

Information brief



Photo: Michele Westmorland

Pacific kava production, trade and consumption: Gaps in data hinder full analysis

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A. Introduction

Kava is made by grinding parts (usually the roots either dried or fresh depending on the country) of the plant Piper methysticum, soaking it in water and then straining it using a cloth or vau^1 . It is reported to lessen anxiety and is said to contain some medicinal properties. It is also reported to have some side effects due to which a number of countries have placed restrictions on its import. These have included limits on the quantity that can be carried into, for example, Australia by arriving passengers, a restiction that still stands.

Kava is a popular social and cultural/ceremonial drink in a number of Pacific Island countries and territories (PICTs). It is also popular among the Pacific Island diaspora now settled in countries like the United States of America, Australia and New Zealand. It is a drink that soldiers from the Fiji military forces take with them when they go for peace keeping duties. A *talanoa*² around the *tanoa*³ is common among all ages and groups of people in many countries across the Pacific region. If taken in moderation this can be an enjoyable experience and a socio-cultural approach to brainstorm ideas or resolve conflicts.

Cultivating and selling kava is an important source of income for many rural farmers and their families. It is also an important value-adding commodity since other than the usual powder form, it comes in other forms including capsules.

The economic importance of kava to many PICTs is significant. It contributes to the gross domestic product (GDP) and to the balance of payments and foreign exchange earnings. These contributions need to be more accurately and

¹Dried inner bark of the hibiscus plant.

²Talk or discussion.

³Traditional bowl in which kava is mixed.

comprehensively measured. This can only happen if statistics on kava production, consumption, imports and exports are compiled by all PICTs.

For this to happen two things are necessary:

- 1. **Statistical classifications are needed to capture data on kava** these are among the basic tools for accurate and reliable data collection, analysis and dissemination. Appendix 1 illustrates the different classifications which have been regionalised to better identify goods, including kava, that are important to the economies of PICTs.
- 2. **Reliable and comprehensive data on kava production, consumption and trade:** this is the crux of the problem; the lack of data on kava is a major issue facing the compilation of statistics on kava, which in turn poses difficulties in developing kava-related policies that could benefit PICTs.

Section B highlights issues due to which the compilation of statistics on kava in PICTs is not up to scratch and proposes ways in which the kava-data lacuna can be significantly improved. Section C analyses the avaiable data by country and makes the issues discussed in Section B clearly visible. Section D of the paper provides a short summary and conclusion.

B. Issues in the compilation of statistics on kava and ways they can be resolved

Data on kava production, exports, imports and household (HH) final consumption expenditure were obtained from 11 countries⁴. Guam and Tokelau reported they had no production, export or import data. Papua New Guinea reported no data on kava since activities are carried on outside of the formal sector. There were data gaps, inconsistencies and other quality issues with the data provided by almost all the other countries indicating that, although kava is an important cash crop and items of trade for many, there is very little available reliable data on the industry as a whole.

Some of the major issues in the compilation of statistics and thoughts on how these can be addressed are highlighted below:

1. Issues in capturing data on the number of growers and the production of kava

For most countries the growing of *Piper methysticum* and the production of kava falls in the <u>informal sector</u>, that is, they are household-based activities carried out by self-employed persons with or without hired casual workers and/or unpaid family workers. However, most of the kava produced in this way is sold. For some HHs this is a major source of income, and therefore needs to be reflected in the country's GDP.

It is therefore recommended that the agriculture departments in PICTs collect data more regularly from HHs through its extension offices and through the periodic agricultural census, on the number of kava growers, quantity of kava produced and the farmgate/market price received.

2. Underreporting of kava exported

Development Division, SPC.

This is common in almost all the PICTs and will be better explained with the following example from Tonga. Table 1 shows two sets of numbers for the quantity of kava exported from Tonga from 2012 to 2020. Statistics on the quantity of kava officially exported, as released by the Tonga Statistics Department, differs from the quantity of kava exports as reported by Tonga's Quarantine and Quality Management Division as having been authorised to be taken abroad. Kava approved by the Quarantine Division to be taken abroad are hand carried, taken as checked-in luggage or taken as unaccompanied baggage for personal use or with the intention to resell it.⁵ Either way, if what Table 1 indicates is correct, then there is a significant undercoverage of the quantity and, as a result, of the official value of kava exported. Table 1 gives two scenarios, the first assumes that data from the Quarantine Division were not included in the official

⁴American Samoa, Federated States of Micronesia, Fiji, Guam, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga and Vanuatu. ⁵In international trade this is referred to as shuttle trade. Shuttle trade to a significant scale as defined by national law are to be included in the IMTS. One of characteristics of shuttle trade is the intention to resell goods as compared to own use. The shuttle trade is normally not recorded due to a low value (below customs threshold), but in some cases they are undeclared to avoid duties. In PICTS, shuttle trade conducted on an informal basis is common among all categories of travellers including non-resident workers where: (a) the value of the imports of goods are not declared in order to avoid import duties. A common way is for persons and individual traders to hand carry goods in excess of customs thresholds or carry goods as part of personal items in checked-in luggage. If caught at the arrival hall/customs check point, duty is paid but often this does not get recorded by customs; (b) the value of exports e.g., travellers carry with them goods as personal items or unaccompanied baggage like a container full of fish or taro which passes through the quarantine department but the information from the quarantine department, most of the time, does not get passed onto the customs administrations. Since data on the shuttle trade are not recorded in the customs trade database passed on to the NSOs, the IMTS falls short of this information. Source: Draft Pacific International Merchandise Trade Statistics Compilation Guide by Nilima Lal, Statistics for

national statistics office (NSO) data released. Scenario 2 assumes that all the export data released by the NSO are covered by the Quarantine Division and that only a portion of the quantity reported by the Quarantine Division was not covered.

