



Pacific Horticultural
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Australia's Commercial Kava Pilot: An Assessment of Systemic Change in the Pacific Kava Industry



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Australia's Commercial Kava Pilot: An Assessment of Systemic Change in the Pacific Kava Industry

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Acronyms

ABS	Australian Bureau of Statistics
AHC	Australian High Commission
BfArM	German Federal Institute for Drugs and Medical Devices
DARD	(Vanuatu) Department of Agriculture & Rural Development
DFAT	Australian Government Department of Foreign Affairs and Trade
FAO	United Nations Food and Agriculture Organization
FDA	United States Food and Drug Administration
FSANZ	Food Standards Australia New Zealand
GESI	Gender equality and social inclusion
GI	Geographical Indications
HACCP	Hazard Analysis Critical Control Point
IPP	Intellectual property protection
MDF	Market Development Facility
NDARC	Australian National Drug and Alcohol Research Centre
NZ	New Zealand
NZ MPI	New Zealand Ministry for Primary Industries
ODC	Australian Office of Drug Control
PHAMA Plus	Pacific Horticultural and Agricultural Market Access Plus Program
PIC	Pacific Island Country
PIF Secretariat	Pacific Islands Forum Secretariat
PNG	Papua New Guinea
PSIDS	Pacific Small Island Developing State
PTI	Pacific Trade Invest
QA	Quality assurance
R&D	Research and development
SPC	Pacific Community
WHO	World Health Organization
WIPO	World Intellectual Property Organization

Terminology

Dried kava	Whole kava root (not ground into a powder) that has been dried
Formal kava market	Kava sold in Australian retailers, such as Coles, Paul's Liquor or Chemist Warehouse
Fresh kava	Kava juice extracted directly from the whole, undried root of the kava plant
Green kava	Harvested whole kava root that has not yet been dried
Informal kava market	Kava sold in Australia on platforms such as Facebook Marketplace or through word-of-mouth via Pasifika community networks
Kava powder	Dried kava root that has been ground or pounded to produce a dried powder
ni-Vanuatu	A person of ethnic Vanuatu origin
Noble kava	Varieties of kava suitable for regular consumption
Pasifika diaspora	Non-indigenous Pacific Islander communities residing in Australia
Tudei kava	Varieties of kava that have specific cultural or therapeutic uses, but which are not generally considered suitable for regular consumption
Vatu	The national currency of Vanuatu

Executive Summary

In December 2021 the Australian Government launched Phase 2 of its Pilot program permitting the commercial importation of kava (the Pilot). The Pilot aimed to assess the risks associated with kava importation and determine whether the resumption of kava imports was viable.

The purpose of this study was to explore market system impacts from the Pilot, changes in the distribution of benefits for women and youth and impacts on the natural environment. It is intended that the findings of this study will inform the Australian Government's decision-making regarding kava importation policy and support for Pacific Island kava stakeholders. The research took place from May to June 2023 and involved in-country data collection in Fiji, Tonga and Vanuatu, as well as remote calls with respondents based in Australia and New Zealand (NZ). Although seven Pacific Island Countries (PICs) exported kava to Australia under the Pilot, the scope of study was limited to these three countries as they represented the largest PIC kava exporters to Australia by volume. A wide range of stakeholders were interviewed, including farmers, exporters, logistics companies, Australian importers and PIC, Australian, and NZ Government representatives. The study also incorporated quantitative findings from a farmer household survey that PHAMA Plus undertook in Fiji, Tonga and Vanuatu from May-June 2023.

High level takeaways from the study are:

1. In a short span of time, Australia has emerged as a major export market for PIC kava. In only the first year of the market opening, Australia rose to become the second most important export market by volume for Tonga and the third most important export market by volume for Fiji.
2. Actors in the PIC kava market reported positive changes resulting from the Australian market opening, including increased trade between Australia and PICs, increased income for exporters and farmers, new entrants to the kava export market and increased opportunities for women and youth.
3. Imports under the Pilot have satisfied pent-up demand for the traditional form of powdered kava within Pasifika communities in Australia. This segment of the market is unlikely to see further significant growth if the importation of kava as a food product becomes business-as-usual trade policy.

4. There are opportunities for Australia to reform domestic policies and provide support to PICs that would help their kava industries to grow, improve product safety and to help exports to Australia to increase.
5. There are issues to monitor regarding food security and adverse effects to the natural environment, but kava cultivation has a high potential for sustainability.
6. Fiji, Tonga and Vanuatu have very different kava cultures, industries and value chains. Australia should consider these differences when formulating policy on importation and support for the kava sectors in these countries.

The study's research questions and key findings are presented below.

Q1. What are the key considerations for Australian policymakers regarding the kava market in Pacific Island Countries?

Q1.1. What is the cultural and economic significance of the kava industry in Pacific Island Countries?

- Kava has played an immensely important cultural and economic role in the lives of Pacific Islanders for thousands of years. Pacific Islanders evidence a strong preference for kava produced in their countries of origin. This preference extends to Pasifika diaspora communities in Australia. Consumption patterns are constantly evolving, but the general trend across the region is more frequent consumption.
- Kava has significant economic importance in the Pacific. Kava is the highest value cash crop across the three countries of study. Figures from Fiji show the value of kava exports to all international markets was FJD 40,655,128 (AUD 27,117,618)¹ in 2022. Kava is the largest cash crop in Vanuatu, valued at AUD 3 billion, eclipsing the sum of all other major crops, including coconut, cocoa, coffee, vanilla, Tahitian Lime, pepper and noni (AUD 1.9 billion).² Kava also plays a unique role at the household level for farmers. It acts as a form of emergency savings and is a critical means for rural households to meet expenses such as school fees and home repair from climate-

¹ Internal data from the Fiji Ministry of Agriculture

² DARD (2023)

related disasters. A farmer household survey conducted by PHAMA Plus in 2023 found that kava cultivation contributed to 82% of household income in communities surveyed in Fiji, 86% in Vanuatu and 73% in Tonga.³

Q.1.2. What are the high-level industry trends and gaps in the kava market system in Pacific Island Countries?

- While kava has a long history in the Pacific, the current trade market is relatively new. Traditionally, people generally consumed varieties that they grew and prepared in local communities. This began to change in the 1980s as kava started to become a cash crop and market commodity.
- As farmers began growing kava for international markets and not only for local consumption, quality and safety issues emerged. Kava exports from PICs included significant quantities of kava not suitable for regular consumption. These issues contributed to the German Government banning the importation of kava in 2002, which led to a cascade of bans in other EU countries.
- Since EU bans of kava, the Vanuatu Government introduced legislation and procedures to better regulate the market and ensure the safety of kava exports. Another important driver of kava safety and quality are the demands of US importers, who impose rigorous testing requirements on kava imports. Significant safety and quality gaps still exist, however, particularly regarding post-harvest processing across the three countries of study.
- The global kava industry still holds enormous growth potential, which can benefit PICs. At the same time, there is a risk that larger countries with more advanced agricultural sectors will enter the market and displace PIC smallholder farmers.

Q.1.3. Do significant barriers exist for exporters to accessing the market pathway under the kava Pilot?

- This study finds that the Pilot has provided PIC exporters with a high degree of access to the Australian kava market. Factors such as Australia's rigorous labelling standards (compared to other comparable markets such as the US and NZ) and requirements that a separate permit be issued for each consignment (such a requirement does not exist in the US or NZ) imported do not constitute significant barriers to trade.

³ It should be noted, however, that interaction with the market economy can be limited in the communities surveyed. Many households would manage to meet most of their basic needs through subsistence farming activities.

- While significant trade barriers were not found to exist, a number of issues were identified that either presented challenges for exporters or were constraints to growth of PIC kava exports to Australia. These included: (i) Australian restrictions on value-added kava or kavalactone food products, which limits the demand for kava in Australia, (ii) long clearance times for consignments of kava imports at Australian ports of entry, (iii) a lack of networks for producers and exporters to the formal Australian retail market and a reliance on informal networks to sell kava, (iv) delays in information sharing on Australian import rules, and (v) uncertainty on the Australian market post-Pilot dampening interest and discouraging investment in exporting to Australia.

Q2. What have been the market system, social and environmental impacts of the opening of the Australian market?

Q.2.1. What market system changes have occurred in the Pacific kava industry resulting from the opening of the Australian market to kava imports?

- A kava market has emerged in Australia that is segmented by country of origin (Fiji, Tonga and Vanuatu) and by informal and formal sales. The informal market supplies traditional powdered kava to Pasifika diasporas, is sold largely outside the formal retail system (such as Facebook Marketplace and community networks), and has limited growth potential. The formal market targets Australians beyond those of Pacific Islander descent. It is small, but growing quickly and is more innovative. The formal market includes major retailers, such as Chemist Warehouse and Coles supermarkets.
- Under the Pilot, exports grew rapidly, but unsustainably, from Tonga and Fiji. Exports increased more slowly from Vanuatu, but likely more sustainably. Tongan exports serve only the informal Australian market, Fijian exports serve both formal and informal Australian markets and exports from Vanuatu target the high-end formal Australian retail market.
- Entirely new exporters have emerged to take advantage of the market opening.
- Exporter/processors have made substantial capital expenditures to meet actual or anticipated increases in demand from the Australian market, such as enlarging processing facilities to increase the scale of output, purchasing machinery to produce kava powder (where exports were previously focused on dried whole root) or achieving Hazard Analysis Critical Control Point (HACCP) certification.

- Some existing exporters made a major shift in their export markets, reorienting to Australia.
- Exporter/processors have increased research and development (R&D) spending, a trend to which the market opening has contributed, alongside other factors. Examples include improvements in packaging, marketing and new product lines, such as instant kava powder.

Q.2.2. What benefits (monetary and non-monetary) have kava exporters and other actors in the value chain experienced as a result of the market opening?

- Key benefits observed in Fiji and Vanuatu included increased income for exporters and farmers, improved income diversification and enhanced risk mitigation for exporters. While figures were not available for Tonga or Vanuatu, the Fijian Ministry of Agriculture estimates that exports to Australia during the Pilot period generated FJD 4,531,281 (AUD 3,022,436) in revenue. Figures from a farmer household survey conducted by PHAMA Plus estimate that exports to Australia during the Pilot period have generated AUD 2,044,277 in revenues for 5,499 farming households in Fiji, AUD 7,592,398 in revenues for 1,257 farming households in Tonga⁴ and AUD 723,216 for 4,037 farming households in Vanuatu.
- For Tonga, the Pilot brought increased opportunity as well as risk for farmers, due to Tonga's unique model of smallholder export aggregation. While this model increases direct market access for farmers to international markets, farmers are typically not paid for their product until it is sold in overseas informal markets.

Q.2.3. What is the benefit distribution for farmers, women and youth in the kava industry? Is there evidence that this has changed since the opening of the Australian market?

- Kava requires no inputs aside from cuttings, is low maintenance, is high value and generally has low barriers to entry. It therefore has great potential as a pro-poor cash crop if international demand grows and if market access in more remote areas can be improved.
- Government representatives in Vanuatu expressed concern that farmers were not receiving a fair distribution of benefits from the kava trade. There was a tendency for them

to view agents unfavourably, believing that they were taking advantage of farmers. Major exporters described, however, how agents are indispensable in the kava industry. Their attempts to source kava directly from farmers did not work due to communication and logistical challenges.

- Opportunity for women and youth was a strong theme that emerged during the course of the study. The Pilot has benefited women- and youth-led enterprises. As kava exporter/processors move up the value chain and develop more sophisticated operations, they employ more women. The percentage of female personnel of major exporter/processors was well over 50%.

Q.2.4. What are the impacts of kava cultivation on land use and the environment? Is there evidence that the impact has changed since the opening of the Australian market?

- Kava is a crop that naturally has a high potential for environmental sustainability due to its suitability for agroforestry practices, organic farming practices and intercropping. The awareness and usage of environmentally sustainable cultivation practices was generally high amongst the farmers interviewed and was evident during site visits to farms across the three countries. If demand from the Australian market were to lead to a significant increase in cultivation, this study does not find that this would likely lead to undue environmental harm.

Q3. What are the policy implications for the Australian Government of the observed impacts of the opening of the Australian market?

Q3.1. What changes to Australian domestic policy and practice could be made to help the Pacific kava industry?

1. Make the market opening permanent trade policy. This study has found that the market opening has produced clear benefits for the PIC kava industry. The best way to sustain and increase these benefits would be to close the Pilot period at the end of 2023 and follow it with a permanent opening of the market. Such an opening would help repair past uncertainty created by kava import bans and be a boost to goodwill and bilateral relations between Australia and PICs. In addition to economic benefits, it would have tremendous culturally symbolic importance to PICs.

⁴ Calculating benefits for Tongan farmers is problematic, however, because these figures are calculated based on market prices during the pilot for kava, a large quantity of the stock of which remains unsold. See Q2.1 for further details.



A kava processor in Labasa, Vanua Levu holding dried roots of kava.

2. Increase communication and coordination with PICs. This could include: (i) consulting PICs more closely in the design of future Pilot phases and/or the formation of kava trade policy and (ii) industry engagement similar to that of NZ Ministry for Primary Industries (NZ MPI).
3. Introduce a phased requirement for kava importers to be certified to help ensure that kava reaching Australia is safe.
4. Allocate resources to speed up custom clearance processes for import consignments of kava.
5. Allow for value-added kava food products in the Australian market, such as flavoured juices and products using kavalactone extracts.
6. Enact stricter point of origin labelling (e.g., if Fijian exports use Vanuatu kava, this must be specified on the label).

Q3.2. What other forms of support could Australia or other development partners provide to support the Pacific kava industry?

1. Help the PIC kava industry position itself for the future and not focus simply on increasing production for traditional, saturated markets.
2. Support PICs to improve the quality of processing equipment and testing facilities (solar dryers, steel pounders, fast and affordable nobility and microbial testing, etc.).
3. Encourage PICs to introduce phased regulation and facilities for mandatory HACCP or other such certification for export.
4. Connect PIC exporters to Australian buyers, through, for example, trade shows, trade missions or other events.
5. Encourage PICs to introduce a purchase register to improve traceability and ensure farmers receive a fair price for the kava they sell.
6. Fund additional research to address critical information gaps in the sector (e.g., the role of the informal sector, or a market study on international market trends).
7. Support regional and national efforts for the introduction of geographic indications (GI) for kava.
8. Support organic and environmental stewardship certification for kava farmers and processors.

Background

Australia's Pilot for the commercial import of kava

In June 2007, the Australian Government banned the commercial importation of kava over concerns related to misuse of the product amongst the some First Nations communities.⁵ In October 2019, Australia reconsidered the ban, allowing for the resumption of commercial imports under a pilot. As described on DFAT's website, 'the Pilot recognises the deep cultural significance of kava for Pacific Islander communities both in Australia and across the Pacific region...[and] supports broader efforts to increase stronger cultural and economic ties between Australia and Pacific Island Countries.'⁶

The Pilot consists of two phases. Phase 1 commenced in December 2019 and allowed for an increase in the amount of kava brought in via passenger travel to Australia from 2kg to 4kg. The resumption of commercial imports of kava as a food took place under Phase 2 in December 2021 for a period of two years.

The Pilot allows for the import of 'kava powder, kava beverages (obtained by the aqueous suspension of kava (*Piper methysticum*) root using cold water only, and not using organic solvent), washed and frozen raw kava roots or rhizomes (whole or sliced) and dried kava roots or rhizomes (whole or sliced).'7

As outlined on DFAT's website, kava imports are subject to biosecurity officer inspection upon arrival to ensure they are 'commercially prepared and packaged in clean and new packaging...free from live insects and other biosecurity risk material'⁸ and subject to other conditions, depending on whether they are in powder or beverage form.

Australian labelling requirements for kava include: (i) listing the name of the food (kava root or kava root powder), (ii) mandatory warning statements, including: 'use in moderation' and 'may cause drowsiness', (iii) indication of country of origin, (iv) lot identification, (v) the name and address of the importer, (vi) a best before date and (vii) prohibitions on making any nutritional or health claims. There is no testing of kava performed at ports of entry. Import consignments are simply 'subject to a visual and label inspection to verify compliance.'⁹

The Australian Government provides dedicated factsheets online for importers covering topics including permits and importing, biosecurity, imported food requirements, and labelling.¹⁰

The Kava plant



A kava farmer in Kadavu, Fiji carrying harvested kava plants back to his village for washing and drying.

