

## Fiji Kava: Production, Trade, Role and Challenges

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### Abstract

Like any other Small Island Developing State (SIDS), Fiji has limited entrepreneurial opportunities. However, these countries have some unique high-value niche products that have attracted global attention. Among the limited niche products in Fiji, kava (*Piper methysticum*) known as ‘yaqona’ or ‘grog’, is a popular agricultural and industrial product. Kava is not only a traditional, ceremonial and social drink in Fiji, but also a product that contributes to social and economic development through export and foreign exchange earnings and provides employment, and livelihoods, and alleviates poverty. As a beverage and pharmaceutical product, Fiji kava is increasing its importance nationally and internationally.

The paper analyzes kava in Fiji as an entrepreneurial and business product, its trends in production, trade, ‘niche market’, growth potential, its role, and also explores the issues and challenges associated with kava in Fiji.

**Keywords:** kava; kava trade; kava production; niche product; yaqona

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## Introduction

Fiji is a middle income SIDS and the 'hub' of the South Pacific. Like any other small island developing nation, Fiji has limited entrepreneurial opportunities. Small-island business is the combination of local entrepreneurial flair with small-scale manufacturing activity and export orientation, and each of these qualities is rare in small-island territories (Baldacchino, 2002). They have, however, some unique high-value niche manufacturing products that have attracted global attention and helped them to grow. Baldacchino (2002) observed, small islands have excelled in small-scale, high value products and put to good use their island identity (cited in Prasad and Raj, 2006, p. 382). Small island developing economies such as Fiji are linked to the global market by their unique niche products, for example, kava and Fiji water.

Kava<sup>2</sup> popularly known as, *yaqona* or *grog* in Fiji is one of the entrepreneurial products with niche market potential. It is a popular social, cultural, ceremonial, economic and entrepreneurial product and a cash crop in Fiji. Traditionally, kava maintains an island identity in Fiji and is an important element in socio-cultural life and economy in Fiji. Kava evolved as a ceremonial drink, became a popular social drink and today, is established as a cash crop and an industrial and niche product in Fiji and other Pacific Island countries.

## Literature Review

Globalization and localization are more integrated today than ever before. Since neoliberal reformations failed to enhance economic productivity and development, niche<sup>3</sup> production was offered as a possible solution. Niche production is a manifestation of the export-led strategies that have been embraced by many island countries including Fiji. It has focused on enhancing economic productivity of Fiji's economy. However, because small island nations such as Fiji are located a long distance from major commercial hubs, they often incur the added costs associated with insularity and remoteness (Baldacchino, 1999). Jones, Murray &

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<sup>2</sup> Kava is a slow growing perennial shrub that takes approximately 3-5 years to develop completely and the maximum height it reaches is 2-3m. It produces infertile inflorescence that sets no seeds (Davis & Brown, 1999, p. 17). Kava is grown as a low bush that is favoured by a wet and deep, well-drained soil (Sofer, 1985, p. 417).

<sup>3</sup> Niche products can be defined as a process of carving out a small business sector by specializing (Shani & Chalasani, 1993, p.58).

Overton (2012, p. 12) noted that isolation and distance from the global markets have led to the development of unsustainable export systems.

In addition, Jones, Murray, & Overton (2012) observed that the advantages of niche production can be compounded into three arguments: (a) stimulation of economies; (b) connection of rural communities to the global market; and (c) increased product value. Niche production is therefore perceived as a form of globalisation where two forces, the local and global, work parallel to each other (Jones et.al., 2012, p. 16). According to Jones et al. (2012, p. 81), for niche products to be successful in the international market, a place-based market strategy is crucial, which involves the identification, definition, delimitation of places and their associated products. Such a strategy is useful as it builds narratives that link the product to place; thus assigning the product the ‘authentic and ‘unique’ value.

The cultivation of kava for the purpose of sale exemplifies the market influencing indigenous development based on local technical knowledge and skills, and derived from customary practices (Maiava & King, 2007, p. 89). Locally produced niche products such as kava are influenced by local structures and methods, but they participate in the global economy (Jones et al., 2012, p. 81).

The trends towards the consumption of “alternative”, “traditional”, and “organic” remedies in the industrialised West are well established (Murray, 2000a, p. 356). Kava as an entrepreneurial and niche product is “part of a much wider trend of agricultural globalization that has pulled (or perhaps more accurately pushed) many developing countries and regions into internationalized markets, supplying primary products to the Western capitalist economies” (Murray, 2000a, p. 356).

