience students from the Biological Husbandry Unit (Lincoln University) and corporates.

Operating two sites, they farm around 5,500 m², growing salads, herbs and baby root crops which they supply to 12 staple outlets. They also collect kitchen waste from 17 cafés and restaurants – that’s an estimated 75 tonnes of compost (120m³) per year, which is reapplied to their farms. All this with 5.5-6 paid FTE staff.

FOOD HUBS

Food Hubs, amalgamation and distribution points for locally grown food, are another innovation in the community food space.

ŌTĀKARO ORCHARD

An example is Ōtākaro Orchard in Christchurch which is being developed as a space with vegetables and a small food forest, and in due course a commercial café operation.

It will be the shop front for the food resilience movement in the region. This food hub was selected as an anchor project of the Christchurch rebuild in 2015 and was officially launched by the Prime Minister in 2016.

It began as a collaborative vision of 200 people and is now “becoming a hub for the local food community and embodying the vision of a 21st-century edible garden city,” to quote project coordinator Peter Wells.

To date, Ōtākaro Orchard has raised almost \$1 million from over 500 Cantabrians, NZ Lotteries, Rata Foundation, Christchurch City Council and many others, approximately \$200,000 in in-kind support and over \$10,000 of volunteer effort on-site.

With the combined efforts of 150 people, aged 5-85, the project has planted a public food forest, secured a 30-year peppercorn lease on its half-acre site, and will soon begin construction of a 200m² exemplar sustainable building, to be open later in 2018.

FOOD FORESTS

A search for “food forest” on the Stuff media website yields over 70 articles, all but one published since 2013 (the other was published in 2009), suggesting a sudden growth in these initiatives in the last five years.

The articles span the country from the Far North to Southland. A sample comprising the first 20 of these articles was analysed for content relating specifically to the expected or proven benefits deriving from them.

Seventeen discrete benefits were noted. However, the principal reason food forests are being established is to provide food (55% of the articles stated this) to a needy community.

This is followed by their role in specifically promoting or providing a nutritional health benefit, the fact that they are lower maintenance (than vegetable gardens), as exemplary or educational spaces, community development, and that they can help alleviate poverty or hunger.

These projects are gaining traction in the community based on their ability to meet real and immediate needs, especially around food nutrition and food security.

We do not yet know how many food forests there are in New Zealand, and those that exist are mostly very young. However, harvest data collected from the University of Canterbury's community garden and food forest suggest that food forest systems do indeed tend to increase in yields year on year, while vegetable garden yields remain static. We are therefore likely to see more such projects developing soon.





Authenticity Key to Natural and Organic Bodycare Sector Growth

Prepared by Susan Robinson-Derus, Director,
Robinson-Derus Associates

The global organic and natural personal care market is booming as consumers seek out certified haircare, oral care, skin care and cosmetic products. A 2015 Grand View Research report forecasts that the sector will reach USD 15.98 billion by 2020, fuelled by millennials, GenZs and older consumers. These are the segments seeking ethical personal products that fit their lifestyle values, particularly environment concerns, and demonstrate social responsibility.

Assurances that labels are true to content are being authenticated through strict ISO manufacturing and operating rules and certification from the US Department of Agriculture (USDA) and the EU. Natural and eco product standards are also being used to give certainty to customers and consumers.

New Zealand too is riding the wave.

Cosmetics New Zealand Executive Director, Garth Willey says there is a movement to natural and organic beauty care products, but it is highly competitive with the big international cosmetic and consumer brands all moving into the sector because they can see growth in mainstream mass retail and online channels.

"The total New Zealand domestic beauty market is valued at \$1.2 billion per annum and our estimate is that 10-15% would be organic or natural products – and growing. Exports of New Zealand made beauty products and ingredients is around \$200 million annually and most of that is from natural or organic personal care products. The US, Asia, including India, China and Southeast Asia, Europe and online channels offer strong growth," Wyllie says.

EXPORT TO GROW

"It's a crowded market with a lot of small players. The reality is that long term survival is slim for many without developing an export market which requires marketing, distribution, access to capital – and transparency across the value chain. You need validation."

There are international success stories. Trilogy International (TIL), owners of Trilogy Natural Products which reports a sale every 22 seconds of one of its 50-strong New Zealand-made organic or natural products, is a trail blazer. Recently sold to CITIC Capital China Partners for \$250 million, TIL has since delisted from the NZX and ASX but will continue to be headquartered and manufacture products in New Zealand.

Boutique New Zealand natural skincare company, Snowberry, was also acquired for an undisclosed sum early in 2018 by multinational consumer goods giant, Procter & Gamble. Snowberry, founded in 2007 by Persian-born Kiwi, Soraya Hendsi, who blends the range of sustainable skincare products, sources many of the natural ingredients, including native botanicals, from its own plantation north of Warkworth.

Wyllie, as head of the cosmetic sector's representative organisation (formerly known as Cosmetic Toiletry and Fragrance Association of New Zealand) is a

What's What and What's Not

- BioGro certified organic and NATRUE certified natural products both contain natural ingredients. The main difference is the type of raw materials used (ie. certified organic products contains organic ingredients).
- Certified organic products must contain at least 95% certified organic ingredients to be able to claim the product is "organic" (that is, ingredients that have been produced in compliance with recognised organic standards).
- A product that is certified natural must contain natural ingredients, but those ingredients do not need to be certified organic.
- Any other ingredients in certified organic or certified natural products must be permitted in BioGro's Organic Standard or NATRUE's criteria.
- This can include non-toxic and environmental-friendly, synthetic preservatives and surfactants that are permitted under the standards. GMOs, petrochemical based materials or any harmful/toxic chemicals or animal testing are NOT permitted in certified organic OR certified natural bodycare and cosmetic products.



Opposite: Organic rosehips from Lesotho.

The organic beauty sector must be able to demonstrate authenticity and transparency.

vocal advocate against false labelling and claims and warns that Fair Trading laws and the Commerce Commission will take action. The association has produced Guidelines for Green Advertising which members, including the 22 members who produce natural or organic ranges, are expected to follow.

He believes the organic beauty sector can be largely self-regulating but must play fair and be able to demonstrate authenticity and transparency.

“Even the big guys get stung like L’Oréal which claimed third party validation of a clinical trial and was found out. New Zealand cannot afford to have its brand credentials damaged by unproven claims.”

New Zealand’s premier and internationally recognised organic certification agency, BioGro, has seen a rise in beauty and bodycare manufacturers seeking validation.

“The organic and natural bodycare and cosmetics sector has a much shorter history when compared to the organic foods sector, said BioGro Accreditation and Technical Manager, Akiko Nicholls. “In fact, criteria that was originally established for organic food, was used and eventually modified to construct private cosmetic standards and has evolved overtime.”

CERTIFICATION

- To be “certified organic” at least 95% of the natural ingredients must come from certified organic production and/or certified wild collection.
- To comply with “made with organic” certification at least 70 per cent of the natural ingredients must meet organic criteria.
- NATRUE certification requires a product to contain natural ingredients but those ingredients do not need to be certified organic.

“It’s not easy to reach full organic certification. Every aspect of the chain of custody must be audited and certified from soil to shelf. To gain organic product certification, wild harvested ingredients, or the source of seaweed for instance, must also be certified organic and audited by third party organisations like us,” Nicholls says.

Gaining and maintaining organic certification for bodycare and cosmetic products can be an expensive and time-consuming process.

“Small companies may struggle to comply with some of the requirements they must adhere to within the organic standards. This includes sourcing appropriate organic ingredients, finding a manufacturer who can produce their products and sourcing and maintaining necessary documentation from the contractor and ingredient suppliers,” she says.

There is also the challenge of sourcing certified and secured, quality organic ingredients from offshore suppliers unless the enterprise has partnerships and social outreach programmes like Trilogy Natural Products, for example.

That’s where natural certification may fill the gap between organic certification and conventional (non-organic) products. BioGro is accredited by NATRUE to provide beauty products and raw materials for natural certification which meets an internationally recognised standard.

"This programme demonstrates authenticity and natural provenance credentials for consumers who are wise to greenwashing," Nicholls says.

Recent research from international market intelligence agency, Mintel, and published in Cosmetics Business magazine in March 2018, shows that 78% of consumers think brands should act ethically. Some 56% of US consumers surveyed said they would stop buying from companies they believed were unethical.

Nicholls believes that there is a need for a duty of care to educate consumers – and many retailers – on what the various certifications mean.

"It's confusing, and in some cases possibly misleading. Most of the time, consumers don't know the difference between organic and natural," she says. "Do you know the difference between BioGro certified organic and NATRUE, or the difference between COSMOs, Natural, Cruelty Free, Fairtrade, Gluten-free or any of the 100 plus marks and logos you see on beauty products around the world?"

"What does an ingredient descriptor like "no-nasties" mean? Natural or organic should not imply better or more effective," says Nicholls. "My advice is that you should always look for a certification logo issued by a third party to ensure that the product you are paying for is making a genuine claim."