Kava is a shrub grown across the Pacific, the roots¹¹ of which are consumed as a beverage. The roots contain kavalactones, compounds that produce mild psychoactive and relaxation effects. As defined in Vanuatu's 2002 Kava Act, the term 'kava' refers either to '(a) plants of the species *Piper Methysticum*; or (b) the traditional beverage obtained by cold water extraction of the plant's underground organs.' This definition is consistent with the Australia New Zealand Food Standards Code (FSANZ) definition of kava adopted by the 43rd Session of the joint Food and Agriculture Organization (FAO) and World Health Organization (WHO) Codex Alimentarius Commission (2020). Kava grows in tropical climates (20–35°C) with high rainfall levels (optimally over 2,200mm annually¹²) and in rich and well-drained soils. The plant takes three to five years to reach maturity at which point it reaches a height of two to three metres and a spread of two metres.¹³ At harvest, a kava plant's log root system is carefully dug out and cleaned. On average, the root mass of a mature plant weights approximately 10 kg undried and 2 kg dried.¹⁴ All stems of the plant are cut at the second node above ground and replanted directly after harvest – kava plants are propagated exclusively through cuttings as kava grows only sterile vestigial flowers that cannot be pollinated.

10 Available at <https://www.dfat.gov.au/geo/pacific/economic-prosperity-in-the-pacific/australia-kava-Pilot>

11 The below-ground parts of the plant include rhizomes and roots. These two parts have different uses, effects when consumed and occupy different parts of the kava value chain. For the purposes of simplicity, in this report the term 'roots' will be used to describe both the roots and rhizomes.

12 PHAMA Plus (2017)

13 PHAMA Plus (2023)

14 PHAMA Plus (2023)

5 Sydney Morning Herald (2007)

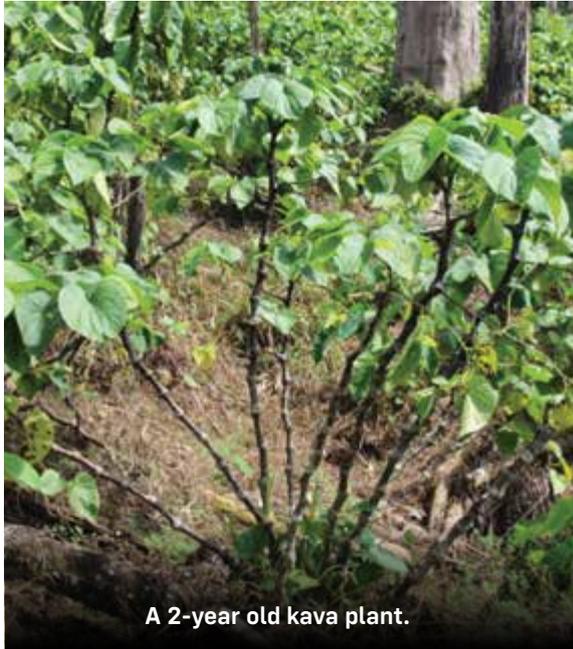
6 DFAT (2023)

7 DFAT (2023)

8 DFAT (2023)

9 DFAT (2023)

The kava plant has two major classifications: (1) noble varieties, which are safe for regular consumption and (2) tudei¹⁵ varieties, which are generally considered unsuitable for regular consumption, aside for occasional ceremonial purposes.¹⁶ Tudei kava contains flavokavins that are more likely to produce undesirable side effects, such as headaches, nausea and lethargy.



A 2-year old kava plant.

Purpose

The primary objective of the study is to examine the changes that have occurred within the market systems of the Pacific kava sectors as a result of the opening of the Australian market. The secondary objectives were to explore: (i) environmental impacts and (ii) changes in the distribution of benefits for women and youth resulting from the Pilot.

The findings of this study are intended to inform the Australian Government's decision-making processes regarding kava importation policy and support for Pacific kava stakeholders. This study focused on impacts in the Pacific and the interests of PICs. It complements separate research that is being led by the Australian National Drug and Alcohol Research Centre (NDARC) and Ninti One on the impacts of the Pilot within Australia.

¹⁵ Also known as 'two day' kava because of its potency. Colloquially, it is said that the effects last for two days.

¹⁶ This is a heavily contested notion. Tudei kava may not be optimal for typical, casual drinkers, but many drinkers consume kava for management of certain conditions. One kava vendor interviewed in Fiji explained how his clients take tudei kava to treat insomnia, manage symptoms of neurodivergence and mood disorders. According to one respondent from Fiji 'there is no bad kava; just different types of kava for different purposes.'

Methodology

The research took place from May to June 2023 and included in-country data collection in Fiji, Tonga and Vanuatu. The scope of the study was restricted to these three countries as they are the largest producers amongst PICs. Together, these three countries accounted for 87% of the number of suppliers of kava to the Australian market between December 2021 – December 2022.¹⁷ The qualitative elements included interviews with a wide range of stakeholders, including farmers, exporters, processors, Australian importers and PIC, NZ and Australian Government representatives. The study's scope did not include other markets, but respondents were asked to reflect on differences between the Australian, NZ and US markets. The study also collected quantitative data on the kava industries in Fiji, Tonga and Vanuatu, which was used in the final analysis. In addition, the study incorporated quantitative findings from a farmer household survey that PHAMA Plus undertook in the same countries of study from May-June 2023.

While DFAT funded the study, the research was undertaken independently. The Study Lead was a consultant from DevLearn, who worked with the support of PHAMA Plus. Respondents included the following groups:

- **PIC government and quasi-government agencies in Fiji, Tonga and Vanuatu**, including ministries of agriculture, trade, biosecurity, customs and district officers
- **23 Exporter/processors**:¹⁸ 8 in Tonga (including freight forwarders), 8 in Vanuatu and 7 in Fiji
- **3 agents/kava traders**: 1 in Fiji and 2 in Vanuatu
- **18 Smallholder farmers**, 2 in Fiji, 1 in Tonga and 15 in Vanuatu
- **Industry experts or academics**, including representatives from the Tonga Kava Committee, the Vanuatu Kava Association, and kava scholar Dr. Vincent Lebot
- 4 Australian importers
- Representatives from the Pacific Islands Forum (PIF) Secretariat
- **Australian Government departments**, including the Australian: (i) Department of Foreign Affairs and Trade, (ii) Department of Agriculture, Fisheries and Forestry (iii) Department of Health and Aged Care

¹⁷ PHAMA Plus (2022)

¹⁸ All exporters interviewed for this study also processed kava to varying degrees.

A more detailed respondent list is provided in Annex I of this report.

Limitations

Limits to generalisability of quantitative findings –

While the study employs a mixed methods design by incorporating market data and results from PHAMA Plus' farmer household survey, the study is essentially qualitative. While qualitative research can offer a representative picture on a topic, it cannot quantify impacts. The study is not a survey and will not be able to report, for example, precisely what percentage of certain actors in the value chain have changed business practices in certain ways.

Limits to ability to collect data on environmental and gender equality, disability and social inclusion (GEDSI) impact –

The in-country data collection period was one week in each country of study. This did not allow for a fulsome environmental assessment or GEDSI impact analysis. These themes are priorities for PHAMA Plus and DFAT, however, and were therefore included as areas of inquiry in the study.

Short study duration given the breadth of investigation –

The data collection period of the study was fifteen days, which was a short timeframe to cover interviews with such a broad range of actors across such a wide range of geographies. In total, approximately 100 individuals were interviewed across Fiji, Tonga and Vanuatu and seven islands within these countries. Remote calls were also held with respondents in NZ and Australia.

Limits to understanding of Australian legal, political and economic context –

While the study included consultations with Australian stakeholders, it focused on articulating the perspectives and outlining the needs of PICs. This study was not able to assess the extent to which all its recommendations are feasible within the Australian context. It simply offers a menu of options for the consideration of the Australian Government. In addition, while the study incorporated Australian kava import data in the analysis, there were limitations to the analysis possible of the demand side in Australia. The study respondents did not include Australian consumers of kava.

Limited access to market data across countries of study – For various reasons, including political sensitivities, data availability and other issues,

this study was not able to obtain the full range of information on the kava sectors in Fiji, Tonga or Vanuatu or information on these countries' kava imports and exports. This problem was particularly acute in Vanuatu, where the Government suffered a serious data loss across Departments in 2022, including in the Ministries of Trade and Agriculture.

Findings



A kava farmer in Vanua Levu, Fiji uproots kava from his farm ready for washing.

Q1. What are the key considerations for Australian policymakers regarding the kava market in Pacific Island Countries?

Q1.1. What is the cultural and economic significance of the kava industry in Pacific Island Countries?

Cultural importance

Kava has played an immensely important cultural and economic role in the lives of Pacific Islanders for thousands of years. Kava culture is most strongly rooted in Vanuatu, Fiji, Tonga, Samoa, Hawaii and Micronesia, although it also has a history in other PICs, including Solomon Islands, Micronesia, Papua New Guinea (PNG) and other countries. Patterns of consumption have traditionally varied considerably across and inside these countries. Some communities consumed kava occasionally to mark important rituals; other communities consumed it far more frequently, even on a daily basis. Consumption also shifted substantially under colonial rule during the 18th and 19th centuries, during which time it was frequently banned. Consumption patterns are still constantly evolving, but the general trend across the region is more frequent consumption.¹⁹ Traditionally the preserve of men, women in urban areas are starting to drink kava as well, a trend accelerated by seasonal worker

¹⁹ Vincent Lebot (2023)

returnees from Australia and NZ, where it is more common for both women and men to gather, socialise and relax over shells of kava after a day of hard work.

Pacific Islanders are proud of their national (and regional) kava varieties and evidence a strong preference for kava produced in their countries of origin. This preference extends to Pasifika diaspora communities in Australia. They also have different styles of preparing and drinking kava. Fijians and Tongans dehydrate kava roots and pound them to produce a powder. This powder is then placed inside a fine cloth and soaked in a large bowl of water (called a *tanoa* in Fiji and *kumete* in Tonga), where it is strained to produce a beverage which is then served in coconut shells (called *bilu* in Fiji and *ipu* in Tonga). In Vanuatu, by contrast, kava is consumed as a beverage extracted directly from fresh undried kava roots, diluted to a ratio of two parts water to one part pure juice.²⁰ The kava served in Vanuatu is generally much stronger than what is drunk in other PICs and therefore smaller quantities of it are generally consumed at a single time. Unlike Fiji and Tonga, where kava is typically prepared and served in private homes, community spaces or restaurants, kava in Vanuatu is mostly consumed at kava bars, known as *nakamal*.²¹

In discussions with Pacific Islanders across Fiji, Tonga and Vanuatu, it was clear that kava formed an integral part of a wide range of social, cultural, political and spiritual functions. In all three countries, it was used to mark important occasions such as weddings, funerals, circumcisions, and community meetings. In Fiji and Tonga, it served as a means to greet guests, demonstrate respect and resolve disputes. As one Fijian described 'Kava is very important here. An event is not an event without it. We also use it to settle arguments. If I have a dispute with someone in my community, my apology will not be accepted if it does not come with a gift of kava.' On Pentecost Island, kava is known as the 'peacemaker', not only because of its role in dispute settlement, but also because it is perceived to be a healthier alternative to alcohol. 'When young men drink alcohol, they can fight, they lose their good judgement. We encourage them to drink kava instead. Nobody fights after drinking kava.' While Fijians and Tongans consume kava as highly social activity, describing it as something that facilitates conversation, ni-Vanuatu often described it as a more meditative experience. 'In Vanuatu, we don't like to talk so much when we drink kava. You see, we drink it and stay quiet. You drink it and listen to the kava speak.'

20 In this report, the term 'fresh kava' describes juice extracted directly from the undried kava root, 'dried kava' describes whole dried kava root, and 'kava powder' describes dried kava root pounded into a powder. This terminology is consistent with that of the kava quality standards in use across the three countries.

21 This describes consumption in urban centres. At the village level, patterns differ.

The cultural importance of kava is also described in the kava quality standards for Tonga and Fiji:

'Fundamental to the Tongan customary and traditional ceremonies, kava has played an important role in the coronations of the King, instalment of nobles, weddings, funerals and social gatherings. The consumption of kava in the customary and traditional ceremonies of Tonga enhances the four main virtues of the Tongan culture – respect, humility, commitment and relationships.'

'The place of kava or "Yaqona" in the cultural life of Fijians is so central that it is referred to as "wai ni vanua" (drink for the people)...It has become the national drink of Fiji and is part of our identity as Fijians...For centuries, it was exclusively used during traditional cultural ceremonies. While it remains and integral part of Fijian customs, the use of the drink has extended beyond the ambits of traditional cultural protocols. It has evolved into a popular social drink in modern Fiji; known for its calming effects.'

Economic importance



Kava has enormous economic importance in the Pacific. Kava is the highest value cash crop across the three countries of study. In Vanuatu, kava is the third largest export commodity, behind coconut oil and copra, and is the third largest contributor to national income.²² The number of farming households estimated to be involved in the kava trade numbers 18,478 in Fiji, and over 20,000 in Vanuatu.²³ The number of households involved in kava production has grown quickly in recent decades, having increased by 44% between 1992 and 2007 in Vanuatu alone. The majority of these producers are smallholder farmers.²⁴

22 DARD (2016)

23 DARD (2016)

24 DARD (2016), p.23

As PTI Australia reports, 'in Fiji alone, 1 in 8 rural households are involved in the crop's cultivation, with a further 3,000 households earning an income through kava trade and retail operations. In 2020, Fijian kava exports were worth over AUD 43.6M and in 2019, Vanuatu's kava exports were worth AUD 48.4M, with these figures set to grow in coming years.'²⁵

In addition to being an important source of national income, Kava also plays a unique role at the household level for farmers. A number of farmers interviewed for this study described kava as a bank. While other crops need to be harvested immediately after reaching ripeness or maturity, kava plants can stay in the ground for many years. When families are hit with unexpected expenses, kava serves the role of a type of emergency savings. It is also a high-value crop that is constantly in demand, despite large fluctuations in its price. As one ni-Vanuatu exporter/processor described, 'it's the only product that keeps kids in school and food on the table.' Another respondent in Fiji described it as 'a bank account in the ground for rural families, who often lack access to basic financial services.' Yet another Fijian exporter reported how 'kava has been transformational for rural communities. I've seen revenue from kava fund cyclone resistant housing, solar panels and school fees.' The farmer household survey found that kava cultivation contributed to 82% of household income in communities surveyed in Fiji, 86% of household income in communities surveyed in Vanuatu and 73% of household income in communities surveyed in Tonga.²⁶ Respondents in the household survey reported that income from kava helped cover school fees, finance small businesses, pay for vehicles, sponsor sports activities and cover other basic household needs.

Q.1.2. What are the high-level industry trends and gaps in the kava market system in Pacific Island Countries?

Recent history of the kava market

While kava has a long history in the Pacific, it was not grown and consumed universally, even in countries that had the strongest kava cultures. The trade market was limited and people generally consumed varieties that they grew and prepared in local communities. Farmers were highly knowledgeable about kava cultivation and could distinguish the varieties they grew.²⁷



A kava farmer in Santos, Vanuatu uses solar drying methods to maintain kava quality.

The market began to shift in the 1980s. Kava started to become a cash crop and market commodity. As acknowledged in Vanuatu's National Kava Strategy, 'The lack of consistency in supply (both for the local and export markets) can be attributed to its use as a cash crop planted by farmers only to meet certain immediate needs.'²⁸ Traditional knowledge eroded with increased migration and a boom in demand, which led to mass planting of whatever varieties were available, including non-local and tudei varieties. This shift was driven by demand from Pasifika diasporas overseas, increasing interest in consuming kava amongst non-Pacific Islanders abroad and the use of kava in pharmaceutical and nutraceutical products. Kava was at times also heavily promoted by PIC national governments. In Vanuatu, for example, Prime Minister Walter Lini (1980 – 1991) promoted kava consumption after the country's independence to reinforce national identity, control social unrest (which he believed to be linked to excess alcohol consumption) and to promote economic development in his home island of Pentecost.²⁹

As farmers began growing kava for international markets rather than for local consumption, quality and safety issues emerged. Kava exports from PICs included significant quantities of tudei kava as well as parts of the kava plant not suitable for consumption, including bark and stems.³⁰ Manufactures of kavalactone-derived products in Germany employed extraction methods using acetones, which produced chemicals linked to

²⁵ PTI (2021)

²⁶ It should be noted, however, that interaction with the market economy can be limited in the communities surveyed. Many households would manage to meet most of their needs related to food and sometimes housing through subsistence activities.

