Pacific Islands Trade & Invest

Pacific Islands

EXPORTING CHILLIES TO NEW ZEALAND

market brief

ABOUT THIS PAPER

This market brief has been prepared by the Pacific Islands Trade & Invest (PT&I) office in Auckland as part of a partnership project with the Food & Agriculture Organization of the United Nations (FAO).

This market report aims to give Pacific Island exporters (or potential exporters) an overview of the New Zealand market; key market trends; market requirements; and market opportunities. This report examines the market for fresh chillies in New Zealand.

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KEY WORDS: Chillies, Pacific Islands, New Zealand, market research, trade, export, fresh.

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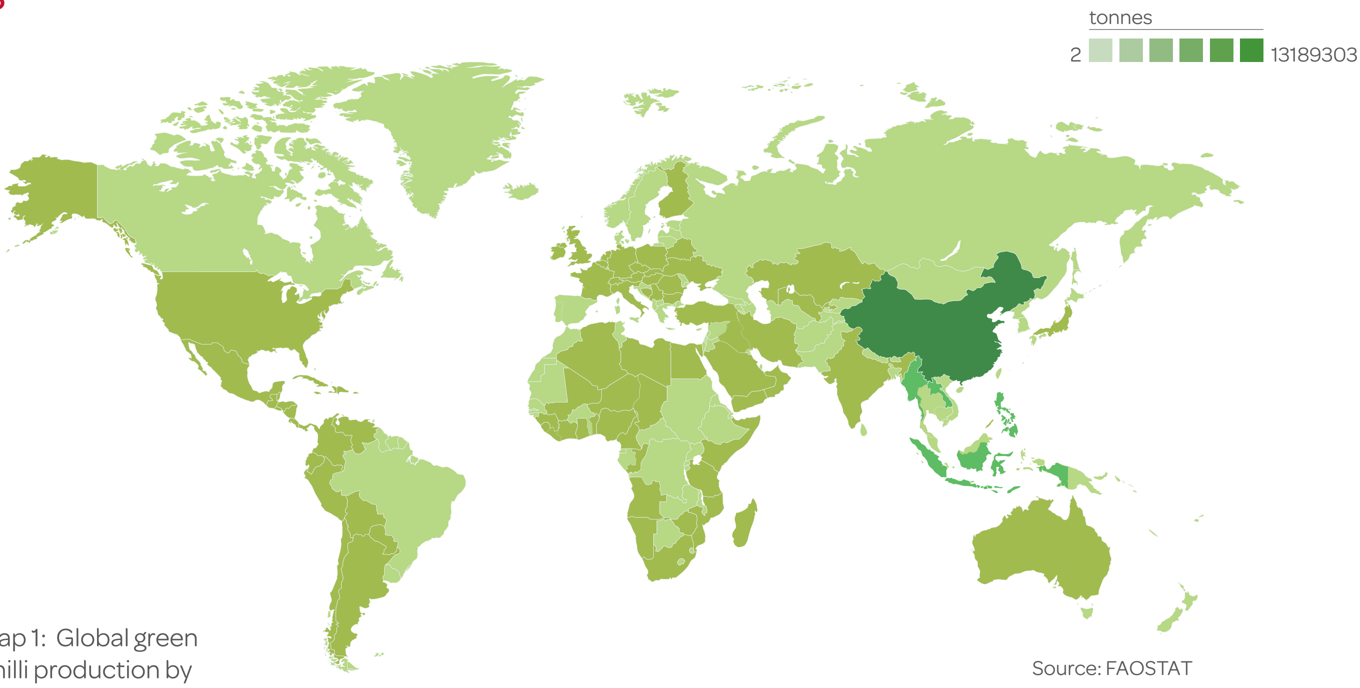

Map 1: Global green chilli production by country (tonnes)

Source: FAOSTAT

GLOBAL PRODUCTION

Global production of green chillies and peppers has increased gradually over the past 10 years from 20.8 million tonnes in 2000 to 27.6 million tonnes in 2010. Production slowed in recent year in large part due to shift to other crops and unfavourable weather conditions in key countries[1].

Most of the chillies produced worldwide are consumed domestically. China and India are not only the largest producers of chillies but the largest consumers of chillies, fresh and dry respectively.

According to FAOSTAT, China was the largest producer of chillies and peppers producing 13.1 million tonnes which was approximately 48% of the worldwide total. Mexico, Turkey, Indonesia and USA were the next large producers.

India is the largest producer of dry chillies, producing 1.2 million tonnes in 2010. China was next producing about 253,800 tonnes, followed by Pakistan (191,800 tonnes), Thailand (158,883 tonnes) and Ethiopia (141,200 tonnes).

In terms of production by region, Asia is the largest producer of fresh chillies and peppers. Production in the Oceania region which includes Australian and New Zealand is relatively small. The Oceania region produced an estimated 56,452 tonnes with Australia the largest contributor to this total. The Pacific Island countries were estimated to produce 952 tonnes. However, only the Cook Islands, Fiji and French Polynesia were represented in the data.

Table 1: Global production of fresh chillies, 2010.

Top producers	Tonnes
WORLD	27,552,507
China	13,189,303
Mexico	2,335,560
Turkey	1,986,700
Indonesia	1,332,360
U.S.A	918,120

Source: FAOSTAT

[1]*Center for Agricultural Policy with Prosperity Initiative (2009)*
[2]*Ibid*

GLOBAL TRADE

Chillies in their fresh and dry form are the two main types of chillies traded internationally. The main markets for both forms of chillies are Asia, North America and the European Union[2].

From 2005-2009, global imports rose by approximately 26% from 1,884,621 tonnes to 2,371,642 tonnes whereas exports increased by about 24% from 1,978,161 tonnes to 2,445,171 tonnes.

In 2009, global imports were valued at approximately US$3,618.2 million (about 2.4 million tonnes) with the United States of America the largest importer of fresh chillies and peppers, followed by Germany, the United Kingdom, France and Canada.

