

Mango *(Mangifera indica)*



1. Offer Analysis

Description & Market Trends

Mango is a tropical fruit, renowned for its sweetness and rich nutritional profile. The Pacific, with its ideal tropical climate, has a fertile ground for mango cultivation. This South Asian native fruit has been embraced in Fiji, contributing to the island's diverse agricultural sector. Mangoes are a source of various vitamins and antioxidants, making them a healthy choice for both local consumption and export.

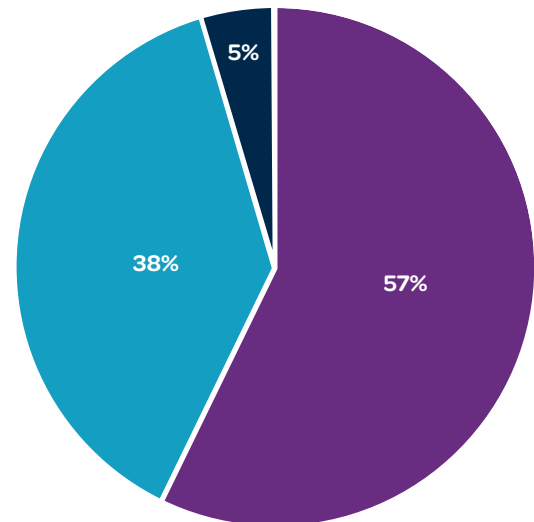
The commercial cultivation of mangoes has been a growing sector, with the produce gaining popularity in local and international markets. The planting season generally starts around spring, with the peak harvest season occurring in summer. The majority of mango farms are located in regions with optimal growing conditions, and both small-scale local farmers and larger agricultural entities cultivate the fruit. Mangoes are often enjoyed fresh but also find their way into a variety of culinary creations, including desserts, juices, and savoury dishes.

The import of mangoes to New Zealand has been steadily increasing, showcasing Pacific's potential as a significant player in the global mango market. Not all varieties are equal though, the Kesar is by far the favoured of all, juicy, bright orange and creamy. In New Zealand, most of the mangoes available are the Tommy Atkins variety, they are firm, fibrous and have a long shelf life. In Europe, importers favour the Kent variety, which is tasty, has very little fibre, yet has a long shelf life.¹



MANGO NUTRITIONAL CONTENT	
Nutrient	Amount (per 100g)
Calories	60
Protein	0.85
Fat	0.36
Carbohydrates	14.97
Fiber	1.58
Sugar	13.64
Vitamin C	40.61
Vitamin A	466.06
Vitamin E	0.91
Vitamin K	3.03
Folate	43.03
Potassium	161.82
Magnesium	10.3
Copper	0.06

Table 1: Mango nutritional content (Source: U.S. Department of Agriculture. FoodData Central. Published 2019)



Mango Market Share in New Zealand in 2023 (%)

- Mango Juice
- Mango (Fresh)
- Mango (Dried)



¹ Mango varieties (*Mangifera indica*) - TopTropicals.com

PRODUCT	2022	2023	Percentage change
Mango Juice (HS code 200989)	3964 Tonnes	4710 Tonnes	+18.8%
Mango (Fresh)	2425 Tonnes	2941 Tonnes	+21.3%
Mango (Dried)	287 Tonnes	296 Tonnes	+3.1%

Table 2: Percentage change of tonnes of Mango products sold in New Zealand, 2022-2023

1.2 Uses & Benefits

Here is a showcase of the various value-added products that can be created from Mango. Underlined below have been identified as top market trends or high potential by assessing the offerings of leading retailers across New Zealand.

Processed Products

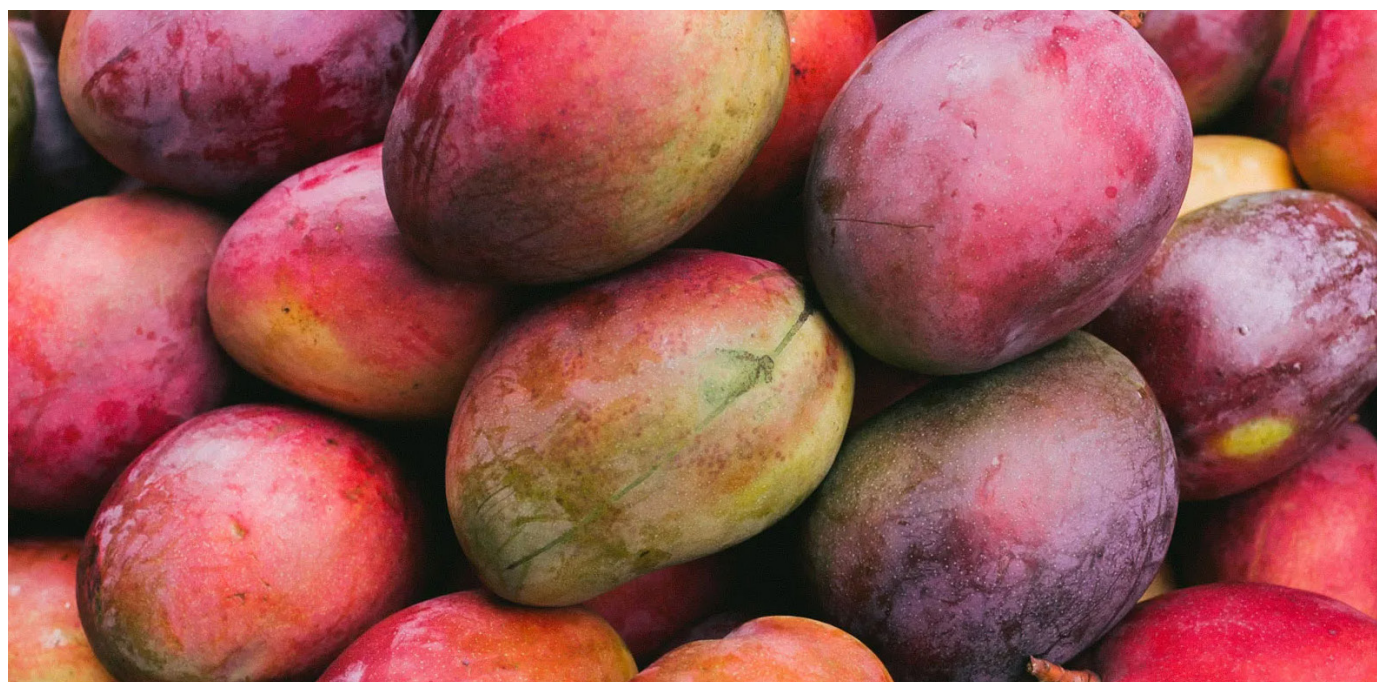
- Juice and concentrates - Mango juice is a popular beverage worldwide, and concentrated juice offers a shelf-stable option. Various blends with other fruits and vegetables can create unique flavours and additional nutritional benefits.
- Pulp - Frozen or canned mango pulp provides a convenient ingredient for smoothies, ice creams, desserts, and baking.
- Dried mango - Slices, strips, or powder forms offer a healthy snack option rich in nutrients and fibre.
- Jams and jellies - Mangoes are suitable for making flavorful jams and jellies, enjoyed on toast or as a filling for pastries.
- Pickles and chutneys - These condiments add a tangy and spicy twist to meals and utilize less-ripe mangoes.
- Mango wine and vinegar - Fermentation processes can transform mangoes into alcoholic beverages or versatile vinegar for culinary uses.
- Powdered mango - Dehydrated mango powder adds a concentrated flavour and nutritional boost to smoothies, yoghurt, and baked goods.

