

# Breadfruit (Artocarpus altilis)



## 1. Offer Analysis

### 1.1 General Description: Production, end-use, and market

Breadfruit is a nutritious starchy fruit tree widely grown across the Pacific Islands, where it is deeply embedded in traditional agroforestry systems. A single breadfruit tree can produce 50–200 fruits per year depending on variety and location. The fruit is roughly football-sized (1–3+ kg) with a green, bumpy exterior and creamy white flesh. Breadfruit thrives in tropical climates and is valued as a food security crop due to its resilience – mature trees tolerate drought and poor soils, and bear prolifically for decades. Pacific Island Countries (PICs) like Fiji, Samoa, and Tonga have historically grown breadfruit mainly for local consumption, but there is increasing interest in commercial production (e.g. new orchards in Fiji and Samoa) to supply export markets.

For over a decade, these countries have been permitted to export fresh breadfruit to New Zealand under strict quarantine conditions, though volumes exported remain small and well below potential market demand. Instead, most surplus breadfruit in PICs is consumed locally or goes to waste in peak season, indicating significant untapped supply capacity if value chains are developed.

New Zealand does not grow breadfruit (its climate is too temperate), so all supply is imported from tropical producers. Fiji has been the primary exporter of fresh breadfruit to the NZ market in recent years. Tonga trialed fresh exports around 2015–2016 but had to suspend them due to compliance issues, and Samoa’s fresh exports are still limited by a small quarantine-treatment facility. As a result, current fresh breadfruit availability in NZ is small and seasonal – typically available about 6 months of the year (December–March and June–August) aligning with Pacific harvest seasons.

New Zealand importer’s interviews indicate that only a few tonnes are imported in each supply window, which is far below the potential demand if supply were consistent. Besides fresh fruit, frozen breadfruit has become an important form in the NZ market. PIC exporters ship frozen breadfruit (often mixed in containers with other frozen root crops like taro and cassava) to reach Pacific diaspora consumers year-round. Processed breadfruit products are still niche – for example, breadfruit flour from Samoa is available on a small scale, sold in Auckland and via online retailers catering to gluten-free customers. Overall, breadfruit in New Zealand is currently a niche product found mainly in ethnic food channels. The growing Pacific Islander population in NZ ensures a strong cultural demand base, and there is emerging interest beyond the diaspora due to breadfruit’s unique qualities (e.g. as a gluten-free flour). This sets the stage for significant market growth, provided key challenges are addressed.

Primary consumer demand for breadfruit in New Zealand comes

Table 1: Breadfruit nutritional content

BREADFRUIT NUTRITIONAL CONTENT	
Nutrient	Amount (per 100g)
Energy	~103 kcal
Carbohydrates	~27g
Sugars	~11g
Dietary Fiber	~5g
Protein	~1g
Total Fat	~0.2g
Vitamin C	~21mg
Potassium	~490mg
Iron	~0.5mg

(Source: U.S. Department of Agriculture. FoodData Central. Published 2019)



from the Pacific Island diaspora. Pacific Island communities (especially those of Samoan, Tongan, and Fijian heritage) seek out breadfruit as a beloved “taste of home” when it is available. They typically prepare it in traditional ways – boiling in coconut cream, roasting in an umu (earth oven), or frying – as part of family and community feasts. Because the breadfruit supply is limited and seasonal, many Pacific Islander consumers exhibit a “buy it while you can” mentality. During the import season, breadfruit often sells out quickly in produce markets where Pacific customers shop. NZ-based Pacific Islanders also tend to be price-sensitive and will substitute with cheaper staples (taro, cassava, kumara, etc.) when breadfruit is too expensive.

If supply became more consistent and prices dropped, importers believe demand could increase to ~12 tonnes per week in season (~288 tonnes/year)<sup>1</sup>. Outside of Pacific Islanders, other ethnic groups contribute modestly to breadfruit demand. Some Indian and Southeast Asian New Zealanders buy breadfruit occasionally (using it in curries or ethnic dishes),

<sup>1</sup> Pacific Community, Breadfruit market study by Andrew McGregor & Kyle Stice. (February 2018).

but their per-household usage is low compared to Pacific families. Health-conscious consumers form a small emerging segment – for example, a “gluten-free/grain-free” market is growing for breadfruit flour and products, albeit from a tiny base. In summary, core demand is strong among New Zealand’s ~300,000 Pacific Islanders, and there are additional niche opportunities (Asian cuisine, health foods) that could grow with product awareness. The overall demand picture is constrained not by lack of interest, but by irregular supply and high prices (many potential buyers simply can’t get breadfruit regularly, or opt out due to cost).