USA imported approximately US$807.6 million worth of fresh chillies. USA's main source of imports came from Mexico, favouring the Mexican variety of chillies such as Jalapeno and Serrano. The USA and EU consumers tended to prefer the mild and sweet chillies (bell peppers).

International exports in 2010 were estimated to be worth about approximately US$3,495 million. By volume, the major exporters of chillies and peppers, green internationally were Mexico, Spain, the Netherlands USA and Israel.

Table 2: Global trade of green chillies, 2009

Top global importers	Tonnes
WORLD	2,371,642
United States of America	648,740
Germany	326,433
United Kingdom	136,874
France	122,591
Canada	112,446

Top global exporters	Tonnes
WORLD	2,455,171
Mexico	608,644
Spain	465,251
Netherlands	461,102
United States of America	99,939
Israel	89,893

Source: FAOSTAT

GLOBAL OUTLOOK

The Center for Agricultural Policy with Prosperity Initiative (2009) reported that in recent years the demand for capsicums (includes chillies, pimeno and paprika) has been growing at an average annual rate of 4% and the market for chillies is expect to continue growing.

key global trends

A recent Deloitte (2010) report highlighted some key global trends and their effect on business. The points are summarized in the following points with additional references to New Zealand and the Pacific Islands exporters:

Table 3 : A summary of key global market trends

	NEW CONSUMER REALITIES	FOOD SAFETY CONCERNS
TREND	Consumers continue to be concerned about the economic conditions. Reassessing their spending habits and priorities. • Shift in spending to private label goods, searching for discounts and better value Value aligned with personal values such as quality, sustainability, heath and etc.	Traceability is important. There is an increasing demand for transparency into the origin, nutrition and quality of the product. Industries have responded by adopting more rigorous, globally accepted standards.
WHAT THIS COULD MEAN FOR BUSINESSES	Traditional market segmentation models have become rapidly out dated. Businesses need to reassess how they analyse the market. Investors are seeking higher levels of fact-based substantiation before making a case for investment. Collaboration between consumer product companies and retailers to develop product for the market.	Consumer education on product origins, recalls and food safety measures. Similar expectations have been placed on food & beverages companies.
NEW ZEALAND	New Zealand consumers more aware of extending their credit line. Saving schemes such as Kiwisaver are enticing consumers to save[3]. Online shopping continues to alter consumer behaviour and expectations.	Greater interest in the product ingredients and the process.
PIC EXPORTERS OF CHILLIES	Research the market and develop your marketing plan and strategy. Examine your price structure and strategy.	Emphasis on product quality, packaging and labelling as well as traceability in the supply chain. Certification and quality assurance programmes will be important. E.g. HACCP. Consumers want to know where there product is from and how it is grown. Exporters should promote the origin story of the product.

[3]*New Zealand Retailers Association. (2012). The Retail Market in New Zealand: An Analysis 2011/12.*

key global trends

MANUFACTURERS SEEK SECURITY IN SUPPLY CHAIN	SOCIAL MEDIA	PRICE STRATEGIES TO IMPROVE PROFITABILITY
Global population growth, expansion of middle class in key developing countries, depletion of food stocks, volatility in food prices.	Online shopping changing consumer behaviour – consumer is savvier and taking charge of their shopping experience. Some companies have been cautious given the possibility of a backlash regarding a perceived lack of sincerity or authenticity by corporations selling products.	High cost of raw materials and input costs such as oil which are squeezing margins across industries. Consumers have learnt to wait for sales, expect every-day-low-prices, chase bargains and even expect discounts on luxury items.
Bottom line is squeezed and companies have felt the backlash of passing costs onto their customers. • Strategic investments in vertical integration to secure raw materials, or • Locking in primary suppliers into longer-term contracts.	Businesses require a clearly articulated and communication social media strategy. Opportunities to reach a larger audience, gauge consumer awareness, product usage and attitudes.	Balancing price with product quality, size, costs and demand to protect margins. Investment in technology, price analytics, and data management. Global competition will drive up service standards.
NZ buyers have vertically integrated some operation in the Pacific Islands to strengthen the links in their operations. E.g. Turners & Growers has established operations in Fiji and recently exported pineapples to New Zealand.	Online – Consumers are making price comparisons, peer reviews and credit/debit card on smart phones. Nearly half of New Zealand adults made at least one on-line purchase in the last year and, on average, they purchased through this channel three times.	A growing emphasis on offering value beyond price only therefore more about value and less about cheap. Retailers giving serious consideration to the brands they offer as they also seek to establish a point of difference in the market.
NZ buyers have expressed a willingness to build long term relationships therefore communication and coordination particularly during the trial period will be important. Schedule market visits to meet with your buyer face to face to discuss opportunities for improvement.	Emphasis on marketing and promotion. What is your point of difference? Organic/Fair Trade certification.	Develop a point of difference. Consideration should also be given how you will promote in the stores. Supermarkets are also interested in what supplier will do to support product launch and in store promotion. Factors to consider include product range, price, terms of trade, quantities and etc.

Source: Deloitte (2009), NZ Retailers Association (2010)

market overview

A significant opportunity to supply New Zealand with fresh chillies during the winter exists for Pacific Island exporters. New Zealand importers have cited a present shortage of chillies in the market and subsequently expressed an interest in importing fresh chillies from the Pacific Islands in particular the birdseye variety of chillies. Market opportunities were also identified in the value-added chilli products provided that the supply is consistent and a high quality standard is maintained.

The New Zealand market for chillies is expected to grow as the cultural population of New Zealand becomes increasingly diverse and the interest in exotic cuisine continues to grow.

MARKET STRUCTURE

The structure of the New Zealand import industry for fresh produce can be segmented into three-tiers based on commercial size[4].

• LARGE COMMERCIAL IMPORTERS
Large commercial importers are aligned with the main supermarket chains, importing in large volumes and possessing national distribution networks. Companies include Turners & Growers Ltd, MG Marketing, Freshmax and Fresh Direct. These companies also supply a range of small retailers.