The kava plant (*Piper methysticum*) is a pepper plant indigenous to Polynesia, Micronesia and Melanesia (FAO/WHO, 2016). Kava in the Pacific Island countries is a traditional drink that has been used for cultural / ceremonial / social purposes for centuries (IKEC, 2010). Other names for kava include *ava* (Samoa), *awa* (Hawaii), *sakau* (Pohnpei, FSM) and *yaqona* (Fiji), *malok* or *malogu* (parts of Vanuatu), *waqa* in Tonga (IKEC, 2010; Rowe, n.d; SPC, 2018). Rowe (n.d.) commented that the tradition of kava has brought people together and consummated important social occasions in the Pacific for 3000 years. As the Austronesian people moved across the Pacific, so, too, did kava. From Vanuatu it went east, through Fiji, then onwards into Polynesia: Tonga, Samoa and Hawaii (Rowe, n.d). The main kava producing and exporting Pacific countries are

Vanuatu, Fiji, Samoa, Tonga and the Solomon Islands. Pacific peoples believe that kava is intimately linked with mana or spiritual power (Rowe, n.d).

Kava is a traditional beverage made from the roots and stems of the pepper plant (*piper methysticum*). It is not only a ceremonial and social product, but also a product of great importance, contributing to social and economic development through its export values and trade, labour employment, livelihoods and poverty alleviation and growth of informal sector activities. Kava is an important agricultural, entrepreneurial and business product in Fiji.

The active ingredients of kava are called kavalactones. There are 15 kavalactones found in kava, each having a different physiological effect (PHAMA, 2018). However, six major kavalactones account for 96 per cent of the fat-soluble extract from kava (ibid.).

Kava grows in its importance as an 'exotic' niche product in Fiji (Murray, 2000a). It has emerged in the international market as demand for bio-organics and herbal remedies increases. While Fiji Islanders consider kava as a traditional and ceremonial product, Western pharmaceutical companies recognise its medicinal potential. It was introduced into the global commodity chain that carved out a place for Fiji in the global economy.

Kava's medicinal properties are highly desired by European pharmaceutical companies which used kava lactones, specifically kavain, to treat human maladies such as "unrest, nervousness, mental distress, inner excitement, psychological stress, lack of concentration and diseases caused by fungi" (Davis & Brown, 1999, p. 10). At the same time, kava is marketed to the Fijian diaspora communities as a way of maintaining their cultural identity. Kava not only helps to bind people and maintain cultural identity abroad, but also has emerged as a commercial agri-business product linking to the core-periphery relationships (ibid.).

Fiji has a well-established kava industry. The success of Fiji kava was evident during 1998-2001 however, it was short lived as the industry "suffered an economic vertigo in the global economy" (Jones et al., 2012, p. 41). Fiji's kava export earnings were F\$6 million in 1997 which increased to F\$35 million in 1998 (Fiji Ministry of Agriculture, 2011, p. 25), an increase of 483 per cent during 1997-1998. The first "kava boom" for Fiji occurred in the 1990s when kava was exported as a traditional beverage, and exported to the European

Union as a nutraceutical product (PHAMA, 2018). By the year 2000, the first reports began to emerge of liver damage associated with taking kava extracts in Germany and the following year kava was banned in Europe and the United Kingdom due to concerns over liver toxicity (Takimai, 2018). The German drug regulatory authority banned kava from Pacific Island countries in 2002. Many European countries such as France, Germany, Ireland and Switzerland withdrew all pharmaceutical products that contained kava. Yoshida (2018) noted that: “Fiji was earning close to \$100 million per annum since 1998 prior to the ban while in 2003 IKEC registered a combined claim of ‘loss of revenue’ of around \$US200 million per annum for the Pacific Island producers”.

The ban had a severe impact on Fiji’s kava export value as it decreased from nearly FJ\$ 6 million in 2000 to FJ\$ 2 million in 2004 (Jones et al., 2012). In November 2008, the EU announced that it was lifting its kava trade ban, but the ban remained in Germany until a German Administrative Court ruling lifted the ban in 2015 saying the benefit-risk ratio of kava medicinal products was positive (Yoshida, 2018). Although the ban has been lifted by the European countries, Fiji kava has yet to be re-established as a niche product in the global market.