Fresh breadfruit is typically sold by the piece or kilogram at produce markets. High price is consistently cited by importers as a major barrier to expanding sales because many price-conscious consumers will opt for cheaper carb sources. The elevated costs stem from every step of the value chain: growers in PICs incur expenses for pest control and certification (raising the farmgate price), exporters must perform quarantine treatments and airfreight or manage cold shipping, and importers face biosecurity inspection fees and the risk/cost of spoilage. All these costs roll into the final price.

Frozen breadfruit, in contrast, has a lower unit price. This is partly because freezing allows bulk sea shipment and year-round sales, improving economies of scale. Frozen taro and other root crops are sold at similar value, making frozen breadfruit price-competitive in that segment. However, frozen product is viewed as less desirable by some traditional consumers (fresh breadfruit has better texture and cultural preference).

Overall, breadfruit remains a premium-priced item in NZ. There is downward pressure on pricing as more supply comes in – for instance, if Pacific exporters achieve larger volumes (e.g. via container loads) and less spoilage, prices could moderate, which in turn would unlock higher demand.

## 1.2 Uses & Benefits

Breadfruit is extremely versatile in culinary uses and can be consumed at different stages of ripeness. When mature but still firm (green stage), it is used like a root vegetable – traditionally boiled, baked, roasted, or fried as a staple carbohydrate much like potato or taro. Ripe soft breadfruit (yellow stage) is sweeter and eaten as a dessert or fermented for storage. Its utility extends beyond fresh consumption into various value-added products:

- **Breadfruit Chips** – Thin slices fried into chips (similar to potato chips) for snacks.
- **Breadfruit Flour** – Dried and milled breadfruit yields a gluten-free flour, used for baking or as a thickener
- **Frozen Breadfruit** – Peeled, pre-cooked or uncooked chunks frozen to prolong shelf life and simplify preparation for consumers (popular in diaspora markets).
- **Other Products** – Breadfruit can be mashed and made into doughs or pastes for traditional dishes, and even fermented into beverages or used as animal feed in some contexts.

Nutritionally, breadfruit is a powerhouse gluten-free carbohydrate source. It is rich in complex carbs and dietary fiber, and provides a range of vitamins (especially vitamin C and several B vitamins), and minerals like potassium, magnesium,

and calcium. The flesh is low in fat and has more protein and micronutrients than staples like white rice or potatoes. These health benefits, along with its status as a plant-based, gluten-free ingredient, are driving interest in breadfruit products among health-conscious and specialty diet consumers (e.g. those on grain-free or paleo diets). In summary, breadfruit offers significant nutritional and functional benefits, usable fresh or processed, which position it as an attractive crop for developing new food products.

## 1.3 Overall Market Insights

This section of the report should be interpreted with caution, as there is no specific HS code for breadfruit. In MPI datasets, breadfruit is classified under HS code 810900091 – ‘Other Fruits, Edible; Fresh, N.E.C. in Heading No. 0801 to 0810’, which may also include various minor tropical fruits. As such, data accuracy may be affected.