• MEDIUM COMMERCIAL IMPORTERS
There are several small-to-medium sized companies which specialise in importing and distributing Pacific produce. Limited by their size, these companies deal only in limited quantities and carry out any necessary sorting and repacking economically. Companies in this category include Tropical Fresh Ltd.

• SMALL IMPORTERS
This tier consists of small family and church networks. Generally products are imported directly from their home countries (such as the Pacific Islands) through to family connections and supplied to their own local buyers.

Fresh chillies are imported by both large and medium commercial importers. Buyers consider consistency in supply and quality, packaging, price as key factors in their purchase decision. With emphasis on quality and consistency of supply, the large buyers have the established infrastructure and systems in place to supply national consumers effectively. These companies supply the two large supermarket chains, Progressive Enterprises and Foodstuffs, as well as independent retailers.

Photo credit: PT&I

[4] *Grandison, G. (2003). Exporting Fruits and Vegetables to New Zealand: A Guide for Pacific Island Producers.*

PRODUCT TYPES

The following provides a general feedback on the market for a few chilli products in New Zealand. Further research is required in these sectors to gauge the market potential opportunities for these products.

FRESH CHILLIES

The New Zealand market for fresh chillies is small, supplied from local production and imported varieties from the Pacific Islands. There is a good supply of fresh chillies produced locally however importers have highlighted a shortage of supply during the winter period which means a good opportunity for Pacific Island exporters who can consistently supply the market with quality fresh chillies.

There is strong competition from local chillies which are generally grown in glass houses. Not to mention the broader competition from substitute products such as frozen chillies. New Zealand chillies have successfully tapped into mainstream supermarkets as well as specialty retail stores with organic fresh chillies.

There is an established market for organic fresh chillies. Organics Aotearoa New Zealand (2010) reported that the domestic market for organic products was valued at NZ$315 million[5]. Certified organic chillies are in demand from specialty retailers who prefer to source local fresh produce followed by the Pacific Islands were the next preferred supplier[6].

FROZEN CHILLIES

Importers have indicated that a good market for frozen chillies exists[7]. However, the market is competitive, with countries such as India and Vietnam supplying frozen chillies to New Zealand. Countries such as India have the ability to supply large volumes consistently. Frozen chillies come in various retail pack sizes. Fiji is exporting frozen 'bongo' chillies to New Zealand stocked in selected retail outlets such as Food World (Mangere) and Vege Oasis. The Ashoka brand of chillies is imported from India.

DRIED CHILLIES

Chilli varieties with thick flesh are difficult to dry and are therefore usually sold fresh[8]. There is a demand for dried chillies particularly from the Asian communities in New Zealand. Importers have expressed interest in sourcing dried chillies in bulk for the hospitality sector. Not much growth in demand was seen from manufacturers, it is likely the growth in demand has been from households[9]. Papua New Guinea is the main Pacific Island suppliers of dried chilli to the New Zealand market. There are several certified organic dried chilli products produced in New Zealand.

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[5] *Organics Aotearoa New Zealand. (2010). New Zealand Organic Report. OANZ.*
[6] *Wood, M. (2012, April 27). (J. Fuavao, Interviewer)*
[7] *Punja, Y. (2012, May 1). J. Fuavao, Interviewer.*
[8] *Ibid.*
[9] *Hammond (2012, May 7). J. Fuavao, Interviewer.*

market overview

DEMAND FACTORS

The New Zealand market for chillies is small and noted to have potential to grow further driven by the growing cultural diversity of New Zealand's population with the growth of many of ethnic communities.

There is a good demand for fresh chillies from the Asian and Pacific Island population in New Zealand. According to the 2006 Census, 265,974 people of Pacific ethnicity and 354,552 people of Asian ethnicity were in living in New Zealand. Between 2001 and 2006, the Asian and Pacific Island ethnic groups showed the largest population increase[10]. The Asian ethnic group increased from 238,176 to 354,552 people in 2006 (an increase of almost 50%). While the Pacific Island ethnic group increased by 14.7%, from 231,801 to 265,974 people during the same period. The majority of people from both ethnic groups resided in Auckland. About 18.9% of Auckland's population identified with the Asian ethnic group while 14.4% identified with the Pacific Island ethnic group[11].

New Zealand consumers were found to be seeking more value by visiting fruit & vegetable stores and supermarkets more often[12]. In terms of frequency and where consumers shop, a recent study (2012) found that most people purchased their food and drink from the supermarkets weekly or more often. The shopper profiles of these respondents were mainly parent/caregivers[13].

People who were likely to shop at green grocers (such as small fruit and vegetable stores and farmers markets) more than once a week were: Maori (18.7%), Pacific (25.4%) and Asian (27.6%) people compared to European/Other people (9.7%). People of Pacific and Asian ethnic background tended to spend less than European/Other people at grocery locations but not at non-grocery locations.

The survey found that the main factors that affected the purchase decision were (in descending order of importance): price, specials, freshness, quality, healthiness and taste.

Green Chillies from Fiji
Photo credit: PT&I

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[10]The following demographic statistics relate to the 2006 census. The 2011 census was postponed due to the Christchurch earthquakes. The census is now scheduled to take place in 2013.
[11]Auckland was the most ethnically diverse region in New Zealand - European (56.5%), Asian (18.9%), Pacific Islands (14.4%) and Maori (11%).
[12]AC Nielsen. (2010). Retail Barometer: Whats Happening Out There. Presentation Slides.
[13]Health Promotions Agency (HPA), 2012.
[14]Farmers' Market Inc NZ. (n.d.). About FMINZ.

KEY MARKET TRENDS

The following points are key trends affecting the market for fresh chillies in New Zealand.

• There is greater consumer education around the use of chillies with various food shows on television promoting its use in particular local produce. Additionally, chefs educating consumers how to use the product.

• Chillies have also become more available in various value added products, such as flavouring on instant noodles, oils and chocolates. New Zealand is developing a taste for spicier food.