It's not easy to reach full organic certification. Every aspect of the chain of custody must be audited and certified from soil to shelf.

**Pure
inside,
nothing
to hide**



Bulk rosehips for organic rosehip oil.

Chinese private equity firm buys Trilogy – and its ethical brand values

Natural beauty company Trilogy is a success story by any measure. Every 22 seconds someone somewhere in the world buys one of Trilogy's 50-strong New Zealand-made organic or natural products.

When sisters Sarah Gibbs and Catherine de Groot formed Trilogy in 2002 with a small range of ethical, natural skincare products, including what is now cult rosehip oil, they had taken a step into the future.

Today, Trilogy is the market leader in natural and organic skincare in New Zealand*, number two in Australian pharmacy** and available in 6000 stores or doors worldwide, with a fast-growing international presence in traditional retail, pharmacy, health, and online channels.

"Natural and organic are becoming mainstream as consumers shift to brands that share their values and are ethical. But if those brands can't prove they do what they say from ingredient sourcing and packaging through to marketing of the finished product, then consumers will walk," says Chief Executive, Angela Buglass. "It's a pretty crowded playground and consumers are much wiser to natural claims and greenwashing."

NATURAL AND ORGANIC CERTIFICATIONS

Trilogy, with over 50 products, has natural and organic certifications and was one of the first natural skincare brands to undertake independent clinical testing with "real people living real lives to give us real results".

Parent company, Trilogy International Limited, has been delisted from the New Zealand and Australian Stock Exchanges on completion in April 2018 of the sale to Chinese private equity firm, CITIC Capital China Partners. CITIC paid \$250 million for Trilogy Natural Products, ECOYA and Goodness Superfood Skincare, leading New Zealand beauty distributor CS&Co and Lanocorp New Zealand Limited, developer and manufacturer of skincare, bodycare and haircare products.

Buglass says Trilogy will not change its ethos or identity and will stay true to its New Zealand provenance, transparency and sustainable, natural values and practices across the value chain.

“Social investment or paying forward through community social responsibility is integral to our identity and our commitment to credence marketing.”

For example, Trilogy partners with African communities that supply some of their natural ingredients with initiatives to help alleviate poverty through education and sustainable enterprise. In Lesotho, the company purchased a state-of-the-art oil press to more than quadruple current production of certified organic rosehip oil. It also donates to the Borneo Orangutan Survival Foundation, the world’s largest orangutan rescue sanctuary, as part of a wider commitment to endangered species whose habitat is under threat. Trilogy does not use raw palm oil in any of its products. Any ingredients derived from palm oil are sourced from certified sustainable plantations.

“We’ve always been early adopters and ahead of the curve on key sustainability and environmental issues like becoming carbon neutral and adhering to ethical trade practices, refusing to use plastic microbeads from the very start and investing in NATRUE and organic certifications,” said Buglass, who is also the President of Cosmetics New Zealand, the operating name for the Cosmetic, Toiletry and Fragrance Association of New Zealand.

AUTHENTICITY

That commitment to authenticity and transparency extends to Trilogy’s campaigns, which primarily feature untouched images of real Trilogy customers of all ages in a celebration of women’s natural beauty.

Buglass says Trilogy’s new owners have strong Asian and US relationships which will help the company grow globally much faster as a leading natural beauty and lifestyle brand.

The company is already dipping its toes into China, launching an e-commerce flagship store on Alibaba’s T-Mall, ranging nationwide in the US through USA specialist grocery retailer Whole Foods Market and retail giant Ulta Beauty, as well as extending deeper into Asia, the Middle East and pushing sales in the UK, where Trilogy rosehip oils exploded after it was reported the Duchess of Cambridge was a fan.

“The natural and organic beauty market is growing around 20 per cent per annum worldwide. We’re well positioned. Our customers found us in their 30s and 40s and now their millennial daughters have discovered us and relate to our values,” says Buglass. “We will continue to pioneer new, natural and sustainably sourced products and take them to the world as an ethical, transparent brand.”

***#1 Brand in NZ Pharmacy**

IRi MarketEdge NZ Pharmacy – Skincare Self Select, Value Sales, MAT to 25/03/18

****#2 Brand in Australia Pharmacy**

IRi MarketEdge AU Pharmacy – Skincare Self Select, Value Sales, MAT to 04/03/18

**Social investment
or paying
forward through
community social
responsibility is
integral to our
identity.**



Authenticity and adherence to being 100% certified organic is the right thing to do.

Plantae: fully certified organic skincare the right thing to do

Plantae, the boutique organic skincare company based in Nelson, stands as a beacon in the crowded bodycare skincare and cosmetics sector as a fully certified organic enterprise from start to finish. Their BioGro certification doesn't come cheap and doesn't come easy, but 'it's the right thing to do,' says CEO and angel investor part owner, Lisa Friis.

"On a strictly commercial level, our adherence to being 100 per cent organic in everything we do means we run a thin line in achieving profitability but we're in for the long term and as a values-based enterprise, sustainability is at the very heart of what we do, be it financially, environmentally or upholding our social responsibilities. Dropping our organic standard to produce something that's "just quite nice and natural" is not who we are, or what matters to us and our customers," says Friis, who bought into Plantae in 2017 after 18 years in investment banking and finance in Asia.

Plantae has only recently invested in an aggressive and comprehensive marketing and PR strategy to get better known to raise brand awareness as they move into new channels, including e-commerce. This is a new strategy, having built the business on word of mouth and a large cohort of loyal repeat customers in New Zealand, and in Korea and Japan, who became fans of founder Carol Priest's natural and organic cosmetic ranges.

CERTIFICATION

“BioGro organic certification which covers every aspect of our value chain from the ingredients, most of which are sourced locally, through to packaging, as well as our commitment to substantiating through science and clinical trials the benefits of our skincare products, has earned us trust,” says Friis, an advocate of the healing and soothing powers of Botanics.

And while she does not want to see cottage industries like soap makers or lavender oil producers run out of business, she decries those that claim to be “organic” without evidence and sees the need for regulation – and education of consumers and retailers – to ensure only authentic, certified products can be sold as organic.

“Conscientious consumers from China to Auckland want to know they are buying the real deal and that the skincare products they choose at their local store or online are safe, just the same as if they were buying food. It’s an issue of transparency and integrity. We will never compromise on those values nor backing our products with science, research and development and independent third-party endorsement that confirms that we are genuinely organic with proven efficacy.”

REAL DEAL

Friis says that BioGro certification with its stringent criteria provides consumers with certainty but it is critical that New Zealand adopts a national standard and definition of what is organic product to lift the bar and upholds the reputation of New Zealand Inc.

Friis has big plans for taking Plantae to the world as a business that is environmentally sustainable, an employer of choice, and helps women put their best face forward.

“We’ve got the product range, sufficient capital and a compelling story to build the business,” says Friis. “Five years out I want us to be known in New Zealand as the cosmetics trendsetter, and a successful exporter with the skills of a big company but retaining the personal relationships and range of quality certified organic products that are made to be enjoyed by consumers.

“We believe that organics products are good for you and the environment now, and good for tomorrow.”

We will never compromise on values nor backing our products with science, research and development and independent third-party endorsement.



Oi is a holistic, social enterprise, committed to a philosophy to do good at scale.

Oi: Revolution in a Box

Organic Initiative, or Oi (as in oy over here), has started a revolution to remove plastic and chemicals from feminine hygiene products worldwide by providing a natural, healthy, all cotton alternative for women.

In just three years, Oi, and its small team of women entrepreneurs, led by co-founder and executive director Helen Robinson, have created a holistic, social enterprise, committed to a philosophy to do good at scale – for women and the environment – the essence of its brand and story.

“Women in New Zealand did not know that sanitary products were made from plastic. We provide a certified organic, biodegradable cotton tampon that is a premium product at an affordable price, which is what every woman deserves,” says Robinson, the former CEO of Microsoft NZ and 2016 Supreme Westpac Woman of Influence award winner.

GRASSROOTS GOOD

“Organic certification is integral to our journey of who we are and why we matter. We can trace the cotton in our tampons back to the field where it is grown, use bioplastic, biodegradable and compostable packaging, and components, and adhere to Fair Trade and UN labour practices. We contribute to grassroots community social responsibility programmes, starting here in New Zealand, and provide women with a quality, 100 percent cotton product that can be trusted as the right choice.

“It is humbling when a customer throws their arms around you and says our cotton tampons have changed their life. Our own research shows that some 25 percent of problems women suffer each month have been alleviated by switching away from the plastic options to our cotton tampons.”

Robinson said that supermarkets were wary of introducing “another” feminine hygiene range when initially approached, but sales of Oi products which are priced on par with other products, are proving that women are taking control and making the choice to “do good for their personal wellbeing and for the world”.

GOOD CHOICES

“We’re at a pivot point,” Robinson says. “We’ve got an ongoing job to educate consumers to turn away from plastic and at the same time encourage faster commercialisation of authentic organic products that are on the mainstream retail shelf, so people can make good choices.”