## **Evolution of Kava in Fiji**

### ***Kava Plantation/ Farming***

Historically, kava has been domesticated for around 3000 years (IKEC, 2010; Rowe, n.d.). In Fiji, yaqona was grown in the second half of the nineteenth century by Europeans on plantations on the island of Vanua Balavu and was sold to meet merchants in Levuka on the island of Ovalau (Sofer, 1985, p. 416). Most kava is grown along hillsides in steep sloping land under bush-fallow rotation in plots that are remotely located. Traditionally, kava is inter-cropped with other subsistence crops such as taro, yam and coconut trees. These crops help as windbreakers and provide shade which prevents moisture loss. Kava has a five-year cropping cycle.

There are more than 200 kava plant varieties (Singh, 1992). In Fiji, 13 varieties of kava are planted compared to 82 varieties of kava in Vanuatu (Fiji Times, 22 May 2013; Fiji Sun, 8 March 2017; SPC 2018). There are different names for the kava varieties in the various places where they are planted. Some of the Fiji kava varieties include: *Matakaro*, *Damu Gona vula*, *Dokobana vula*, *Qila balavu*, *Dokobana loa*, *Vula kasabalavu*, *Loa kasa leka*, *Kabra*, *Loa*, and *Vula kasa leka*

(IKEC, 2010, p.3). Fiji kava varieties are considered as “noble” varieties that are preferred for human consumption (PHAMA, 2018). Fiji is the second largest producer and consumer of kava next to Vanuatu.

The advantage of farming kava is that it is a high value cash crop, a non-perishable agricultural commodity and also it is not a seasonal crop that can be harvested at any time of the year. According to Sofer (1985) kava was produced mainly by small farmers in small land holdings in Fiji and in the late 1980s about 94 per cent of the area of yaqona was under *mataqali*<sup>4</sup>. There were 10, 471 kava farmers in 2016 (PHAMA, 2018). The “great majority of Fiji’s kava farmers are *i-Taukei* unmechanised small holders, farming less than one hectare of *mataqali* land” (PHAMA, 2018). Most kava is grown using a combination of family and hired labour (PHAMA, 2018).

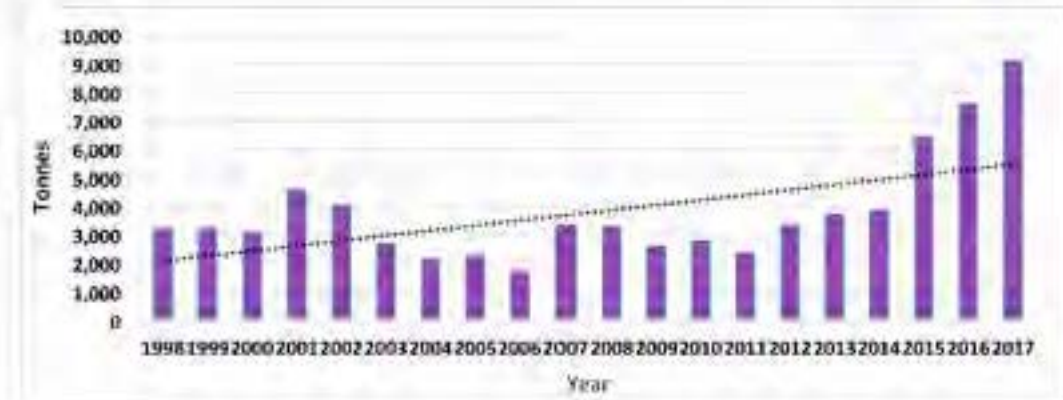
### ***Kava Production***

As Figure 1 shows, kava (yaqona) production in Fiji had highly fluctuating trends in the last two decades between 1998-2017. During this period, kava production in Fiji had reached its highest level in 2001 with a production level of 4,575 tonnes which then declined to the lowest level of 1,700 tonnes in 2006 (Fiji Bureau of Statistics, 2012). The production maintained 4,000 tonnes level in 2002 and thereafter, declined until 2006 and again in 2007, the production level jumped up to 3,350 tonnes and thereafter the production grew unprecedentedly (Figure 1). Between 4,000-4,500 tonnes of dry weight kava is estimated to be produced annually in Fiji (PHAMA, 2018). The annual average production of kava in Fiji was nearly 3,900 tonnes between 2007 and 2016 (Fiji Bureau of Statistics, 2018).