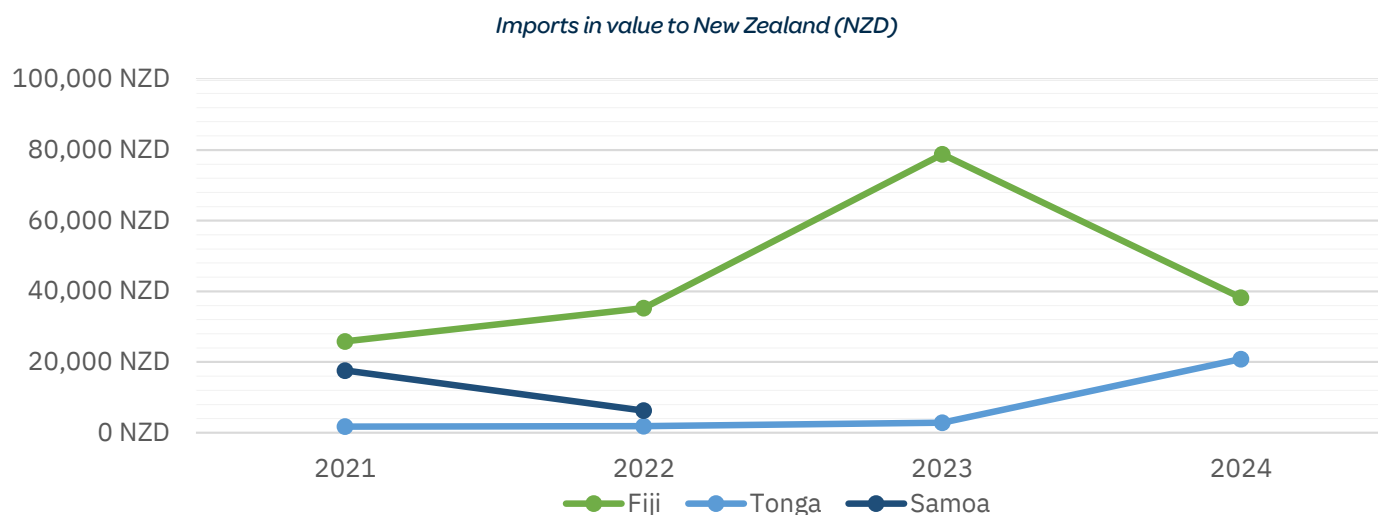
**Table 2: Imports of breadfruit in value to New Zealand**

(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)

	2021		2022		2023		2024	
	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total	Value (NZD)	% Total
Fiji	\$25,865	93.75%	\$35,318	94.96%	\$78,791	96.47%	\$38,228	63.70%
Tonga	\$1,723	6.25%	\$1,876	5.04%	\$2,883	3.53%	\$20,838	34.72%
Samoa		0.00%		0.00%		0.00%	\$949	1.58%
<b>Grand Total</b>	<b>\$27,588</b>	<b>100.00%</b>	<b>\$37,194</b>	<b>100.00%</b>	<b>\$81,674</b>	<b>100.00%</b>	<b>\$60,015</b>	<b>100.00%</b>

**Figure 1: Imports of breadfruit in value to New Zealand**

(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)



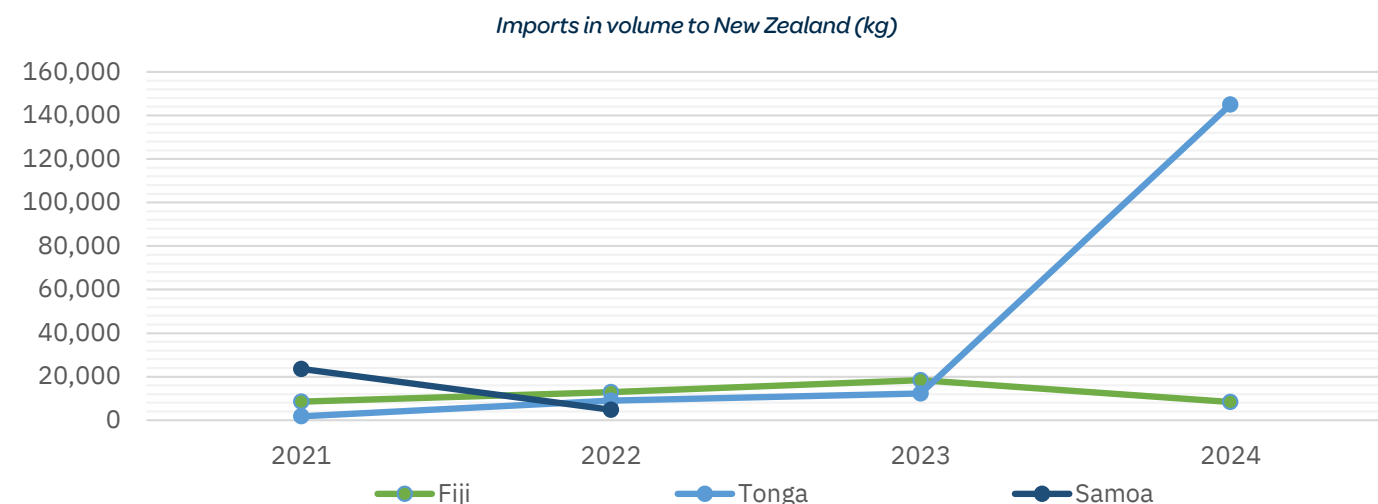
**Table 3: Imports of breadfruit in volume to New Zealand**