Table 1: Tonga – Quantity of kava exports authorised to be taken abroad by the Quarantine Division, 2012–2020

	Official exp	oorts data y the NSO	released	Export data from quarantine	Scenario 1 – Q tonnage not incl official export data NSO	uded in the	Scenario 2 – Only net quantine tonnage not included in the official export data released by the NSO			
Year	Value (TOP)			Quantity (tonnes)	Value of quarantine data (column 5 multiplied by column 4) (TOP)	Total export value (column 2 plus column 6) (TOP)	Net Value of ne quarantine tonnage (column 5 less column 3) multiplied by column 4) (To		Total export value (column 2 plus column 8) (TOP)	
1	2	3	4	5	6	7	8	9	10	
2012	2,021,143	118	17,164	210	3,595,912	5,617,055	92	1,574,769	3,595,912	
2013	2,078,618	69	30,027	218	6,536,874	8,615,491	148	4,458,256	6,536,874	
2014	2,388,235	123	19,394	196	3,795,498	6,183,732	73	1,407,263	3,795,498	
2015	6,628,562	116	56,904	218	12,393,665	19,022,227	101	5,765,103	12,393,665	
2016	4,215,267	92	45,770	104	4,760,066	8,975,333	12	544,799	4,760,066	
2017	1,640,747	33	50,000	79	3,949,999	5,590,745	46	2,309,252	3,949,999	
2018	3,831,014	77	50,000	123	6,170,000	10,001,014	47	2,338,986	6,170,000	
2019	5,651,701	113	50,000	129	6,440,000	12,091,701	16	788,299	6,440,000	
2020	9,965,306	211	47,183	243	11,456,001	21,421,307	32	1,490,696	11,456,001	

Source: Tonga Quarantine Division and SPC Land Resources and Statistics for Development Divisions

Note: Price in column 4 is calculated using information on exports from the IMTS provided by the Tonga Statistics Department (refer to Table 6 in Appendix 2); this is assumed to be the official export price to estimate the value of the total quantity of kava approved by Tonga's Quarantine Division to be taken abroad.

Price is a critical value for all trade, and especially in the case of a commodity such as kava that appears to have almost as much in unofficial as in official export quantity. There is anecdotal evidence (from SPC's Land Resources Division) that most of the kava taken by passengers is purchased in Tonga at the local price and from 2016 to end of 2018 the price was sitting at over TOP 100 per kilo due to the impact of El Niño and other natural disasters.

It is therefore recommended that appropriate institutional arrangements be put in place between the NSOs, customs administrations and quarantine departments to be able to <u>estimate the correct value</u> of official and <u>unofficial exports</u> in the IMTS. Partner country trade data can also be checked but experience shows that because kava carried by travellers is usually within the permitted limit, it does not get recorded at the destination.

Until such arrangements are put in place, the challenge is for the NSOs to obtain data from the quarantine departments, work out different scenarios, find out which scenario is correct and include the estimates in the IMTS. NSOs should take note that though customs administrations are the preferred source for international trade data, supplementary sources can be used to verify or correct data.

3. Issues in obtaining data for estimating final consumption expenditure of households⁶

Kava is consumed by many HHs in countries across the region but, except for Fiji, no other PICT is able to provide the data on this important economic crop. It is recommended that more emphasis be given to this item in the consumption expenditure data from the HH Income and Expenditure Surveys (HIES).

4. The lack of quality checks on the data being compiled on kava

As mentioned earlier in this paper, some of the data obtained from the countries could not be used for the analysis in Section C because they did not meet the quality standards required.

It is recommended that NSOs do a simple supply-use analysis for kava using the template at Figure 1. Doing this will allow confrontation of data from different sources, for example, the quantity of kava produced obtained from the agriculture census and kava growers associations/councils, and household and market surveys; exports of kava from

⁶Households' final consumption expenditure is an important component of the GDP expenditure approach.

customs and the quarantine departments and thereby identify gaps and eliminate discrepancies to get consistency of supply and use at the commodity level.

Figure 1: Supply and use framework

		SUPPLY	7		USE							
vices					Final cons	umptior	expenditure	Capital fo	rmation			
Goods and servic	Domestic Production	Imports	Total supply	Intermediate consumption	돺	Government	Non-profit institutions serving HHs	Gross fixed capital formation	Change in inventories	Exports	Total use	
Kava												

5. Issues with the data on quantity of kava imported and exported

The focus of customs administrations is revenue collection, therefore, unless the revenue is based on quantity, errors in the data often go uncorrected.

The way forward, and this is supposed to be the common practice, is for the NSOs to check/edit the trade data i.e. work out the unit values so that outliers get flagged, queried and corrected.

6. Split between exports and re-exports

Data on exports⁷ of kava obtained from some countries included re-exports⁸ of kava. To be consistent when analysing the data across all countries, re-exports of kava for all countries were included with exports.

The way forward is for the NSOs to report international trade by exports and re-exports so that exports of kava produced by a country can be identified from kava imported and then exported without any value added.