Convenience and Ready-to-Eat Options

- Fresh-cut mango - Pre-cut and washed mango cubes offer convenience and reduce food waste.
- Frozen mango chunks - Ideal for smoothies, yoghurt bowls, and baking, these frozen pieces are readily available year-round.
- Mango snacks - Dried mango chips, bites, and bars with various flavourings and coatings cater to on-the-go snacking needs.

Other Value-Added Products

- Mango butter - This rich and creamy butter extracted from the kernels has cosmetic and skin care applications.
- Mango kernel oil - This oil is a healthy alternative for cooking and can be used in cosmetics and hair care products.
- Mango leaf fresh or extract - Possesses anti-inflammatory and antioxidant properties with potential applications in pharmaceuticals and nutraceuticals. Also religious uses.
- Biodegradable packaging - Utilizing mango peel waste to create sustainable packaging options contributes to a circular economy.



1.3 Overall Market Insights

Table 3: Imports of fresh Mango in value to New Zealand

	2020		2021		2022		2023	
	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total
Australia	\$4,879,263	55.13%	\$6,589,460	74.43%	\$4,350,561	54.55%	\$6,458,693	55.60%
Peru	\$1,211,204	13.69%	\$808,046	9.13%	\$1,459,165	18.29%	\$1,956,456	16.84%
Mexico	\$1,876,697	21.20%	\$580,636	6.56%	\$851,950	10.68%	\$1,647,332	14.18%
India	\$139,034	1.57%	\$314,430	3.55%	\$658,688	8.26%	\$1,101,594	9.48%
Ecuador	\$744,270	8.41%	\$560,440	6.33%	\$655,546	8.22%	\$453,088	3.90%
Grand Total	\$8,850,468	100.00%	\$8,853,012	100.00%	\$7,975,910	100.00%	\$11,617,163	100.00%

(The grand total includes all countries importing to New Zealand. Only the Top 5 countries are displayed above. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

Figure 2: Imports of fresh Mango in value to New Zealand

(Only the Top 5 countries are displayed.)

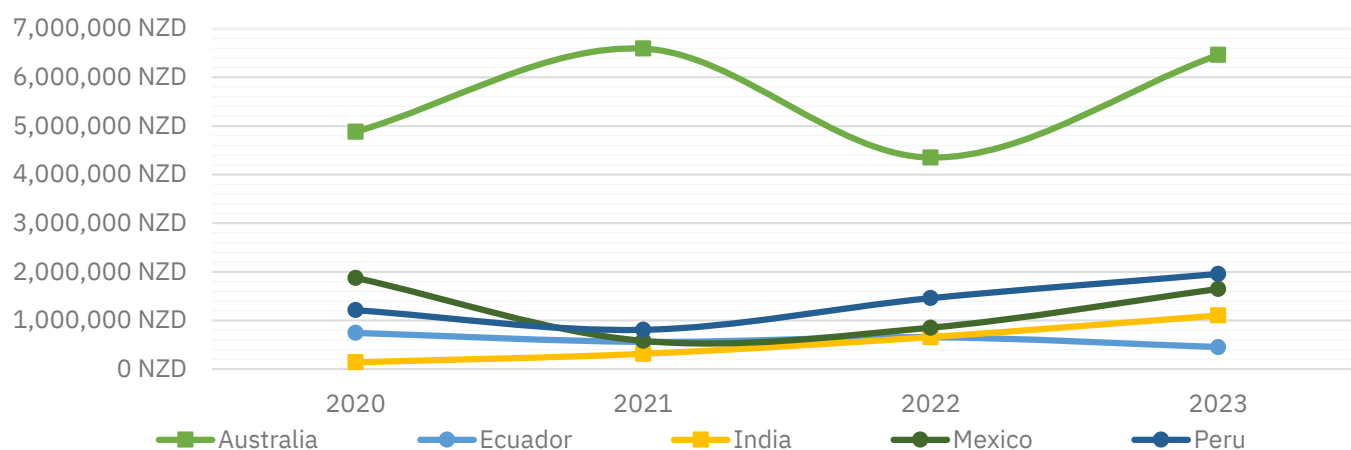


Table 4: Imports of fresh Mango in volume to New Zealand

	2020		2021		2022		2023	
	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total
Australia	1,148,151	36.6%	1,422,390	55.9%	914,459	37.7%	1,154,971	39.3%
Peru	692,820	22.1%	480,244	18.9%	746,677	30.8%	973,470	33.1%
Mexico	860,160	27.4%	250,340	9.8%	260,306	10.7%	528,124	18.0%
India	35,107	1.1%	132,061	5.2%	218,168	9.0%	174,280	5.9%
Ecuador	402,976	12.8%	260,175	10.2%	286,340	11.8%	110,454	3.8%
Grand Total	3,139,214	100.0%	2,545,210	100.0%	2,425,950	100.0%	2,941,299	100.0%