• Quality standards and traceability have become paramount in the New Zealand market. Given the current state of the economy and the increasing concern around food safety, commercial importers are seeking to secure their supply chain by establishing long term relationships with its suppliers. To instil confidence in consumers, buyers have tightened their procedures and placed significant emphasis on complying with quality standards and food safety measures at every phase of the supply chain.

Importers, wholesalers, distributors and retailers alike are expressing greater interest in recognized certifications and standards. In the case of the supermarket chains, Progressive Enterprise (owned by Woolworths Australia) currently implement their own, the Woolworths Quality Assurance (WQA). New Zealand GAP and Hazard Analysis & Critical Control Points (HACCP) are considered to be the baseline in the market.

• The growing popularity of Farmer's markets in New Zealand which has driven the demand for local produce due to concern of what is in our food; the benefits of investment into local resources; climate concerns and the increasing awareness of sustainable agriculture[14].

• In the fresh produce market, there has been a growth demand for pre-packed fresh fruits and vegetables which appeal to the need for convenience from consumers with increasingly demanding lifestyles.

HEALTH BENEFITS

The present consumption of fresh chillies in New Zealand is in small quantities such that taste is considered to be more important than nutritional value[15]. Still the nutritional aspects and medicinal properties of food continue to be a growing area of interest in the market.

Chillies are a good source of vitamin A, C and E and antioxidants particularly in the red chillies. Chillies contain high levels of capasaicin, the active component which gives the crop its heat properties and is said to have anti-tumourigenic properties, specifically a powerful inducer of apotosis in liver cancer cells[16]. Research has shown capasaicin to be effective in battling obesity. It increases the body's metabolic rate and aids the fat burning process. Capasaicin can also supress the appetite.

Other health benefits associated with chillies include the effective treatment for acute and chronic pain notably that associated with shingles and arthritis; the improvement blood circulation and clear congestion that help with the common cold[17].

[15]*Horticulture New Zealand. www.vegetables.co.nz.*
[16]*Scott, K. (2006). Medicinal Seasonings: The Healing Power of Spices. Cape Town, South Africa: Medspice Press.*
[17]*Information gathered from various online resources. Content should not be interpreted as medical advice.*

import statistics & information

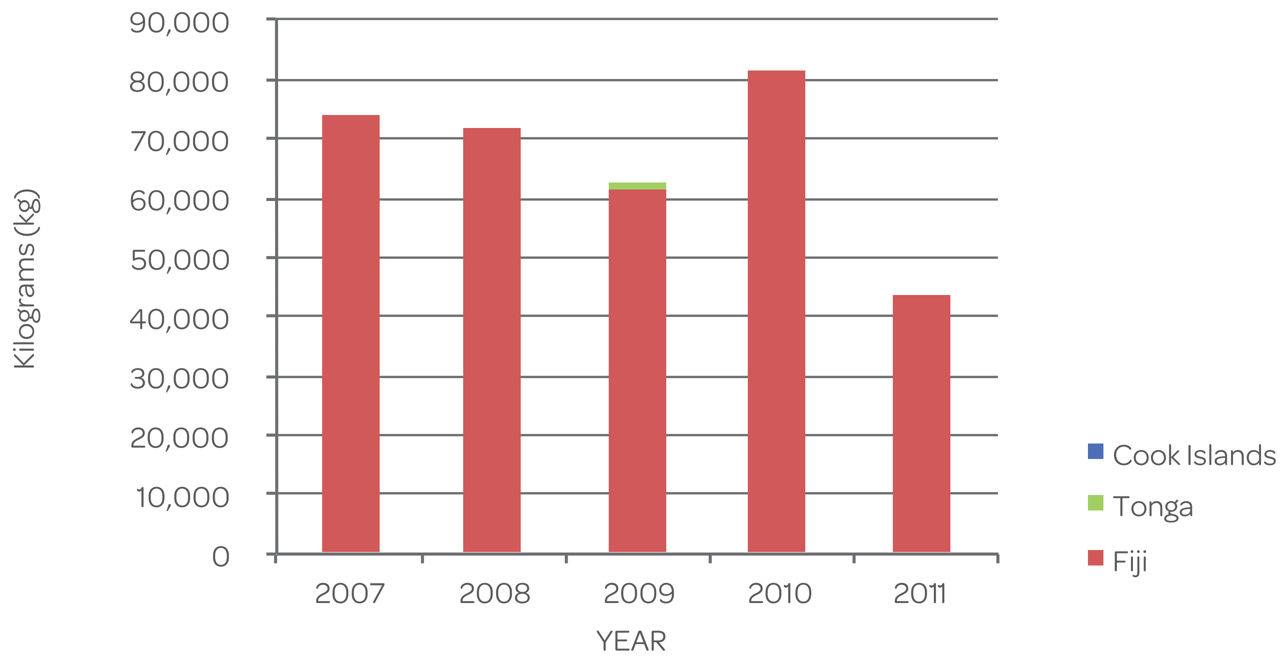
IMPORT STATISTICS

Fresh chillies are available in New Zealand all year round. The market is supplied by local and imported fresh chillies from the Pacific Islands. Currently the Cook Islands, Fiji and Tonga are the only countries that have the market access required to export fresh chillies to New Zealand.

January to April is considered to be the main season for local chillies while fresh chillies imports happen during the New Zealand off-season, from May to November. Seasonal windows can vary from year to year as a result of changing climate patterns. A longer summer can extend the availability of local chillies into May.

Presently the New Zealand trade statistics do not isolate the data for imported fresh chillies from imported fresh capsicums. The New Zealand Ministry of Primary Industries (MPI) reported that the overall trend for fresh chillies imported into New Zealand has increased by 28% from 244,830 – 341,142kg. Fiji was the main supplier of fresh chillies, accounting for 99% of the total fresh chillies imported into New Zealand. The remaining share of imported fresh chillies was sourced from Cook Islands[18]. Although adverse climate conditions and crop damage were reported to be the cause of a reduction of fresh chillies imports from Fiji which fell from 65,806 kg in 2008 to 53,748 kg in 2009 – a reduction of 22%[19].