Other than the six suggestions given above on the way forward, it would also be useful to put in place a registration/licensing system whereby self-employed persons need to obtain a license to farm, sell or operate a makeshift kaya bar.

C. A look at data on kava provided by countries

The analysis by country shows that for most of the kava producing countries in the region the price of kava started soaring from around 2015 partly as a consequence of the impact of El Niño and other natural disasters, including cyclone Pam (2015) and the associated serious flooding that followed. To identify issues and make informed decisions that could lead to an improvement in the quality of life of people producing kava and kava related products and engaged in internationally trading it, it is important to bring about improvements in the compilation of statistics in PICTs.

1. Fiji

Fiji was able to provide all the data on kava for the period 2005 to 2019.

1.1. Quantity and the value of kava produced and its consumption, 2005–2019

According to the 2020 Fiji Agriculture Census Report, 26 per cent⁹ of the total HHs in Fiji are engaged in growing *Piper methysticum*. The report is accessible using this link: https://www.fiji.gov.fj/Media-Centre/News/2020-FIJI-AGRICULTURE-CENSUS-REPORT-RELEASED

The analysis on the quantity and the value of kava produced and its consumption show similar trends: a slow and steady increase up until 2014 but thereafter the growth accelerates. The increase in production seems to be driven by consumer demand as well as higher farmgate ¹⁰ prices paid to the growers. While the quantity of kava produced increased by 420%

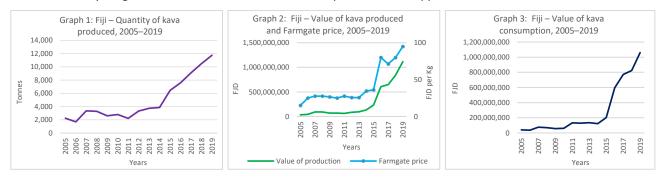
⁷Kava produced in the country and purchased by residents of another country

⁸Kava imported into the country from another country and then in the same condition, without any value added, purchased by residents of another country.

^{918,474} of 70,991

¹⁰A basic price with the "farm gate" as the pricing point, that is, the price of the product available at the farm, excluding any separately billed transport or delivery charge – OECD.

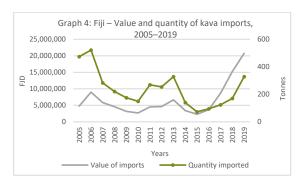
from 2005 to 2019, the price per kilogram of kava for the same period increased by 533% which is 114 percentage points more. The retail price of kava in Fiji, depending on which part of the plant it is made from e.g. whether it is lewena¹¹ or waka, ¹² currently ranges from FJD 60 to FJD 90. Refer to Graphs 1 to 3 and Appendix 2, Table 1.

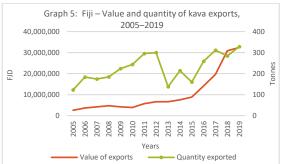


1.2. Imports and exports of kava, 2005-2019

The analysis on the imports of kava shows a decline of 31% in the quantity of kava imported from 2005 to 2019 but the dollar per tonne paid for imports for the same period showed an increase of 530%, which is 560 percentage points higher. The increase of 336% in the value of imports from 2005 to 2019 was therefore driven by escalating import price of kava. Fiji's major source market for kava is Vanuatu. In 2019 kava contributed 0.4% to Fiji's total imports, 0.17 percentage points more than 2005 and 0.08 percentage points more than 2018.

The analysis on the exports of kava shows an increase of 168% in the quantity of kava exported from 2005 to 2019 but the dollar per tonne paid for exports for the same period showed an increase of 375%, which is 207 percentage points more. The increase of 1,171% in the value of exports from 2005 to 2019 was driven more by the increase in the export prices than by the quantity of kava exported. Fiji's major destinations are PICTs. In 2019 kava contributed 1.5% to the value of Fiji's total exports, 1.3 percentage points more than 2005. Refer to Graphs 4 and 5 and Appendix 2, Tables 3 and 4.





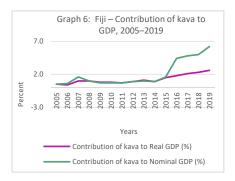
1.3. Contribution of kava to GDP, 2005–2019

Imports of kava, together with what is produced in Fiji, forms the total supply of kava in Fiji; the use mostly being for domestic final consumption and with the quantity remaining being re-exported. As per the requirements of the System of National Accounts, Fiji constructs a supply and use table ¹³ (SUT) to fill-in the data gaps and do valuation adjustments etc to get a reconciled GDP using the production, income and expenditure approaches. Refer to Appendix 2, Table 5. (Read 9.2.1 of the 4th day presentations using this link https://sdd.spc.int/events/2013/07/4th-regional-conference-heads-planning-and-statistics-hops-4 to get an overview of the SUT methodology.)

¹¹Made from the stump of the kava plant.

¹²Made from the root of the kava plant.

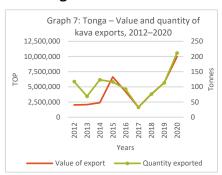
¹³The principle SUTs are based on: (a) products available for use in a country, either domestically produced or imported = total supply; (b) the total supply is used for intermediate consumption, final consumption expenditure, capital formation and exports.



The difference in the contribution between nominal and real GDP starts widening from 2016 due to inflation and the analysis in paragraph 1.1 (Quantity and the value of kava produced and its consumption, 2005–2019) mentions the increase in the farmgate price.