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Figure 3: Imports of fresh Mango in volume to New Zealand

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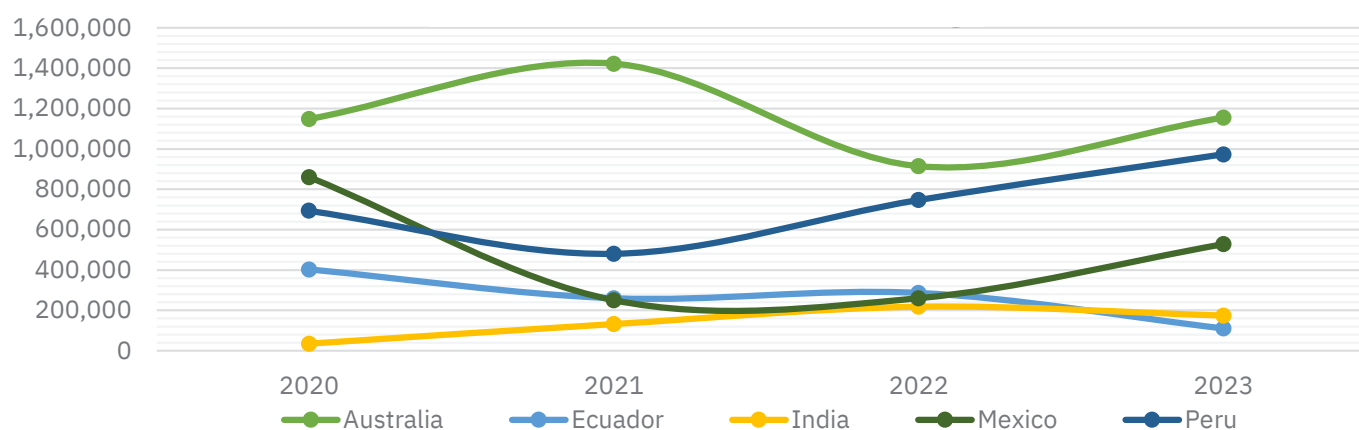


Table 5: Average price per kg of fresh Mango imported to New Zealand by trade country

	2020	2021	2022	2023	Grand Total
Australia	4.25 NZD	4.63 NZD	4.76 NZD	5.59 NZD	19.23 NZD
China	14.35 NZD		3.00 NZD		17.35 NZD
Ecuador	1.85 NZD	2.15 NZD	2.29 NZD	4.10 NZD	10.39 NZD
Fiji	3.06 NZD	2.84 NZD	3.77 NZD	3.63 NZD	13.30 NZD
India	3.96 NZD	2.38 NZD	3.02 NZD	6.32 NZD	15.68 NZD
Mexico	2.18 NZD	2.32 NZD	3.27 NZD	3.12 NZD	10.89 NZD
New Zealand		4.07 NZD			4.07 NZD
Peru	1.75 NZD	1.68 NZD	1.95 NZD	2.01 NZD	7.39 NZD
Taiwan		22.25 NZD	14.54 NZD	10.37 NZD	47.16 NZD
Thailand	8.77 NZD	8.78 NZD	8.76 NZD	11.78 NZD	38.09 NZD
Tonga	0.20 NZD	0.19 NZD	0.26 NZD	0.14 NZD	0.79 NZD
Turkey	2.79 NZD				2.79 NZD
United States	1.98 NZD	2.42 NZD	2.65 NZD	4.65 NZD	11.70 NZD
Vietnam	5.64 NZD	2.64 NZD	6.80 NZD	6.03 NZD	21.11 NZD

Figure 4: Average price per kg of fresh Mango as declared at New Zealand's border

(Only the Top 5 countries are displayed.)