There is a growing movement against plastic worldwide, with many retailers removing plastic bags from checkouts for instance. Robinson says consumers would move faster if they considered that the entire length of New Zealand would be covered in conventional plastic sanitary products in just one woman’s lifetime.

DOING GOOD AT SCALE

“That’s what we mean by having the information and options to make the right choice to do good at scale,” Robinson says.

Oi, with its invocation to join the revolution and say NO to plastics, has taken its hard-hitting environmental messages, branded loud and proud on the packaging of all its feminine hygiene products, into the 350 million strong US market, testing the waters in supermarket and online shopping channels.

“We’re after doing good at scale in all we do and say. The US offered us the biggest bang for our bucks,” Robinson said. “We’re looking at vertical and horizontal channels. To date we’re doing well in natural supermarkets on the West Coast and on Amazon where is it so easy to buy and sell as well as other online channels.”

The next target is larger international mass market retailers. Asia too is in the headlights, but it will be “softly softly” as the team researches individual markets, consumer behaviours, product appeal, like the revolutionary menstrual cup and pads, as well as channels.

“We have to grow the business true to our ethos to do good at scale for women’s health and wellbeing and the greater good of our planet,” says Robinson.



Organic certification is integral to who we are and why we matter.



We have the potential of becoming an organic world bread basket if it could be proven to be economically feasible.

NATRUE certification key in Linden Leaves' growth plans

Brigit Blair started at her kitchen table in Christchurch, selecting and blending natural plant ingredients that would be kind to the skin and help two of her kids with severe eczema and allergies.

That was 1995 and today Linden Leaves is recognised internationally as a provider of quality skincare products, that combine nature and science, and sustainable sourcing. Still "made with love from New Zealand", the Natural Skincare product range is 100 per cent NATRUE certified. The rosehip, avocado and evening primrose oil products and white tea extract are all certified organic.

"Certification by reputable independent agencies is important to us," says Global Marketing Director, Juliet Blair, the daughter of the founder. "Efficacy and reputation matter to us and our customers who are conscious consumers. They are educated, know what they want and what they are comfortable putting on their skin and can see through greenwashing."

"Keeping the customer safe and delivering an efficacious product is paramount. We believe in providing transparency, so our customers are informed so they can make their own decisions and choices right for them."

Full organic certification is out of reach under current definitions, Blair says, and not part of the forward plan for Linden Leaves, partly due to the need

to source quality assured and uninterrupted supply offshore of some of the natural and wild grown botanical ingredients.

“We are not 100 per cent organic and don’t purport to be, but the internationally recognised NATRUE certification with its strict criteria meets our ethos for authenticity, transparency and provenance.”

This certification guarantees that all ingredients are natural, contain no synthetic fragrances and colours, no petroleum derived products, no silicon oils or derivatives, no genetically modified ingredients, no irradiation of botanical ingredients of the end product, and that products are not tested on animals.

NATRUE, based in Brussels, collaborates with independent certification bodies worldwide, including BioGro in New Zealand, to certify natural and organic cosmetics products or raw materials to the NATRUE standard and label criteria across the entire process.

Compliance is expensive and time consuming, but recognised certification says to consumers you can trust us and that is important as the family company begins its fresh push into international and omni-channel marketing, Blair says.

“Our future is international growth and we are open to new distribution and marketing models. Online shopping is a huge step,” she says. “The customer is in total control, shopping wherever and whenever they want so the whole experience needs to be true to brand across every channel.”

Korea, Japan, Hong Kong are all in the mix with a cautious approach to China where due to animal testing requirements for beauty and skincare products, cross-border e-commerce channels are used instead to enable access to the brand.

The ambition is for Linden Leaves to become the New Zealand equivalent of a French l’Occitane or Australia’s Jurlique, with a full wellbeing offer that captures the consumers’ imagination.

“New Zealand cosmetics and skincare have a less established reputation internationally to that of French brands, but New Zealand products are recognised for quality, efficacy and freshness and we have the potential of becoming an organic world bread basket if it could be proven to be economically feasible,” says Blair. “But, regardless, Linden Leaves at least has the ability to continue to build a brand that is credible and trustworthy because we can show that our products are what they say they are – and all made with love in New Zealand.”

**Certification
by reputable
independent
agencies is
important to us.**



Brigit and Juliet Blair, Made with Love

working with natural habitats

We protect wild plants and animals from toxic chemicals, and nurture and conserve biodiversity and on-farm habitats

responding to a changing world

Our organic producer and consumer organisations provide farmers and the public with the latest scientific and market research on organics

managing climate change

Organic practices store carbon and cut excess nitrogen to significantly reduce greenhouse gas emissions that are driving global warming

Going
ORGANIC
Good for you,
New Zealand,
our planet
and...

people's health and wellbeing

We grow food as nature intended, free from synthetic chemicals, GMOs, antibiotics and hormones

animal health

We set and enforce the highest animal health and welfare standards

clean water

We use best practice farming methods to protect watersheds and waterways from pollutants

the earth

We build deep, fertile soil to avoid degradation and use natural methods to control pests and diseases without toxic chemicals

GOOD ECONOMIC SENSE

Accounting for the True Cost of Food and Farming

BY CERASELA STANCU, ENVIROSTRAT

Summary

- The concept of True Cost Accounting (TCA) has emerged because of growing interest regarding the true cost of food production and consumption, and whether the price consumers pay is a true reflection of that cost.
- Country, product and industry specific studies have been published and they provide valuable insights into the economics of food systems and the hidden costs of food.
- The practice and methods for true cost accounting are still developing, but TCA is expected to be critical to support the transition to a more sustainable food system.
- The Organic community sees opportunity in the application of TCA to inform the next generation of organic standards (Organic 3.0) as well as to better communicate the benefits of organics over conventional production systems and products.
- New Zealand needs to consider the application of TCA to agriculture and food production to gain new insights to maintain export competitiveness and address challenges resulting from the impact of agriculture on natural capital.

True cost accounting presents a new opportunity to understand the economics of the food system.

THE CONCEPT OF TRUE COST ACCOUNTING

The challenges of life today, like climate change, food security, obesity or antibiotic resistance and the broader pursuit of sustainable development, all have economic, environmental and social costs and benefits.

Over the last decade, consumers, researchers and policymakers have started looking more closely at the true cost of food production and consumption, and whether the price consumers pay is a true reflection of that cost.

If we are to make informed decisions for us to transition to, and ultimately achieve a sustainable system of food production, then we must correctly account for every input in the value chain. True cost accounting presents a new opportunity to understand the economics of the food system, empower consumers to generate demand for sustainable produce but also enable farmers and producers to adopt sustainable systems of production.

TRUE COST ACCOUNTING

The Sustainable Food Trust in the United Kingdom was one of the first organisations to define true cost accounting (TCA) as a discipline, *“identifying, categorising, quantifying, and putting a price on the range of costs and benefits arising from different production systems and developing*

Often the most profitable forms of food production are those which are most damaging to the environment and society.



various mechanisms through which we can ensure that in the future, polluters will pay and those that are producing healthy and sustainable food will be better rewarded financially than those whose food production systems are damaging the planet and undermining public health.”⁵⁹

At its core, TCA⁶⁰ is a system of accounting for all the different costs and benefits of products and production processes in different industries. TCA requires the inclusion of natural and social capital on the balance sheet, something that it is generally missing in the current pricing system for food commodities and farming, and therefore hides some of the costs from consumers.⁶¹

Failing to account for the hidden costs of food production, means that often the most profitable forms of food production are those which are most damaging to the environment and society. Thus, the advantages of organic food production can only be fully articulated and properly measured when the true costs and benefits are calculated following TCA. It is for this reason that IFOAM is working to support implementation of Organic 3.0 through progressing the concept and practice of True Value and Fair Pricing.⁶²

Various other initiatives and groups are working on raising awareness about TCA, measurements and metrics, including Global Alliance for the Future of food, True Price, TEEBAgriFood, FAO, Natural Capital Coalition, Earth Economics, Soil and More. Studies being undertaken will provide knowledge on how to correctly account for economic, social and environmental costs and insights that can be used by different interest groups from producers and policymakers to final consumers.

The Natural Capital Protocol (NCP) and the Social Capital Protocol (SCP) are two important platforms to progress knowledge and the practices required for true cost accounting.

TEEB for Agriculture and Food (TEEBAgriFood) focuses on ‘presenting evidence on how different production systems are based on ecosystem

59 FoodTank, 2017. The real cost of food: examining the social, environmental, and health impacts of producing food, report.

60 also referred to as ‘true cost economics’ or ‘environmental full cost accounting’.

61 Sustainable Food Trust, 2017. The Hidden Costs of UK Food, report.

62 For more information, go to <https://www.ifoam.bio/en/organic-30/sustainable-organic-agriculture-action-network-soaan-phase-three>

services, how they both depend upon and impact on natural and social capital (in both a positive and negative way) and how they can contribute to the transformation required and aspired to in the SDGs'.⁶³

Their initial study, *TEEB for Agriculture and Food Interim Report* describes how the economic environment in which farmers operate is distorted by significant externalities and the lack of understanding of dependency on nature and ecosystem services.