²⁷ Vincent Lebot (2023)

²⁸ DARD (2016), p.14

²⁹ Vincent Lebot (2023)

³⁰ Vincent Lebot (2023)

liver toxicity. A series of case reports of liver damage linked to kava consumption surfaced in 1999-2000.³¹ In response, the German Federal Institute for Drugs and Medical Devices (BfArM) banned the importation of kava in 2002, which led to a cascade of bans in other EU countries. A team including the Pacific Kava Council and European national scientists, international trade lawyers, and diplomats later challenged this ban in court, with the German Administration Court ruling in 2014 that *'the regulatory authority to ban kava as a measure to ensure consumer safety was inappropriate and even associated with an increased risk due to the higher risk inherent to the therapeutic alternatives.'*³²

The ban sent a shockwave through the Pacific, particularly in Vanuatu, which was a key supplier to the European market. In response, the Vanuatu Government introduced legislation and procedures to better regulate the market and ensure the safety of kava exports. This would see the introduction of Vanuatu's Kava Act in 2002, which regulates both its domestic and export markets. The act enforces organic cultivation, specifies which varieties and parts of the plant can and cannot be sold (i.e. bans the sale of tudei kava and other parts of the plant aside from the roots), mandates a minimum maturity of three years for harvest (five years for export), stipulates that labelling must include the variety and island of origin (and the words *'original Vanuatu kava'* for exports), bans the export of plant parts for propagation and reserves the kava trade for ni-Vanuatu (or companies with at least 51% ni-Vanuatu ownership).

Vanuatu also has an active Kava Association and the Government of Vanuatu has a detailed Kava Strategy and accompanying operational plan. Vanuatu is now seen as the leader amongst its PIC peers, and respondents from both the Governments of Fiji and Tonga reported that they are planning to emulate systems in place in Vanuatu. Fiji has a Kava Bill currently under review and Tonga is undertaking research to inform planned legislation. Both countries have kava associations and Fiji has a Kava Task Force³³ (inactive since the 2020 pandemic), with representatives from the public and private sectors. No supply management schemes are in place in any of the three countries, but a price floor exists for farmers in Vanuatu selling dried kava to exporters.

An arguably equally important driver of kava safety and quality are the demands of US importers. All exporters interviewed for this study reported that the US has large, well-financed importers who

operate at scale for the retail market. This includes sales of traditional forms of powdered kava as well as value-added products created with kavalactone extracts, such as kavalactone capsule supplements, kavalactone-infused canned beverages and other kava or kavalactone-added food or nutraceutical products. US importers systematically test kava imports for microbial contaminants, heavy metals, pesticides and kavalactone levels. All exporters in the three countries of study who export to the US market stated that this testing obliged them to improve their own quality and safety standards by upgrading their storage and processing facilities. This, in turn, also often incentivised exporters to advise farmers from whom they source kava on how to improve standards. While the United States Food and Drug Administration (FDA) website states that it performs sample testing of food products,³⁴ this was not cited by exporters to the US market as a driver of testing and quality. One exporter from Vanuatu stated that he had been exporting to the US since 2017 and none of his importers had their consignments tested by the FDA. PIC exporters attributed the reason for such testing to US kava importers' desire to ensure safe and high-quality product to their consumers and to ensure consistent kavalactone levels for use in extracts and value-added food products.

PIC government agricultural extension services and non-profit organisations (principally those funded by Australia and NZ, such as PHAMA Plus and MDF) have also played a major role in helping farmers improve the safety of their kava processing systems by providing improved drying systems, pounding or grinding machines, washing systems and support for marketing. PHAMA Plus has also developed detailed guidelines for kava cultivation and processing across the three countries (aligned with the Codex Regional Kava Quality Standard),³⁵ which governments and kava associations cited in each country of study as a useful resource. While large gaps still exist at the farmer level and with smaller exporters, there are numerous exporters with highly sophisticated in-house testing facilities, processing equipment and quality assurance (QA) controls. Many exporters across the three countries of study are FDA and HACCP certified.

Considerable research has taken place in past decades not only to improve the safety and quality of kava, but also to better understand its varieties and the effects they produce for kava drinkers. Dr Vincent Lebot, widely considered the world's preeminent kava expert, has contributed numerous publications on the classifications and chemistry of the plant. Significant research is also taking place

31 Kenny Kuchta et al. (2015)

32 Kenny Kuchta et al. (2015)

33 Comprised of representatives from Biosecurity, the Ministry of Agriculture, the Ministry of Health, exporters, and PHAMA Plus

34 FDA (2023)

35 The National Quality Standard for Kava Export Vanuatu, the Tonga Kava Quality Standard and the Fiji Kava Quality Manual

at PHAMA Plus, the University of the South Pacific (USP) and Australian universities, including the University of Adelaide. The private sector is also heavily involved in research, and as the Vanuatu National Kava Strategy rightly points out, it is the private sector that has been primarily responsible for industry innovation.³⁶

One kava processor/exporter based in Vanuatu reported to have classified upwards of 250 varieties, including their DNA profiles, strength and kavalactone profiles. This work is complicated, however, by the fact that the plant's chemical profile is also determined by the soil and climactic conditions in which it is grown (i.e. the terroir of kava).³⁷

Kava drinkers are also developing a greater appreciation of different varieties of kava and their effects. This was strongly observed in Vanuatu, with consumers clearly distinguishing varieties for potency, flavour, effects, and uses (some for relaxation, some for stimulating effects, etc.). Many Ni-Vanuatu exporters market their product not simply as kava, but as a specific variety, with some of the most prominent varieties, including Bir Kar, Borogoru, Kelai, Melo Melo and Palarasul. Building on this trend, the Pacific Community (SPC) is currently working in cooperation with the World Intellectual Property Organization (WIPO) to develop geographical indications (GI) for kava and its main varieties under its Regional Kava Development Strategy.

Views on the future of the market

Exporters and importers expressed excitement and optimism on the future of the international kava market. Several respondents interviewed for this study who had direct connections with retail outlets in Australia and the US shared anecdotes of non-Pacific Islander customers having used kava to help regulate sleep, reduce anxiety and manage the cessation of consumption of drugs and alcohol. They described how the hundreds of kava bars that have emerged in recent years in Florida, California and New York provide people with the social experience of a traditional bar without needing to consume alcohol. Many of these respondents or the companies to which they source kava are bringing a wide range of kava and kavalactone products to market for a wide range of purposes, including flavoured beverages, snacks, confectionery, skin care products and even pet food. These respondents saw enormous growth potential for the industry.

36 DARD (2016), p.23

37 DARD (2023)



Fiji Kava root powder and capsules available on Australian supermarket shelves.
Picture: Australia in Fiji/Facebook

At the same time, many saw PIC economies' high reliance on the kava industry as a large risk. As kava increases in popularity globally, many respondents in this study expressed a fear that there is a risk that larger countries with more advanced agricultural sectors will enter the market and displace PIC smallholder farmers. Countries including China, Indonesia, the Philippines and Australia have climates suitable for kava cultivation and could be incentivised to start production if kava becomes a global commodity. One Fijian exporter to Australia who also has a bricks and mortar store in Brisbane has already set up sizeable operations in PNG. He grows kava in PNG, exports it to Fiji for processing and re-exports it for the Australian market. *'I see PNG and Indonesia taking over eventually as significant kava producing countries. They have much larger land masses, excellent climate and soil conditions, do not have the same vulnerability to cyclones, have low labour costs and have workers with a strong work ethic...existing [PIC] producers have a comparative advantage now, but they will not have it forever. They need to prepare for fierce future competition.'*

Kava sector country profiles



Vanuatu³⁸

Population:

319,137

GDP:

AUD 1,448,989 (2022)⁴⁰

GDP per capita:

AUD 4,540 (2022)⁴¹

Land mass:

12,190 sq. km³⁹

No. kava plants under cultivation:

53,593,413 (2022)

Annual kava production:

153,446,700 kgs.(2022)

Annual kava exports:

1,258,791 (2021) kgs.

Annual kava imports:

0 kgs. (2022)

No. licenced exporters:

19 (2022)

As stated in the country's National Kava Strategy (2016–2025), Vanuatu considers itself 'the home of kava.'⁴² Vanuatu has an estimated 53,593,413 kava plants in cultivation and an annual production of 153,446,000 kgs., valued at AUD 3 billion. 1,258,791 kgs. (1%)⁴³ of its annual production is exported, meaning its kava sector is also the most domestically-oriented of the three countries of study. Over 20,000 households in the country are estimated to be involved in production.⁴⁴

In 2021, Vanuatu's largest export markets were Kiribati (390,180 kgs.), France⁴⁵ (373,622 kgs.) and Fiji (292,000 kgs.) Nineteen enterprises in the country had export licences in 2021. Vanuatu exports significant quantities of whole dried root to New Caledonia, where it is mostly processed and consumed locally, and to Fiji, where it is mostly processed and re-exported as Fijian kava. It has numerous exporters with highly sophisticated operations, processing capacity, quality control and marketing that export to the international retail market. A strong culture and knowledge of native varieties allows Vanuatu to occupy a particularly high end of the international retail market. The islands of Éfaté and Santo (and to a lesser extent Pentecost) have good port access, while other islands suffer from very poor infrastructure and are largely disconnected from international markets.

Vanuatu is the most advanced of the three countries in terms of domestic regulation and controls. It has a Kava Act, which regulates issues related to cultivation, harvest, processing, labelling and national ownership of the trade. Vanuatu's Biosecurity Department, under the Ministry of Agriculture, also performs testing for nobility for each consignment of kava that is exported. The Biosecurity Department is the responsible agency for the issuance of export licences to kava exporters, which involves an inspection of the exporter's facilities against the country's Sanitary and Phytosanitary (SPS) Measures. The country has a domestic company, Quality Solutions, that can provide HACCP accreditation and two laboratories (Quality Solutions and Bureau Veritas) that can perform tests for nobility and microbial contamination.

Vanuatu is also arguably ahead of Fiji and Tonga in terms of vision and ambition for the sector. It has a National Kava Strategy (2016–2025) that aims to make Vanuatu 'the leading producer of quality kava in the Pacific and the world.'⁴⁶

A key disadvantage Vanuatu faces compared to Fiji and Tonga, however, is poorer levels of infrastructure and relatively higher transport, energy and other operating costs.

The country's kava sector value chain is illustrated on the following page.

³⁸ DARD (2016), (2023)

³⁹ World Bank (2023)

⁴⁰ World Bank (2023)

⁴¹ World Bank (2023)

⁴² DARD (2016), p.6

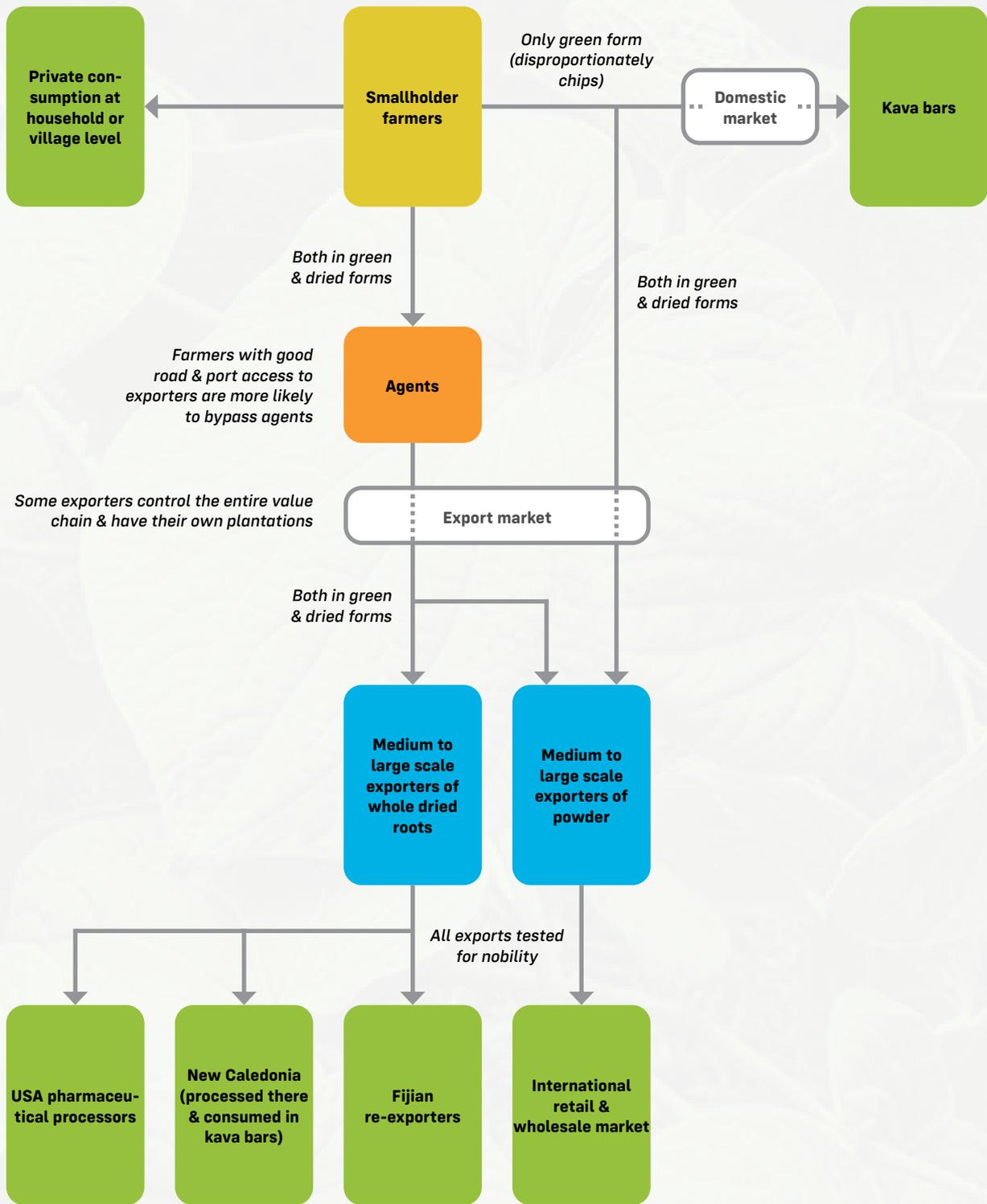
⁴³ Assuming 2022 exports were roughly the same as 2021 exports. Comprehensive export data for 2022 was not available.

⁴⁴ DARD (2016)

⁴⁵ Including New Caledonia

⁴⁶ DARD (2016)

Vanuatu Kava Value Chain





Fiji

Population:
924,610 (2022)

GDP:
\$6,509,552 (2022)⁴⁹

GDP per capita:
AUD 7,040 (2022)⁵¹

Land mass:
18,270 sq. km⁴⁷

Annual kava production:
12,855,000 kgs. (2022)⁵⁰

Annual exports:
498,094 kgs.(2022)⁴⁸

Annual imports:
267,967 (2022)kgs.

Fiji's annual kava production in 2022 was 12,855,000 kg., with annual exports at 498,100 kgs. Approximately 18,478 households in the country are estimated to be kava producers

In 2022, Fiji's largest export markets were the USA (263,306 kgs.), NZ (90,055 kgs.) and Australia (52,197 kgs.). Fiji imports significant quantities of kava from Vanuatu and PNG, with 231,224 kgs. and 36,436 kgs. imported from these two countries respectively in 2022. These patterns of export were established during past cyclone-related kava shortages and continue today due to the high quality and lower costs these countries can offer. Like Vanuatu, Fiji also has numerous exporters with highly sophisticated operations, processing, quality control and marketing capacity that supply the international retail market. It also exports significant quantities of kava to lower-cost informal international markets to Fijian diasporas, often through smaller exporters (compared to Vanuatu, where a smaller number of high-end exporters dominate the export market).

Fiji lacks the kava-specific regulation and government-led quality control of Vanuatu's kava market, but such regulation is in development and many larger exporter/processors are well capitalised and highly innovative. Quality standards are driven in large part by buyers in the United States, who perform various forms of testing of kava imports. Domestic laboratories for testing include the USP, the Ministry of Agriculture and Douglas Labs. Value addition largely takes place in import markets, but processor/exporters are currently developing opportunities to onshore this in Fiji.