Graph 2 : New Zealand importation of fresh chillies from 2007-11



Source: Ministry of Primary Industries

Data on the local production of chillies was not available. However based on FAOSTAT figures it is estimated that New Zealand's production of green chillies and peppers gradually increased from 5,200 to 5,700 tonnes during the period 2006-2010.

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[18]Ministry of Primary Industries (NZ)
[19]Hogg, G., & Coombes, P. (2012, April 19). J. Fuavao, Interviewer.
[20] Kumaran, B. (2012, April 19). J. Fuavao, Interviewer.
[21]Turners & Growers. (n.d). Produce A-Z: Chilli Peppers.
[22]Latham, E. (2009, March 2). The colourful world of chillies.
[23]Punja, (2012,1 May). J.Fuavao, Interviewer.
[24]Scott, K. (n.d.). Medicinal Seasonings: The Healing Power of Spices. Cape Town, South Africa: Medspice Press.
[25]Slip the skin off, cut in half and remove the seeds then stuff with a favourite filling – e.g. cheese or meat based filling.

VARIETIES

The main varieties of fresh chillies imported from the Pacific Islands are 'hot rod', 'red fire' and 'birds eye' chillies[20].

The two most common varieties of chillies found in New Zealand are the Asian cayenne pepper (green chilli) and the Mexican pepper (red chilli)[21]. The 'fireflame' variety, a hybrid of the cayenne chilli, is a variety that was noted to be on the supermarket shelves in New Zealand supermarket[22]. It is a 'medium-heat' flavoured chilli which can grow to 10-16 cm in length and grows all year round. Jalapeno, birdseye and cayenne varieties of chillies were observed on the supermarket shelves.

The demand for chillies in New Zealand is based on colour, flavour and use[23]:

COLOUR: Presentation of the product is important to the public therefore it is important that product achieves a high level of quality in terms of its presentation and taste. Preserving the red colour of the mature chili was noted to be a key selection criterion in processed chillies.

FLAVOUR: Chillies are key ingredient in a lot of Mexican, Spanish, Indian and Asian dishes. Chillies are known for their heat flavour properties that come from the high concentration of capsaicin, the phytochemical that gives plants of this genus their strong flavour and irritant effects[24]. The Scoville Heat Unit (SHU) scale is the most widely used guide to measure the level of capsaicin in the variety of chillies. The higher the SHU score the hotter the burn.

USE: Not all chillies are hot and each variety may have a different application. While there are a large number of different varieties of chillies grown in the world, not all are suited for the end user.

Red chillies from Tonga
Photo credit: PT&I

import statistics & information

Image courtesy of vegetable.co.nz

	TYPE	CHARACTERISTICS	FLAVOUR	USE
1	Dutch Red	Leathery texture	Hot	Used in its dried form, plaited or used in curry pastes.
2	New Mexican - Anaheim	- Large size - Ripens from green to black/brown to red	Mild flavour	Excellent when stuffed[25]. In its red form, this chilli is often used for its decorative purposes or in sauces or pastes.
3	Wax - Hungarian Yellow Wax	- Large size - Long shaped chilli - Ripens from lime green to yellow to red.	Mild	Salsas, sauces, roasting, stuffing, smoking and pickling
4	Jalapeno	- Shape: cylindrical shape with a blunt point	Hot	Green jalapeno: raw slices on nachos or salsa. Red jalapeno: sauces, pickles or dried. When red its skin is tough and best not to use in raw form.
5	South American Yellow	- Medium size	Ranges from medium sweet to hot	Flavour ranges from medium which is good to use with chicken to hot which is good in meat dishes.
6	Cayenne peppers	- Thick skins	Hot	Used in chilli and curry pastes. Mexican pepper is noted to be good in sauces.
7	Exotic - Thai or Birdseye	- Small size - Long thin chilli	Hot	A versatile product which can be used in its raw form or cooked.
	Haberno - Scotch bonnet	- Small size - Lantern shaped	Very hot Tropical fruit notes	Matches well with tomatoes. It is said to be the hottest chilli grown commercially.

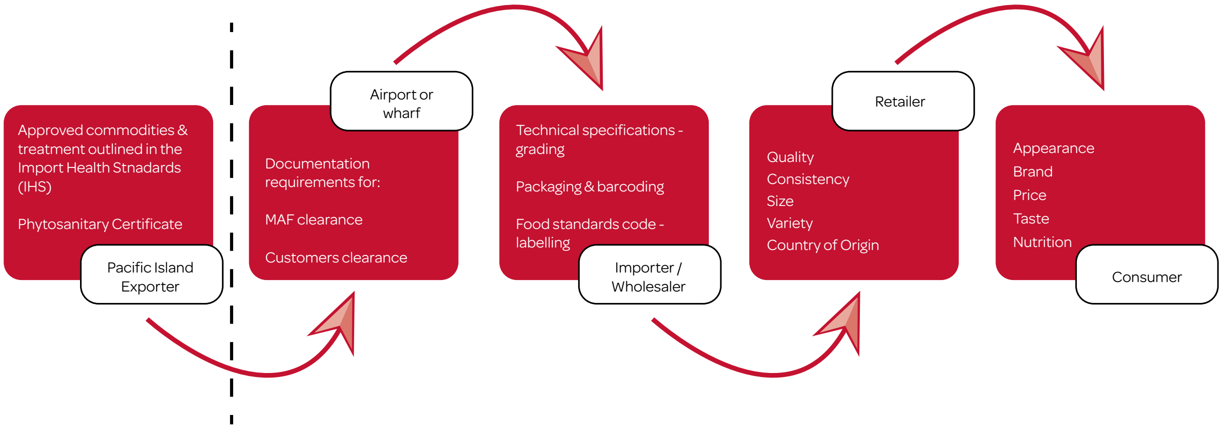
Source: vegetables.co.nz

market requirements

EXPORT PROCESS

As a guide, Graph 2 shows factors considered at each stage of the export process. It requires an understanding of the market requirements such as biosecurity measures and food and safety requirements.