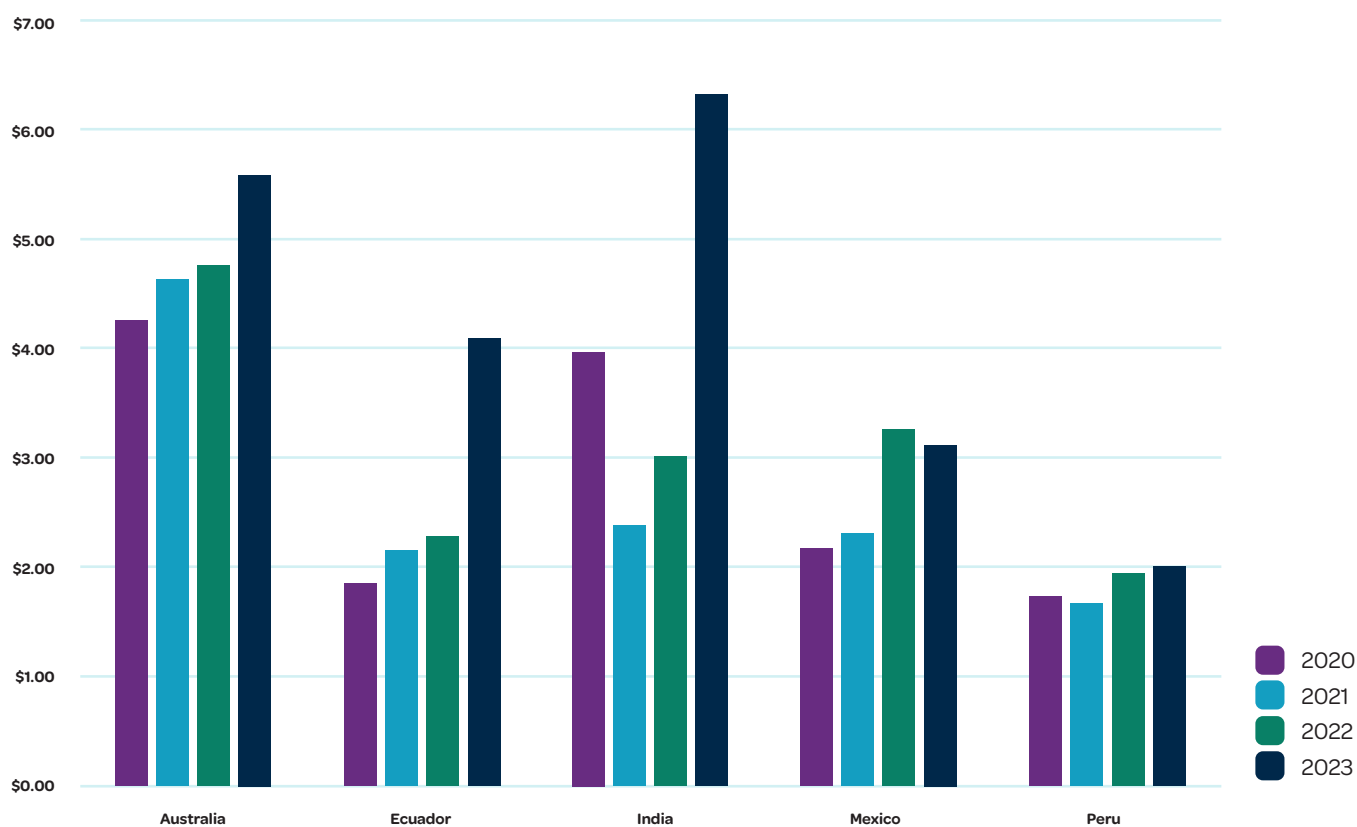


Table 6: Imports of dried Mango in value to New Zealand

	2020		2021		2022		2023	
	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total
Thailand	\$1,339,526	81.03%	\$1,797,558	86.80%	\$2,160,735	59.97%	\$3,088,083	82.50%
Ghana	\$267,498	16.18%		0.00%	\$153,808	4.27%	\$470,597	12.57%
Peru	\$24,051	1.45%		0.00%	\$324,341	9.00%	\$131,634	3.52%
Australia	\$22,011	1.33%	\$14,861	0.72%	\$389,698	10.82%	\$52,607	1.41%
Côte d'Ivoire		0.00%	\$258,556	12.48%	\$574,290	15.94%		0.00%
Grand Total	\$1,653,086	100.00%	\$2,070,975	100.00%	\$3,602,872	100.00%	\$3,742,921	100.00%

(The grand total includes all countries importing to New Zealand. Only the Top 5 countries are displayed above. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

Figure 5: Imports of dried Mango in value to New Zealand

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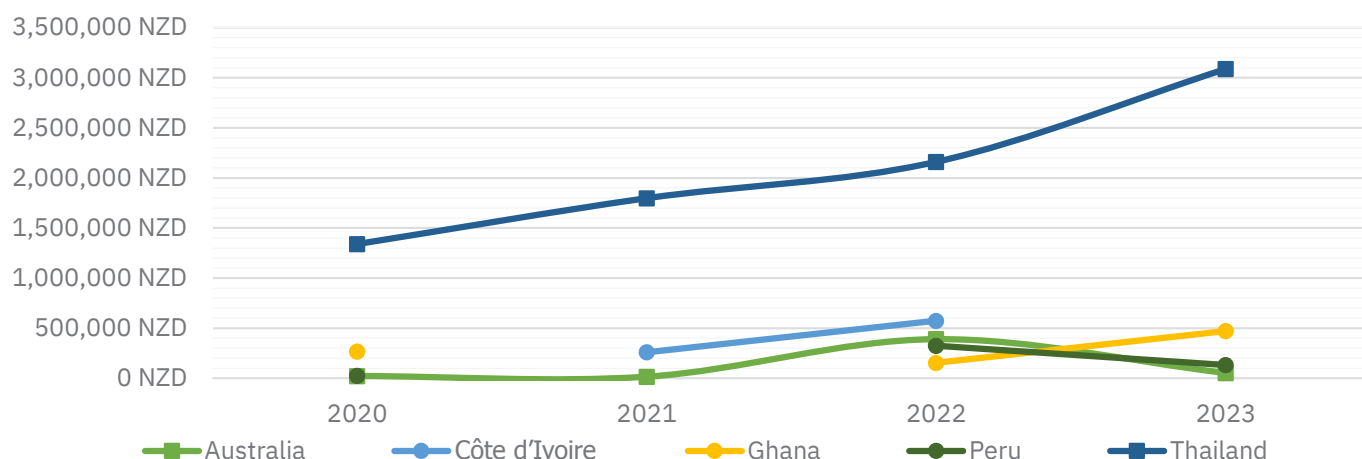


Table 7: Imports of dried Mango in volume to New Zealand

	2020		2021		2022		2023	
	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total
Thailand	138,619	84.5%	195,400	86.3%	204,333	71.0%	260,591	88.0%
Ghana	17,700	10.8%		0.0%	10,805	3.8%	29,667	10.0%
Philippines	6,896	4.2%	9,988	4.4%	6,841	2.4%	3,907	1.3%
Australia	826	0.5%	1,021	0.5%	24,422	8.5%	2,038	0.7%
Côte d'Ivoire		0.0%	19,995	8.8%	41,480	14.4%		0.0%
Grand Total	164,041	100.0%	226,404	100.0%	287,881	100.0%	296,203	100.0%

(The grand total includes all countries importing to New Zealand. Only the Top 5 countries are displayed above. *Some countries may not have an IHS, and small quantities may appear in this table. This represents sample size commodities recorded at the border.)