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<sup>4</sup> A sub-clan, the exogamous social unit in Fiji which is recognized as the primary land-owning unit (Sofer, 1985, p. 418).

Figure 1. Trends in Kava Production in Fiji, 1998-2017



Source: Mohanty based on data from Fiji Bureau of Statistics, 2012 and 2018.

Kava production varies depending on seasonal weather conditions. Occurrence of extreme climate change events such as drought and cyclone affect the kava production in Fiji significantly.

Traditionally, the Northern division is the largest yaqona producing area, accounting for over 60 per cent of area and production in Fiji, followed by the Central and Eastern divisions (Fiji Ministry of Primary Industries, 2011). The yield of kava varied between two to three tonnes per hectare in various divisions in Fiji, the Northern division with the highest yield per hectare (Fiji Ministry of Primary Industries, 2011). Kava is grown in remote rural areas, mostly in outer islands. Moala kava from Moala Island in the Lau archipelago is a popular type in the urban market in Fiji. Other yaqona producing islands are Koro, Ovalau, Gau in the Eastern division and Taveuni in Northern division (Fiji Ministry of Primary Industries, 2011).

Cakoudrove province was the leading area in kava production in Fiji in 2016 followed by Kadavu, Lomaiviti, Bua, Naitasiri, and Macuata (PHAMA, 2018). Of the total of 10,471 kava farmers in 2016 in Fiji, nearly 72 per cent of the farmers were located in these six provinces (Table 1). There were 218 female kava growers in 2016, accounting for about 2 per cent of the total kava growers in Fiji (Table 1). The proportions of female growers were slightly higher in Namosi, Serua, Ra and Macuata, varying between 3.5 -4 per cent. In Kadavu, over 80 per cent of all households grew kava compared to Cakoudrove, Lomaiviti and Bua where the proportion of households growing kava varied between 35 to 42 per cent (PHAMA, 2018).

Table 1. Number of Kava Farmers by Province and Gender in Fiji, 2016

Province	Number of Kava Farmers				% Total kava farmers
	No. of male	No. of female	% female	Total	
Cakaudrove	3,005	31	1.0	3,036	29.0
Kadavu	1,523	6	0.4	1,529	14.6
Lomaiviti	1,155	36	3.0	1,191	11.4
Bua	889	28	3.1	917	8.8
Naitasiri	787	16	2.0	803	7.7
Macuata	662	25	3.6	686	6.6
Ra	429	17	3.8	446	4.3
Namosi	406	20	4.7	426	4.1
Ba	380	10	2.6	390	3.7
Nadroga	359	12	3.2	371	3.5
Tailevu	322	10	3.0	332	3.2
Rewa	159	1	0.6	160	1.5
Serua	139	6	4.1	145	1.4
Lau	22	0	0.0	22	0.2
Rotuma	17	0	0.0	17	0.2

Source: PHAMA, 2018.

### ***Kava Processing***

The raw kava roots are washed, converted into chips, dried in the sun and grinded into powder form. There are two kava processing factories in Fiji, located at Ovalau and Veisari near Suva. Pounding and grinding machines are used for processing kava for beverage and pharmaceutical uses. Kava is processed and marketed in different forms such as chips, powder, tablets and capsules. Fiji kava root powder is available in zip-lock foil pack as well.

### **Kava Trade**

Fiji kava has an expanding market at different levels: rural, urban, regional and global. A large proportion of kava produced is, however, domestically consumed and traded in domestic markets in Fiji. Of the estimated 4,000-4,500 tonnes dry weight kava produced in Fiji annually, between 3,300- 3,700 tonnes dry weight kava, that is, over 82 per cent is consumed in the domestic sector (PHAMA, 2018). The shrinkage, wastage and losses of kava are between 600-650 tonnes dry weight (PHAMA, 2018) which is nearly 15 per cent of total kava production. Only about 3 to 4 per cent of kava produced in Fiji was exported to global markets in 2016 and 2017 (Table 2).

Most of the kava is sold to domestic consumers through vendors in the municipal



markets and kava shops in either raw or powder form (PHAMA, 2018). A large volume of kava supplies come to towns and cities in Fiji mainly from the islands in the Northern and Eastern provinces. Much of the demand for traded kava in Fiji is in the urban areas such as Suva, Nausori, Lautoka, Nadi, Sigatoka in Viti Levu and Labasa in Vanua Levu. Most of the kava sold in the local markets are dried kava. Reddy, Naidu, and Mohanty (2003, p. 144) in a study on urban informal sector found that kava was a common household consumption product in Fiji and it ranked the third highest expenditure in urban households next to food and transport.