The country's kava sector value chain is illustrated on the following page.

47 World Bank (2023)

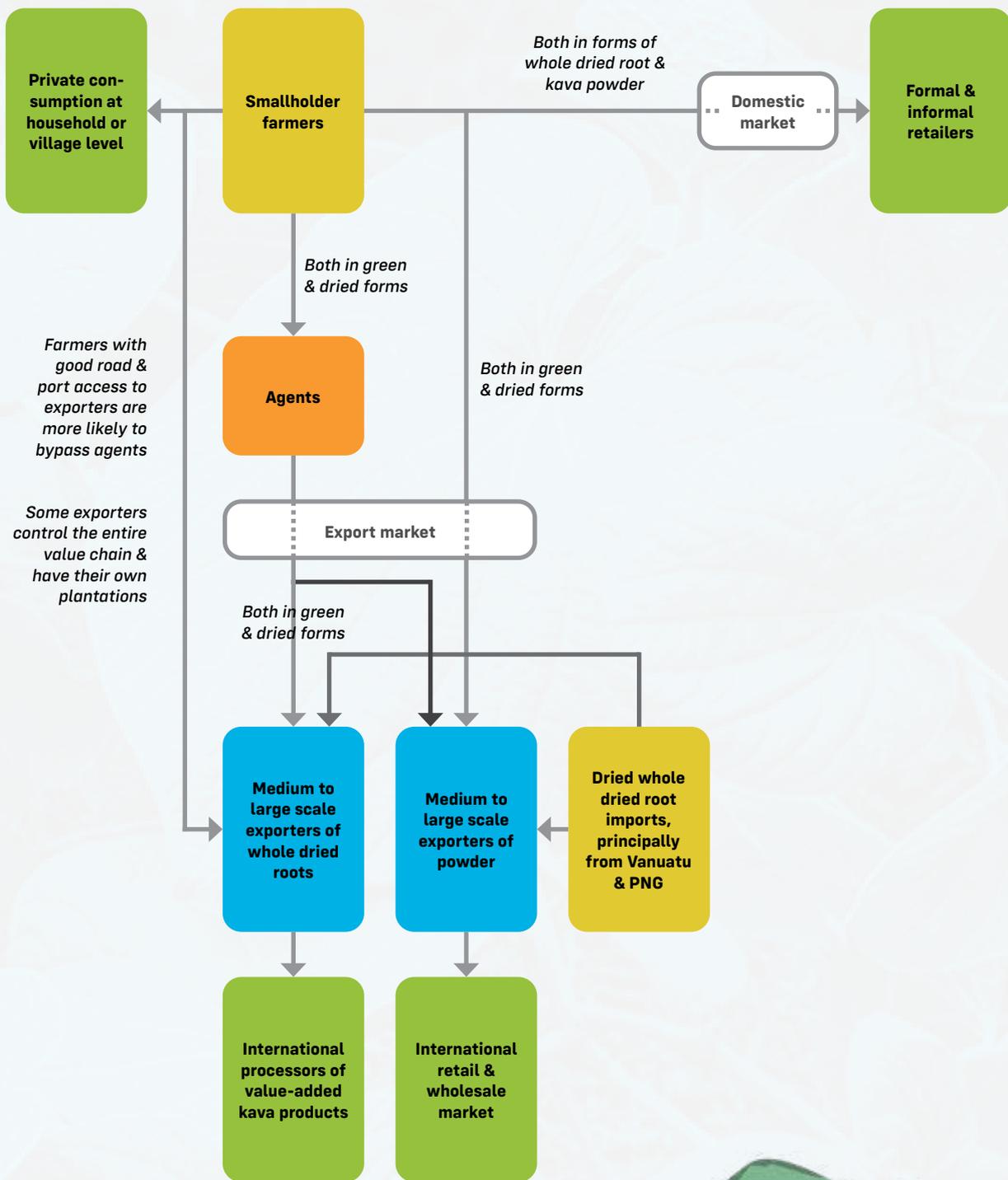
48 Internal data from Fiji Department of Biosecurity

49 World Bank (2023)

50 Internal data from Fiji Department of Biosecurity

51 World Bank (2023)

Fiji Kava Value Chain





Tonga

Population:
106,017

GDP:
AUD 710,957 (2022)⁵²

GDP per capita:
AUD 6,706 (2022)⁵⁴

Land mass:
720 sq. km

No. Kava plants under cultivation:
278,088 (2022)

Annual kava production:
207,155 (2022)

Annual exports:
369,986 (2022) kgs.

No. licenced exporters:
66 (2022)⁵³

Tonga has an estimated 278,088 kava plants in cultivation and an annual production of 207,155 kgs⁵⁵. Tonga's kava industry is the most export-oriented of the three countries of study and in 2022, exported a greater quantity of kava than Fiji or Vanuatu despite its much smaller population and landmass. Its largest export markets were NZ (148,200 kgs.), Australia (112,506 kgs.) and the US (107,054 kgs.). Sixty-six enterprises in the country have export licences, 12 of which were active in 2022.

Tonga has a model of export not found in Fiji or Vanuatu, whereby smallholder farmers aggregate their supply and ship their kava to overseas markets with freight forwarders who hold the export licences. This increases direct smallholder access to overseas markets, but also introduces greater risk; Tongan farmers typically ship their kava unsold to community networks abroad and do not receive payment until it is sold overseas. There is only one exporter in Tonga who is connected to a formal international buyer, which is in the US. This exporter is in the process of significantly upgrading his facilities to obtain HACCP certification from a certifier overseas. A Tongan Government representative reported that efforts are underway in one district to establish a contract farming system with this exporter, as it would represent a more reliable income stream for farmers.

All kava exported from Tonga must be processed at one of six government approved facilities in the country. This ensures a basic standard of post-harvest quality, but it is not as rigorous as standards such as HACCP. The Vanuatu-based company Quality Solutions recently set up operations in Tonga and provides HACCP certification by service providers based in Australia and NZ. The Tonga Water Board and Ministry of Land's Geology Department provide testing for microbial contamination of water, but there is a lack of access to testing for nobility, microbial contamination of kava, and heavy metal content. The latter issue may be of concern given that many processors in the country rely on iron machines. The Tongan Government, however, is in the process of helping producers replace iron machinery with stainless steel equipment.

There is no evidence that Tongan kava is of lower quality than that of Fiji or Vanuatu, but Tonga is also far behind its competitors in terms of marketing and packaging. Fiji and Vanuatu have numerous exporters who package their product in robust and attractive bags that make their products appealing for non-Pacific Islander consumers overseas. Tongan kava, by contrast, is packaged in very basic clear plastic bags with simple sticker labelling.

The country's kava sector value chain is illustrated on the following page.

⁵² World Bank (2023)

⁵³ Internal correspondence from the Tongan Quarantine Division, Ministry of Agriculture & Food, Forests and Fisheries

⁵⁴ World Bank (2023)

⁵⁵ Internal correspondence from the Tongan Quarantine Division, Ministry of Agriculture & Food, Forests and Fisheries

Key market system gaps

Below are key market system gaps highlighted by respondents during the study.

Lack of kava sector regulation

Vanuatu introduced a Kava Act in 2002, amended in 2015 to include updates related to licencing and enforcement. As described earlier in this report, the act addresses issues related to cultivation, harvest, processing, labelling, and national ownership of the trade. Neither Fiji nor Tonga has such kava-specific regulation. Fiji has a Kava Bill that was drafted in 2016, but there have been indications that the Bill may undergo significant further revisions to update it and allow for greater stakeholder consultation into its drafting. Tonga is further behind, with no draft bill in place. Tongan Government representatives reported, however, that research on the kava sector has been underway to prepare for such a bill.

Use of unsustainable kava cultivation practices

As internal research by PHAMA Plus has demonstrated,⁵⁶ gaps exist regarding the use of environmentally sustainable practices in kava cultivation. The main issues of concern are cultivation on steep slopes (those more than 45°) that are vulnerable to soil erosion, soil degradation and deforestation. According to one soil scientist, soil degradation is more pronounced in Fiji and Tonga than Vanuatu as the former two countries have had more intensive agriculture and less virgin forested area.

There is also unnecessary use of herbicides and pesticides. For example, one farmer interviewed employed pesticides to treat kava 'die-back', which is an ineffective treatment for the condition. Kava die back refers portions (or the entirety) of the above-ground plant rotting back to the stem base. According to kava specialists at PHAMA Plus, kava die-back most commonly occurs when the plant is stressed due to drought or being grown in conditions with inadequate shade cover. The disease is caused by a virus spread via infected planting material and insects (aphids) that feed on the plants. This virus cannot be killed through pesticides that are currently in use in the Pacific.

Lack of transport infrastructure

While outside the direct scope of this study, it would be remiss not to mention transport challenges in the kava industry, given their gravity and impact on poor households. Both

green and dried kava can experience spoilage and wastage in transit from farms to local markets and points of export. This is especially acute for green kava (whole root that has not been dried), which can bruise in transit. PSIDS generally suffer from poor road networks, poor airport and seaport infrastructure and farmers often lack adequate vehicles to transport produce safely and hygienically. Given the South Pacific is a region with extremely high rainfall, unpredictable weather patterns and vulnerability to cyclones, harvested kava can rot or develop mould. Smallholder farmers in remote areas bear the brunt of these challenges, which represent a serious equity issue in Pacific kava industries.

Lack of post-harvest processing facilities

Exporter/processors near major ports in Vanuatu and Fiji have highly sophisticated processing facilities, which they are constantly improving. Even smaller processors close to urban areas in these countries have access to facilities that ensure a basic level of safety and hygiene. Tonga also has a network of government-approved processing facilities in hubs that provide a basic standard of post-harvest processing.

In remote areas, however, the picture is very different. This is worrying considering that industry actors and experts described kava as a product with a high risk of microbial contamination. As a root crop it is harvested from an environment with high levels of bacteria. Rhizomes are peeled manually, which can introduce contaminants when proper handwashing procedures are not followed. Kava is often washed with water from streams and other sources contaminated with faecal bacteria. The drying process takes days, which is often done on the ground or other areas accessible to animals. When it rains, kava is often transferred to the home, where it is placed on the floor. A lack of packhouse facilities in Fiji and Vanuatu⁵⁷ also leads kava processors to frequently store it inside homes or other unhygienic locations. In the course of this study, all these issues were directly observed. One kava expert noted that given the frequent unsanitary processing of kava, it is surprising that there is not a greater incidence of consumers becoming ill from drinking it. He posits that kava may have strong antimicrobial properties. This claim appears to have empirical backing.⁵⁸

⁵⁶ PHAMA Plus (2023).

⁵⁷ It was not clear if this issue was present in Tonga
⁵⁸ Truong Ngoc Minh et al. (2022)

Considering the gaps that exist in ensuring safe kava is exported from producer countries, the lack of testing requirements for kava imports to Australia and the absence of food safety certification requirements for PIC exporters to the Australian market, there is a risk of contaminated kava making its way to Australia.

Lack of access to affordable, in-country testing and certification

Domestic HACCP certification is available in all three countries of study, as are testing facilities for high risk issues related to kava: (1) adulteration with tudei varieties and (2) microbial contaminants. Well-financed exporters in Fiji and Vanuatu often invest in their own in-house laboratories to test for nobility, microbial contaminants, heavy metal contaminants as well as kavalactone levels. Many exporters also pay for foreign HACCP certification (often Australian) as an additional layer of quality assurance and to make their products more marketable internationally. Tonga lacks in-country access to affordable laboratory testing.

Lack of quality control at points of export

While Vanuatu requires a test of nobility for every consignment of kava exported, Fiji and Tonga do not have such control processes in place. This represents a serious safety gap. Adulteration of kava exports has historically been a serious problem and tudei kava is visually indistinguishable from noble varieties in powdered form. Even in Vanuatu, where this control exists, there are gaps in implementation of the testing system. Since samples are taken from exporter packhouses and not points of export, it is possible for exporters to export batches other than those that have been tested. This problem was reported by various industry actors in Vanuatu.

Q.1.3. Do significant barriers exist for exporters to access the market pathway under the kava Pilot?

Exporters and PIC Government representatives felt that the Pilot had provided the PIC kava industry with good access to the Australian market. When asked what barriers existed to trade with Australia, two respondents in Fiji even stated that they believed no barriers existed. This opinion was also shared by one Australian importer.

These statements are borne out by strong export growth observed from Fiji, Tonga and Vanuatu during the Pilot period. In only the first year of the market opening, Australia rose to become the second most important export market by volume for Tonga and the third most important export market by volume for Fiji. While Australia

represented only the sixth most important export for Vanuatu, this ranking under-represents the importance of the Australian market for Vanuatu – Fiji is the third largest importer of kava from Vanuatu and nearly all Fijian imports of Vanuatu kava were reported to have been processed in Fiji and subsequently re-exported to other international markets, including Australia. Increasing future PIC kava exports to Australia, therefore, would require an increase in demand, not an easing of market access requirements.

While the Pilot has provided good market access to PIC kava exports, respondents did report a number of issues that either represented moderate barriers to trade or constraints to Australian demand. These are explored below.

Moderate barriers/issues

■ *Restrictions on value-added kava or kavalactone products*

Export figures from Fiji and Tonga showed a rapid increase in exports in 2022 followed by a marked decrease in 2023. This is likely because pent-up demand for the traditional powdered form of kava was quickly satisfied and the market is now saturated. Other major kava markets, notably the US, are developing new uses of the product, including value-added food products. Such food products are banned in Australia and NZ under the FSANZ kava standard. This will constrain demand in the Australian kava market. As one Australian importer stated *'bans on new kava products not only hurts Pacific exporters, but also Australian companies. We are being left behind in terms of the innovation happening in the US.'*

While value addition for kava and kavalactone products has traditionally taken place in American and European markets, there are signs that this is starting to take off in the Pacific. At the time of the release of this report, for example, a Suva-based company had procured equipment to develop a kavalactone-infused cola in Fiji. In Vanuatu, one processor was in the process of launching a kavalactone gum. An artisanal chocolatier in Port Vila also produces chocolates that contain micronised kava powder.

■ *Long clearance times at Australian ports of entry*

Every exporter and importer interviewed for this study complained about long clearance times at Australian ports of entry. The reported wait times ranged from several weeks to several months, compared to the couple of days it took to clear ports of entry in the US and NZ. Exporters and importers did state, however, that consignment

clearance times had improved somewhat over time, but even exporters who had been serving the Australian market without hitches since the beginning of the Pilot reported typical clearance times of several weeks (and no less than one week), even with the aid of customs brokers.

Government representatives and exporters in Vanuatu and exporters reported that wait times were in part due to frequent confusion at Australian ports on what kava was and how it was classified, 'We kept encountering issues with border control not knowing what it was, looking it up and seeing it classified as a drug...it took a whole year for these issues to start improving,' reported one official. Another representative from the Vanuatu Government stated that this represented a sufficiently serious pain point that they were considering opening a dedicated customs broker help desk in Australia to speed up inspections and clearance of kava consignments in response.

While long wait times were a major inconvenience for all forms of export, they represented a critical barrier to trade for fresh kava juice. All kava domestically consumed in Vanuatu is produced from grinding the fresh root, which as one Australian importer described 'tastes infinitely better than dried kava.' One exporter from Vanuatu is already sending frozen concentrate to the US, but stated '*I will not even consider the Australian market until I see the customs clearance times come down. My product would just spoil.*' Five other exporters in Vanuatu and Fiji were also looking into the export of fresh juice. Australian clearance times represent a critical barrier to this emerging segment of the international kava market.⁵⁹

■ Most producers and exporters lack networks to sell to importers for the formal Australian market.

All Tongan exporters interviewed expressed dissatisfaction with the informal market, which is saturated, has low prices and provides them with late and unreliable payments (the segmentation of formal and informal kava markets is explained further under Q.2.1.). They are keenly aware that kava from Fiji and Vanuatu has found a place on supermarket shelves in Australia while kava from Tonga has not. Tongan exporters want to break into higher-value Australian retail sales, which require connections to the formal market and retailers

that they do not have. This issue was by no means isolated to Tonga, however. Several exporters in Fiji were in the same position. In Vanuatu, producers on Tanna Island, for example, expressed frustration that no linkages exist with international markets whatsoever.