Figure 6: Imports of dried Mango in volume to New Zealand

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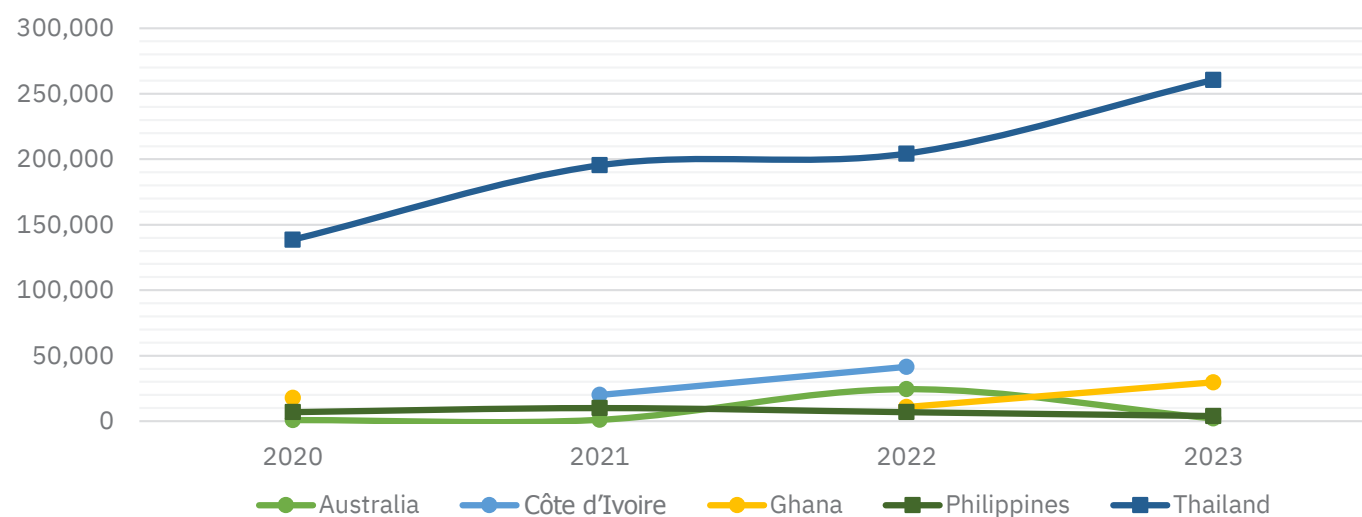
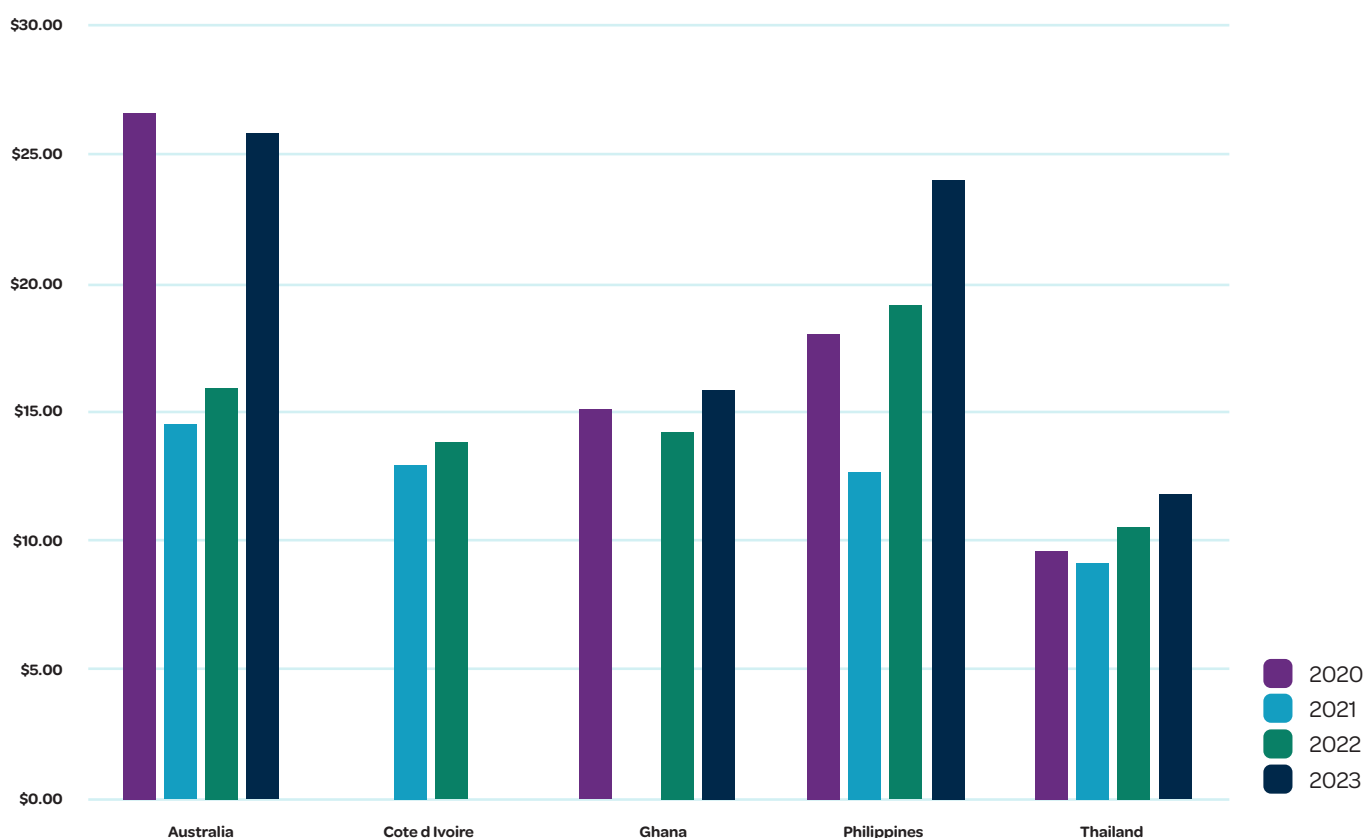