Beyond exploring mechanisms and approaches on how to account for costs and benefits of different food systems, TCA practitioners and advocates have started focusing on how to internalise such costs. They are looking at the role subsidies, taxation and health or insurance can play.

Scaling up of TCA into all aspects of agriculture and food systems is a critical step in transforming the way we produce, deliver, and consume our food – and ultimately pay for the real cost of the food we consume.

WHY IS TCA IMPORTANT FOR NZ AS A FOOD TRADING NATION

Recognising the importance of TCA for the transformation of agriculture and food systems, studies are underway at a country level to understand the systemic issues and true-cost of food, and how to use buying power to address hidden costs and drive change.

This is very important for New Zealand as our own experience with the food miles threat in the mid 2000s has shown that environmental externalities, especially carbon emissions, can cause challenges for exporters and consumers. They can also provide opportunities for business and product innovation as the experience with carbon management and certification has shown.⁶⁴

The United States and United Kingdom are two of the countries that have investigated the real cost of their food production systems. They are using the insights of those studies to advocate for better alignment between future food pricing and agricultural subsidies and the interests of society and environment.

UK hidden food system externality costs: 2015

Natural capital degradation	£30.93 billion
Biodiversity loss	£12.75 billion
Food consumption-related health costs	£44.91 billion
Food production-related health costs	£16.08 billion
Farm support payments and regulation	£6.36 billion
Imported food	£9.22 billion
Total	£120.25 billion

The 2017 UK study, *The Hidden Costs of UK Food*, prepared by the Sustainable Food Trust is relevant for New Zealand and particularly insightful.

It presents a systematic assessment of UK food production and identifies two of the core issues to addressing the hidden costs of the food sector:

1. Lack of business case for food producers to adopt more sustainable practices
2. Absence of a mechanism to assess and price different types of damages from food systems.⁶⁵

TCA is a critical tool in transforming the way we produce, deliver, consume and ultimately pay for the real cost of food.

⁶³ TEEB for Agriculture & Food Interim Report, 2015. The Economics of Ecosystems & Biodiversity, report.

⁶⁴ See for instance selected food study cases.

⁶⁵ Sustainable Food Trust, 2017. The Hidden Costs of UK Food, report.

5.6

ecological footprint per capita

10.1

Biocapacity per capita

4.5

Biocapacity credit(+)/deficit(-)

The UK report finds that for every £1 UK consumers spend on food, additional costs of around another £1 are incurred. Health costs and natural capital degradation are the top externalities and they jointly represent over 60% of all costs (see box for more details).

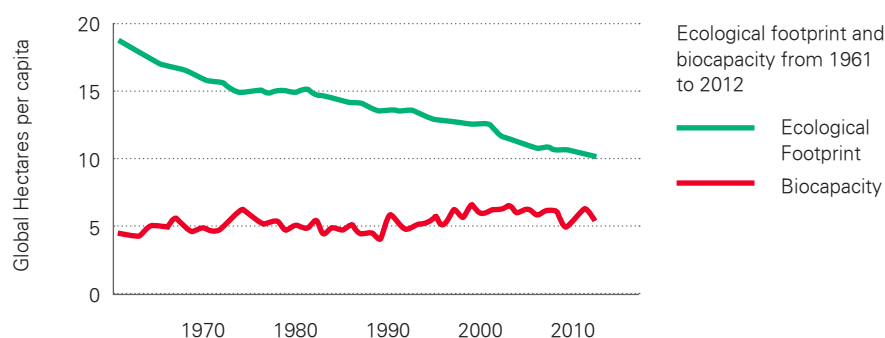
A FAO report *Natural Capital Impacts in Agriculture* estimates the external costs of global production of maize, rice, soybean and wheat are 1.7 times higher than the product value – this is without taking into account health or other social costs.

No academic or industry studies have yet attempted to estimate the total costs of agricultural externalities for New Zealand.

Some data is available on agriculture's specific impacts like GHG (greenhouse gas) emissions, nutrient leaching, waste or soil loss. However, most of them have not been priced.

Some international studies have presented high-level estimates that include New Zealand, for example *Natural Capital at Risk: The Top 100 Externalities of Business* (Trucost, 2013). The study estimates natural capital costs from cattle ranching for Australia and New Zealand amounts to USD 17.3 billion while the revenue is only USD 3.4 billion.

New Zealand's ecological footprint: 2016 update



Data Sources: National Footprint Accounts 2016 (Data Year 2012) World Development Indicators. The World Bank (2016); UN Food and Agriculture Organization

- EF: uses 'global hectares' as a common measurement unit
- EF accounts for the country's resources as well as impacts
- Currently humanity uses the equivalent of 1.6 planets; 2 planets by 2030.
- GHGs, bio-system integrity N&P flows, and land-system change are all estimated to have crossed **planetary boundaries** (SEI)

Trends in our ecological footprint suggest that our natural capital costs are likely to increase, given New Zealand's high rate of bio-capital depletion:

Treasury and Statistics NZ have been using an economic-environmental accounts approach to determine well-being and the government is seeking changes to Public Finance Act to require reporting on wellbeing measures natural, human, social, and physical and financial capital. As part of the Living Standards Framework, NZ Treasury has just published a series of discussion papers regarding the value of natural, social and human capital.⁶⁶ The papers provide useful insights regarding valuation, and can be used as guidance in future TCAs.

It is important that New Zealand conducts a systematic TCA for the entire agriculture sector with the aim of informing decisions, including pricing

66 For more information, see [treasury.govt.nz/publications/media-statement/treasury-opens-discussion-wellbeing-measures](https://www.treasury.govt.nz/publications/media-statement/treasury-opens-discussion-wellbeing-measures)

decisions, attracting suitable investment and to better engage with consumer and markets. At a minimum, sector specific TCA should be carried out.

TCA AND ORGANIC SECTOR

TCA presents a great opportunity for the organic sector to demonstrate its true value and compare its impact with conventional products. As the global umbrella of organic organisations, IFOAM sees the potential TCA can play in providing new evidence to build a stronger, substantiated narrative and proposition for consumers and markets for organic produce – while addressing unfair price competition that acts as a barrier to organics expansion.⁶⁷

Notwithstanding the fact that common frameworks for TCA application on organic and non-organic food systems are still emerging, there are various efforts focused specifically on quantifying externalities of organic produce and production systems vis a vis conventional produce.

In 2017, a pilot study conducted by EOSTA, in collaboration with EY, investigated the impact of growing organic fruit and vegetables⁶⁸ from a range of countries.

The study considered water pollution, soil erosion, pesticide contamination and greenhouse gas emissions.

The impact on livelihoods, health, soil, water and climate was analysed and compared to conventionally grown crops in the same regions.

TCA presents a great opportunity for the organic sector to demonstrate its true value.

67 2017 Consolidated Annual Report of IFOAM – Organics International

68 True Cost Accounting for Food, Farming and Finance (TCA-TFF), 2017. Eosta *et.al.*, report.





The difference in impact between organic and non-organic produce is at times small⁶⁹. This suggests the need for organic producers to continuously innovate and lift their performance to clearly differentiate their organic offering from conventional goods and command sustainable market premiums.

Product impacts expressed as the difference between organic and non-organic (source: adapted from TCA-TFF 2017)

Product	Health	Soil	Water	Climate
Apples	0,19€/kg	0,05€/kg	0,01€/kg	0,10€/kg
Tomatoes	Negligible	0,01€/kg (positive impact compared to non-organic which is 0).	Negligible	0,01€/kg (negligible)
Avocadoes	0,07€/kg	0,04€/kg	0,01€/kg	0,01€/kg
Carrots	Negligible (impact estimated at 0 for both organic and non-organic)	0,01€/kg	Negligible	Negligible

The study was carried out by experts from EY and Soils & More, highlighting the importance of credibility and independent validation of results.

There is opportunity for New Zealand to build on the study results, address some of the recommended improvements in methodology and scope and become part of a community of practice at the forefront of the TCA movement.

This is especially relevant with the current government’s focus on reducing the impact of agriculture on both greenhouse gas emissions and water quality. The government has indicated a move towards a polluter pays approach that is likely to shift the expectation and burden of cost from taxpayer to farmer and producers. Furthermore, a shift towards lower impact, higher value land use is emerging.

For example, a pilot project in Waipa catchment, Waikato, is investigating the conversion of selected dairy farms to organic production to reduce nutrient leaching and sedimentation. Provided that the organic milk price does not fall below \$7.37/kgMS (milk solids), reductions of 40 per cent or more in sediment and nutrient leaching are expected to be achieved through utilising specific mitigation measures with no change in operating profit. If the payout for organic milk increases, the operating profit increases significantly too which makes organic conversion quite attractive. In addition, reductions in GHG emissions can also be achieved, further strengthening the business case for going organic.