Kava roots are sold in various forms. Small lateral roots, termed *waka*, are the most common part of the plant that are used and sold in urban markets (Pollock, 2009, p. 273). The dried rootstock is known as *lewena* (Pollock, 2009, p. 273). Each part and product of the yaqona crop has a different price. Dried kava roots (*waka*) can cost at a local urban market in Fiji for F\$100-150 per kg; dried rhizome (*lewena*) costs between F\$80-120 per kg (PHAMA, 2018). Kava is also sold in the form of tea, capsule, powder or liquid. The pounded powder of *waka* costs F\$80-100 per kg whereas the pounded powder of *lewena* costs between F\$ 70-80 per kg (PHAMA, 2018).

Fiji diaspora communities living abroad play a crucial role in promoting kava exports. Prior to pharmaceutical companies' demands, kava was mainly exported for consumption by some 1.25 million Pacific Islanders settled abroad mainly in the USA, Australia, New Zealand and Canada (Prasad and Raj, 2006, p. 385). According to the 2016 Census, nearly 61,473 Fiji-born people were living in Australia (Government of Australia, 2018). Similarly, 52,755 Fiji-born people were living in New Zealand in 2013 (Government of New Zealand, 2013). Fijian diaspora population accounted for 5.3 per cent of the total overseas-born population living in New Zealand (Government of New Zealand, 2013). Fiji's emigrant population has created a market for kava export, especially in Australia and New Zealand. Fijian yaqona is more readily available in New Zealand than other types of kava (Pollock, 2009:274).

### ***Kava Export***

Kava is one of the chief export commodities in Fiji next to sugar, garments, gold, fish and mineral water. Fiji did not become a net exporter of kava until the 1980s (Mangal, 1988) and exports did not take off substantially until the 1990s (Murray, 2000a, p. 361). By 1998, a large increase in demand for kava for pharmaceutical

use had led to a dramatic rise in its price (Davis and Brown, 1999, p. 13). Because of the sudden surge in demand in the pharmaceutical industry, the farmers uprooted as much kava as they could, compromising the sustainability of the industry (The Fiji Times, 4 May 2012). Prasad and Raj (2006) argued that growers exploited the increased demand to their peril by exporting low quality products from the late 1990s and this adversely affected the yaqona export industry.

Fiji's kava business created three market fields: pharmaceutical (drug), nutraceutical (nutritional supplement) and beverage (Pollock, 2009, p. 268). In 2011, about 12 per cent of kava produced in Fiji was exported which declined to nearly 3 per cent in 2017 (Table 2).

Table 2. Kava Trade in Fiji 2007-2017

Year	Net trade (Export-import)		Export: import volume ratio	% share of kava export to total production
	Volume (Tonnes)	Value (Million F\$)		
2007	-108.8	-1.67	0.616	5.2
2008	-36.1	-0.19	0.836	5.6
2009	+37.9	+0.98	1.217	8.2
2010	94.1	+1.51	1.629	8.7
2011	+26.5	+1.17	1.098	12.4
2012	+37.9	+1.25	1.149	8.8
2013	-190.6	-0.06	0.419	3.7
2014	+74.3	+4.16	1.532	5.5
2015	+87.5	+6.58	2.205	2.5
2016	+164.4	+10.56	2.744	3.4
2017	+187.3	+11.01	2.510	3.4

Source: Fiji Bureau of Statistics, Primary Production Division, 2012-2018.