In 2016, kava's contribution to nominal GDP was more than 2.6 percentage points higher than its contribution to real GDP, in 2017 and 2018 it was higher by 2.7 percentage points and in 2019 by 3.6 percentage points.

2. Tonga



Tonga provided data on the quantity and value of kava exports for the period 2012 to 2020. Analysis shows that from 2016 the quantity and the value of exports follow a similar trend. This is also the period where the export price per tonne remained relatively steady between TOP 45,000 and TOP 50,000. Analysis shows an increase of 79% in the quantity of kava exported from 2012 to 2020 and an increase of 175% in price per tonne for the same period, this is 96 percentage points more than the increase in the quantity. The increase of 393% in the value of exports from 2012 to 2020 was driven more by the increase in the export price per tonne than by the quantity of kava exported.

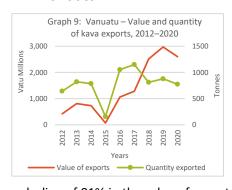
In 2019, kava contributed 28% to Tonga's total exports, 20 percentage points more than 2012 and 16 percentage points more than 2019. Refer to Graph 7 and Appendix 2, Table 6. Note that the data used here are from the NSO – refer to point 2 under Section B.

3. Federated States of Micronesia (FSM)



FSM provided data on the quantity and value of kava exports for the period 2011 to 2018. Analysis indicates that both the quantity and value of exports generally showed an increasing trend from 2011 until 2016 when a decline set in. Exports for 2018 compared to 2017 showed an 18% decline in the quantity, a 19% decline in the value and no change in the price per tonne. In 2018, kava contributed 1% to FSMs total exports, which was the same as in 2011 but 1 percentage point less than in 2017. Refer to Graph 8 and Appendix 2, Table 7.

4. Vanuatu

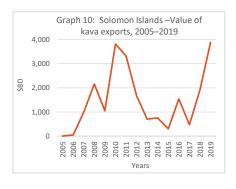


Kava contributes significantly to Vanuatu's economy, however for this study the NSO was only able to provide data on the quantity and value of kava exports for the period 2012 to 2020. Nonetheless, the NSO reported that Vanuatu was making every effort to improve the data collection on kava, the custodianship of which now lies with the country's biosecurity agency. The NSO also reported that the Vanuatu Primary Producers Authority, established in 2018, is bestowed with the role to register all primary producers in the country and thus far they have registered some 7,500 kava producers.

The sharp decline of 80% in 2015 compared to 2014 in the quantity exported,

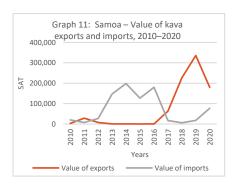
a decline of 91% in the value of exports and a 53% decline in the price was due to Cyclone Pam, a category 5 storm that hit Vanuatu in March 2015. Recovery efforts saw Vanuatu bounce back and in 2016 compared to 2015, registered an increase of 566% in the quantity exported, an increase of 1,436% in the value of exports and a 131% increase in the price per tonne. In 2018 compared to 2017, despite a 29% decline in the quantity exported, the value of exports increased by 97% due to a 179% increase in the price per tonne. In 2020, kava contributed 49% to Vanuatu's total exports, which was 38 percentage points more than in 2012 and 3 percentage points more than 2019. Refer to Graph 9 and Appendix 2, Table 8.

5. Solomon Islands



Solomon Islands provided data on the value of kava exports for the period 2005 to 2019. Analysis indicates that the value of exports fluctuated considerably over time. Over the whole period from 2005 to 2019, there was a general upward trend. However, sharp increases in exports between 2005 and 2010 were followed by equally sharp declines between 2010 and 2015; followed once again by another upturn between 2017 through 2019. Exports for 2018 compared to 2017 showed an increase of 304% and for 2019 compared to 2018 an increase of 103%. Contribution of kava exports to Solomon Islands' total exports is negligible. Refer to Graph 10 and Appendix 2, Table 9.

6. Samoa



Samoa provided data on the value of kava exports and imports for the period 2010 to 2020. The analysis shows that the data on imports and exports in Samoa are moving in opposite directions i.e. when imports increase, exports decline or vice versa. The reasons for this inverse relationship are not clear but may be the consequence of weather or biosecurity regulations. Contribution of kava imports to total imports and kava exports to total exports are negligible. Refer to Graph 11 and Appendix 2, Table 10.

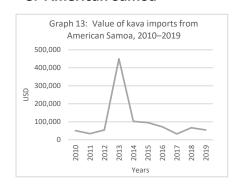
7. Kiribati



Kiribati provided data on the quantity and value of kava imports for the period 2012 to 2020. The quantity and value of kava imports have similar trends. The sharp decline in the quantity imported by 69% and value of imports by 65% in 2016 compared to 2015 can be linked to lower production in the kava producing countries of Fiji and Vanuatu in 2015 due to Cyclone Pam. Kava imports in 2020 compared to 2012 saw the quantity increase by 11% but the value of imports increased by 374% due to a 328% increase in the price per tonne of kava imported. In 2020 compared to 2019, a 23% decline in the quantity imported, a 22% decline in the value imported but a 1% increase in the price per tonne was noted. In 2020, kava contributed 5% to Kiribati's total

import, which was 4 percentage points more than in 2012 and 1 percentage point less than 2019. Refer to Graph 12 and Appendix 2, Table 11.