Table 8: Average price per kg of dried Mango imported to New Zealand by trade country

	2020	2021	2022	2023	Grand Total
Australia	26.65 NZD	14.56 NZD	15.96 NZD	25.81 NZD	82.98 NZD
Canada		0.00 NZD	0.00 NZD	0.00 NZD	0.00 NZD
China	13.03 NZD	11.69 NZD	12.04 NZD	12.55 NZD	49.31 NZD
Côte d'Ivoire		12.93 NZD	13.84 NZD		26.77 NZD
Fiji	11.57 NZD	12.79 NZD	18.72 NZD	10.55 NZD	53.63 NZD
Ghana	15.11 NZD		14.23 NZD	15.86 NZD	45.20 NZD
India	3.92 NZD	12.19 NZD	4.61 NZD	6.44 NZD	27.16 NZD
Indonesia		2.00 NZD			2.00 NZD
Malaysia	4.63 NZD	55.00 NZD		22.01 NZD	81.64 NZD
Mexico		19.81 NZD			19.81 NZD
Peru	20.91 NZD		19.44 NZD	23.46 NZD	63.81 NZD
Philippines	18.03 NZD	12.74 NZD	19.13 NZD	24.03 NZD	73.93 NZD
Singapore	13.03 NZD	12.25 NZD	13.12 NZD	13.59 NZD	51.99 NZD
South Africa		29.00 NZD	14.75 NZD	20.36 NZD	64.11 NZD
Sri Lanka	22.11 NZD	19.95 NZD	5.34 NZD	15.75 NZD	63.15 NZD
Taiwan	21.63 NZD	26.94 NZD	85.75 NZD		134.32 NZD
Thailand	9.66 NZD	9.20 NZD	10.57 NZD	11.85 NZD	41.28 NZD
Ukraine	5.51 NZD				5.51 NZD
United States				0.00 NZD	0.00 NZD
Vietnam	176.00 NZD		15.00 NZD	14.24 NZD	205.24 NZD

Figure 7: Average price per kg of dried Mango as declared at New Zealand's border

(Only the Top 5 countries are displayed.)



2. Market Access

2.1 Biosecurity Requirements and Advice

Importing Mango into New Zealand requires strict biosecurity controls to protect the country's unique flora, fauna, and agriculture. The Mango IHS can be found [here](#) which outlines the specific conditions that must be satisfied before a product can be brought into the country. The complete list of fresh fruits and vegetables authorised by countries for import into New Zealand is available via this link: [Importation and Clearance of Fresh Fruit and Vegetables 152.02 \(mpi.govt.nz\)](#)

When Mango is authorised to be imported to New Zealand from your country, there are particular quarantine requirements that exporters from Pacific Island countries must comply with before shipping.

These requirements include:

- ✓ Mango must be grown following commercial production requirements specified by the New Zealand Ministry for Primary Industries (MPI).
- ✓ Control measures must be **implemented** to target pests of economic importance (regulated) to New Zealand.
- ✓ Mango should be the primary content, it must not include flowers, leaves, roots or any other plant parts.
- ✓ Mango should be intact, sound and clean; free from rot, signs of shrivelling and dehydration, any visible foreign matter, damage caused by pests affecting the flesh, and abnormal moisture; able to withstand transportation and handling.
- ✓ Clean packaging, free from soil and contaminants.
- ✓ Inspection by the exporting country's quarantine/biosecurity agency to ensure the **absence of regulated pests**.
- ✓ A valid and **completed Phytosanitary Certificate** issued by the exporting country's NPPO (quarantine/biosecurity agency) in line with International Plant Protection Convention (IPPC) standards, verifying compliance with the relevant import health standard.
- ✓ Dried mangoes, if imported, should be clearly labelled and packaged in airtight containers to retain freshness.

Importers must follow **the clearance process diligently**, as failure to comply at any stage can result in refusal to enter the New Zealand border. Non-compliance reduces the willingness of New Zealand importers to source commodities from the Pacific and has financial implications for exporters.

2.2 Biosecurity Clearance in New Zealand for imported Mango

Countries approved to export fresh mangoes to New Zealand can be found via the [PIER Search tool](#).

STEP 1: Provision of Documents

- ✓ Importers must submit detailed information to MPI before goods arrive.
- ✓ Electronically issued phytosanitary certificates are sent to MPI.
- ✓ MPI reviews all accompanying documents for compliance with Import Health Standards (IHS).

STEP 2: Non-compliant Documentation

- ✓ Clearance is refused for consignments without valid phytosanitary certificates and those detected with regulated pests.
- ✓ Correct documentation must be provided within 48 hours if missing.
- ✓ Consignments detected with regulated pests are treated before they are released.
- ✓ A consignment may fail clearance if:
 - the number of goods exceeds those stated on the phytosanitary certificate (within reason)
 - the consignment contains unmanifested goods

STEP 3: Transit Requirements

- ✓ Consignments that are shipped in phases (short-shipped) must comply with the IHS.
- ✓ Transit consignments must meet requirements for importing into transit countries.

STEP 4: Transport to Approved Inspection Facility

- ✓ Consignments are transported to an approved transitional facility under an MPI inspector's direction, using pest-proof containers for inspection.