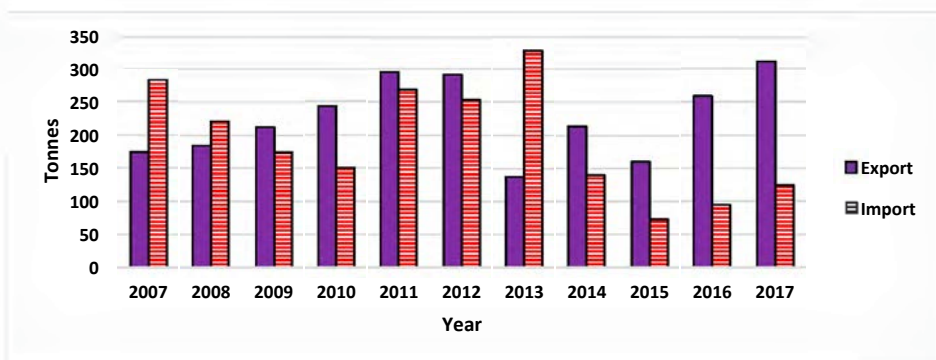
The annual average volume of kava export from Fiji was 226 tonnes during 2007-2017. As illustrated in Figure 2, the kava export volume had reached its peak in 2011 with 295 tonnes, an increase of about 21 per cent from the previous year. The Fiji Government's export-led and import substitution policy had a significant impact on the kava trade. According to PHAMA (2018) the 35 kava exporters registered with Ministry of Agriculture (MOA) are exporting kava to various destinations. Fiji's export volume had increased steadily from 137 tonnes in 2013 to nearly 311 tonnes in 2017. That was a 126 per cent growth in export volume, while the export value increased by 98 per cent during this period (Figure 2). Fiji witnessed the second "kava boom" in the last five years mainly due to increasing kava prices and growing demands for Fiji kava in the Pacific region and globally. The niche market demand for Fiji's kava is mainly in the form of processed roots and for beverages and pharmaceutical uses. In contrast, the kava import volume declined by 62 per cent during this period (PHAMA, 2018). The export value

almost tripled from F\$6.6 million in 2013 to F\$19.7 million during 2013 and 2017 (Fiji Bureau of Statistics, 2018).

Kava export in Fiji generated nearly F\$20 million in 2017, with an annual average value of nearly F\$8 million during 2007-2017 (Figure 3). Of the total export value, nearly F\$4 million was generated from within Pacific Island countries (Fiji Bureau of Statistics, 2018). Among the Pacific Island countries, Marshall Islands, Nauru and Tonga were the leading importers of Fiji Kava in 2017 (Fiji Bureau of Statistics, 2018). Outside the Pacific region, Fiji kava has a ‘niche’ market in six areas including New Zealand, USA, Hawaii, Australia, the United Kingdom and UAE (Fiji Bureau of Statistics, 2018). These countries together accounted for nearly 82 per cent of total export volume and 78 per cent kava export value of Fiji kava in 2017 (Fiji Bureau of Statistics, 2018).

Despite increasing yaqona production, Fiji remained a net importer of kava. The export and import volume ratio was 0.6 in 2007 that increased to 2.7 in 2016 (Table 2). The kava trade deficit in Fiji was highest in 2013 (Figure 2) with an export and import volume ratio of 0.4. However, the kava export grew substantially in the last four years since 2014 and the net trade volume has reached nearly 187 tonnes in 2017 (Table 2).

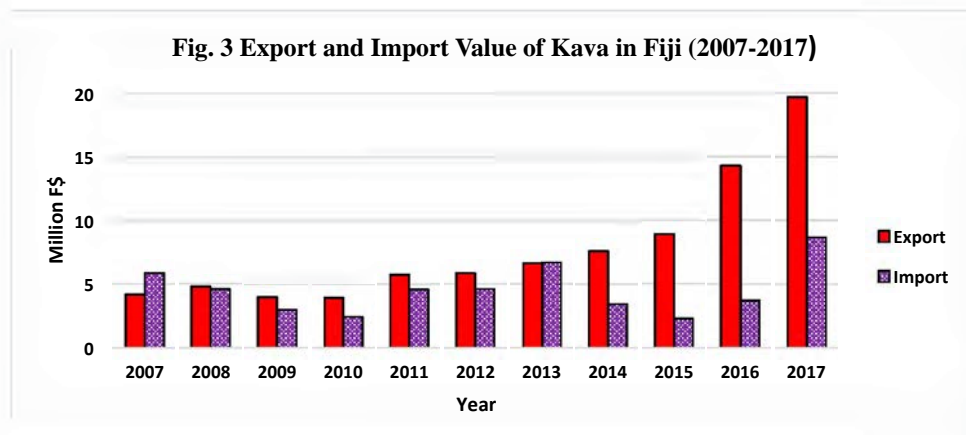
Figure 2. Trends in Kava Export and Import Volume in Fiji, 2007 -2017



Source: Mohanty based on data from Fiji Bureau of Statistics, 2012 -2018.

The kava export earning has been increasing since 2012 and it had reached nearly F\$ 20 million in 2017 (Figure 3). The annual average export value was about F\$8 million during 2007-2017 (Fiji Bureau of Statistics, 2018).