Australia has invested resources to connect Pacific Island kava producers to markets in Australia via support from Australia Pacific Trade Invest (PTI). PTI is the trade and investment promotion network of the PIF Secretariat and has a mandate to 'facilitate trade, investment and tourism deals between the economies of the Pacific Island Countries and Territories and the rest of the world.'⁶⁰ PTI has held events during the Pilot period introducing several kava companies to potential buyers in Australia.

Minor barriers/issues

■ Information on Australian import rules has not always been shared in a timely and proactive manner.

With a few exceptions, exporters found the factsheets on kava import requirements, published on Australian Government websites, to be clear and informative. They did frequently comment, however, that this information could have been shared more proactively. Exporters frequently cited misunderstanding of the requirements for country of origin information (that the text be placed in a box) that left them in the position of consignments having reached Australia with labels that had to be reprinted. Other exporters mentioned changes in forms that had occurred during the Pilot.

Exporters also acknowledged, however, that Australian regulatory authorities had exercised flexibility and understanding in such cases where such rule changes had taken place. One major exporter from Fiji with high-end packaging reported that his company had undertaken considerable research on labelling requirements before sending designs to a packing company. After a large consignment had shipped to Australia, he learned of the aforementioned formatting change to the country-of-origin details. After arguing his case to Australian Customs, he was permitted, as a one-time concession, to import his consignment with existing packaging.

⁵⁹ It should be noted, however, that there may be technologies not currently in use in Vanuatu that can mitigate this problem, such as UHT pasteurization (Seerwan et. Al 2013).

⁶⁰ PTI (2023)

There is also currently a lack of clarity on whether fresh juice imports are permitted. Current Australian Government factsheets on kava imports mention 'kava beverages obtained by the aqueous suspension of kava root' (i.e., kava powder mixed with water), but do not mention kava juice extracted directly from the root of the plant.

In general, however, respondents acknowledged that Australia invested heavily in publicising and disseminating high-quality information on the Pilot to PIC stakeholders via Australian-funded development partners. PTI Australia and PHAMA Plus jointly presented two webinars to inform PIC exporters of importation requirements in December 2021, with a follow-up webinar in June 2022. PTI Australia also provided advice directly to exporters during the Pilot period, held a Vanuatu Social Media Masterclass in August 2022 and PHAMA Plus was frequently cited by stakeholders as a key source of information on the Pilot across the three countries of study.

■ **Uncertainty on Australian market post-Pilot dampens interest and discourages investment in exporting to Australia.**

Several exporters expressed reservations about investing time and capital for the Australian market given the uncertainty surrounding the market opening. Tonga's only exporter linked to a formal international market (in the US) reported that he was not willing to explore exporting to Australia until a final decision is made on the opening of the market.

Linked to this uncertainty was a widely held suspicion that Australia holds a bias against kava. One exporter in Vanuatu summed up a common sentiment in the industry: *'why do they need a Pilot? The evidence is clear that kava is safe. New Zealand imports kava. It doesn't make sense to me. I don't think Australia really wants kava in their country.'* As one expert explained 'there is a long history in the Pacific of Westerners looking down on kava as something unclean or unwholesome. Pacific Islanders retain a memory and resentment of the frequent bans that existed on kava during colonial times.' As another respondent described, *'I don't mind having to put a label on my package that kava may cause drowsiness and should be used in moderation, but why is that not required for a bottle of vodka? Australia is afraid of kava because it comes from the Pacific.'*

There was also a perception that Australian policy on kava has been reactionary and not evidence-based, which creates nervousness amongst investors. *'They banned it all of a sudden out of fear. If I invest in that market, how do I know they will not ban it again? If someone in Australia*

gets sick from eating a pineapple with a fungal contamination, Australia will not ban the import of pineapples, but if one person gets sick from kava contaminated with E. coli, Australia will say that kava is dirty and ban it.'

■ **Not significant barriers/issues**

The following two issues are explored to provide Australian Government policymakers with balanced feedback on trade policy, not to outline issues that represented pain points for exporters.

■ **Australian regulation requiring a separate permit for each import consignment**

Australia requires a permit for every consignment of kava imported. This stands in contrast to other markets such as the US and NZ, which issue a permit licence allowing for unlimited import consignments. Australia's unique permitting system exists because kava is on the Office of Drug Control's (ODC) list of controlled substances.

One small start-up importer described what this meant for his enterprise: *'it's annoying. It's red tape. It means I have to buy in bulk and have to plan more carefully, but in the end, it's manageable.'* This study finds that the permit system only represents a significant barrier if it is related to the long clearance times at customs. It was not clear, however, if these two issues were linked. DFAT indicated that the permit system is likely to end if the Pilot concludes and the market fully opens, as kava would be classified as a normal food product.⁶¹

■ **Labelling and packaging requirements, which are more stringent than NZ and US markets**

Surprisingly, exporters welcomed Australian labelling requirements, which are more stringent and demand additional details than labelling for the US or NZ markets. One exporter summed up the general sentiment in the statement: *'it was a learning curve for us and required some additional investment, but they are reasonable. It's good for products to have this kind of detail.'* Many exporters described the labelling requirements more positively, such as one exporter from Fiji: *'if we want kava to have greater acceptance, we need to up our game. The Australian labelling requirements facilitate traceability and give the consumer more information...the industry should be moving in this direction anyway.'* Stakeholders from Vanuatu often stated that they wanted even stricter labelling to include point-of-origin information. Many Government of Vanuatu representatives were resentful that Fijian kava exports simply state 'product of Fiji' even when many of these exports include significant quantities of imported kava from Vanuatu.

⁶¹ Internal interview with DFAT personnel

While many exporters struggled with labelling and packaging requirements at the onset of the Pilot, these challenges were quickly overcome. As DFAT reported, as of December 2022, 100% of PIC kava consignments were compliant.⁶²

Q2. What have been the market system, social and environmental impacts of the opening of the Australian market?

Q.2.1. What market system changes have occurred in the Pacific kava industry resulting from the opening of the Australian market to kava imports?

This study finds that the opening of the Australian market has contributed to the following market system changes in the three countries of study.

■ **A kava market has emerged in Australia that is segmented by country of origin and by informal and formal sales.**

With the market opening, two distinct kava markets have appeared in Australia, that of the formal and informal. Buyers in the informal market consist nearly exclusively of Pasifika communities, who purchase kava from platforms such as Facebook Marketplace or by word-of-mouth within community networks. The formal market, by contrast, includes major retailers such as Chemist Warehouse, Coles and Paul's Liquor. Consumers in this market include Pasifika as well as non-Pasifika communities.

The Fijian, Tongan and ni-Vanuatu nationals interviewed in this study all evidenced a strong preference to consume kava produced in their country of origin and reported that this preference extended to the Fijian, Tongan and ni-Vanuatu communities in Australia. All Fijian and Tongan exporters who sold to the informal kava markets in Australia did so to their own communities. It was also reported, however, that the ni-Vanuatu community in Australia does not have the same degree of preference for Vanuatu kava because the fresh kava juice that they consume in Vanuatu is not available in Australia.

All exporters reported that the informal market for kava in Australia is saturated and has limited growth potential. The price for low and mid-quality kava from Fiji and Tonga in the Australian market was reported to have dropped 50% from its peak in mid-2022. By contrast, exporters targeting

high-end retail sales to consumers beyond the Pasifika diaspora in Australia were experiencing rapid growth. For example, a major exporter from Vanuatu who has developed a line of instant kava powder has quickly expanding consumer base in Australia. They reported that their sales were increasing by double digits on a monthly basis and that they could not keep up with demand.

■ **Exports increased rapidly (but likely unsustainably) from Tonga and Fiji. Exports increased more slowly from Vanuatu (but likely more sustainably).**

News of the opening of the Australian market was widely disseminated and generated market excitement across the three countries of study. Exporters seized on the new opportunity, with exports from the period of December 2021 to April 2023 totalling 114,825 kg. for Tonga, 56,188 kg. for Fiji and 33,828 kg. for Vanuatu. This represented 38% of Tonga's total kava exports and 10% of Fiji's total kava exports by volume for the period.

Caution is warranted when trying to determine a trendline for such a short period for a new market. The data to date does show, however, that Tonga and Fiji experienced an export surge in 2022 with a subsequent marked dip in 2023. For Fiji, exports peaked at 10,016 kgs. in May 2022. For Tonga, exports peaked at 16,420 kgs. in November 2022 and then fell dramatically in 2023 (January to April), averaging 4,782 kgs. per month. Fiji's exports averaged 6,469 kgs. per month during the same period. For Vanuatu, export volumes averaged 2,114 kgs. per month from December 2021 to April 2023. There was strong monthly volatility in exports from Vanuatu (likely simply due to smaller export volumes) throughout the Pilot period that did not produce a trendline.

62 PHAMA Plus (2022)



The below graphs illustrate the export volumes from each country during the Pilot period.

Figure 1: Exports of kava from Fiji to Australia during the Pilot period

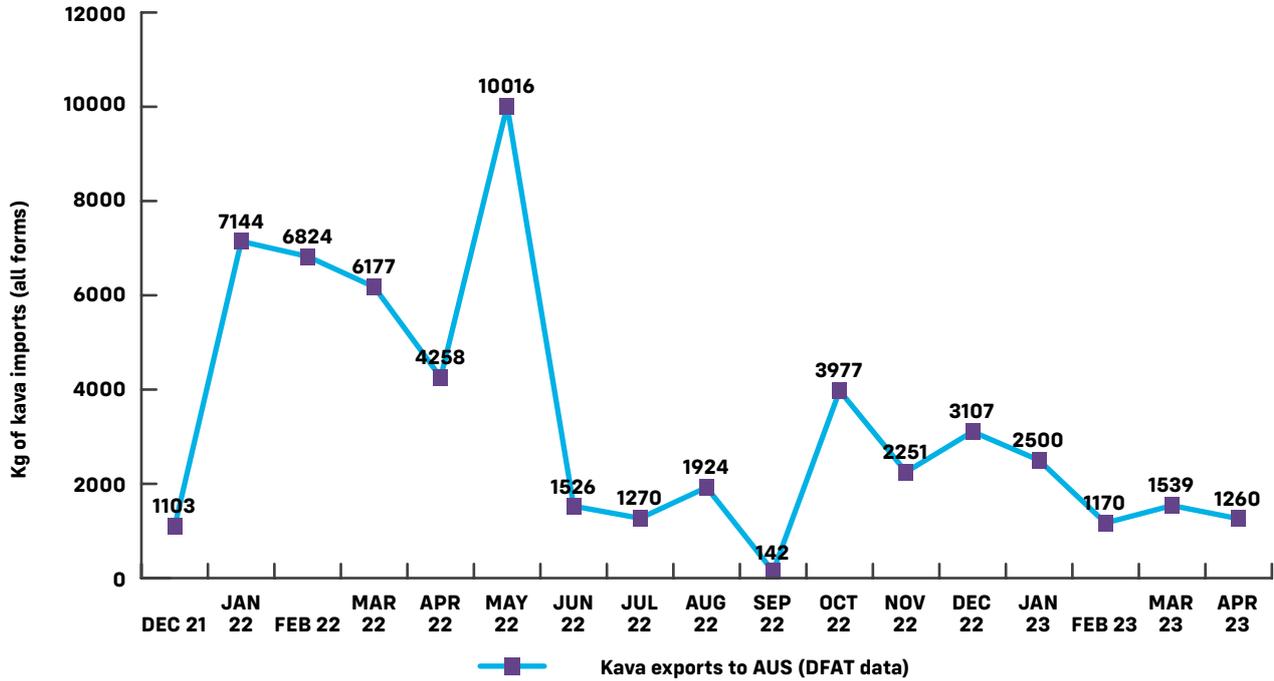


Figure 2: Exports of kava from Tonga to Australia during the Pilot period

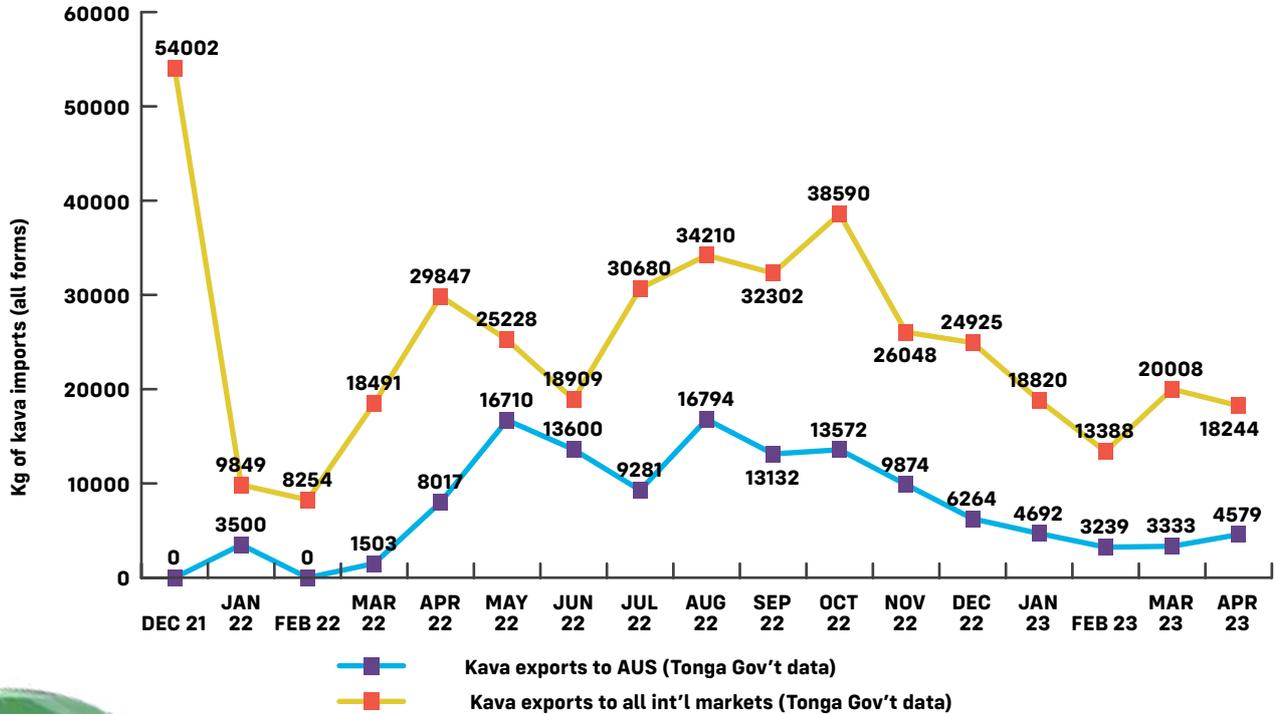
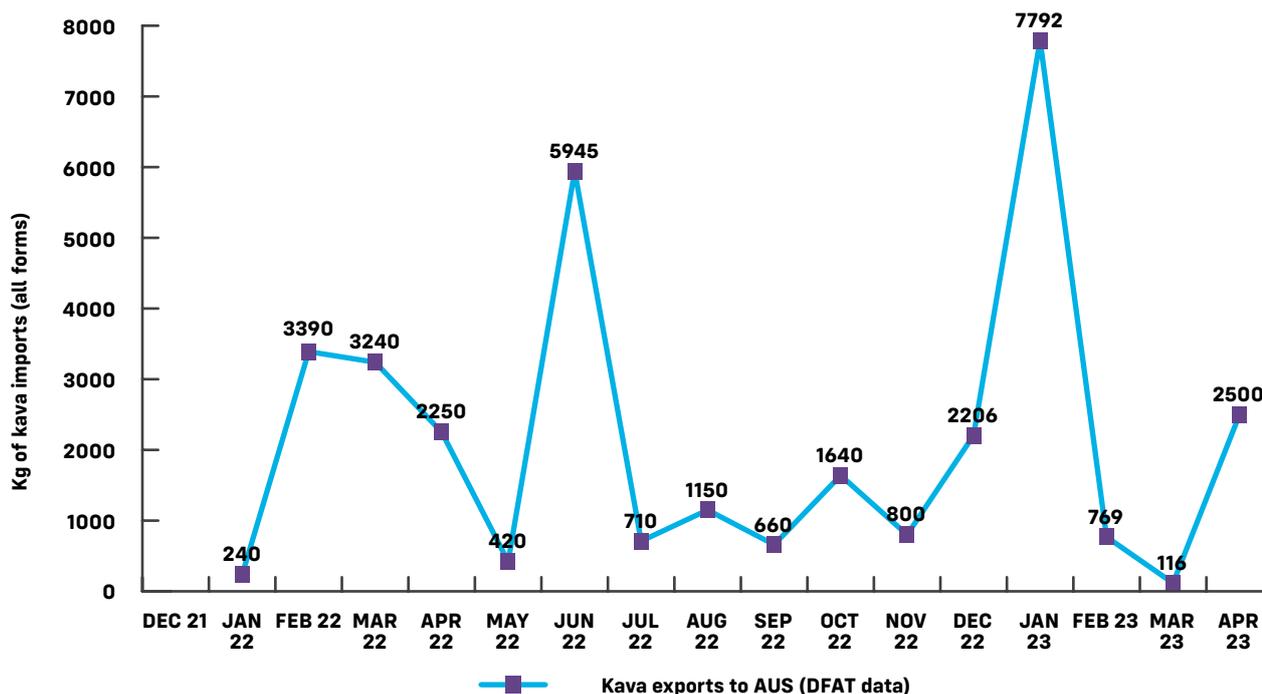


Figure 3: Exports of kava from Vanuatu to Australia during the Pilot period



Many industry actors – notably representatives from government – across the three countries of study were aware of Tonga’s higher export volumes to Australia and expressed curiosity about the reasons behind Tonga’s success. Respondents from Tonga were not able to provide a single explanation for this phenomenon. This study proposes several possible factors, listed below.