8. American Samoa



American Samoa provided data on the value of kava imports for the period 2010 to 2019. 2013 saw a 732% increase in the value of imports. Kava imports in 2019 compared to 2010 saw an 8% increase in the value of imports. In 2019 compared to 2018, a 19% decline in the value imported was noted. Contribution of kava imports to American Samoa's total imports for all the years is less than 1%. Refer to Graph 13 and Appendix 2, Table 12.

D. Conclusion

Kava is an important source of cash income for kava producers in many countries in the region. Kava is reported to be a crop that provides a high rate of return to labour for growers, both those who serve domestic markets and those who maintain the high quality standards required to meet export demand and associated biosecurity conditions.

There are believed to be many opportunities for expanding kava production in the region, but as has been demonstrated in this paper, there is a lack of reliable and comprehensive data on production, domestic consumption and exports. Without such data it is difficult to build a strong investment case for either private sector or government intervention.

Many of the data gaps and issues around the lack of data needed to compile statistics on the kava industry have been highlighted in this paper, and are clearly visible in the data submitted by the countries that contributed to this study. Only Fiji was able to provide reasonable quality and coverage of data on kava from multiple sources, most other countries were only able to provide data from their IMTS trade statistics:

- Tonga, FSM and Vanuatu submitted data on the quantity and value of kava exports;
- Solomon Islands submitted data on the value of kava exports;
- Samoa submitted data on the value of kava exports and imports;
- Kiribati submitted data on the quantity and value of kava imports, and;
- American Samoa submitted data on the value of kava imports.

Kava is consumed in most PICTs, either from domestic production, or in the case of most of the atoll nations from imports, but because the production is HH-based and the nature of trade informal, data on kava do not get fully captured. The contribution of kava to the economies of the region is not therefore truly reflected despite the fact that it is an important source of income and employment for many HHs and a foreign exchange earner for some countries. Several suggestions on the way forward to improve kava statistics have been made in this paper for NSOs to consider.

The paper also throws some light on the increase in the price of kava traded internationally and going by the retail price data provided by Fiji, the rising export prices influnce higher prices consumers also have to pay domestically. Although the volume of production has increased, the continued demand for kava from the growing number of Pacific migrants overseas will probably see prices escalating further.

In August 2021 it was reported that Australia was considering allowing kava to be grown domestically, a possibility that was causing concern to many, notably the Government of Vanuatu¹⁴, which saw this as a threat to growers across the Pacific region. Such concerns were somewhat allayed by Griffith Asia Institute in an October 2021 paper stating "Like some Australians, the sub-committee was not fully aware of the deep cultural and economic significance of drinking the ceremonial beverage of kava to the people of many Pacific island countries and their diaspora living in Australia. Members welcomed any moves to expand a regulated market in Australia for the safe consumption of kava and opening up to trade opportunities.¹⁵

Another interesting development was the signing of a memorandum of agreement between Fiji Kava and iTaukei Trust Fund Board to develop Fiji Kava's supply chain and the relationship between commercial partners in Fiji. ¹⁶

It is important that all countries involved in the kava trade act collectively to protect the industry in the face of any external challenges and for that all PICTs need to pay more attention to the compilation of data on kava and build a comprehensive picture of the industry and its importance to the economies of the region.

 $^{{}^{14}} https://www.rnz.co.nz/international/pacific-news/449662/commercial-production-of-kava-in-australia-will-badly-affect-vanuature and the second control of the second co$

¹⁵One region, one family, one report: Activating trade and investment between Australia and the Pacific islands region.

¹⁶ https://www.fijivillage.com/news/-Kava-farmers-expected-to-benefit-from-MOU-signed-between-Fiji-Kava-and-iTaukei-Trust-Fund-Board-x5f48r/?fbclid=IwAR2oW45sZfYCLYyB9U5h2vrTP7Nkbre-4VdQ0SR1aGR5PUDMqtDouuK-0D8#.YWZ15Fa3qKY.facebook

Appendix 1 – Classifications used for the compilation of data on kava

Pacific Standard Industrial Classification of All Economic Activities (PACSIC) 2014

This is a regional classification of all productive activities undertaken in PICTs. Derived from the United Nations International Standard Industrial Classification of All Economic Activities Revision 4, PACSIC caters for capturing data of industries e.g. production of kava that are of significant economic importance to PICTs. Access the classification using the link https://www.spc.int/DigitalLibrary/Get/s4aid

Figure 1: Kava in PACSIC, 2014

Section A: Agriculture, forestry and fishing

DIVISION	GROUP	CLASS	SUB-CLASS	DESCRIPTION
01				CROP AND ANIMAL PRODUCTION, HUNTING AND RELATED SERVICE
				ACTIVITIES
		0128		Growing of perennial and non-perennial spices, aromatic, drug and
		0128		pharmaceutical crops
			0128_01	Growing of ginger
			0128_02	Growing of kava
			0128_03	Growing of vanilla
			0128_04	Growing of noni
			0128_05	Growing of pyrethrum
			0128_06	Growing of chilies
			0128_07	Growing of betel nuts
			0128 99	Growing of perennial and non-perennial spices, aromatic, drug and
			0120_99	pharmaceutical crops n.e.c.