Figure 3. Trends in Kava Export and Import Values in Fiji, 2007-2017



Source: Mohanty based on data from Fiji Bureau of Statistics, 2012 and 2018.

The New Zealand and United States are the leading export markets of Fiji kava. New Zealand accounted for about 42 per cent of kava export volume followed by USA in 2017 (37 per cent) (Fiji Bureau of Statistics, 2018). However, in terms of kava export value, USA was the leading country, contributing nearly 58 per cent of Fiji's total export value in 2017 (Fiji Bureau of Statistics, 2018). The average export price was F\$55 /kg during 2007-2016 with the USA export price value reaching an average of F\$97/kg (PHAMA, 2018).

### ***Kava Import***

Due to fluctuations in kava production, Fiji has been a net importer of kava since 2002 with Vanuatu being the key market (The Fiji Times, 4 May 2012). Fiji imported about 328 tonnes of yaqona in 2013 with a negative net trade value of – F\$ 0.06 million (Table 2). There was about a 30 per cent growth in imported kava in 2016 compared to the previous year, with an annual average volume of kava import of 192 tonnes during 2007-2017. The annual average import value of kava was F\$5 million between 2007 and 2017. Fiji imported nearly 124 tonnes of yaqona in 2017. Vanuatu accounted for about 82 per cent of the total volume of Fiji's imported kava and 91 per cent of total imported value in 2017 (Table 3). Papua New Guinea remained the second leading importer of Fiji kava during the period. The other countries from where Fiji imported minor quantities of its yaqona are USA, Singapore and Chile (Table 3). Some of the imported kava was re-exported (PHAMA, 2018).

Table 3. Leading Countries of Kava Import in Fiji, 2017

<b>Import country</b>	<b>Volume of import (Tonnes)</b>	<b>Value of import (F\$)</b>	<b>% share to total volume of import</b>	<b>% share to total value of import</b>
Vanuatu	101.16	7,868,680	81.6	90.9
Papua New Guinea	21.36	705,097	17.2	8.1
New Zealand	1.48	76,032	1.2	0.9
USA	0.01	900	0.01	0.0
Singapore	0.001	899	0.0	0.0
Chile	0.001	190	0.0	0.0
Total	124.01	8,651,799	100.0	100.0

Source: Fiji Bureau of Statistics, Economics Statistics Division, 2018.

The net-trade value grew from F\$4 million 2014 to F\$7 million in 2015 and F\$11 million in 2017 (Fiji Bureau of Statistics, 2018). The export: import ratio had increased from 1.5 in 2014 to 2.5 in 2017 (Table 2).

## **Role of Kava in Fiji**

Kava has a distinct social, cultural, economic, developmental, environmental and political role in Fiji. The following section provides a brief description of the role of kava in Fiji.

### ***Social and Cultural Role***

Kava is a widely accepted ceremonial and/or social drink in Fiji. Kava promotes social networking and bonding, and provides a social safety net and thus has a critical role in promoting ‘social capital’. It promotes friendship, and sharing and caring for one another and has a social protection role. It thus facilitates an informal social protection system in Fiji. Kava has therefore, distinct human and social values in Fiji.

Traditionally, kava was used in religious rites and rituals and was consumed by chiefs (Fiji Ministry of Agriculture, 2011, p. 25). Yaqona rituals are the same in every part of Fiji. Kava used to be consumed by indigenous Fijians only but over the years, it has acquired a status of national drink consumed by all races throughout Fiji. Davis and Brown (1999, p. 12) observed that kava is a ceremonial drink in Fiji and there are several occasions of kava ceremonies that include “formal occasions, welcoming royalty or distinguished guests such as heads of

state”. Additionally, informal kava sessions often happen at social occasions in Fiji. Kava thus forms an integral part of cultural, economic and social life in Fiji.

As a cultural beverage, kava consumption is regulated by village elders and chiefs. It is used in “events such as electing a new chief, marriage and death ceremonies, and important meetings of traditional institutions” (Sofer, 2007, p. 234). Kava is used in almost all social activities such as funerals, weddings, festivals, family and village functions. It enhances sociability. Prasad and Raj (2006, p. 384) observed that kava is used as “Fijian ceremonial rituals, an item of exchange as a means of strengthening social ties, a beverage to affirm social ranks, and a communal activity to facilitate communication and camaraderie”.