BIOGRAPHY

Envirostrat Principal Cerasela Stancu is a sustainability specialist with over 20 years’ experience working on environmental and sustainable development issues across Europe, Asia and New Zealand. Since moving to NZ in 2005, she has worked with the public and private sector, especially primary industries, on issues regarding sustainable business performance and the uptake of strategies and practices for improved competitiveness and environmental outcomes.

There’s a shift to polluter pays and lower impact, higher land value.

⁶⁹ The study suggests that the small difference is explained by the fact that conventional farmers more and more adopt organic production practices even though they are not certified organic.

Exploring the Financial Realities of Organic Farming: a Rural Economist's Perspective

PREPARED BY CON WILLIAMS, RURAL ECONOMIST AT ANZ

PROJECT OVERVIEW AND OBJECTIVES

There is increasing interest in organics from the farming community and consumers alike.

Farmers are often very in touch with their environmental surroundings and want to do the best to preserve these for future generations. Organics ticks a number of boxes here.

Consumer motivations are similar in terms of wanting to protect the environment, but also include a health and wellness aspect for themselves and family. Health and wellness is a super trend in food markets with many different sectors within this. Organics fits under the natural and socially conscience minded segment. While many of these markets are still often small in dollar terms, they are usually the fastest growing.

With this as the big picture backdrop, we thought it would be useful look at the financial case for organic farming across New Zealand's five largest primary land-based sectors: dairy, red meat, kiwifruit, viticulture and pipfruit.

PROCESS

We set out to source credible local data that enables comparison between conventional and certified organic production systems in terms of:

- physical productivity (or yield/ha)
- financial cost of production
- financial returns per unit of production
- net financial farm-gate returns/ha
- net financial return on investment.

These variables do not exist in isolation and can be influenced by several factors. In some cases, we can dig deeper, but often a lack of quality data has limited the insights. For organic farmers, the shift to organics will often not only be about the financial outcomes either.

EARLY INDICATIONS

Data available suggests a mixed bag of returns for organic dairy farmers over the last 20 years. Much depends on the milk price premium that is received. A surge in global demand from around 2013 has supported net farm-gate returns for organic farmers to levels comparable or above average for conventional dairy farmers. Recently the global market has been over supplied, but this appears to be now correcting itself as evidenced by Fonterra's opening 2018/19 organic milk price of \$8.10/kg ms. This would appear to represent a through the cycle, or medium-term view of a market expected to grow at 10%+ per annum.

Red Meat

Access to a representative dataset has been very difficult to come by, limiting insight to the financial performance. Our report will comment on anecdotes from individual, niche businesses. This limits the ability to generalise the findings with other conventional red meat farms but gives some specific examples of what is possible.

Pip fruit

Comprehensive data was difficult to access. However, there is evidence of reasonable premiums for those who can manage the technical challenges of managing an organic orchard.

Viticulture

With around 80% of wine production coming out of Marlborough, it is not surprising that the available data-set is Marlborough centric. Financial comparisons suggest comparable returns are being achieved by organic and conventional growers. Increasingly, wine companies are implementing certified organic practices to support their premium programmes, citing sustainability, quality and branding as points of differentiation.

Kiwifruit

The difference in financial returns between conventional and organic is perhaps the most compelling of all sectors. This is especially the case for SunGold even with no premium between the different categories yet – watch this space.

SOME COMMON THEMES

Each of the factors noted below can individually, or collectively have a greater impact on returns than perceived “organic” versus “conventional” management factors:

People / Management

- This is always important, but especially so for organic production systems which need to be more closely and precisely managed to perform consistently well.

Genetics / Varietal

- Certain animal breeds and plant varieties possess characteristics that are better suited to organic production practices. Identifying the right combination of genetics, biophysical factors and market demand provides opportunity for organic producers to maximise future revenue streams.

Biophysical / Location

- The physical and environmental aspects of a piece of land will determine whether it is suitable for an organic production system. These aspects need to be closely analysed to assess its productive capacity and associated risks.

Leadership / Vision

- Passion is important to go the extra mile. Successful conversion and consistent performance of organic farms require perseverance. Vision of what the future could look like for farming systems and food markets is important too. An individual's appetite to adopt a particular farm policy, or change to an alternative enterprise, is influenced by their attitude to risk, existing debt levels, availability and sources of capital, age, experience in different fields, and family circumstances.

Innovation

- Innovation is important to any business, but the technical challenges associated with organic farming practices suggest an even greater need for innovation. Innovations around weed, pest and disease control can dramatically improve financial performance of organic farming systems with the added benefit that learnings can be passed to conventional production practices.

NON-FINANCIAL METRICS

True cost accounting (TCA), is expected to become increasingly important and accepted as a method of accounting for non-financial metrics associated with food production and consumption. Our work did not delve into this space, we acknowledge the opportunity available to the organic sector to compare and potentially demonstrate strong performance against other metrics such as natural and social capital impact. For further information read the investigation on Accounting for the True Cost of Food and Farming, by Cerasela Stancu from Envirostrat.

FURTHER READING

We aim to release full findings in a report due out in August, which can be found online at ANZ Business Insights: comms.anz.co.nz/businsights/article/index.html

Or alternatively report will feature in an article in the September edition of ANZ AgriFocus, which can be found online at: www.anz.co.nz/rural/rural-news-insights/agri-focus/

BIOGRAPHY

Con Williams joined ANZ in 2010 as the Bank's dedicated Rural Economist for New Zealand. Con provides detailed analysis and commentary on all aspects of New Zealand's major primary sectors and soft commodity markets. This includes regular publications such as the Agri Focus, and Commodity Price Index. Con has previously worked as a senior economist for Meat and Wool New Zealand's Economic Service and on environmental policy related to climate change. He also lectured at Massey University for a short stint where he gained a Bachelor of Applied Science (First Class Hons).

GOING FOR GOOD

Information on the number of licensees and land area under certification was provided by the four active organic certifying agencies:

- AsureQuality
- Bio Dynamic Farming and Gardening Association in New Zealand (Demeter New Zealand)
- BioGro New Zealand
- Organic FarmNZ

A small number of operators have certification with two certifiers. This principally relates to producers who have certification with Demeter New Zealand to provide certification for their application of Bio Dynamic principles, and certification typically from BioGro New Zealand to enable them to export their organic products. Adjustments have been made to the results to minimise the potential for a double-up of results.

Organic Certification in New Zealand is Growing

MEASURING ORGANIC CERTIFICATION ACTIVITY

Several units of measurement can be used to assess trends in organic certification. Each farmer, grower, processor, transporter and retailer in the organic sector is counted as a licensee. Each operation across the production chain is counted separately as a licensed operation. A single licensee may have multiple licensed operations (eg. if a grower produces organic apples and processes apples into organic apple juice this would be counted as a single licensee but as two licensed operations). As in previous sector reports, figures for the number of operations under conversion to organic were also collected.

TRENDS IN ORGANIC CERTIFICATION ACTIVITY

The numbers of both organic licensees and organic operations have increased since the last organic sector report in 2015. The aggregated figures from the four certifying agencies show that there are now 1,118 licensees and 1,672 licensed operations.

Since the 2015 sector report, the number of licensees and operations has increased by 121 (12%) and 172 (11%) respectively.

Table 16: Number of organic licensees and operations 1997-2017

	1997	2007	2009	2012	2015	2017
Number of Licensees	335*	860	1,145	1,221	997	1,118
Number of Operations		1,206	1,416	1,765	1,500	1,672
		% growth p/a 1997-2007	% growth p/a 2007-2009	% growth p/a 2009-2012	% growth p/a 2012-2015	% growth p/a 2015-2017
Number of Licensees		16%	17%	2%	-6%	6%
Number of Operations			9%	8%	-5%	6%

*1997 & 2002 figures from OPENZ Surveys



Figure 2: Numbers of Organic Licensees and Operations, 2007-2017



**5% annual
increase
in certified
operations**

The 12% increase in Licensees since 2015 is a sign of positive growth in the organic sector.

OPERATIONS UNDER CONVERSION TO ORGANIC

In addition to the number of licensees and operations, certifying agencies provided figures on the number of operations under conversion to certified organic.

Table 17: Numbers of organic operations by status, 2012-2017

Certification	2012	2015	2017
Full	1533	1396	1,531
Under Conversion	232	104	141
Total	1765	1500	1,672

Converting to organic production takes multiple years but does provide an indication of the future growth in the scale of organic production. Figures from 2017 on the number of organic operations under conversion are only comparable to figures from the 2012 and 2015 reports as the status of organic conversions relied on the use of organic certificates in the earlier census. In 2012, 13% of the total operations were under conversion while in 2015 7% and in 2017, 8.5 % were in conversion.

LICENSED OPERATIONS BY TYPE OF ACTIVITY

For the 2017 sector report, certifying agencies specified the number of organic operations within particular types of activity. While the total number of licensees and operations reveal the total number of participants in the organic sector, reporting operations by type of activity allows for a more refined assessment of the shape of the sector.