(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)

	2021		2022		2023		2024	
	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total	Quantity (Kg)	% Total
Fiji	8,523	25.1%	12,851	48.3%	18,420	59.9%	8,367	5.5%
Tonga	1,789	5.3%	8,940	33.6%	12,314	40.1%	145,004	94.5%
Samoa	23,580	69.6%	4,817	18.1%	0.0%	0.0%	0.0%	
<b>Grand Total</b>	<b>33,892</b>	<b>100.0%</b>	<b>26,608</b>	<b>100.0%</b>	<b>30,734</b>	<b>100.0%</b>	<b>153,371</b>	<b>100.0%</b>

**Figure 2: Imports of breadfruit in volume to New Zealand**

(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)



**Table 4: Average price per kg of fresh or chilled breadfruit as declared at New Zealand's border**

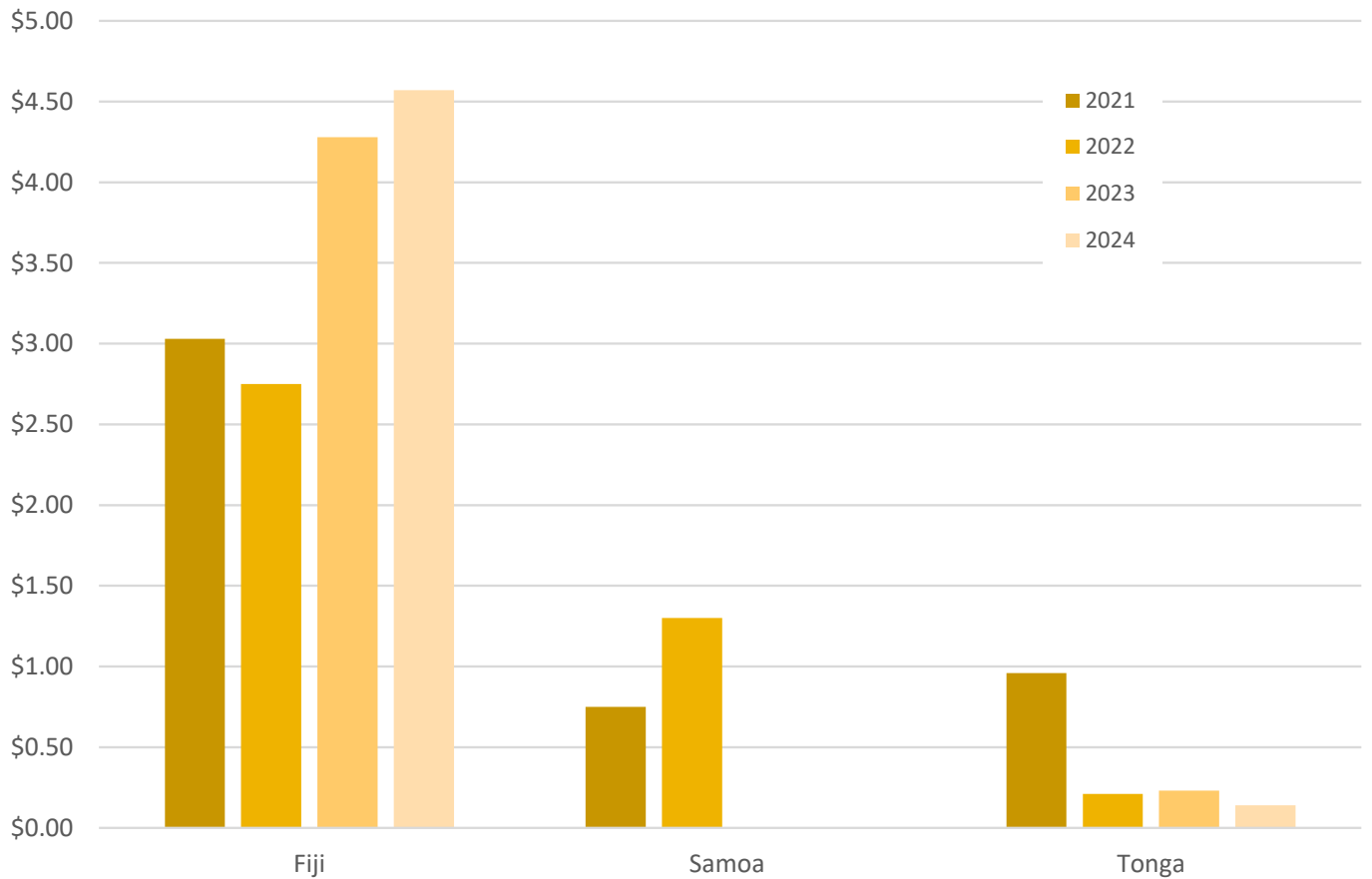
(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)