Graph 2: General export process from the Pacific Islands to New Zealand



Once the produce receives biosecurity clearance, it will be graded and resorted according to the buyer's quality standards. New Zealand buyers have also noted that not only do the products undergo assessment by their quality standards, the quality of the produce will be assessed again by the retailers. This is particularly done by the supermarket chains.

Generally, fresh produce earmarked for the supermarkets are packed into specialised plastic crates then transported to the supermarket distribution centres, where they will be assessed against the supermarket quality standards. Fresh chillies are repacked for the retail shelves generally they are packed in small trays wrapped in plastic or small plastic bags.

Consistent supply and quality continues to be stressed by importers as areas requiring further improvement. To ensure the efficient delivery of goods to customers, buyers have also highlighted coordination as an area for further improvement.

It is important for Pacific Island exporters to remember that when exporting products to New Zealand to contact the buyer, so that their customs agent is made aware of the arrival of the goods. This will help with the quick release of the goods to the buyer.

QUARANTINE REQUIREMENTS

Chillies (Capsicum frutescens) are a host for fruit fly and therefore may only be exported to New Zealand if a Bilateral Quarantine Agreement (BQA) has been signed between the exporting country and New Zealand[26].

The BQA stipulates New Zealand's requirements for the control of fruit fly species associated with imported produce into New Zealand. It details the maximum pest limit required by New Zealand; treatments that must be undertaken by the exporting country; and the inspection procedure on arrival in New Zealand including the actions to be undertaken by the exporting country and New Zealand if pests should be found in the produce[27].

Cook Islands, Fiji and Tonga are the only countries with an established Import Health Standards (IHS) therefore the only countries currently permitted to export fresh chillies to New Zealand.

All fresh fruit and vegetables are prohibited entry into New Zealand unless they are covered by a valid Import Health Standard (IHS). Prior to its exportation to New Zealand, there are several quarantine requirements that exporters of fresh chillies in the Pacific Island countries must follow, which is outlined in the Import Health Standard.

The consignment must:

• Be inspected by the exporting country's national plant protection organization (NPPO) in accordance with the appropriate official procedures, ensuring that the consignment is free of any visually detectable regulated pests as specified by New Zealand Ministry of Agriculture and Forestry.
• Undergo the pest control activities prior to export;
• Be accompanied by a valid and completed Phytosanitary Certificate - a certificate issued by the authority of an exporting country, in accordance with the requirements of the International Plant Protection Convention (IPPC), which verifies that the requirements of the relevant import health standard have been met;
• Be in clean packaging – free from soil and other contaminants;
• Not have soil contamination in excess of 25g per 600 units;
• Not be contaminated with foliage in excess of one leaf per 50 units

Any foliage or soil contamination found to be above the acceptable level of tolerance, shall be washed (soil contamination); or resorted (foliage contamination); reshipped or destroyed all at the importer's option and expense.

Additional declarations required for fresh chilli imports from the Pacific Island countries:

• **COOK ISLANDS:** Declare that the cartons contain chillies of the "Birds Eye" variety and all cartons have been packed and labelled as such.

• **FIJI:** Declare that the chillies are of the "Hot Rod" and/or "Red Fire" and/or "Birds Eye" variety and all cartons have been packed and labelled as such.

Exporters must also declare at what stage the chillies were harvested and packed – "Red Fire" (mature green stage of maturity); "Hot Rod" (whitish to yellow stage of maturity); "Birds Eye" chillies (ripe stage of maturity).

• **TONGA:** the High Temperature Forced Air (HTFA) treatment record must accompany each consignment (either the original or copy of the original); unique batch number encoded on the print out; the batch number must match the treatment record(s); fruit weights in the inspected sample must be less than the "probe fruit" on the treatment record.

ENTRY REQUIREMENTS FOR PROCESSED CHILLIES

The entry requirements for value added chilli products are governed by separate Import standards from fresh produce[28]. An advantage of exporting value-added agricultural products is that it circumvents the biosecurity restrictions that apply to fresh produce.

Normally, there are no certification or inspection requirements for the importation of commercially manufactured plant products provided that all relevant documents have accompanied the consignment.

This import health standard specifies that consignments of dried chillies are required to undergo inspection.

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[26] *Ibid.*
[27] *Ministry of Primary Industries. Official website: www.mpi.govt.nz.*
[28] *Ministry of Agriculture and Forestry.*
(2012). BNZ-NPP-Human: Importation into New Zealand of Stored Plant Products Intended for Human Consumption. Wellington.
[29] *Diagram adapted from MAF Biosecurity New Zealand Standard: 152.02: Importation and Clearance of Fresh Fruit and Vegetables into New Zealand.*

Graph 3 presents an overview of the clearance process for fresh fruits and vegetables imported into New Zealand[29]. Failure to comply at any stage of the process can be costly for the importer and ultimately affect the product's value on the market.

PRE-EXPORT INSPECTION

Inspection is carried out in accordance with appropriate official procedure and found to be free of any visually detectable pests.

NPPO will issue a Phytosanitary Certificate (PC) which must accompany all fresh produce consignments.

YES

Were pre-export inspection conditions satisfied?

NO

Undergo treatment if live pests are found.

IMPORT HEALTH STANDARD MUST BE IN PLACE

CONSIGNMENT RECONCILIATION

Documentation checks on arrival. PC details will be checked against contents of the actual consignment

Transported to an approved facility for sampling & inspection, provided they are in pest proof containers.

YES

Were the correct & completed documents presented?

NO

Hold consignment until correct/complete documents are received.

INSPECTION & SAMPLING

Inspection carried out on individual unit & packaging, for the presence of pests, seeds, signs or symptoms of disease, soil or any other contamination.

A sample is taken from any part of the lot including selection of cartons /packages from different areas of the lot.

Proceed to biosecurity clearance process.

YES

Was the consignment free of contamination?

NO

If a live organism found, importer has the option of:
- Pest identification,
- Treat,
- Reship, OR destroy

BIOSECURITY CLEARANCE

A written biosecurity clearance shall be issued by an inspector for each consignment/lot of imported fresh fruit and/ or vegetables cleared for entry into New Zealand.