It should be noted that in relation to non-primary production, one site could be certified for several separate activities. For example, a retailer may have certification as a retailer, but may also be certified as a processor, a wholesaler or even an importer if they are importing organic products. A company producing milk products could have certification for processing, transport, export and wholesale.

Table 18: Number of organic operations by activity, 2012-2017

	2012	2015	2017	Per Annum Growth
Organic Certification Operations (From organic certifiers)				
Livestock	168	139	139	0%
Dairy	99	84	101	10%
Horticulture	720	610	480	-11%
Viticulture			150	NA
Apiary	18	9	6	-17%
Aquaculture	7	8	5	-19%
Import	12	17	29	35%
Processing	274	285	304	3%
Retail	18	19	24	13%
Transport	12	8	34	163%
Wholesale	24	42	67	30%
Mixed/other	413	317	333	3%
Total	1,765	1,538	1,672	4%
MPI Official Organic Assurance Programme – Registered Exporters				
Exporters	75	88	94	3%

There has been a 5% annual increase in certified operations since the 2015 census. There has been no change in livestock farms (mainly sheep and beef farms) while there has been a 10% increase in the number of dairy farms.

There were 630 horticultural and viticultural operations, the same as 2015. (Note that until 2015 viticulture was included in the horticulture results). The number of apiary operations continues to decline with only six now certified. This is a significant decrease from a peak of 18 operations in 2012. The number of certified aquaculture operations has also declined from eight to five since 2015.

The number of certified importers has increased by 70% to 12 since 2015. Some organic processing companies import ingredients for their products and some retailers also import finished organic products.

The number of organic processors has continued to increase from 285 in 2015 to 304 in 2017. Processing facilities include wineries, meat and dairy companies, operations that further process organic products as well as those producing inputs like animal feed for organic producers. The increase in processors is a sign of the growing range of organic processed products produced.

Retailers gaining certification for their operations has increased from 19 in 2015 to 24 in 2017. This reflects the growing trend for retailers to provide assurance to their customers of the integrity of their services and products. Retailers include specialist organic shops as well as some larger supermarkets.



There has been significant growth in certified transport operators from eight in 2015 to 34 in 2017. This is in step with the increase in certified processors of organic food, including dairy companies, obtaining transport certification to cover the pickup of products from organic farms. The increase in certified transport and wholesalers reflects a trend of increased formalisation in organic supply chains and those companies participating in them.

The mixed and other category includes certifications such as wild collection, as well as some of those licensees that have certification for multiple different operations.

Another useful measure for monitoring the level of interest and activity in organic exports is the number of exporters who are registered under the Ministry for Primary Industry Official Organic Assurance Programme (OOAP). In 2017, there were 94⁷⁰ operators registered as exporters, in 2015 88, while in 2010/11 there were 75.

70 Sourced from the MPI Register of Organic Exporters (23 May 2018) at www.foodsafety.govt.nz/registers-lists/organic-exporters-register

New Zealand Producing for Good

NZ LAND AREA UNDER ORGANIC CERTIFICATION IS UP

Table 19: Land area under organic certification by activity 1997-2017 and growth per annum between reports

	1997*	2002*	2007	2009	2012	2015	2017
Land area – Livestock (ha)	6,210	39,564	52,070	108,566	92,522	42,837	64,278
Land area – Horticulture (ha)	4,945	7,322	5,045	8,175	11,188	23,454	22,223
Land area – Viticulture (ha)	-	-	-	-	-	2,022	1,720
Land area – Mixed/Other (ha)	805		6,768	7,702	3,043	5,821	650
Total	11,960	46,886	63,883	124,443	106,753	76,149	88,871
		% growth p/a	% growth p/a	% growth p/a	% growth p/a	% growth p/a	% growth p/a
		1997-2002	2002-2007	2007-2009	2009-2012	2012-2015	2015-2017
Land area – Livestock (ha)		107%	6%	54%	-5%	-18%	25%
Land area – Horticulture (ha)		10%	-6%	31%	12%	37%	-3%
Land area – Viticulture (ha)							-7%
Land area – Mixed/Other (ha)				7%	-20%	30%	-44%
Total		58%	7%	47%	-5%	-10%	8%

*1997 figure from Saunders et al.

*2002 figure from Agricultural Census

The total land area in New Zealand under organic certification in 2017 was 88,871 ha. This represents a 17% increase from the 76,149 ha under certification in 2015.

The land area in organic livestock production has increased from 43,000 ha in 2015 to 64,278 ha in 2017, a 50% increase equivalent to 21,441 ha. Over this period 17 new organic dairy operations were established and if they were of an average size they would total 2,499 ha under certified production.

It is likely that much of the growth has come from a change in the average size of certified sheep and beef livestock operations. Sheep and beef farms are typically larger with some very large. As has occurred in the past, the entry or departure of just a few of these larger farms can have a significant impact on the total organic land area in New Zealand.

The combined area in horticulture and viticulture has decreased from 25,476 ha in 2015 to 23,943 ha in 2017, a decrease of 1,533 ha or 6%. Some of this decrease is a result of the exclusion of dual certification properties (Biodynamic and BioGro certification). The kiwifruit sector case study (section 5.2) reflects a slight decline in organic kiwifruit area, however this would contribute only slightly to the overall decrease. Based on industry feedback, the area in organic pipfruit continues to rise so it is likely that the decrease was from other crops.

The land area in organic viticulture has decreased by 302 ha, or 4%, since 2015 to 1,720 ha. This is a result of the removal of duplicated listings of vineyards with dual certification.

Figure 5: Land area under organic operations by activity, 1997-2017



89,000 ha under certified organic production

COMPARISONS ARE DIFFICULT

It is worth noting that comparing land area under organic certification between countries can be problematic, given significant differences in both the type and intensity of production in different contexts. For example, Australia is the country with the largest area of certified land in the world, however much of this is very extensive farmland of low productivity.

Certified organic land area does not measure productivity; population-based analysis favours countries with lower populations; export values favour countries with strong exporting industries and does not consider domestic production for domestic consumption – in countries such as Germany and France this is significant.

Organic livestock production +50%

Table 20: Land area under organic certification as a share of total area in agricultural production, population consumption and organic exports

Country	Land Area under Organic Certification (ha)	% of Agricultural Area under Organic Certification	Total Popn (m)	Organic Area by population – (ha organic per person)	Total Organic Retail Sales \$USm	Organic retail sales per capita \$US	Value of Organic Exports US\$m	Value of organic exports by Popn (US\$m)
Australia	27,145,021	6.70%	24	1.13	1084.00	45	542	22.58
China	2,281,215	0.40%	1,409	0.002	6805.000	5	2,280	1.62
USA	2,031,318	0.60%	323	0.01	44912.00	139	547	1.69
Spain	2,018,802	8.70%	46	0.04	1943.00	42	1,042	22.65
Italy	1,796,363	14.30%	59	0.03	3049.00	52	2,242	38.00
France	1,538,047	5.50%	65	0.02	7769.00	120	736	11.32
Canada	1,251,320	7.50%	82	0.02	3461.00	42	472	5.76
Denmark	201,000	7.69%	5.7	0.04	1497.00	263	384	67.37
New Zealand	88,871	0.5%	4.7	0.02	142.00	30	242	51.49

Source Data from FiBL Statistics and is for 2016

Australia
has the
largest area
under organic
production

**New
Zealand**
the smallest
but the second
highest per capita
exports after
Denmark.

NZ CERTIFIED LAND AREA STILL LOW

The total proportion of New Zealand land under organic certification remains relatively small compared with many other countries.

In relation to certified area, New Zealand has the smallest total area of certified organic land and second to lowest percentage of agricultural area under organic certification with only 0.51% of land.

Australia has by far the largest area in organic production with 27,145,021 ha, however other countries such as Italy, Spain, Canada and Denmark have a high percentage of their total agricultural area under organic certification.

The comparative intensity of production is provided by the analysis of organic land area with the total population of the country. Australia has the largest area of certified land by population while New Zealand has similar levels as France and Canada and significantly more than China.

NZ #2 IN HIGHEST PER CAPITA EXPORTS

Total organic retail sales and per capita consumption levels are a good measure of the size of the local market. Consumers in the USA, France and Denmark have high levels of per capita consumption of organic food while Australia, Spain and Canada have similar levels. New Zealand has slightly lower levels. China has the lowest level of per capita consumption of organic food with only an average annual expenditure of \$5 per person per year.

Another measure of the activity for a country's organic sector is the analysis of total organic exports by population. In this situation, New Zealand has the second highest per capita exports for the nine countries after Denmark.

Global Market and Production Growth

Internationally, organic production and the markets for organic products continue to grow. More farmers cultivate organically, more land is certified organic, and the market is continuing to grow.

Table 21: Organic market size and growth for selected regions and countries – 2016

Country/Region	Retail Sales (EURb)	% Growth Rate (2015-16)	Retail Sales (EURb)
World	84.698		
North America	41.939		
– USA	38.937		8.4
Europe	33.526		11.4
– Germany	9.478		9.9
– France	6.736		21.7
Asia	7.343		
– China	5.900		N/A
Australia	0.941		5.4

Source IFOAM 2018 and FiBL statistics⁷¹

Global organic market

EUR85b
+10.5%
p.a.