	2021	2022	2023	2024
Fiji	3.03 NZD	2.75 NZD	4.28 NZD	4.57 NZD
Samoa	0.75 NZD	1.30 NZD		
Tonga	0.96 NZD	0.21 NZD	0.23 NZD	0.14 NZD

**Figure 3: Average price per kg of fresh or chilled breadfruit as declared at New Zealand's border**

(The data captured correspond to the HS Code 810900091 - Other Fruits, Edible; Fresh, N.E.C. In Heading No. 0801 To 0810, it may include other fruits than Breadfruit.)

*Average Price per kg Top 3 Countries*



## 2. Market Access

### 2.1 Biosecurity Requirements and Advice

New Zealand has very stringent biosecurity measures for importing fresh fruits and vegetables, and breadfruit is no exception. Because breadfruit is a host for fruit flies and other pests, NZ's Ministry for Primary Industries (MPI) enforces a specific [Import Health Standard \(IHS\) for fresh breadfruit](#). The IHS outlines the specific conditions that must be satisfied before a product can be brought into the country. The complete list of fresh fruits, herbs, 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 \(mpi.govt.nz\)](#)

New Zealand's strict biosecurity regulations heavily shape the breadfruit market. Import protocols for fresh breadfruit are onerous (mandatory quarantine treatments, inspections, etc.), which add to cost and can cause supply interruptions if any issue arises. For example, in 2019 a single instance of fruit fly larvae found in a breadfruit shipment led to a suspension of Fiji's exports – a reminder that failure to meet protocols can abruptly remove product from the market. When Breadfruit 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 to New Zealand. These requirements include:

- ✓ Breadfruit must be grown following commercial production requirements specified by New Zealand Ministry for Primary Industries (MPI).
- ✓ Breadfruit should be the primary content and inspected in accordance with appropriate official procedures and found to be free from visually detectable quarantine pests, as specified by the New Zealand Ministry for Primary Industries.
- ✓ All fresh breadfruit must undergo an approved quarantine treatment before export to NZ. High-Temperature Forced Air (HTFA) treatment is the most common – the fruit is heated at a controlled temperature for a set duration to ensure any fruit fly eggs/larvae are killed. Some countries may use vapour heat treatment or irradiation as alternatives. The treatment must be done in a facility approved under a Bilateral Quarantine Agreement (BQA) between NZ and the exporting country (e.g. Fiji has BQA protocols for breadfruit).
- ✓ Inspection by the exporting country's quarantine/biosecurity agency to ensure the absence of regulated pests.
- ✓ Frozen breadfruit (uncooked) is generally easier to import – it still requires a phytosanitary certificate and must come from a pest-free or treated source, but the freezing process and processed form reduce pest risks. Exporters of frozen breadfruit typically must have their processing facility approved/hygienic and include a certificate of origin and any treatment details.

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.