Classification of Individual Consumption According to Purpose (PACCOICOP) 2020

PACCOICOP 2020 is a regional classification of goods and services purchased by individuals and HHs in PICTs. It has been derived from the United Nations Classification of Individual Consumption According to Purpose 2018 to capture data on goods commonly consumed in PICTs. Access the classification using the link https://sdd.spc.int/news/2020/07/07/PACCOICOP-2020

Figure 2: Kava in PACCOICOP 2020

DIVISION	GROUP	CLASS	SUB-CLASS	DESCRIPTION	TYPE
02				Alcoholic beverages, tobacco and narcotics	
	02.3	02.3.1		Narcotics	(ND ¹⁷)
			02.3.1_087	Kava (also known as yaqona or sakau)	
			02.3.1_088	Marijuana, opium, cocaine and their derivatives	
			02.3.1_089	Cola nuts, betel nuts and betel leaves	
			02.3.1_090	Chemicals and man-made drugs	

Pacific Harmonized Commodity Description and Coding System (PACHS) 2017

This is a regional classification of exports and imports of goods. It has been derived from the World Customs Organisation's Harmonized Commodity Description and Coding System 2017. PACHS17 allows data on the exports and imports of goods specific to the Pacific e.g. kava be captured. Access the classification using the link https://sdd.spc.int/digital_library/pacific-harmonized-commodity-description-and-coding-system-2017-pachs17

¹⁷Non-durable

Figure 3: Kava in PACHS 2017

SECTION II	Vegetable products
Chapter 12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder
Heading 1211	Plants and parts of plants (including seeds and fruits), of a kind used primarily in perfumery, in pharmacy or for nsecticidal, fungicidal or similar purposes, fresh, chilled, frozen or dried, whether or not cut, crushed or powdered
Sub-Heading 1211.90	Other
Regional Sub-Heading 1211.90.11	Kava (yaqona or sakau) in dried chips form

Appendix 2 – Data on kava

Table 2: Fiji – Kava production and consumption, 2005–2019

	Quantity	y of production	Farm	gate price	Value of pro	duction	HH consu	umption
Year	Quantity (tonnes)	Variation: year on year (%)	FJD per kg	Variation: year on year (%)	Value (FJD)	Variation: year on year (%)	Value (FJD)	Variation: year on year (%)
2005	2,259		15		33,885,000		40,000,006	
2006	1,700	-25	25	66	42,330,000	25	36,200,000	-10
2007	3,350	97	28	11	92,460,000	118	75,600,000	109
2008	3,286	-2	28	0	90,365,000	-2	70,500,000	-7
2009	2,603	-21	27	-4	68,979,500	-24	55,800,000	-21
2010	2,792	7	25	-6	69,800,000	1	60,300,000	8
2011	2,227	-20	28	10	61,242,500	-12	131,900,000	119
2012	3,328	49	26	-6	85,696,000	40	128,600,000	-3
2013	3,733	12	26	0	96,124,750	12	135,200,000	5
2014	3,871	4	35	34	133,549,500	39	122,100,000	-10
2015	6,442	66	36	4	231,912,000	74	203,100,000	66
2016	7,595	18	80	122	607,600,000	162	596,500,000	194
2017	9,113	20	71	-11	649,301,250	7	770,300,000	29
2018	10,481	15	80	12	838,480,000	29	823,200,000	7
2019	11,742	12	95	19	1,115,490,000	33	1,060,400,000	29

Source: Fiji Bureau of Statistics and SPC

Table 3: Fiji – Kava imports, 2005–2019

				Imp	orts				
Years	Quantity		V	/alue	Pric	e	Total imports of all commodities		
rears	Quantity (tonnes)	Variation: year on year (%)	Value (FJD)	Variation in value: year on year (%)	FJD per tonne	Variation: year on year (%)	Value (FJD)	Kava imports as a % of total imports	
2005	474		4,751,933		10,027		2,722,794,000	0.17	
2006	521	10	8,970,226	89	17,202	72	3,124,342,000	0.29	
2007	283	-46	5,819,920	-35	20,570	20	2,890,071,000	0.20	
2008	220	-22	4,563,557	-22	20,712	1	3,601,404,000	0.13	
2009	175	-21	3,165,834	-31	18,138	-12	3,022,159,000	0.10	
2010	149	-14	2,672,960	-16	17,881	-1	3,464,614,000	0.08	
2011	269	80	4,529,371	69	16,845	-6	3,913,571,000	0.12	
2012	253	-6	4,603,213	2	18,170	8	4,030,678,000	0.11	
2013	328	29	6,661,271	45	20,307	12	5,198,924,000	0.13	
2014	140	-57	3,411,244	-49	24,427	20	5,012,583,000	0.07	
2015	73	-48	2,284,381	-33	31,446	29	4,756,824,000	0.05	
2016	94	30	3,698,935	62	39,240	25	4,820,066,303	0.08	
2017	124	32	8,651,799	134	69,766	78	4,972,360,580	0.17	
2018	170	37	15,239,178	76	89,694	29	5,696,683,662	0.27	
2019	328	93	20,734,633	36	63,134	-30	6,008,529,782	0.35	