71 statistics.fibl.org/world.html

Table 22: Country/region by organic land area

Country/Region	Land Area (million ha)
Australia	27.4
Europe	13.5
Latin America	7.1 ha (Argentina is the largest with 3m ha)
Asia	4.9 ha (China has 2.3m ha)
North America	3.1m
Africa	1.8

Source IFOAM 2018

ORGANIC MARKET TRENDS

Global

The most recent estimate on the size of the global market for organic food is EUR\$85b as reported in the IFOAM 2018 report. The 2016 figures which the report uses, indicate growth of 397% in organic sales since 2000 at a Compound Annual Growth Rate (CAGR) of 10.5%. The largest markets making up this total were:

- USA EUR42.0b
- Germany EUR9.5b
- France EUR6.7b

USA

The USA Organic Trade Association (OTA) is the main business organisation representing organic businesses in the USA. Its 2017 Organic Industry Survey⁷² reported that the USA organic sector:

- Grew 6.4% from 2016 to a value of over US\$49.4b in 2017
- Made up of US\$45.2b in food products and US\$4.2b in non-food products
- Organic food makes up approximately 5.5% of total USA food sales
- Fruit and vegetables are the largest organic food category with sales of US\$16.5b
- Organic dairy and egg products are the second largest category at US\$6.5b – however, this category only grew by 0.9% between 2016 and 2017
- OTA research⁷³ reported in 2017 that Millennials are the largest consumer group in the USA and that they are buying organic products, especially when they become parents.

Europe

Europe is the world's second largest market for organic products. In 2016, organic retail sales in Europe rose by 11.4% to EUR33.5b (EUR 30.7b in the EU countries). Between 2006 and 2016⁷⁴ the organic retail market grew by 112%.

- Over this period significant growth occurred in Sweden (301% growth), France (226%) and Spain (244%)
- Lower growth over this period was reported for the UK (3%) and Germany (79%)

72 ota.com/news/press-releases/20201

73 www.ota.com/resources/consumer-attitudes-and-beliefs-study

74 www.ifoam-eu.org/en/organic-europe

- The highest per capita consumption of organic food was in Europe with Switzerland (US\$304 per person), Denmark (US\$252 per person) and Sweden (US\$218 per person)
- The highest organic market share for organic sales was in Denmark with organic products comprising 9.7% of all food and drink sales, followed by Luxembourg at 8.5% and Switzerland at 8.4%
- Mainstream retailers generate most organic food sales in Europe with all leading supermarkets offering organic foods under their private labels
- In the United Kingdom, the Soils Association reported⁷⁵ in 2018 that total sales in 2017 were NZ\$4.2b and growing at 6% per year.

Asia

In 2016, (IFOAM 2018) Asia was the third largest market for organic products, most of them imported:

- Japan, Singapore, Taiwan and South Korea were the key drivers
- China's organic market was estimated by the latest IFOAM report to be NZ\$12b, the fourth largest organic market in the world
- According to *Nielsen's Global Health and Wellness Survey*, 40%-50% of Chinese consumers will choose natural, organic and sustainable products
- In 2015⁷⁶, according to the China Organic Food Report, China exported organic food products worth US\$2.28b, down from a peak of US\$2.84b in 2012.

Australia

In 2017, the Australian market for Australian produced goods was conservatively estimated at A\$2.4b as reported in the *Australian Organic Market Report 2018*.⁷⁷

- Fruit, vegetables, nuts, meat, and eggs accounted for almost 75% of the value
- The report estimated total organic exports at A\$717m with meat making up 58% of this total and fresh fruit, vegetables and nuts 16%.

Growth in 'new' organic categories

While organic farming initially focused on food production there has always been demand for non-food products that provide consumers with an assurance about the integrity of the products and conform with organic farming practices. In addition, production and markets for non-agricultural production systems such as aquaculture have also developed. Some examples of these trends are explored below:

Organic and natural beauty products⁷⁸

The market size for this market was estimated at US\$11.057b in 2016 with forecasts that it would reach US\$22b by 2024⁷⁹. North America was the largest market (33.5% of total sales with Asian and European markets growing strongly. For example, in 2017, the organic and natural beauty market in the UK was estimated to be worth £75.9(NZ\$146m), a 24% increase⁸⁰ from the previous year.

**40%-50%
of Chinese
consumers will
choose natural,
organic and
sustainable
products.**

**Nielsen's Global Health
and Wellness Survey**

⁷⁵ www.soilassociation.org/certification/market-research-and-data/the-organic-market-report/

⁷⁶ www.statista.com/statistics/448071/export-value-of-organic-food-from-china/ – China Organic Food Report

⁷⁷ Australian Organics Report 2018 austorganic.com/ao-market-report/

⁷⁸ Note this category includes products that are not certified organic. See case study in this report – section 5.5 *Authenticity Key to Natural and Organic Bodycare Sector Growth* for clarification on claims.

⁷⁹ www.persistencemarketresearch.com/mediarelease/natural-organic-personal-care-product-market.asp

⁸⁰ www.theguardian.com/environment/2018/feb/07/organic-food-and-drink-sales-rise-to-record-levels-in-the-uk

**172 countries
practise organic
farming.**

**58m ha
under organic
production
worldwide.**

Organic Textiles

The profile of organic textiles has grown rapidly over the last 20 years. Production of organic cotton peaked in 2010-11 and currently organic cotton only makes up approximately 1% of total cotton production (IFOAM 2018). Market demand signals are looking positive with leading fashion and sports brands, including Nike, Levi Strauss and H&M committed to using sustainable cotton by 2025⁸¹. The market for organic wool textiles is significantly less developed though it is possible that leading brands will want to source organic wool to align with their sustainable textile sourcing promises. This could provide opportunities for New Zealand organic sheep farmers.

Organic Aquaculture

There have been organic standards for organic aquaculture production for many years with the first certification in 1995 (IFOAM 2018), however the production and marketing of certified organic seafood has had limited visibility and poor data to quantify its size. In 2016, it was conservatively estimated that 400,000 tonnes of certified organic seafood was produced, primarily in China (77%) and Europe (22%). A 2017 report from the European Commission⁸² provided details on EU production and identified that the largest EU producer was:

- Ireland with 44% of total EU production (mainly mussels, salmon and oysters)
- Italy (17%)
- UK (7%)
- France (6%)
- Norway – is also a key producer (but not an EU member country) with an estimated production of 17,200 tonnes (mainly salmon) in 2016.

The EU analysis also reviewed the economic performance of EU organic agriculture and found mixed results. Premiums were typically available, but the often, low scale of production and small production volumes resulted in increased costs and made supply to larger retailers difficult. The findings also showed that there was significant competition from other well recognised, sustainable seafood labels. The New Zealand organic aquaculture sector is small with five certified operators and limited production.

GLOBAL ORGANIC PRODUCTION GAINING MOMENTUM

In 2016 (according to IFOAM), 172 countries reported organic farming activities, up from 170 in 2015 with an estimated 57.8m ha, or 1.2% of total agricultural land, under organic production worldwide. This represents an increase from the 43.7m ha reported in 2014.

Production areas

The regions and countries with the largest areas of organically-managed agricultural land in 2016 were;

- Australia – 27.4m ha
- Europe – 13.5m ha
- Latin America – 7.1m ha (Argentina was the largest with 3m ha)

81 organic-market.info/news-in-brief-and-reports-article/organic-textiles-big-brands-commit-to-sustainable-cotton.html

82 EU Organic Aquaculture 2017 – www.eumofa.eu/eumofa-publications

- Asia – 4.9m ha (China has 2.3m ha)
- North America – 3.1m ha
- Africa – 1.8m ha.

In relation to organic land use in 2016:

- Over 66% of the organic agricultural land was in grassland/grazing,
- 18% in arable land (rice 4.1m ha, green fodder 2.8m ha, oilseeds 1.3m ha)
- 8% in permanent crops – (coffee .9m ha, Olives .7m ha, grapes .4m ha)

In addition to organic agricultural land, 39.7m ha of non-agricultural land was estimated as certified for wild collection and beekeeping.

The highest percentage of agriculture land under organic

production can be found in Liechtenstein (37.7%) and French Polynesia (31.3%), followed by Samoa (22.4%), Austria (21.9%), Sweden (18%) and Italy (14.5%).

Organic producers

There were 2.7 million organic producers worldwide in 2016, with approximately 40% in Asia, 27% in Africa and 17% in Latin America. Countries with the highest numbers of producers were India (835,000), Uganda (210,352) and Mexico (210,000).