- **Aggregation model of export** – Tonga has developed a unique export model. In Fiji and Vanuatu, smallholder farmers sell their kava to exporter/processors. In Tonga, smallholder farmers aggregate their supply with freight shippers who hold an export licence. This model increases smallholder farmer access to foreign markets. The risks and benefits of this model are explored under Q.1.3 in the section to follow.
- **Higher levels of speculation amongst Tongan traders** – In the model described above, the smallholder ‘exporters’ ship their kava to community networks abroad, relying on their contacts in Australia to market and sell the product. The point of sale is often not at export, but in Australia, meaning that large quantities of kava leave Tonga unsold. Smallholder farmers bear the risk in this model, as they will only be paid if the kava is successfully sold in Australia. The motivation behind this risky strategy appears twofold. First, Tongan farmers are willing to speculate in this new market for a product that traditionally

demanded very high prices and for which there has been huge pent-up demand. Second, fear amongst farmers that the Pilot would discontinue and that the Australian market would once again close motivated speculative exports. As a DFAT contact in Nuku’alofa described, ‘we received a lot of questions from Tongans who were afraid that the Australian market would close. They wanted to export what they could while the window was open.’ Exporters in Fiji and Vanuatu also expressed fear regarding the uncertainty of the Pilot, but this did not motivate them to ship unsold product abroad.

- **Relatively stronger demand for Tongan kava in Australia** – According to the 2021 Census from the Australian Bureau of Statistics (ABS), the number of Australians who have Fijian ancestry numbers 66,296, the number with Tongan ancestry is 43,469 and the number with ni-Vanuatu ancestry is 2,380.⁶³ In addition, there are 3,588 Fijian nationals on student visas in Australia, 205 Tongans, and 58 ni-Vanuatu.⁶⁴ There are also significant numbers of seasonal workers from these three countries in Australia the figures for which are not publicly available. While the Fijian community in Australia is larger than that of Tongans, if Tongans consume significantly larger quantities of kava than their Fijian

⁶³ ABS (2021)

⁶⁴ Internal correspondence with DFAT

counterparts (which was reported by many respondents in both countries), this could mean that demand for Tongan kava is larger than the demand for Fijian kava in Australia. Examining such differences in consumption, however, was out of the scope of this study and could not be verified.

- **Stronger informal market networks in Australia** – Compared to Fijian respondents, a stronger story emerged from Tongan respondents of community connections in Australia not only for the import of kava, but also for the informal marketing and distribution of kava, including to non-Tongan communities in Australia. Again, exploring this dynamic was out of the scope of this study and would require further investigation.

■ **Entirely new exporters have emerged.**

A number of entirely new exporters emerged across the three countries of study to take advantage of the market opening. Of the three new exporters interviewed for this study, all were established specifically to take advantage of the new market pathway to Australia. Interviews with PIC ministries of trade and agriculture suggested that most enterprises that were newly established during the Pilot period did so to export to Australia. It was reported, however, that many of these exporters (especially from Fiji) took a short-term opportunistic approach and have dropped off as the Australian market became saturated.

■ **Exporter/processors have made substantial capital expenditures to meet actual or anticipated increases in demand from the Australian market.**

In Fiji and Vanuatu, numerous exporters invested in machinery to scale up production, shift to new types of products and improve quality standards directly in response to the market opening. Two major exporters in Vanuatu, which primarily export whole roots, invested in grinding and pounding machines to produce kava powder for Australia. Exporters in Fiji made significant capital investments to upgrade facilities, prepare for scaleup and achieve HACCP certification. One exporter in Vanuatu developed an entirely new product line of high-end instant kava powder for the Australian market. The farmer household survey demonstrates that it was mainly those directly involved in exporting that made capital expenditures during the Pilot period. While smallholder farmers in Fiji and Vanuatu did not report making additional investments, 53% of farmers surveyed in Tonga reported doing so. Capital expenditure reported by Tongan farmers in

the survey included vehicles, processing machinery and new buildings. Unlike Fiji and Vanuatu where, smallholder farmers sell to exporters, in Tonga smallholder kava farmers aggregate their supply and ship through freight forwarders.

One exporter from Fiji who made such investments expressed frustration that the Australian market is not more demanding in terms of safety and quality standards. *'Australia opened the floodgates and every fly-by-night exporter poured in. We made huge investments to ensure the safety of our product and expected Australia to have more quality control. We're now at a huge cost disadvantage compared to companies that did not make such investments.'* Another exporter from Vanuatu interpreted the situation differently. *'It's a new market without many controls and this serves opportunists. They will drop off eventually. Those of us who invest to make a safe and quality product will be rewarded in the long run.'*

■ **Some existing exporters made a major shift in their export markets, reorienting to Australia.**

Most exporters who sold to the Australian market reported that Australia accounted for approximately 5% to 10% of their total exports. For a few exporters, however, this percentage was much higher. One exporter in Vanuatu, who lost his main buyer in the US, shifted his exports nearly entirely to the Australian market, stating the Pilot had been 'life saving' for his business.

■ **Exporter/processors have increased R&D spending.**

A small number of larger and more sophisticated exporter/processors in Fiji and Vanuatu already invested in R&D for new processing methods and product lines before the Pilot. Some of these enterprises reported that the opening of the Australian market has encouraged them to make further investments in innovation. This includes micronised instant powders, tinctures, extractions and the export of fresh kava juice (expecting that such products will eventually be permitted for sale in Australia). At present, the majority of value addition for kava and kavalactone product occurs in the US. Some exporter/processors believed that if the Australian market opens to such products (which some believe is likely), there is the possibility for the value addition for such products to happen in PICs instead of Australia, especially since shipping costs to Australia are significantly lower than to North America.

Q.2.2. What benefits (monetary and non-monetary) have kava exporters and other actors in the value chain experienced as a result of the market opening?

■ **Increased income for exporters and farmers**

While figures were not available for Tonga or Vanuatu, the Fijian Ministry of Agriculture estimates that exports to Australia during the Pilot period generated FJD 4,531,281 (AUD 3,022,436) in revenue. Figures from the farmer household survey estimate that exports to Australia have generated AUD 2,044,277 in revenues for 5,499 farming households in Fiji, AUD 7,592,398 in revenues for 1,257 farming households in Tonga⁶⁵ and AUD 723,216 for 4,037 farming households in Vanuatu.

Because the Pilot has provided good market access to PIC exporters, and because the market for traditional forms of kava powder in Australia is saturated, this study finds that if the Kava Pilot became permanent trade policy, benefits for exporters and farmers is unlikely to increase in the short-term. Exports to Australia would likely plateau, with benefits for existing kava-producing households and exporters simply sustained. Future market growth depends on increasing demand amongst the non-Pasifika community in Australia in the high-end formal market. This may take off and constitute a large segment of the kava market in the long term, but the growth of this market is constrained by Australian regulation that limits kava and kavalactone value added food products.

■ **Income diversification and risk mitigation for exporters**

Three exporters interviewed for this study described the market opening as *'life saving.'* One was entirely reliant on the US market and whose buyer fell through in 2022. The Pilot provided him an opportunity to find a new market for his existing product. Another was a family business working in the tourism sector which lost nearly their entire clientele during the pandemic. The Pilot provided the family an opportunity to pivot to kava exports to Australia, which for them was an entirely new business activity. Australia's Kava Pilot was well-timed to provide PIC economies with a new source of income during a period in which their tourism industries were severely affected by COVID-19.

■ **Increased opportunity as well as risk for Tongan farmers**

As outlined above, the Tongan value chain for commercial exports to Australia consists exclusively of the informal market, where kava is sold through family and community networks. Farmers reported that they would typically not be paid for their product until the kava was sold in Australia. They complained that such a system led to long delays in payments, frequent disagreements and even non-payment altogether if kava remained unsold in Australia or was consumed by those to whom it was shipped. One exporter explained that he stopped shipping to Australia altogether for these reasons: *'I got sick of kava getting lost, people drinking my kava or saying nobody is buying it. I only ship to the US now because it doesn't work doing business with family.'* A representative from the Tonga Kava Association observed that *'[much of] the kava sold to the Australian market is just sitting in garages.'* These issues were not reported by exporters in Fiji or Vanuatu.

Q.2.3. What is the benefit distribution for smallholder farmers, women and youth in the kava industry? Is there evidence that this has changed since the opening of the Australian market?

Kava requires minimal inputs aside from cuttings, is low maintenance, is high value and generally has low barriers to entry. It therefore has great potential as a pro-poor cash crop if international demand grows and if market access in more remote areas can be improved. While this study finds that exporters enjoy high levels of access to the Australian market, this is not true at the farmer level. In Vanuatu, for example, only farmers on the islands of Éfaté, Santo and Pentecost supply exporters, despite excellent kava being grown in many other provinces. Farmers interviewed in Tanna Island, for example, are eager to connect to international markets but have no connections to international buyers. This means gains from the international kava trade are inequitably distributed within the three countries of study.

Government representatives in Vanuatu expressed concern that farmers were not receiving a fair distribution of benefits from the kava trade. There was a tendency for them to view agents unfavourably, believing that they were taking advantage of farmers. One exporter from Vanuatu, described, however, how agents are indispensable in the kava industry: *'We used to buy our kava directly from farmers, but it was a nightmare. Communications and managing logistics were extremely difficult. Now we just rely on agents.'* Another exporter from Vanuatu commented *'you*

⁶⁵ Calculating benefits for Tongan farmers is problematic, however, because these figures are calculated based on market prices during the pilot for kava, a large quantity of the stock of which remains unsold. See Q2.1 for further details.

can't manage your business dealing with individual farmers in these remote areas, it's just impossible. I have to use agents.' The Vanuatu Ministry of Agriculture reported that farmers in Santo were less likely to use agents because major exporter/processors are based there and because the island has better road and port infrastructure. Given the immense transport, geographic and infrastructure challenges in the Pacific, agents are likely to continue playing a key role in the industry. The Vanuatu Department of Agriculture & Rural Development (DARD) mentioned that they are considering developing a permit system for agents and possible price regulations between agents and farmers. A price floor of 2,000 Vatu already exists for farmers selling dried kava to exporters, though one farmer reported receiving less than this amount. Interviews with farmers across the countries of study made clear that farmers themselves have very poor access to information on pricing, virtually no visibility on their rate of return and poor business planning capacity.

Opportunity for women and youth was a strong theme that emerged during the course of the study. In Vanuatu, the study interviewed a ni-Vanuatu youth-owned export company and an Australian youth-owned import company. Both enterprises formed in 2022 and focus solely on the Australian market. Across the three countries of study, four female-owned aggregators and exporters were identified (though numerous others undoubtedly exist). The largest such enterprise was in Vanuatu. The company offers high-end kava to international markets and employs a staff of 16. The other examples were family-run businesses where the women's husbands were either chronically ill, working abroad or employed in non-agricultural activities outside the home.

Kava exporter/processors also employed a high percentage of women. Every single kava exporter/processor that employed greater than ten personnel had a team comprised of over 50% women. The largest employer interviewed had a team of approximately 160 employees, around 90% of whom were women. It was clear that as kava exporter/processors moved up the value chain and developed more sophisticated operations, they employed more women. This applied both to administrative roles in the office as well as technical operations on the factory floor. When asked why they preferred female staff, enterprises in Fiji and Vanuatu reported that women employees were more punctual, more reliable, had stronger work ethic and had a finer attention to detail.

Q.2.4. What are the impacts of kava cultivation on land use and the environment? Is there evidence that the impact has changed since the opening of the Australian market?

Kava has a high potential for environmental sustainability. It is an understory plant⁶⁶ and grows optimally with 30% shade cover, making it highly suitable for agroforestry practices.⁶⁷ It can be intercropped⁶⁸ and requires neither herbicides nor pesticides.⁶⁹

The awareness and usage of environmentally-sustainable cultivation practices was generally high amongst the farmers interviewed and evident during site visits to farms across the three countries. All farmers interviewed employed intercropping, growing kava alongside peanuts, corn, taro and sugarcane. No examples of monocropping were directly observed on site visits, although examples do exist in the countries of study. Typically, smallholder farmers employ intercropping to a greater extent than larger producers.⁷⁰ Vanuatu's Kava Strategy (2016-2025) states that 'mono-cropping is not recommended as it can lead to severe disease problems and reduce production levels.' The strategy advises farmers that 'inter-cropping is a better technique because you can grow food or cash crops at the same time as the kava and other plants can help protect the kava from weeds, pests and wind and provide shade.'⁷¹

Most farmers employed agroforestry techniques, growing kava under coconut trees, papaya trees, banana trees and native tree species. Kava was also observed to be grown in clear cut areas and it was evident that plants did not thrive under full exposure, although three farmers interviewed insisted kava grew better in full sun (two farmers believing this increased kavalactone levels). This represents a critical knowledge gap: kava has not only been demonstrated to grow optimally with 30% shade, but the use of agroforestry practices also reduces required fallow periods and reduces risk of soil erosion.⁷² In the farmer household survey, issues related to soil erosion were more commonly reported in Vanuatu, followed by Fiji and lastly Tonga. Presumably, this is related to the countries' topographies. Tonga has a much flatter landmass than the other two countries of study.

66 The understory is the layer of vegetation that naturally grows beneath the main canopy of a forest.

67 PHAMA Plus (2023)

68 Intercropping is the practice of growing multiple crops mixed together or in close proximity. It is a more environmentally-sustainable practice than monocropping, which is the practice of growing only a single crop in a particular area (and typically over multiple seasons)

69 PHAMA Plus (2023)

70 DARD (2016), p.23

71 DARD (2016), p.22

72 PHAMA Plus (2023)

In term of weed control, farmers employed a variety of methods, including manual weeding with a machete, intercropping to create a groundcover and the use of herbicides. Generally, weed control is not required once the plant reaches 18 months of age,⁷³ but there was one case observed where herbicides and pesticides were used liberally (and ineffectively) in Tonga with mature plants. The use of herbicides and pesticides is banned in Vanuatu and no farmers reported their use. The use of such chemicals was very rarely reported in Fiji. This was consistent with the farmer household survey, which found that the rate of organic farming was highest in Vanuatu and lowest in Tonga.

There had been a strong trend of increased kava cultivation across the three countries of study decades before the opening of the Australian market. It is difficult, therefore, to attribute an increase in kava cultivation to the market opening. Farmers did report in the household survey, however, that this was the case. In Fiji, 11.6% of respondents reported increasing cultivation because of the market opening, compared to 8.8% of respondents in Vanuatu and 31.3% of respondents in Tonga. If demand from the Australian market were to lead to a significant increase in cultivation, however, this study does not find that this would likely lead to undue environmental harm.

An issue mentioned in both Tonga and Vanuatu was that of food security. In both these countries, numerous respondents reported that in past decades, in certain regions, farmers over-prioritised kava as a cash crop over traditional subsistence and local market food crops. This reached a point where these regions encountered food security problems and an oversupply of kava. As one official from the Tongan Ministry of Agriculture stated, *'I had to advise farmers that they needed to grow to eat, not only to grow to drink.'*



Kava being pounded in machine.