No special tariffs or trade barriers apply to Pacific breadfruit – in fact, under trade agreements like PACER Plus, many PIC-origin goods enter NZ duty-free, so the main regulatory hurdles are biosecurity and food safety rather than tariffs. The influence of regulation on market size is significant: when rules were clarified in 2002 to ban non-commercial cooked breadfruit imports (due to fruit fly risk), it essentially eliminated informal personal imports and shifted all supply to officially treated fresh or frozen channels.

Market entrants must therefore factor in compliance as a cost of doing business, and those who navigate NZ's regulations successfully will have an advantage (since poor compliance by one exporter can disrupt the whole market's access). Overall, regulatory requirements raise the bar for entry but also ensure that only serious, prepared suppliers participate – which can improve consistency for the market in the long run.

### 2.2 Biosecurity Clearance in New Zealand for imported Breadfruit

Countries approved to export fresh Breadfruit 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 or transit countries.

#### Step 4: Transport to the 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 to 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, frequency varies based on importer history.

## 2.3 Food Safety Requirements

Apart from biosecurity, breadfruit (being a food item) must comply with New Zealand's general **food safety and labeling regulations** - Food Act 2014 ([Available here](#)). Fresh whole breadfruit is usually sold unlabeled in produce sections, so the main requirement is that it be fit for consumption (not contaminated or adulterated). Importers of fresh produce have to register under the Food Act and keep records traceable to the source. Any treatments (e.g. if fruit were irradiated) must be disclosed according to Food Standards Code labeling rules, but in practice breadfruit is not irradiated for NZ (HTFA is used instead).

For processed breadfruit products (flour, chips, frozen packs, etc.), all packaged food must carry an appropriate label in English. This includes: product name, ingredients (if multi-ingredient; pure breadfruit flour would just list breadfruit), net weight, country of origin (strongly recommended, and required by major retailers), manufacturer details or importer contact, and date marking if applicable. A nutritional information panel is required for packaged foods like chips or flour sold at retail. Breadfruit products should also meet any specific standards – e.g. if making health claims ("gluten-free", etc.), they must comply with the Food Standards Code requirements for those claims (breadfruit naturally is gluten-free, so it can be labeled as such, but the producer must ensure no cross-contamination with gluten sources).

## General Requirements

- **Traceability:** Businesses must be able to trace where their food products came from and where they are going to ensure that any products that are found to be unsafe can be quickly removed from sale.
- **Hygiene:** All aspects of food handling, from production to harvesting, processing, storage, and sale, must adhere to strict hygiene standards.
- **Labelling:** Food items must be correctly labelled, including ingredients and allergens, and may need to have nutritional information displayed.

Please note 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.*

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



## 3. Market Specification

### 3.1 Quality

Quality needs may vary between importers, so exporters and growers of Breadfruit (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.

Consistent high quality is a top priority for NZ breadfruit importers. Several quality factors are particularly important:

**Maturity Stage:** Breadfruit must be harvested at the right maturity. Immature breadfruit (fully green interior) is a big problem – it will be hard and watery even after cooking, which disappoints customers. NZ retailers reported issues with past shipments containing too many immature fruits; knowledgeable Pacific customers will reject fruit that looks too green. On the other hand, overripe fruit (very yellow/brown and soft) is prone to rot and also undesired. Importers prefer breadfruit with a slight yellow blush on green skin, indicating maturity but not overripeness. Exporters should carefully grade out immature and overripe fruit, shipping only mature, firm fruit that will ripen gradually en route. Typically, this means harvesting when latex sap is minimal and flesh is firm but not rock-hard.

**Variety and Size:** In the Pacific, there are many breadfruit varieties (round, oval, large, small, seeded/seedless). NZ buyers have learned that some larger varieties have very short shelf-life (as little as 3–4 days before going soft), whereas smaller round varieties like ‘Uto Dina’ from Fiji stay firm up to 10–14 days under cooling. Thus, importers prefer specific varieties known to ship well. For Fiji, Uto Dina and Balekana are favored. Very large breadfruits (>3 kg) are usually not wanted – they not only risk incomplete quarantine treatment (heat may not penetrate fully) but also spoil faster and are too expensive per piece for retail. Exporters should target medium-sized fruits (~1–2 kg each) which NZ wholesalers and consumers find manageable (average fresh breadfruit in NZ is ~1.2 kg each). Uniformity in size and variety in each shipment is ideal so that buyers can predict ripening and customers know what to expect.