STEP 5: Phytosanitary Security Before and After Inspection

- ✓ Consignments not inspected within 4-6 hours are securely stored.
- ✓ Non-compliant consignments are securely stored until biosecurity requirements have been satisfied.

STEP 6: Inspection

- ✓ MPI conducts risk profiling activities before or upon arrival.
- ✓ Visual inspections verify the absence of pests or contaminants and compliance with the IHS.
- ✓ Sampling plans determine inspection quantity based on lot size.
- ✓ Biosecurity clearance is granted when all IHS requirements are met.

STEP 7: Reconciliation

- ✓ Compliance checks validate phytosanitary certificates.

2.3 Food Safety Requirement

In New Zealand, food safety regulations are primarily governed by the Food Act 2014 (Available here), the Food Regulations 2015, and the Australia New Zealand Food Standards Code. These regulations apply to all foods sold in New Zealand, including imported foods like Mango.

General Requirements

- **Traceability:** Businesses must be able to trace where their food products came from and demonstrate how they are going to ensure that any products that are found to be unsafe can be quickly removed from sale. (Section 110 of New Zealand Food Act 2014)
- **Hygiene:** All aspects of food handling, from production to harvesting, processing, storage, and sale, must adhere to strict hygiene standards. (Food Hygiene Regulations 1974)
- **Labelling:** Food items must be correctly labelled, including ingredients and allergens, and may need to have nutritional information displayed. (Sections 11, 12, 227, 228 of New Zealand Food Act 2014)

Please note that this information may be subject to change; it is crucial to consult New Zealand's Ministry for Primary Industries | NZ Government (mpi.govt.nz) or similar authorities for the most current guidelines. They are country-specific and product-specific. ** Failure to adhere to these regulations can result in rejection at the New Zealand border, additional treatment costs, fines, or other penalties.*

2.4 Pharmaceuticals and Cosmetic Requirements²

Mango butter, derived from the seeds of the mango fruit, is increasingly popular in both the pharmaceutical and cosmetic industries due to its rich composition of antioxidants, essential fatty acids, and vitamins. In the pharmaceutical sector, mango butter is valued for its moisturising and healing properties, often used in treatments for dry skin, eczema, and dermatitis. The production of pharmaceutical-grade mango butter must adhere to strict purity standards, including being free from contaminants and undergoing clinical testing to ensure efficacy and safety. These regulations differ depending on the intended use of food safety standards for nutraceuticals and cosmetic regulations for cosmetic products, as well as the target export markets. In New Zealand, this typically involves adhering to Good Manufacturing Practices (GMP) and meeting the criteria set forth by the New Zealand Medicines and Medical Devices Safety Authority (Medsafe). Compliance with local authorities such as the Food and Drug Administration (FDA) will also be required for products aimed at the U.S. market.

In the cosmetic industry, mango butter is a sought-after ingredient in skincare and haircare products, and it is used for its hydrating and nourishing properties. Cosmetic-grade mango butter has less stringent requirements compared to its pharmaceutical counterpart. Still, it must meet safety standards for topical use, be free from harmful additives, and be ethically sourced. Cosmetic products containing mango butter must also comply with labelling requirements, including listing all ingredients and potential allergens.

Beyond mango butter, other products derived from mango include mango seed oil, used similarly in skin and hair care, and mango extract, utilised in dietary supplements, flavouring agents, and as a natural sweetener.

2.5 Overview of the export process from the Pacific Islands to New Zealand



3. NZ Buyers' Requirements

3.1 Quality

Quality needs may vary between importers, so exporters and growers of Mango (fresh and processed) should be aware of any importer specifications regarding size, colour, and general quality of the commodity. Contact your relevant biosecurity and food safety authorities for further information on market specifications.

Mango Juice/Puree: Quality requirements for mango juice or puree include a high fruit content with no added artificial colours or flavours. The juice should be free from sediments, and the puree should have a smooth consistency without lumps. The pH level should be maintained to ensure safety shelf stability, and the product should be pasteurised to

² Mango butter | Centre for the Promotion of Imports from developing countries (CBI)

eliminate pathogens. The flavour, colour, and aroma should be characteristic of ripe mangoes, and the product must comply with food safety standards for microbial and pesticide residues.

Fresh Mango: Fresh mangoes must be ripe but not overripe, with a uniform size and shape appropriate to the variety. The skin should be free from blemishes, cuts, or bruises. The fruit should have a firm texture, freshness, and a vibrant colour typical of the specific mango variety. There should be no signs of insect infestation or fungal growth. >40% light green background colour. Pink blush. Skin with yellow flesh. Oval heart shaped. Firm smooth skin, sweet aroma & free of foreign odours and tastes. Fully coloured fruit >14% DM. Fruit shoulders above the stem end. Weight and grading depend on the variety of Tommy Atkins (Between 325g and 562g) and Honey Gold (Between 388g and 777g). Temperature at arrival 13-18°C

Frozen Mango: Frozen mangoes should be made from fully ripe, high-quality fresh mangoes. The pieces should be uniform in size, free from freezer burn, and maintain the fruit's natural colour and flavour. The texture should be firm and not mushy upon thawing. The product should be quick-frozen to preserve nutritional value and freshness. There should be no added sugar or preservatives, and the product must meet food safety standards for microbial content.

Dried Mango: Quality dried mangoes should have a uniform size and colour, with a texture that is neither too hard nor too chewy. They should be moisture-free to prevent mould growth, but not overly dry. The flavour should be sweet and tangy, without any off-tastes or odours. Dried mangoes should not have added sugar or preservatives if marketed as natural. The product should comply with standards for microbial safety, and the drying process should ensure the elimination of pathogens.

Mango Butter: Mango butter, used mainly in cosmetic and skin care products, should be high purity, with no additives or contaminants. The texture should be smooth and consistent, and the colour should be uniform, typically a creamy white or slightly yellow. The butter should have a mild, pleasant aroma and not be rancid. It should be free from pesticides and heavy metals, and the production process should ensure the removal of any harmful substances.