Recommendations

Q3. What are the policy implications for the Australian Government of the observed impacts of the opening of the Australian market?

Q3.1. What changes to Australian domestic policy and practice could be made to help the Pacific kava industry?

Make the market opening permanent trade policy

This study has found that the market opening has produced clear benefits for the PIC kava industry. The best way to sustain and increase these benefits would be to close the Pilot period at the end of 2023 and follow it with a permanent opening of the market. Such an opening would help repair past uncertainty created by kava import bans and be a boost to goodwill and bilateral relations between Australia and PICs. In addition to economic benefits, it would have tremendous culturally symbolic importance to PICs.

Increase communication and coordination with PICs

It was evident through interviews with PIC government stakeholders across the three countries of study that they did not feel adequately consulted in the design and rollout of the Pilot. Many high-level government representatives stated that they first heard about the Pilot through media reports or informal networks. There was a feeling that there was a missed opportunity to work consultatively with the Australian Government and prepare their industries for the new market opportunity. Whatever decisions the Australian Government makes in the future regarding the Pilot and import rules for kava, this report recommends soliciting input from PICs and providing advance notice to allow their industries time to adjust.

It is also recommended that Australian High Commissions (AHCs) provide clear points of contact in each country who can answer questions related to kava importation. This was not always in place, with respondents sometimes complaining across the countries of study that information requests to AHCs often went unanswered. It should be noted, however, that the AHC in Tonga appeared particularly responsive and Australian-funded programmes such as PHAMA Plus provided a vital and appreciated source of information on the Pilot across the three countries of study.

PIC government representatives in Vanuatu and Tonga compared this 'top down' approach to recent exchanges with the NZ MPI, which they felt was more collaborative. Under an initiative termed the Enhanced Pacific Market Access Partnership, started in 2021, NZ has taken a new approach to creating market access for PIC producers. As a representative for the NZ Ministry for Primary Industries described when interviewed for this study, *'Previously, we would respond to requests to open markets and reduce barriers, but this didn't result in an increase in trade. We therefore flipped the switch and started by looking at the market demand, building market pathways from there.'* For example, in Tonga, NZ MPI sent delegations to meet with the Tongan government and industry leaders in March and May 2023 to explain FSANZ import requirements, strategise on how to grow the Tongan watermelon industry and make direct linkages with NZ watermelon retailers. Similarly, Government of Vanuatu representatives described a mission from NZ MPI that took place in May 2023 to support Vanuatu's lime industry. Both missions involved in-person meetings, joint planning sessions and facilitating contacts with buyers. This study finds that these missions offer an example of good practice for Australia to consider in future.

Introduce a phased requirement for certification of exporters to Australia

This study finds there have been two major drivers for the safety and quality of kava for international markets: (1) domestic regulation and support for the industry within PICs and (2) the demands of US importers. All three countries of study ban the export of tudei kava and all three countries perform inspections of processing facilities for basic hygiene standards before granting export licences. All three countries also benefit from PIC government, Australian, and NZ-funded initiatives to help actors improve the hygiene of their kava processing.

The demands of US importers are arguably a stronger driver of the safety and quality of kava for export. All exporters interviewed who export to the US market described their import partners as highly demanding in terms of quality and stringent in terms of testing. It was reported that US importers, as standard practice, test not only for nobility, but for microbial contamination, the presence of heavy metals and often even kavalactone levels. This has obliged exporters to improve their practices, invest in their own testing and provide feedback to their farmers/suppliers to ensure the quality and safety of their standards. This feedback loop does not exist with the Australian market as importers do not do the same testing. As one Australian importer

stated, *'this kind of testing is expensive and we don't have the scale right now to justify it.'* Another exporter attributed this to uncertainty related to the future of the pilot: *'I think we'll see Australian importers invest more in testing once they know this opening is permanent.'*

In terms of the quality of kava imported to Australia, i.e., the flavour, consistency and kavalactone levels, this report argues that this should be left for the market to self-regulate. As with other comparable products, such as tea, coffee or alcohol, there is a space in the market for products of varying price and quality. In terms of safety, however, i.e., nobility and microbial risk, a critical gap remains. Most exporters recognised this gap, with many expressing concerns about products reaching Australian markets. As one Australian importer stated, *'there isn't a single vendor in Australia who isn't worried about poor quality kava damaging the market'*

Many exporters suggested that Australia introduce testing procedures for kava at ports of import for basic food safety, i.e., for heavy metal content, microbial contamination and nobility. This option would likely be resource intensive and would further slowdown what is an already lengthy customs clearance process. Instead, this study recommends that Australia consider a system whereby only certified exporters are permitted to export to Australia. This could include HACCP or another similar certification scheme. The requirement could distinguish between exports of dried roots, which would require further processing in Australia, and products that have been processed for direct consumption, such as powder and juice. 'Raw' products that require further processing to become food products should not be subject to the same requirements.

A certification requirement should be phased-in over time, with accompanying support for enterprises to have access to affordable domestic certification providers. All three countries have access to HACCP certification in-country, but further study is needed on the cost and accessibility (in terms of affordability and geographical access within the three countries) to such certification. Mandatory HACCP certification for exporters is likely the direction that the PIC industries will take themselves. In July 2023, the Vanuatu Primary Producers Authority (VPPA) had begun signalling to exporters that it was intending to introduce HACCP requirements for all kava exports by 2025. A majority of exporters interviewed during this study were already HACCP certified and even smaller exporters believed this would not represent an undue barrier to entry if accompanying support for affordable in-country certification was established.

Certification requirements would not only improve the safety of kava reaching the Australian market, but would also improve traceability and allow for targeted bans for particular producers or processors if issues arise.

Allow for value-added kava products in the Australian market, such as flavoured juices and products using kavalactone extracts.

Allowing value-added kava and kavalactone products into the Australian market would drive demand for imports, provide opportunities for Australian companies and encourage PIC companies to move up the value chain. This would help create quality jobs in the Pacific, especially for women. This would require an amendment to the FSANZ food standard for kava, which, as an expert from the NZ Ministry for Primary Industries stated, 'prohibits food for sale having as an ingredient or a component - kava or any substance derived from kava.'

Allocate resources to speed up custom clearance processes for kava

Identifying the reasons behind the lengthy clearance times at Australian customs was beyond the scope of this study. Addressing this issue, however, would improve market access, especially for exporters of fresh juice or other kava processed products that may be permitted in future.

Enact stricter point of origin labelling

This study finds that Australia's labelling requirements, which are stricter than those of the US or NZ, have been a positive move for the kava industry. To help better inform consumers and promote the appreciation of national varieties and origins of kava, this study suggests that requirements be amended to specify the source countries of kava on labels. This would principally affect Fijian exports of kava to Australia, which heavily rely on imported kava from Vanuatu. If product is a mix of kava from these two countries, it would have to specify as such on the label.

Q3.2. What other forms of support could Australia or other development partners provide to support the Pacific kava industry?

In addition to making changes to domestic Australian policy and practice, this report finds that there are numerous forms of support that Australia or other donors could provide to help PIC kava industries. Supporting the sector should be a priority for international donors and development partners. Support for the sector is a priority for the Australian and New Zealand funded PHAMA Plus program because of: (i) the growth opportunity internationally for diversified products derived



from kava, (ii) the large number of households involved in kava production, (iii) the high motivation of exporter/processors, who are willing to change practices and increase scale, and (iv) an opportunity to diversify PIC economies beyond tourism.⁷⁴

The forms of support listed below are in line with PHAMA Plus' intervention areas to help PIC kava industries, which include assistance for PIC kava industries to: (i) promote R&D to support transition to new kava-based products, (ii) upgrade processing equipment to improve product quality and safety, (iii) enhance the environmental sustainability of production and (iv) facilitate industry investment in response to threats and opportunities to kava export growth.⁷⁵

Ensure Australian policy helps the PIC kava industry position itself for the future

This is a high-level, cross-cutting recommendation (incorporated in the recommendations to follow) that recognises that the comparative advantage of countries such as Fiji, Tonga and Vanuatu are likely time-bound. Australian strategies in future to support the PIC kava industry should help them move up the value chains, develop premium and more diversified products and not simply focus on increasing production for traditional, saturated markets.

⁷⁴ PHAMA Plus (2023)

⁷⁵ PHAMA Plus (2023)



A Tongan farmer sun drying his kava.

Support PICs to improve the quality of processing equipment and testing facilities

Serious gaps exist across the three countries of study in terms of improving processing and testing facilities. This study recommends support be targeted at the farmer level to improve awareness of more hygienic processing practices and access to related equipment. This would include providing farmers with solar dryers and clean water sources. At the processor level, grant funding could be made available to improve access to stainless steel pounding/grinding machines and testing facilities for nobility, heavy metal content and microbial contamination.

Encourage PICs to introduce phased regulation and facilities for mandatory HACCP or other such certification for export.

All three countries of study already require inspection of facilities by their national governments to be granted export licences. Many exporters already have FDA or HACCP certifications. Requiring exporters to have more robust certification requirements would reduce risk, improve the reputation of the kava industry, and would reward enterprises that are invested in safe and quality product for the long-term. Exporters and PIC Government representatives interviewed were supportive of the introduction of certification requirements for the Australian market and did not believe this would be an undue barrier to trade.

Connect PIC exporters to Australian formal market buyers

Working through national Chambers of Commerce for example (which are connected to exporters of varying sizes), Australia could help better connect smaller exporter/processors with buyers abroad. As several respondents pointed out, Australia is generous in its support for market systems development programs across the Pacific (such as MDF, PHAMA Plus and Strongim Bisnis), but could do more to connect Pacific producers to Australian consumers. As a representative from the Vanuatu Chamber of Commerce commented '*it's fantastic that Australia removed this barrier, but it needs to build a pathway too. Where are the trade missions, where are the trade shows, where is the support for the marketing of kava in Australia like there is for tourism?*'

As mentioned earlier in this report, PTI Australia has already made efforts to connect PIC exporters to retailers in Australia. There may, therefore, be a lack of awareness of these activities, a feeling that only larger exporters have benefited from these activities or that such activities have not connected exporters to the segment of the Australian market that is the most dynamic, which is high-end retail growth of premium product (i.e., not sales of traditional kava powder).

Support PICs to introduce purchase registers.

A purchase registry is a centralised database where businesses can register their purchases and establish records of ownership. Purchase ledgers already exist in countries such as Fiji for sectors including sugar, rice and the coconut trade, demonstrating that such systems are technically feasible. Such a register would increase price transparency, helping to ensure farmers receive a fair price for the kava they sell. They would also increase traceability and help deter the theft of kava (a frequent problem across the Pacific). Such a register could be used, for example, to track if thieves (who are not kava producers themselves) are selling kava to agents or exporters.

Such a register would be in line with existing concerns across the three countries of study that farmers are vulnerable to exploitation, that distribution of benefits in the industry is poorly understood and that a permitting system may be required for agents that trade kava between farmers and exporter/processors.

Fund additional research to address critical information gaps in the sector.

The Pacific is a data-poor region, and this is no less true for the kava sector. There is a lack of publicly available research on the formal and informal markets, global industry trends and transparent, accessible technical information on extraction methods and kavalactone profiles of different varieties grown under different conditions. This poses a challenge to PIC policy makers in formulating strategies for their kava sectors and for producers and exporter/processors in formulating their business plans. This is underscored in the Vanuatu National Kava Strategy (2016-2025), which states that 'there is insufficient investment by government in R&D' combined with 'variable levels of awareness and availability of publications that farmers can use to improve production'⁷⁶ Government representatives, exporter/processors and farmer reported huge variation in, for example, required fallow periods for kava cultivation, ideal growing conditions, maximal harvest ages of plants, and what contributes to kavalactone levels.

Support regional and national efforts for the introduction of Geographic Indications (GI) for kava.

GIs are a form of intellectual property protection (IPP) that specify a product originating from a particular geographical region. Well-known examples include Champagne, Scotch and Darjeeling tea. GIs help ensure product quality, link products to the natural environment and help preserve cultural heritage. If kava takes off as a global commodity, recognition of a GI will help position existing PICs in a premium market and protect their market share against more productive competitors. Australian support for existing efforts to establish GI, led by SPC, would build an enormous amount of goodwill and help mend offended sensitivities caused by past kava bans.

Support organic or environmental stewardship certifications for kava farmers and processors.

This study found that while gaps exist, kava is largely grown organically and in an environmentally sustainable manner. Helping close existing gaps – including unnecessary deforestation and issues related to soil degradation – would not be difficult, would benefit farmers, help protect the environment and would help remove some of the stigma around kava that exists in the minds of Australian consumers created by import bans.

⁷⁶ DARD (2016), p.6



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Annex I: Survey Respondents

The following respondents were interviewed during the study. The figures reported below represent the number of separate enterprises or agencies interviewed, not individuals.

PIC government, quasi-government agencies

- Fiji Biosecurity Authority
- Fiji Ministry of Agriculture and Waterways
- Tongan Ministry of Trade and Economic Development (MTED)
- Tongan Ministry of Agriculture and Food, Forests (MAFF)
- Tongan Customs Service
- Tongan Government District Officers of Vava'u and Eua
- Vanuatu Ministry of Agriculture, Livestock, Forestry, Fisheries, and Biosecurity (MALFFB)
- Vanuatu Primary Producers Authority (VPPA)
- Vanuatu Department of Agriculture and Rural Development (DARD)
- Vanuatu Department of Agriculture, Fisheries and Forestry Biosecurity
- Vanuatu Bureau of Standards (VBS) Laboratory
- Vanuatu Ministry of Tourism, Trade, Commerce and ni-Vanuatu Business (MTTCNVB)
- New Zealand Ministry for Primary Industries
- New Zealand High Commission to Vanuatu

23 Exporter/processor/producers: 8 in Tonga (including freight forwarders), 8 in Vanuatu and 7 in Fiji

3 agent/kava traders: 1 in Fiji, 2 in Vanuatu

18 Smallholder farmers, including 2 in Fiji, 1 in Tonga and 15 in Vanuatu

Industry experts or academics, including representatives from the Tonga Kava Committee, the Vanuatu Kava Association, Ninti One, and kava researcher Dr. Vincent Lebot

4 Australian Importers

Pacific Islands Forum Secretariat

New Zealand Ministry for Primary Industries

Australian government departments

- Australian High Commissions in Fiji, Tonga and Vanuatu
- Department of Foreign Affairs and Trade (DFAT)
- Department of Agriculture, Forest and Fisheries
- Department of Health and Aged Care



Annex II: Survey Protocols

Interview Protocol for Kava exporters

Interview mode		Date of interview	
Country		Name	
City (their base)		Sex	
Respondent group	kava exporters	Title	
Contact details		Business name	

Notes

- *Italicised text is internal notes for the interviewer.*
- *Questions are written assuming industry working group representatives will also be exporters themselves. Questions that are only for industry associations are written in a separate colour.*
- *For questions asking quantitative information, the interviewer will ask for a range if the respondent is unable to provide precise figures.*
- *To streamline this form, not all questions are written out in full. Questions listed in this form will be compound, asking: (i) the endline (current value), (ii) baseline (value before the start of the Pilot, i.e., Dec. 2021) and (iii) the reason for the change (i.e., attribution to the Pilot).*

Introduction

Hello, my name is [NAME] and I am a short-term consultant working for the PHAMA Plus programme [if respondent is not familiar with programme, explain that it is an Australian and New Zealand-funded programme that helps Pacific Island countries improve livelihoods and economic development].

PHAMA Plus has put me in touch with you today because we are undertaking a study to assess the impact of the opening of the Australian market to kava imports in December 2021. I will be speaking with a range of stakeholders across Fiji, Tonga, Vanuatu and in the Australian Government. The findings of the study will help the Australian Government make decisions on the future of the Pilot.

Your identity and personal information will not be included in the final report and all the information that you share with me will be kept anonymous. If any of my questions are unclear, please feel free to ask me to explain further. There are no right or wrong answers and we can skip any questions that you do not wish to answer. You may also stop the interview at any time for any reason. The interview will last about one hour.

Do you have any questions for me before we begin?

Do you consent to proceeding with this interview?

Business profile

1. Confirm information in the table at the top of this form.
2. What are your main business activities?
What percentage of your business is related to kava exports?
3. How long have you been exporting kava to Australia? Did you export before the 2007 ban?