Source: Fiji Bureau of Statistics and SPC

Table 4: Fiji – Kava exports, 2005–2019

				Ex	cport				
Years	Quantity		Va	lue		ice	Total exports of all commodities		
rears	Quantity (tonnes)	Variation: year on year (%)	Value (FJD)	Variation: year on year (%)	FJD per tonne	Variation: year on year (%)	Value (FJD)	Kava exports as a % of total exports	
2005	123		2,553,666		20,826		1,192,579,000	0.21	
2006	183	50	3,674,216	44	20,031	-4	1,201,573,000	0.31	
2007	174	-5	4,153,246	13	23,847	19	1,209,811,000	0.34	
2008	184	6	4,750,661	14	25,780	8	1,471,028,000	0.32	
2009	224	22	4,180,686	-12	18,669	-28	1,310,259,000	0.32	
2010	244	9	3,900,666	-7	16,015	-14	1,605,383,000	0.24	
2011	296	21	5,700,409	46	19,288	20	1,924,848,000	0.30	
2012	300	1	6,636,133	16	22,138	15	2,181,741,000	0.30	
2013	137	-54	6,601,761	-1	48,025	117	2,119,726,000	0.31	
2014	214	56	7,574,259	15	35,400	-26	2,302,158,000	0.33	
2015	160	-25	8,864,530	17	55,346	56	2,059,222,000	0.43	
2016	259	61	14,138,312	59	54,659	-1	1,930,859,146	0.73	
2017	311	20	19,658,137	39	63,154	16	2,039,324,779	0.96	
2018	284	-9	30,807,017	57	108,382	72	2,101,986,862	1.47	
2019	328	16	32,454,630	5	98,835	-9	2,218,698,815	1.46	

Source: Fiji Bureau of Statistics and SPC

Table 5: Fiji – Supply and use of kava, 2005–2019

		Supply		U	se	Difference
Year	Production	Imports	Total	Exports	Consumption	Difference
			FJ	D		
2005	33,885,000	4,751,933	38,636,933	2,553,666	40,000,006	-3,916,739
2006	42,330,000	8,970,226	51,300,226	3,674,216	36,200,000	11,426,010
2007	92,460,000	5,819,920	98,279,920	4,153,246	75,600,000	18,526,674
2008	90,365,000	4,563,557	94,928,557	4,750,661	70,500,000	19,677,896
2009	68,979,500	3,165,834	72,145,334	4,180,686	55,800,000	12,164,648
2010	69,800,000	2,672,960	72,472,960	3,900,666	60,300,000	8,272,294
2011	61,242,500	4,529,371	65,771,871	5,700,409	131,900,000	-71,828,538
2012	85,696,000	4,603,213	90,299,213	6,636,133	128,600,000	-44,936,920
2013	96,124,750	6,661,271	102,786,021	6,601,761	135,200,000	-39,015,740
2014	133,549,500	3,411,244	136,960,744	7,574,259	122,100,000	7,286,485
2015	231,912,000	2,284,381	234,196,381	8,864,530	203,100,000	22,231,851
2016	607,600,000	3,698,935	611,298,935	14,138,312	596,500,000	660,623
2017	649,301,250	8,651,799	657,953,049	19,658,137	770,300,000	-132,005,088
2018	838,480,000	15,239,178	853,719,178	30,807,017	823,200,000	-287,839
2019	1,115,490,000	20,734,633	1,136,224,633	32,454,630	1,060,400,000	43,370,003

Source: Fiji Bureau of Statistics and SPC

Note: Due to confidentiality reasons, Fiji generally does not publish its SUT. What appears as the difference in this table comprises change in inventories, intermediate consumption etc in Fiji's fully balanced SUT.

Table 6: Tonga – Kava exports, 2012–2020

				Ex	ports				
Year	Quantity		Value		ı	Price	Total exports of all commodities		
rear	Quantity (tonnes)	Variation: year on year (%)	Value (TOP)	Variation: year on year (%)	TOP per tonne	Variation: year on year (%)	Value (TOP)	Kava exports as a % of total exports	
2012	118		2,021,143		17,164		26,757,196	8	
2013	69	-41	2,078,618	3	30,027	75	30,429,410	7	
2014	123	78	2,388,235	15	19,394	-35	35,005,767	7	
2015	116	-5	6,628,562	178	56,904	193	37,274,276	18	
2016	92	-21	4,215,267	-36	45,770	-20	47,540,446	9	
2017	33	-64	1,640,747	-61	50,000	9	41,617,401	4	
2018	77	133	3,831,014	133	50,000	0	29,019,928	13	
2019	113	48	5,651,701	48	50,000	0	46,368,718	12	
2020	211	87	9,965,306	76	47,183	-6	35,401,084	28	

Source: Tonga Statistics Department

Table 7: Federated States of Micronesia – Kava exports, 2011–2018

				Ex	ports				
Vaar	Quantity		Value		ı	Price	Total exports of all commodities		
Year	Quantity (tonnes)	Variation: year on year (%)	Value (USD)	Variation: year on year (%)	USD per tonne	Variation: year on year (%)	Value (USD)	Kava exports as a % of total exports	
2011	33		218,480		6,672		43,470,832	1	
2012	45	38	481,637	120	10,626	59	52,233,130	1	
2013	42	-7	451,426	-6	10,743	1	34,859,000	1	
2014	64	53	701,547	55	10,946	2	32,140,811	2	
2015	73	14	801,436	14	10,987	0	39,574,796	2	
2016	75	3	826,993	3	10,996	0	48,724,634	2	
2017	63	-17	827,655	0	13,197	20	45,980,591	2	
2018	51	-18	674,352	-19	13,177	0	46,770,141	1	