**Physical Condition:** No bruises, cuts, or punctures on the fruit. Breadfruit skin is easily damaged during handling – a seemingly minor bruise at packing can manifest as a black rotten spot by the time it ripens. Importers have observed ~15% of fruits with such damage in some shipments, which they want to reduce. Suppliers should implement gentle handling: padding in picking bins, avoiding dropping fruit (breadfruit shouldn't hit the ground), and careful packing in cartons to cushion each fruit. The stem end should be trimmed and ideally capped or dripped of latex; an exposed stem can be an entry for pathogens or hide insects. Any sap that does leak on skin should be cleaned so it doesn't leave black stains or stickiness that consumers find unappealing. Freedom from pests and disease is critical (as discussed, NZ will inspect – any scale insects or fungal spots can cause rejections). Visually, fruit should be clean, with light green/yellow coloration, and free of surface mold or excessive dirt.

**Shelf Life:** Buyers expect a reasonable shelf life after arrival. Fresh breadfruit should be able to hold for at least a week post-clearance under proper storage (at 12–15°C). Using varieties like Uto Dina and harvesting at correct maturity help ensure this.

Some retailers in NZ reported large oval varieties turning soft in 3 days – that is too short for them to sell through. So, exporters should monitor how long their fruit stays marketable and look for at least ~7–10 days shelf life. Precooling fruit after harvest and maintaining a cold chain at about 13°C can extend life (but avoid chilling below 10–12°C, which can cause chill injury). Trials have shown storing breadfruit at -12°C (with proper humidity) can keep it for a couple of weeks. NZ importers will value shipments that arrive in firm condition and give them a few days to distribute and sell before fruits ripen fully.

In practice, meeting these quality expectations means having a good post-harvest handling protocol: pick at correct ripeness, handle gently, treat for pests, and pack carefully. Exporters should communicate the variety and grade specifications to NZ buyers. Some importers might even provide feedback or specs – for example, requiring >80% of fruit in a shipment to be in a defined maturity color range, or specifying “no visible defects >2 cm in diameter”. Adhering to such specs builds importer confidence. It was noted that Pacific Island customers in NZ are very discerning about breadfruit quality – they will not buy if it's too green or looks damaged – so importers will only reorder from suppliers who consistently hit the quality mark.

[\(See Foodstuff North Island full requirements\)](#)

### 3.2 Certifications

An important aspect for processed imports is ensuring the exporting facility follows good manufacturing practices. While NZ does not routinely require HACCP certificates at the border for low-risk foods, importers often prefer suppliers who are HACCP or ISO 22000 certified or inspected by local food safety authorities. This gives assurance that products like breadfruit chips are safe (free of contaminants, proper moisture content to prevent mould, etc.). Also, no additives in excess of allowed levels should be present – for example, sulphites as preservatives in dried breadfruit would need to be within permitted limits and declared on the label.

Two certification standards have to 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 aquaculture 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's essential to maintain the volume of Breadfruit you supply.

In summary, importers require dependable volumes – even if starting small – delivered on a consistent schedule. Meeting this requirement may involve robust harvest planning and possibly coordinating with other breadfruit producers to ensure continuity. Those suppliers who manage consistency will likely become preferred partners for NZ importers, as reliability is as prized as quantity in this market.

### 3.4 Packaging and Labelling

Breadfruit 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.

Packaging needs for breadfruit are straightforward but crucial to maintain quality. High-quality, strong, moisture-resistant cardboard cartons should be used to withstand stacking and transport, ensuring the produce arrives store-ready without the need for repacking. Individual fruits should be adequately cushioned to minimise the risk of bruising.