INTERNATIONAL TRENDS

Information Technology and Organics

As with most sectors, the organic sector is engaging with a range of new information technology developments which provide opportunities to support the marketing of organic products. Key trends include:

Social media

Many companies, including New Zealand organic food and beverage companies, are using various social media channels to better communicate with consumers. Social media is a collective term used to refer to online platforms which involve elements of community, content creation and sharing. Examples include Facebook, Twitter and Instagram. Facebook is the most widely used social media platform in the world today. In April 2018, Facebook had approximately 2.196 billion users internationally⁸³ making it the largest social media channel. Many New Zealand organic companies have very active Facebook pages, including Little Bird Organics (37,413 likes, 37,498 followers); Ceres Organics (22,509 likes, 22,390 followers); Only Organic (19,261 likes, 18,833 followers); Chantal Organics (17,159 likes, 17192 followers).

Blockchain technology

This public, decentralised technology enables the recording of transactions so that the records cannot be altered once they have been made. It provides great potential for ensuring transparency and openness with any transactions. For food companies, retailers, distributors and consumers it provides a secure process to track and transfer products right through the supply and delivery chain. This is especially useful for organic products and complements

⁸³ www.statista.com/statistics/264810/number-of-monthly-active-facebook-users-worldwide/

organic certification processes to provide an added assurance to manage risks of fraud – as well as potentially provide consumers with a greater understanding of the integrity and story behind their organic purchases. The use of this technology is being actively researched⁸⁴ for the organic sector as well as being implemented. The large French retailer, *Carrefour* became the first European retailer to introduce blockchain for food products and includes some of its organic products in this programme⁸⁵.

Internet sales

Have grown rapidly over the last few years and this has resulted in some disruption to conventional supply chains and retail sales. For example, in Germany⁸⁶ in 2017, 22% of consumers bought their cosmetics online where natural and organic cosmetics have a 9.7% market share.⁸⁷

In the USA, the 2017 purchase of the largest organic retailer, Whole Foods by the e-commerce company Amazon for US\$13.7b reflects a strategy by this company to target the US\$800b US grocery sector.⁸⁸ Currently, only 2% of USA retail food is sold on-line, however it is anticipated that this will increase.

In New Zealand, the world's largest retailer, China-based Alibaba, has recently bought an interest in Milk New Zealand Dairy.⁸⁹ Fresh milk from this company is being supplied to the Alibaba Hema Fresh Supermarkets in Shanghai as well to its online Tmall platform.⁹⁰ At the Hema Fresh supermarkets consumers can shop in-store using their mobile phones to browse and purchase products or order online for a 30-minute delivery within 3 km. The QR code on the packaging tells consumers where and how the milk was produced.

ORGANIC CERTIFICATION TRENDS

Some recent certification developments include:

Completion of a new EU organic regulation

This is expected to come into force in 2021. The regulation reflects a change in import policies from the current principle of equivalency to one of compliance with EU rules. Equivalent standards will only be recognised within bilateral trade arrangements or other existing agreements. Bilateral discussions are in progress on a Free Trade Agreement between the EU and New Zealand.

Mutual Recognition agreement between China and New Zealand

New Zealand was the first country in the world to sign a mutual Certified Organic Products Agreement with China at the end of 2016.⁹¹

Establishment of a single, mandatory national standard for organics

OANZ is leading the lobby, collaborating with government, officials and the sector to define a national standard and underpinning legislation to place New Zealand's organic regulatory system on the same footing as many other countries. The Ministry of Primary Industries has recently completed the consultation process⁹² to gauge support for a number of options, including recommendations aligned to the OANZ strategy for a single, legally enforceable national standard. The next phase would be to draft an Organic Act and standards. OANZ argues that a robust regulatory framework

84 www.soilassociation.org/certification/food-drink/business-support/supply-chain-and-sourcing-support/the-organic-supply-chain-report/

85 organic-market.info/news-in-brief-and-reports-article/ecovia-blockchain-to-build-a-sustainable-food-industry.html

86 organic-market.info/news-in-brief-and-reports-article/vivanness-2018-natural-and-organic-cosmetics-digitalized.html

87 organic-market.info/news-in-brief-and-reports-article/natural-cosmetics-amazon-vs-zalando.html

88 fortune.com/longform/amazon-groceries-fortune-500/

89 milknewzealand.com

90 www.stuff.co.nz/business/farming/102224889/alibaba-founder-jack-ma-visits-new-zealand-farm-investment

91 Organic Exporters Association – NZ Organic Exports to China, Member Update May 2017.

92 MPI Discussion Document Paper No 2018/09 'Would New Zealand benefit from new organic regulation?' May 2018

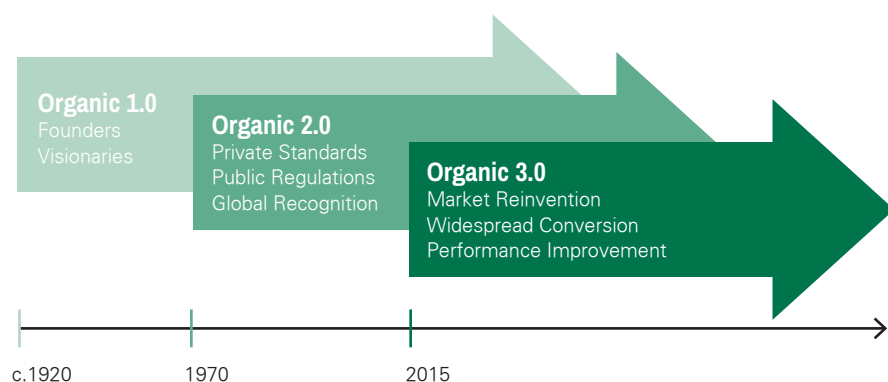
would enhance export opportunities, encourage producers to invest in organic production and provide customers, consumers and the community, domestically and internationally, with the credence and confidence to purchase certified organic products. New Zealand is one of only two countries in the world's top 25 organic markets (by value) that does not have a mandatory organic standard.

IFOAM Organic 3.0

IFOAM has developed the concept of Organic 3.0 to reflect the progressive development of organic standards and strategies.

- **Organic 1.0** was started by organic pioneers, who observed the problems with the direction that agriculture was taking at the end of the 19th century and beginning of the 20th century and saw the need for a radical change.
- **Organic 2.0** started in the 1970s when the writings and agricultural systems developed by the pioneers were codified into standards and later into legally-mandated, regulatory systems.
- **Organic 3.0** is about bringing organic out of its current niche into the mainstream and positioning organic systems as part of the multiple solutions needed to solve the tremendous challenges faced by our planet and our species.

Figure 1 IFOAM 3.0 Strategy for better and more organic agriculture and for a more sustainable global agriculture⁹³.



Regenerative Organic Certification⁹⁴

The Rodale Institute in the USA has led this certification concept. It aims to support current organic certification standards while at the same time facilitate the widespread adoption of holistic, regenerative practices throughout agriculture. It builds upon the USDA Organic Standards and similar programmes internationally, particularly in the areas of animal welfare and farmer and worker fairness.

⁹³ IFOAM Strategic Plan 2017 – 2025 sourced from www.ifoam.bio/sites/default/files/strategic_plan_v03.pdf

⁹⁴ rodaleinstitute.org/regenerativeorganic/

This plethora of standards is confusing for customers and consumers.

Linkages with United Nations Sustainable Development Goals

Eosta, the Dutch organic food distributor has been one of the first companies in the organic sector actively incorporating United Nations Sustainable Development Goals into its business model.

Competing sustainability assessment initiatives

Organic certification labelling has been how customers and consumers have identified food products grown in accordance with sustainable organic production systems.

There are also other sustainability assessments, standards and reporting initiatives being used and developed which could compete against the primacy of certified organic food products. The number of Voluntary Sustainability Standards (VSS) is growing. The United Nations International Trade Centre Standards Map⁹⁵ records over 210 standards, codes of conduct and audit protocols that address sustainability hotspots in global supply chains. This plethora of standards is confusing for customers and consumers, and some of the programmes have a less well-defined sustainability impact than organic certification.

In addition to VSS there are some large initiatives by retailers to develop sustainability assessment and reporting systems as well as recognition programmes for approved VSS programmes. These include:

The Sustainability Consortium (TSC)⁹⁶

this organisation has close links with the world's largest retailer (Wal-Mart) and is establishing quantitative systems to enhance sustainability assessment and reporting. It currently has US\$200 billion worth of consumer goods using TSC tools.

The Consumer Goods Forum (CGF)

Sustainable Supply Chain Initiative.⁹⁷ This initiative aims to promote good social and environmental practices in global supply chains by benchmarking and recognising third-party audit programmes and certification schemes. The CGF is made up of representatives from 400 retailers from 70 countries with combined sales of EUR 3.5 trillion.

The CGF and TSC initiatives reflect the serious intent of many mainstream retailers to address sustainability concerns, provide better quality information on sustainability attributes of products to consumers and protect the reputation of their brands and businesses. They typically recognise organic certification as an important process and it is hoped that the other third-party sustainability audit and certification agencies they recognise provide the same levels of integrity.

95 www.standardsmap.org

96 www.sustainabilityconsortium.org

97 www.theconsumergoodsforum.com/initiatives/sustainable-supply-chain-initiative/about/



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