Source: FSM Division of Statistics, Department of Resources and Development

Table 8: Vanuatu – Kava exports, 2012–2019

				Ex	oorts				
Vaar	Quantity		Value		Pr	ice	Total exports of all commodities		
Year	Quantity (tonnes)	Variation: year on year (%)	Value (VUV)	Variation: year on year (%)	VUV per tonne	Variation: year on year (%)	Value (VUV)	Kava exports as a % of total exports	
2012	643		418,000,000		650,078		3,698,000,000	11	
2013	819	27	810,000,000	94	989,011	52	3,811,000,000	21	
2014	786	-4	728,000,000	-10	926,209	-6	5,692,000,000	13	
2015	158	-80	69,000,000	-91	436,709	-53	4,249,000,000	2	
2016	1,052	566	1,060,000,000	1,436	1,007,605	131	5,292,302,421	20	
2017	1,150	9	1,277,000,000	20	1,110,435	10	6,363,000,000	20	
2018	811	-29	2,513,000,000	97	3,098,644	179	6,760,658,166	37	
2019	877	8	2,970,000,000	18	3,386,545	9	6,408,192,958	46	
2020	774	-12	2,601,483,150	-12	3,361,089	-1	5,306,530,902	49	

Source: Vanuatu National Statistics Office

Table 9: Solomon Islands – Kava exports, 2005–2019

	Exports							
Year		Value	Total exports of all commodities					
	Value	Variation in value:	Value	Kava exports as a %				
	(SBD)	year on year (%)	(SBD)	of total exports				
2005	3		753,128,682	0.0000				
2006	49	1,329	901,792,486	0.0000				
2007	989	1,918	1,211,799,738	0.0001				
2008	2,156	118	1,640,568,754	0.0001				
2009	1,053	-51	1,286,715,241	0.0001				
2010	3,810	262	1,761,494,784	0.0002				
2011	3,322	-13	3,115,703,109	0.0001				
2012	1,674	-50	3,429,967,897	0.0000				
2013	706	-58	3,571,799,812	0.0000				
2014	751	6	3,377,790,668	0.0000				
2015	305	-59	3,176,069,000	0.0000				
2016	1,541	405	3,470,468,770	0.0000				
2017	473	-69	3,934,778,638	0.0000				
2018	1,913	304	4,531,495,085	0.0000				
2019	3,880	103	1,106,326,242	0.0004				

Source: Solomon Islands National Statistics Office

Table 10: Samoa – Kava exports and imports, 2010–2020

	Exports				Imports			
Year —	Value		Total exports of all commodities		Value		Total imports of all commodities	
	Value (SAT)	Variation: year on year (%)	Value (SAT)	Kava exports as a % of total exports	Value (SAT)	Variation: year on year (%)	Value (SAT)	Kava imports as a % of total imports
2010	2,970		179,093,984	0.00	20,034		786,362,000	0.00
2011	28,810	870	153,111,162	0.02	7,567	-62	805,751,718	0.00
2012	7,900	-73	176,427,618	0.00	26,865	255	791,973,802	0.00
2013	580	-93	144,103,200	0.00	147,420	449	851,292,154	0.02
2014	519	-11	117,400,172	0.00	198,462	35	895,325,981	0.02
2015	420	-19	136,017,840	0.00	126,895	-36	855,389,663	0.01
2016	876	109	143,755,166	0.00	180,016	42	899,005,000	0.02
2017	62,967	7,088	112,215,339	0.06	17,305	-90	900,997,000	0.00
2018	226,423	260	119,204,456	0.19	6,103	-65	939,443,298	0.00
2019	336,002	48	130,097,446	0.26	17,855	193	1,031,312,647	0.00
2020	179,580	-47	99,340,000	0.18	77,187	332	828,649,702	0.01

Source: Samoa Bureau of Statistics

Table 11: Kiribati – Kava imports, 2012–2020

	Imports								
	Quantity		Value		Price		Total imports of all commodities		
Year	Quantity (tonnes)	Variation: year on year (%)	Value (AUD)	Variation in value: year on year (%)	AUD per tonne	Variation: year on year (%)	Value (AUD)	Kava imports as a % of total imports	
2012	117		1,984,257		16,921		135,133,000	1	
2013	110	-6	2,484,826	25	22,661	34	141,857,785	2	
2014	110	0	2,797,375	13	25,437	12	147,922,499	2	
2015	119	8	3,056,097	9	25,683	1	155,448,160	2	
2016	37	-69	1,079,653	-65	28,895	13	184,166,367	1	
2017	90	142	4,799,449	345	53,073	84	171,027,798	3	
2018	103	14	6,895,259	44	67,049	26	162,638,855	4	
2019	169	65	12,102,265	76	71,427	7	189,348,691	6	
2020	130	-23	9,411,207	-22	72,344	1	192,937,151	5	

Source: National Statistics Office

Table 12: American Samoa – Kava imports, 2010–2019

	Imports							
Year	Va	lue	Total imports of all commodities					
	Value	Variation:	Value	Kava imports				
	(USD)	year on	(USD)	as a % of total				
	(030)	year (%)	(03D)	imports				
2010	50,295		433,870,868	0.01				
2011	33,949	-33	463,240,279	0.01				
2012	54,058	59	514,310,359	0.01				
2013	449,814	732	478,543,309	0.09				
2014	102,215	-77	611,070,028	0.02				
2015	95,625	-6	675,394,554	0.01				
2016	72,479	-24	654,763,945	0.01				
2017	32,366	-55	578,661,000	0.01				
2018	67,034	107	653,344,000	0.01				
2019	54,179	-19	711,567,000	0.01				

Source: American Samoa Department of Commerce