Fresh breadfruit is typically packed in strong cardboard cartons or crates. NZ importers often prefer the standard 10 kg carton size used for many tropical fruits, as it is easy to handle and stack. Within each carton, fruit should be cushioned – wrapping each breadfruit in paper or padding partition cells can prevent them from bruising each other. Ventilation holes in the cartons are important to allow airflow (breadfruit can respire and generate heat; some ventilation prevents overheating and mold). Cartons should be able to withstand stacking without crushing the fruit at the bottom. In some cases, plastic crates are used (if part of a returnable packaging system), but single-use fiberboard cartons are more common for export. Each carton should have a label indicating at minimum: "Breadfruit", variety if known, count or weight, exporter name, and country of origin (COO labeling is encouraged on produce; consumers often see "Product of Fiji" on the store bin). NZ retail law requires country of origin labeling for single-ingredient fresh produce starting in 2022, so ensuring the COO is on packaging or on accompanying documentation is now mandatory. Many importers will add their own sticker or signage, but providing clear labels from origin is a good practice.

For frozen breadfruit, packaging is usually poly bags or vacuum packs inside boxes. For instance, peeled breadfruit segments might be vacuum-sealed in 1 or 2 kg bags, then 10–20 of those bags in a master carton. The packaging must keep the product at frozen temperatures and prevent freezer burn – so a thick plastic liner or vacuum seal is ideal. Labeling for frozen products should include all the info mentioned (product, net weight, producer, origin, pack date/best-before date, etc.). It's also wise to include cooking instructions or usage tips for consumer

packs

### 3.5 Transport recommended and precautions

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

Fresh breadfruit can be shipped by air or sea. High-value, small shipments often go by air freight to maximize freshness (transit <1 week from harvest to NZ retail). For example, early-season breadfruit sometimes flies on the same routes as fresh papaya or mango from Pacific islands. Air freight is costly, but the premium retail price of breadfruit can sometimes justify it for small volumes. Larger shipments use refrigerated sea containers. As noted, breadfruit is generally kept at about 12–15°C cold storage; a reefer container can be set accordingly (not as cold as typical fruit like apples, which travel at near 0°C). Sea transit from islands like Fiji or Samoa to NZ is relatively short (4–8 days sailing), so with proper precooling and packing, quality can be maintained. The cold chain must be unbroken – after HTFA treatment and packing, fruit should be cooled and kept in a cool environment through to loading in the refrigerated container or air cargo hold.

Importers may specify their preference. Some might require the exporter to use ethylene absorbent sachets in packaging to slow ripening, or a modified atmosphere bag lining to extend shelf life (there have been trials where breadfruit wrapped in special film lasts longer, though it's not yet standard practice). These are value-add steps that could be adopted if needed. At minimum, exporters should ensure containers are loaded properly (e.g. not over-stacked blocking airflow) and all export documents are affixed/present to avoid delays at the border. For processed items like chips, ambient (room temperature) shipping is fine, but ensure they are well sealed against moisture and handled to avoid crushing the chips. Flour typically ships in moisture-proof sacks (20 kg bags, as noted with Samoan flour in NZ) – pallets of flour must be shrink-wrapped and kept dry.

In summary, appropriate packaging and careful transport are required to deliver breadfruit in good condition. NZ buyers will expect packaging that protects the fruit and meets basic labelling laws. Missing or incorrect labels (e.g. no country of origin) or damaged packaging can lead to rejection or markdowns, so getting this right is part of meeting buyer specs. Many Pacific exporters are already experienced with packaging root crops (taro, etc.), so leveraging similar materials and methods works for breadfruit. It's advisable for exporters to discuss packaging with their NZ importer – some importers might even supply standardized boxes or labels to use for uniformity. By aligning on these requirements, suppliers improve their professionalism in the eyes of buyers, which can lead to longer-term relationships.

### 3.6 Mixed Loaded Consignments

Mixed-loaded consignments must be issued with the correct documentation and loaded and transported appropriately to minimise any risk of contamination and/or damage risk.

## 4. Types Buyers/Distributors

**Fresh Importer:** A small number of importers handle breadfruit alongside other Pacific produce, including established companies with tropical produce divisions such as Moshims. These importers manage MPI clearance and distribute product to retailers or through wholesale produce markets.

**Processed Food Industry:** Essentially in frozen form with brands such as Cibus.



## 5. Key Success Factors



## Acknowledgments

We would like to extend our sincere appreciation to the representatives of Moshim Ltd and Cibus for generously sharing their valuable insights on the New Zealand market. Their contributions were instrumental in the preparation of this report.