Final document check including a Treatment Certificate if the shipment was treated before cleared for entry into NZ.

PEST ID / TREATMENT

Is the pest, a regulated pest?

- YES: Treat, reship or destroy

- NO: Proceed to final clearance process

- 'Unlisted': unlisted organism will be reported to MAF for advice on the fate of the consignment.

market requirements

DOCUMENTATION REQUIREMENTS

Discrepancies in the paperwork have been highlighted as one of the issues at the border with consignments which delayed the clearance of shipments from the Pacific Islands. The document must match what is in the container. This issue is particularly prevalent with informal consignments[30].

Upon arrival in New Zealand MAF inspectors will check the relevant documents. If incorrect or incomplete documentation is presented, the consignment will be held in a transitional facility until the correct documents are presented.

To ensure that there are no delays upon arrival, it is important that the correct documentation is presented such as the Phytosanitary Certificate, quarantine declaration, bill of lading, airway bill or invoice to the satisfaction of the MAF inspector.

TREATMENT PATHWAYS FOR PACIFIC ISLAND COUNTRIES

It is important that fruit fly hosts are treated in the Pacific Island countries according to the BQA. Stringent controls are put in place to regulate the threat of fruit fly entry into New Zealand. Chilli exporters must follow an approved quarantine pathway before it can export to New Zealand[31].

The following treatment pathways pertain to chillies:

• COOK ISLANDS & FIJI: Non-host status is based on maturity and chilli variety.

• TONGA: Chillies from Tonga must undergo heat treatment prior to export. The fruit temperature is raised from ambient to 47.2°C and then held for a minimum of 20 minutes.

PACKAGING FOR EXPORT

The packaging of fresh fruits/vegetables must be clean, free from soil and other contaminants. Fresh chillies are a fruit fly host so it is important that they are shipped in pest proof packages.

All packages must be sealed with a sticker/label identifying the authority in the exporting country and directly traceable to the Phytosanitary Certificate. The package and seal must be intact on arrival in New Zealand.

• If the seal(s) or package(s) are insecure or have been tampered with, the fresh fruit/vegetables shall be reshipped or destroyed.

• If consignments are not packaged correctly or are not covered by correct certification, Biosecurity New Zealand is to be advised of details within two working days[32].

Fresh chillies are transported to New Zealand by airfreight. They are normally packed loose in 1 kg bags then placed in 8 – 10 kg cartons for export[33]. It is important to have discussions about packaging with the New Zealand importer to understand their preference or simply advice on effective means of packing and preserving the product's freshness in transit.

[30] *Tohovaka, S., Barker, R., & Roberts, B. (2012, April 27). J. Fuavao, & T. Mato, Interviewers.*
[31] *Pathway is defined as a series of activities that, when implemented according to a documented procedure, form a traceable export system.*
[32] *Ibid*
[33] *Ibid*
[34] *New Zealand Food & Safety Authority. (n.d.). Guide to comply with labelling requirements.*
[35] *Ingredients such as aspartame, quinine, guarana, caffeine, unpasteurised milk and egg products etc.*

PACKAGING & LABELLING FOR RETAIL

In terms of packaging for retail, all value added food must comply with the packaging and labelling regulations in New Zealand.

Packaging for retail must effectively address:

(1) FOOD SAFETY ISSUES: The package must protect its contents from deteriorating from heat and moisture and etc. It must be able withstand rigorous distribution and handling. Reliable packaging will be able to prolong the shelf life of the product;
(2) CONVENIENCE: The product must be easy to use. Consumers should be able to gain access to its contents;
(3) AFFORDABILITY: Consumers must be able to afford it;
(4) VISUAL APPEAL: The package design must be attractive in order to compete with the other products on the shelves.

Information that must be labelled on a packaged product includes[34]:

- A use by or packing date
- Product name or description
- Name and physical address of the manufacturer / importer / distributor: (A postal address alone is not enough)
- Warning and advisor statements: are required if certain ingredients have been used in the product[35]. The warning statement need to have specific words and must be at a height of 3mm or more. Certain ingredients such as eggs, gluten and nuts need to be declared as they can cause severe adverse reactions in some people.
- A list of ingredients: listed from the greatest amount to the smallest amount of ingoing weight including water.
- Use and storage instructions
- Nutritional information panel
- Country of origin
- Labelled in English – the information may be presented in other languages however it must not be different from the information presented in English.

Importantly the information presented on the labels must be legible and prominently displayed in contrast to the background. The information on the label must also be clear and accurate.

competitive landscape

COMPETITION

Competition in the New Zealand market for fresh chillies is limited to local supplies and imports from the Pacific Islands. The main competition is from New Zealand chillies however imports from the Pacific Islands come in during the winter period when there is a shortage of local supplies therefore they do not compete directly.

New Zealand fresh chillies are grown in tunnel houses or glass houses. Some local producers not only grow chillies but value-add to the product themselves and sell direct at the local farmer market and/or supply the restaurants and stores directly. Local producers such as Orcona Chillies N Pepper and Fire Dragon Chillies, supply gourmet value added chilli products to high end retailers such as Farro Fresh.

Importers have highlighted the retailers' preference for local chillies due to the high quality and consistency of supply[36]. New Zealand chillies are sold in the main supermarket chains, fruit and vegetable stores and specialty retailers. Local growers have successfully tapped into the mainstream and the organic markets by complying with recognized certifications and quality standards such as New Zealand GAP and New Zealand's leading organic certification, Biogro NZ.

Fiji has been the main supplier of fresh chillies from the Pacific Islands mainly during the winter months. While this window of opportunity exists for the Pacific Island exporters, there are indications of increasing competition from New Zealand chillies grown in glass houses. Supply and quality inconsistencies remain the main challenges for fresh chillies from the Pacific Islands.

Importers expressed great interest in importing fresh birdseye chillies from the Pacific Islands. To compete effectively in the market, the production issues would need to be addressed. Further research into the market may be able to identify other niche varieties that Pacific Island producers can target. The general consensus from importers is that the opportunities for Pacific Island exporters is in value added goods such as dried chillies, frozen chillies, chilli sauce, etc. However, ventures into these markets require greater emphasis on marketing, branding, packaging and price.