4. How many people work in your business? What percentage of your employees are women? What kind of work do the men and women do in your business?
5. Have you heard about Australia's kava Pilot? How did you hear about it?
6. What sources of information did you use to learn how to export to Australia? What was most useful?
7. What information gaps existed for you in understanding the Pilot or exporting kava to Australia in general?

Business practice questions

For kava industry association representatives, questions will be added to ask to what degree the changes they have experienced as exporters are indicative for the overall kava exporting sector.

8. From whom do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
9. At what price do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
10. In what form (raw, powdered, etc.) and variety do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
11. To whom do you sell kava? Also ask baseline and reason for any changes (attribution to the Pilot).

At what price do you sell kava? Also ask baseline and reason for any changes (attribution to the Pilot). X

12. In what form (raw, powdered, etc.) sell kava? Also ask baseline and reason for any changes (attribution to the Pilot). If kava is sold in a different form than it is bought, ask about the value addition (forms of processing)
13. What is the annual or monthly volume of your kava exports? Also ask baseline and reason for any changes (attribution to the Pilot).
14. What percentage of your revenue comes from kava exports? Also ask baseline and reason for any changes (attribution to the Pilot).
15. Do you see kava exports as a growth sector? If yes, ask why and if there is attribution to the Pilot.
16. What percentage of your kava exports go to Australia? Also ask baseline and reason for any changes (attribution to the Pilot).
17. What are your marketing and branding activities? Also ask baseline and reason for any changes (attribution to the Pilot).
18. What are the main barriers for exporting kava to Australia?
19. How can demand in the Australian market for kava from your country be stimulated?
20. Have you made changes to your business in response to the opening of the market, including investments in training, hiring, marketing, equipment, or technology? What was the cost of this investment? When did you make it?
21. What forms of support have you received to date to help you take advantage of the opportunity of the opening of the Australian market? What further support would be helpful?
22. Do you plan to continue exporting kava to Australia? Do you expect any changes in demand and your volume of exports? Why?

General industry questions

23. What is the relative importance of the domestic and export markets for the kava industry? Also ask baseline and reason for any changes (attribution to the Pilot).
24. What is the relative importance of the kava industry compared to other agricultural sectors to rural households and the overall economy? Also ask baseline and reason for any changes (attribution to the Pilot).

Environmental questions

25. What are the main environmental impacts of kava production (including deforestation, land degradation (including soil and fertility erosion, water pollution and pesticide use)? Also ask baseline and reason for any changes (attribution to the Pilot).
26. How is kava grown? The purpose of this question is to assess the extent of the use of environmentally friendly practices when growing kava. Depending on the knowledge level of the participant, further probing can ask if kava is grown in single or multi-crops, or uses practices such as agroforestry, organic farming, integrated pest management and practices to limit deforestation and other practices to promote responsible land use?
27. What is the kava industry doing to minimise environmental harm in the kava industry? What further could be done? What support would help this to happen?

GEDSI questions

28. What role do women, youth and persons with disabilities play in the kava export sector in your country? Also ask baseline and reason for any changes (attribution to the Pilot).
29. What is the kava industry doing to maximise benefits and reduce harm to women, youth and PWD in the kava industry? What could be further done?

Cultural questions

30. Has there been any cultural impact in your country to the opening of the Australian market?
31. Are there issues regarding the availability or price for kava in your country for domestic consumers (especially for community or cultural rituals)? Also ask baseline and reason for any changes (attribution to the Pilot).
32. What are general attitudes and perceptions regarding kava exports and the Pilot in the business community and more widely in your country?

Recommendations and concluding questions

33. What recommendations would you suggest to the following groups regarding the Pilot and regarding exporting kava to Australia more generally?
 - o Kava industry associations
 - o Farmers
 - o Your government
34. Do you think it might be useful for the Australian Government to introduce testing for kava? If yes, ask for what properties (biosecurity, varieties, quality, etc.)
35. Are there any other risks, opportunities, or other considerations in the kava sector relevant for this study that you would like to mention?

Interview Protocol for Kava aggregators

Interview mode		Date of interview	
Country		Name	
City (their base)		Sex	
Respondent group	Kava aggregators	Title	
Contact details		Business name	

Notes

- Italicised text is internal notes for the interviewer.
- For questions asking quantitative information, the interviewer will ask for a range if the respondent is unable to provide precise figures.
- To streamline this form, not all questions are written out in full. Questions listed in this form will be compound, asking: (i) the endline (current value), (ii) baseline (value before the start of the Pilot, i.e., Dec. 2021) and (iii) the reason for the change (i.e., attribution to the Pilot).

Introduction

Hello, my name is [NAME] and I am a short-term consultant working for the PHAMA Plus programme [if respondent is not familiar with programme, explain that it is an Australian and New Zealand-funded programme that helps Pacific Island countries improve livelihoods and economic development].

PHAMA Plus has put me in touch with you today because we are undertaking a study to assess the impact of the opening of the Australian market to kava imports in December 2021. I will be speaking with a range of stakeholders across Fiji, Tonga, Vanuatu and in the Australian Government. The findings of the study will help the Australian Government make decisions on the future of the Pilot.

Your identity and personal information will not be included in the final report and all the information that you share with me will be kept anonymous. If any of my questions are unclear, please feel free to ask me to explain further. There are no right or wrong answers and we can skip any questions that you do not wish to answer. You may also stop the interview at any time for any reason. The interview will last about one hour.

Do you have any questions for me before we begin?
Do you consent to proceeding with this interview?

Business profile

1. Confirm information in the table at the top of this form.
2. What are your main business activities?
3. How long have you been in the kava business? Were you in business before the 2007 ban on kava exports to Australia?
4. How many people work in your business?

Information and awareness of Pilot

5. Have you heard about the Pilot for the importation of kava to Australia?
6. How did you hear about the Pilot?
7. What sources of information did you use to learn how to export to Australia? What was most useful?
8. What information gaps existed for you in understanding the Pilot or exporting kava to Australia in general?

Business practice questions

9. From whom do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
10. At what price do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
11. In what form (raw, powdered, etc.) and variety do you buy kava? Also ask baseline and reason for any changes (attribution to the Pilot).
12. To whom do you sell kava? Also ask baseline and reason for any changes (attribution to the Pilot).
13. At what price do you sell kava? Also ask baseline and reason for any changes (attribution to the Pilot).
14. In what form (raw, powdered, etc.) sell kava? Also ask baseline and reason for any changes (attribution to the Pilot).
15. What is the annual or monthly volume of the kava that you buy? Also ask baseline and reason for any changes (attribution to the Pilot).
16. What percentage of your business comes from kava? Also ask baseline and reason for any changes (attribution to the Pilot).
17. What percentage of the kava that you aggregate goes to Australia? Also ask baseline and reason for any changes (attribution to the Pilot).
18. What are your marketing and branding activities? Also ask baseline and reason for any changes (attribution to the Pilot).
19. What are the main barriers for exporting kava to Australia?
20. Have you made changes to your business to in response to the opening of the market, including investments in training, marketing, equipment, or technology?
21. What forms of support have you received to date to help you take advantage of the opportunity of the opening of the Australian market? What further support would be helpful?

Recommendations and concluding questions

22. What recommendations would you suggest to the following groups regarding the Pilot and regarding exporting kava to Australia more generally?
 - o Kava industry associations
 - o Your government and the Australian government
23. Are there any other risks, opportunities, or other considerations in the kava sector relevant for this study that you would like to mention?

Interview Protocol for Pacific Island Country Government Agencies

Interview mode		Date of interview	
Country		Name	
City (their base)		Sex	
Respondent group	Pacific Island Country Government Agencies	Title	
Contact details		Government Agency	

Notes

- Italicised text is internal notes for the interviewer.
- For questions asking quantitative information, the interviewer will ask for a range if the respondent is unable to provide precise figures.
- To streamline this form, not all questions are written out in full. Questions listed in this form will be compound, asking: (i) the endline (current value), (ii) baseline (value before the start of the Pilot, i.e., Dec. 2021) and (iii) the reason for the change (i.e., attribution to the Pilot).
- Questions in colour are only for ministries of agriculture.

Introduction

Hello, my name is [NAME] and I am a short-term consultant working for the PHAMA Plus programme [if respondent is not familiar with programme, explain that it is an Australian and New Zealand-funded programme that helps Pacific Island countries improve livelihoods and economic development].

PHAMA Plus has put me in touch with you today because we are undertaking a study to assess the impact of the opening of the Australian market to kava imports in December 2021. I will be speaking with a range of stakeholders across Fiji, Tonga, Vanuatu and in the Australian Government. The findings of the study will help the Australian Government make decisions on the future of the Pilot.

Your identity and personal information will not be included in the final report and all the information that you share with me will be kept anonymous. If any of my questions are unclear, please feel free to ask me to explain further. There are no right or wrong answers and we can skip any questions that you do not wish to answer. You may also stop the interview at any time for any reason. The interview will last about one hour.

Do you have any questions for me before we begin?
Do you consent to proceeding with this interview?

Profile

1. Confirm information in the table at the top of this form.
2. What are your business activities?

Information and awareness of Pilot

3. Have you heard about Australia's Kava Pilot? How did you hear about it?
4. What sources of information did you use to learn how to export to Australia? What was most useful?
5. What information gaps existed for you in understanding the Pilot or exporting kava to Australia in general?
6. What types of information did your agency provide (including promotional and awareness events) on the Pilot and to whom?

Kava industry questions

7. What are the main barriers for exporting kava to Australia?
8. Has your agency made investments in response to the opening of the market, including investments in training, marketing, equipment, or technology? If yes, ask for details.
9. Has your agency made changes in regulations, policies, or practices in response to the opening of the market? If yes, ask for details.
10. What forms of support have you received to date to prepare for kava exports to Australia?
11. What forms of support have you provided the kava industry to help it prepare for export to Australia?

Environmental questions

12. What are the main environmental impacts of kava production (including deforestation, land degradation (including soil and fertility erosion, water pollution and pesticide use)? Also ask baseline and reason for any changes (attribution to the Pilot).
13. How is kava grown? The purpose of this question is to assess the extent of the use of environmentally friendly practices when growing kava. Depending on the knowledge level of the participant, further probing can ask if kava is grown in single or multi-crops, or uses practices such as agroforestry, organic farming, integrated pest management and practices to limit deforestation and other practices to promote responsible land use?
14. What regulations exist regarding environmentally friendly agricultural practices, particularly for the kava sector?
15. What is the kava industry doing to minimise environmental harm in the kava industry? What further could be done? What support would help this to happen?
16. What are farmers doing to mitigate climate-change related risks?

GEDSI questions

17. What role do women, youth and persons with disabilities play in the kava sector in your country? Also ask baseline and reason for any changes (attribution to the Pilot).
18. What is the kava industry doing to maximise benefits and reduce harm to women, youth and PWD in the kava industry? What could be further done?
19. Has there been any cultural impact in your country to the opening of the Australian market?
20. Are there issues regarding the availability or price for kava in your country for domestic consumers (especially for community or cultural rituals)? Also ask baseline and reason for any changes (attribution to the Pilot).
21. What are general attitudes and perceptions regarding kava exports and the Pilot in the business community and more widely in your country?

Recommendations and concluding questions

22. What are your expectations for the kava sector in the future?
23. What is your hope for the future of the kava Pilot?
24. What recommendations would you suggest to the following groups regarding the Pilot and regarding exporting kava to Australia more generally?
 - o Kava industry associations
 - o Your government
 - o The Australian government
25. Do you think it might be useful for the Australian Government to introduce testing for kava? If yes, ask for what properties (biosecurity, varieties, quality, etc.)
26. Are there any other risks, opportunities, or other considerations in the kava sector relevant for this study that you would like to mention?

Annex III: Kava Household Survey Findings (Fiji, Tonga & Vanuatu)

Participating Countries

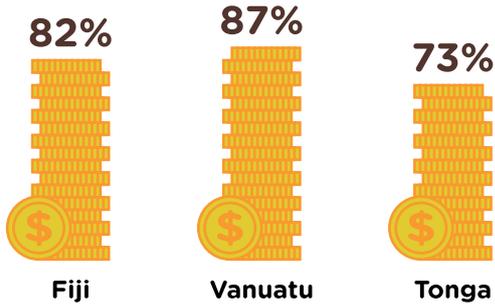


Fiji

Vanuatu

Tonga

Contribution of Kava to Household Income

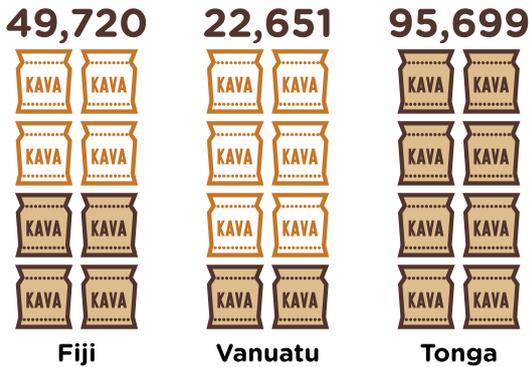


Fiji

Vanuatu

Tonga

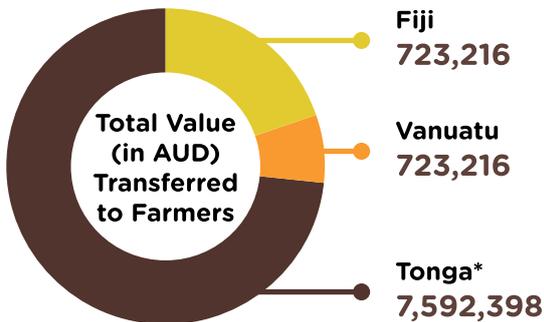
Total Kava Export from Dec 2021 to Dec 2022 (KG)



Fiji

Vanuatu

Tonga



* While the majority of Tongan farmers directly exported their kava to Australia at initially high prices, stakeholder consultations uncovered that the price of Tongan kava experienced a decline. This decrease was attributed to the supply of low to mid-quality kava after it reached its peak in mid-2022. The value presented is based on the export from December 2021 to December 2022.

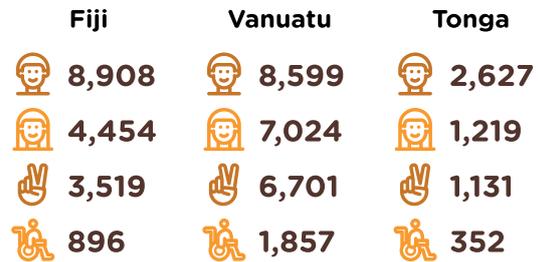
Kava farmers participating in export through exporters



Tonga

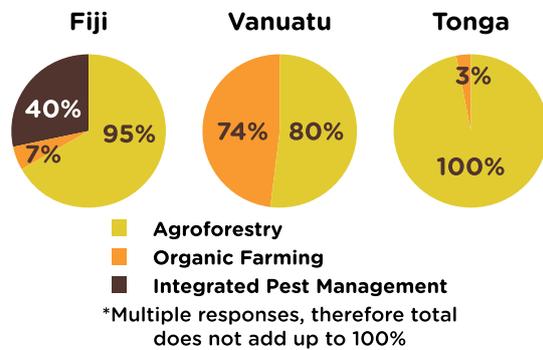
Households

Estimated number of men, women, youth and PWD

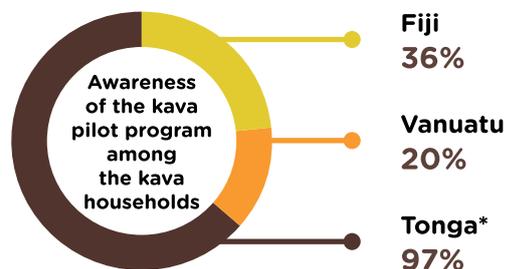
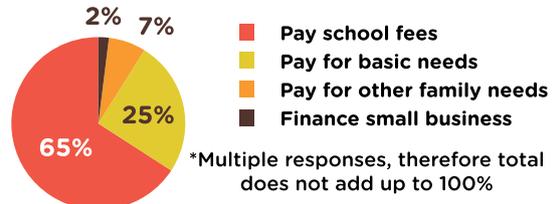


Note: The disaggregated data pertains to individuals within kava farming households, who are engaged in selling kava to exporters targeting the Australian market.

Environmental and Climate Resilience Practices in Kava Farming



Use of income from sales of kava*



*Awareness level in Tonga is high as most farmers export directly to Australia.