3.2 Certifications

Several certification standards could be considered for the New Zealand market:

a) HACCP (Hazard Analysis and Critical Control Points) is a systematic approach to food safety that identifies, evaluates, and controls potential hazards in food production.

It's a preventive system that identifies critical points in food production process where hazards can be controlled or eliminated. It aims to ensure the safety of food products by identifying and managing potential risks at critical stages of production.

b) New Zealand GAP (Good Agricultural Practices) is a set of voluntary standards that focus on agricultural and aquacultural practices to ensure the safety and sustainability of food production. These requirements cover various aspects, such as environmental conservation, worker welfare, and food safety. Essentially, Global GAP aims to establish and maintain standardised farming and food production practices to meet quality and safety standards for global markets.

3.3 Volume

New Zealand buyers prefer consistency in supply. Orders can range from a few kilograms for smaller businesses to several metric tonnes for larger retailers or manufacturers. It is essential to maintain the volume of mango you supply.

3.4 Seasons of Production and Harvest

In Fiji, mangoes are in season from September to March. For export, it is recommended to pick mangoes when they are half-ripe, just as their colour begins to change. This ensures they reach their destination in optimal condition. Harvesting is recommended early in the day to preserve quality, avoiding the intense heat that can build up in the field and potentially damage the fruit.

3.5 Packaging

Mango should be packaged appropriately, taking care of biosecurity and food safety requirements. All products should have clear labels indicating the product name, country of origin, net weight, packaging date, expiration date, and other relevant certifications.

Mango Juice/Puree: Packaging for mango juice or puree must be airtight to prevent oxidation and loss of flavour. Typically, these products are packaged in Tetra Paks or similar cartons, which provide a sterile, light-proof environment. Plastic bottles can also be used, preferably those made from PET (Polyethylene Terephthalate) as they are strong, lightweight, and recyclable. Aseptic bulk packaging like drums or bag-in-box systems are common for larger quantities, ensuring prolonged shelf life and ease of transport.

Table 9: New Zealand Mango Import Seasonality

[illegible]

Fresh Mango: Fresh mangoes require packaging that allows for some air circulation while protecting the fruit from damage during transportation. Standard options include cardboard boxes with ventilation holes or plastic crates. These containers often contain cushioning materials like bubble wrap or foam netting to prevent bruising. It is also essential that the packaging is stackable and sturdy to withstand handling and shipping stresses.

Frozen Mango: Packaging for frozen mango, usually in chunks or slices, needs to be moisture-proof and freezer-safe. Vacuum-sealed plastic bags or resealable freezer bags are commonly used. These bags should be tough enough to prevent freezer burn and leakage. Larger plastic containers or cartons resistant to low temperatures can be used for bulk packaging, often with inner liners for added protection.

Dried Mango: Dried mangoes require packaging that prevents moisture ingress to maintain their texture and flavour. Mylar bags or foil-lined pouches with zip-lock or heat-sealed closures are ideal. These materials offer a barrier against light, moisture, and air, prolonging the product's shelf life. Packaging should also be resealable if not intended for single use, allowing consumers to maintain product freshness.

Mango Butter: Mango butter, commonly used in cosmetics, requires packaging that protects against contamination and oxidation. Small, airtight containers made of glass or high-grade plastic are typical. Dark or opaque containers are preferred to protect from light, mainly if the butter is used in skincare products. Mango butter may be packed in larger quantities of sealed plastic or metal drums to ensure stability and purity during storage and transport.

3.6 Transport recommended and precautions

Mango should be transported using conditions that will minimise contamination risks for biosecurity and food safety requirements.

Mango Juice/Puree: Prefer sea freight for bulk and air freight for quick, small deliveries. Ensure leak-proof packaging and temperature control.

Fresh Mango: Use air freight for freshness over long distances; sea freight for closer destinations. Require temperature control, gentle handling, and ventilation.

Frozen Mango: Sea freight in refrigerated containers is common; air freight for urgent deliveries. Maintain consistent freezing temperature and moisture-proof packaging.

Dried Mango: Suitable for both air and sea freight, with sea freight being more cost-effective for bulk. Keep dry and at a moderate temperature and protect against humidity and pests.

Mango Butter: Both sea and air freight work, with air freight for time-sensitive shipments. Store in cool, dry conditions away from extreme temperatures and sunlight.

4. Buyers/Distributors

Pharmaceuticals/Skin Care industry: Buyers and manufacturers such as Pure Ingredients or Shieling Laboratories require high-quality mango butter for the cosmetic and nutraceutical sector.

Beverage industry: Companies such as Juice Fiji, The Homegrown, Karma Organic (Juices), Remedy (Kombucha), Tank (Fresh smoothies).

Processed Food Industry: For integration into preparations with companies such as the collective (Probiotic yoghurt with mango puree), Wattie's (Baby puree), ParrotDog (Mango flavoured beer), Pure Delish (Granola).

Fresh or Dried whole Mango Buyers

Large commercial & wholesalers: Foodstuff (Gilmours, Trents Wholesale), Foodstuffs (New World, Pak'n Save, Four Square), Woolworth (New Zealand Grocery Wholesalers) Bidfood New Zealand.

Table 10: Volume of Fresh Mango by New Zealand Importer's, with percentage of total market share, 2020-2021

	Fiji		Total Quantity (Kg)	Total % Total
	Quantity (Kg)	% Total		
FARM FRESH VEGE LTD	918	36.60%	918	36.60%
VALLEY FRUIT AND VEGE LTD	823	32.81%	823	32.81%
UMAR FOODMART LTD	767	30.58%	767	30.58%
Grand Total	2,508	100.00%	2,508	100.00%

5. Key Success Factors