MARKET PLAYERS

A few players have been identified in the market for fresh chillies, Turners & Growers, Tropical Fresh Limited and Progressive Enterprises. The market faces competition from local producers as well as substitute products such as dried and frozen chillies.

Turners & Growers and Tropical Fresh Ltd import fresh chillies from Fiji, which has been the main supplier from the Pacific Islands. Generally fresh chillies imported from the Pacific Islands have been inconsistent over the past few years. Imports from the Cook Islands and Tonga have been in small volumes and intermittent. Fresh chillies are packed for Progressive Enterprise which owns the Countdown supermarkets in 80g retail plastic bags.

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[36] *Hogg, G. (2012, April 19). J. Fuavao, Interviewer.*

PRICES

Wholesale prices for green chillies from Fiji are generally between NZ$10.00-NZ$15.00 per kg while red chillies from Fiji are about NZ$20.00 - NZ$30.00 per kg. Wholesale prices for local red chillies have a higher price of approximately NZ$40.00-NZ$50.00 per kg. The wholesale prices for local green chillies are generally about NZ$10.00 less than that of local red chillies.

The retail prices observed for pre-packed fresh chillies (from New Zealand) at the supermarket were NZ$5.99 for green chillies and the same price was observed for red chillies. Both chillies were packed in 80g bags for the Countdown supermarkets. Local birdseye chillies pre-packed in 80g plastic bags had a retail price of $4.99. During the period of this research, fresh green chillies from Fiji were selling at a retail price of $12.99 per kg.

KEY SUCCESS FACTORS

PRODUCT QUALITY: Quality is important for a new exporter seeking industry buy-in. A bad shipment can affect the reputation of the buyer therefore it is important to get it right[37]. The quality parameters of fresh chillies are generally assessed on the following factors.

- Presentation: It is important that the chillies have a good rich colour; have a glossy appearance; and smooth surface.
- Shape: The supermarket chain place great emphasis on a consistently high level of presentation on their shelves. For chillies they are looking for no obvious deformities in the shape
- Maturity
- Size: length
- Texture: The texture of the chilli should be firm juicy with the calyx intact

Improved production and postharvest practices were highlighted as areas which can contribute significantly to better quality. For Birdseye chillies, once they turn red they tend to go soft and ruin in packaging[38].

PACKAGING: Can the product handle the transit? The packaging of fresh produce needs to be durable to withstand handling, transit and cooling. Cartons of produce exported from the Pacific Islands, were noted to be of substandard quality with moisture entry and the corners of the cartons collapsing when stacked.

The shelf life of fresh chillies can be prolonged with appropriate packaging. For example, fresh chillies sold in Countdown supermarkets are packed into 80g breathable plastic bags which can improve the shelf life of the product in the refrigerator by three weeks.

RELATIONSHIP BUILDING: Building a relationship with the buyer is critical factor for success. Advice from New Zealand importers is to establish a relationship and gradually build your exports, seeking to improve with every shipment. Coordination and communication are important factors required to build a relationship with a commercial buyer. Constant communication and regular market visit can help strengthen the relationship and ensure that a quality product reaches the consumer efficiently.

MARKETING & BRANDING: There are a number chilli products available on the market. It is important for an exporter to identify the target market(s) for each product it offers particularly if the chillies are earmarked for retail. The packaging especially its appearance and marketing needs to be tailored to suit. Key question – what is your point of difference?

In the competitive market for chilli sauce, Hot Samoan Boys Chilli Sauce is successfully positioned in the market as a premium chilli sauce by creating a point of difference. This is a product that shows the power of effective marketing and branding.

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[37]Hunter, J. (2012, April 17). J. Fuavao, Interviewer.
[38]Ibid.

market entry

STRATEGIC OPTIONS

From the discussions with New Zealand buyers, opportunities for fresh chillies have been highlighted in the following areas:

• New Zealand's off-season given the short supply of domestic supply, the proximity of the Pacific Islands to the market and the limited number of countries with the approved market access for fresh chillies to New Zealand. Consistent volumes, quality and packaging have been highlighted as the main impediment to growth for Pacific Island exports in this window.

• There is a market for bulk products such as dried chillies if the volume frequency of supply and in particular price is satisfied. It important to clarify the requirements specified by importers to ensure that the proper procedure is followed.

• The general consensus is that opportunities exist in value added chilli products particularly if a point of difference can be established on the market. Value added chilli products require significant investment in product development, marketing, packaging to compete effectively on the shelves.

• Organic and the fair trade market continue to exhibit growth in New Zealand. With the Pacific Islands' proximity to the market and strong associations with 'natural growing' the Pacific Islands have the potential to leverage these traits to tap into these growth markets in New Zealand.

MARKET ENTRY

Entry into the New Zealand market for fresh produce is effective through an importer as they have the appropriate infrastructure to ensure that the produce is processed, stored and distributed effectively and efficiently to the New Zealand market.

It is important to structure your approach to the New Zealand market, ensure that you have all the relevant information ready prior to discussions with a potential buyer. Work out your price, identify your target market and be ready to present your company. Key information includes the capacity to supply the market, processes, packaging, price and marketing. When approaching potential importers, it is useful to have the information on your company and product readily available such as:

• Company profile
• Product range and profile
• How long you've been in business
• Export experience: current export markets if any
• Product specifications covering different varieties available
• Supply capacity: what quantities are available
• Frequency of supply including seasonal variations
• Packaging
• Terms of trade (minimum orders etc.)
• Shipping/Freight schedules
• Price of your product range: include any discounts for large orders etc.
• Business card with a list of all contact details

Once a relationship has been established, it is important to build on it by keeping the buyers informed of what is happening.

Opposite page : Opportunity in value added products with a point of difference in the markets such as Hot Samoan Boys Chilli Sauce

Photo credit: PT&I - Chris Brimble

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