Another cultural implication that has emerged over the years is the consumption of kava by both genders. Prior to the commoditization of kava, it was largely consumed by men in a male-dominated environment -such as in the bures- in the presence of one woman (Pollock, 2009). Pollock (2009, p. 274) noted that “formerly, though women had a role in the preparation and formal presentation of kava, it was consumed mainly by Fijian men; however, that is changing”.

Kava is believed to promote to a great extent the cultural integration in Fiji. It bridges cultural differences between individuals and groups and brings them together. Nosa and Ofano (2009) found that kava brings equality and oneness as it allows each person to serve the other. Talanoa session is an important cultural element in Fijian society where people sit together and discuss their problems and resolve conflicts. Kava is an important element of talanoa sessions and it helps in breaking down social barriers and resolving interpersonal or intergroup conflicts (Sofer, 2007, p. 234).

In an island setting with limited recreational opportunities, kava drinking has various social and cultural implications. There are numerous social ills associated with kava consumption. Kava drinking sessions preoccupy individuals and groups for long period during night. As a result, this preoccupation affects inter-personal relations and at times, it leads to breaking of family ties. Kava drinking is also directly or indirectly associated with domestic violence and social crimes in Fiji.

Furthermore, kava consumption has an adverse impact on educational development as well. A study shows that in Fiji “one third of rural teachers consume yaqona for an average of six hours on nights prior to teaching in the classroom, and this negatively affects education delivery and student academic achievement”

(Aporosa, 2008).

### ***Economic and Developmental Role***

Kava is an important cash crop in Fiji and involves agri-business. Kava gives greater economic returns than other crops such as cassava and taro (Davis and Brown, 1999, p. 13). It is an important business product and is also one of the export products that generate substantial foreign exchange in Fiji. The total gross income from kava sales is about F\$320 million, of which 92 per cent comes from domestic sales and 8 per cent from exports (PHAMA, 2018). The Fiji kava industry is valued at around FJ\$66 million per year benefiting over 21,000 kava farms (Fiji Sun, 8 March 2017).

Kava industry enhances entrepreneurship, provides employment and creates a “niche” market. Kava business involves almost all major economic sectors in Fiji: agriculture, industry and service sectors for its growth and promotion. Economic sectors such as agriculture, tourism, and transport are heavily involved in the kava business. Kava business includes retailing and trading, thus is a tertiary economic sector activity as well. Thus, kava is a primary, secondary and tertiary sector activity in Fiji. The kava value chain includes farmers, traders, vendors and exporters.

Kava provides livelihoods to small rural farmers and retail traders. Nearly 44 per cent of Fiji’s population now lives in rural areas. One in 8 rural households is a kava grower in Fiji and in some provinces such as Kadavu, over 80 per cent of all households grow kava (PHAMA, 2018). Kava farming helps rural households through income-generation and clearly has a role in poverty alleviation in Fiji. The business generates household income and supports children’s education, and transport. According to *The Fiji Times* (4 May 2012), Kava business brings the village youth more money and creates the employment prospects better.

Kava industry has a large employment potential and the industry provides employment to a large number of people in the informal sector (Prasad and Raj, 2006). Kava remains a major source of income and livelihood to the rural farmers in Fiji. Rural communities are connected to global markets through this niche product.

Fiji kava promotes the tourism sector as well. Tourists are attracted to kava sessions and enjoy kava drinking with the local populace. They participate in

traditional Fiji kava ceremonies as well. Kava tourism is a significant revenue generator in Vanuatu (Rowe, n.d).

### ***Medicinal Role/ Health Implications***

The health implications of kava have been heavily researched. Most of the research to date has focused on kava's potential to reduce anxiety. Kava is an intoxicating product. Many argue that kava has several health benefits (Davis & Brown, 1999 and Lebot, Merlin & Lindstom, 1992 & 1997). Kava is an anxiolytic herbal medicine used in the treatment of sleep and anxiety disorders (2007). Kava's biological effects is due to the presence of kava lactones which are reported to include sedative, anxiolytic, anti-stress, analgesic, local anaesthetic, anticonvulsant and neuroprotective properties (Gounder, 2006). Kava consumption induces relaxation and sleepiness (Catty, 1956 cited in Davis and Brown, 1999, p. 7). Traditionally, kava has been used to treat gout, rheumatism, diarrhoea, asthma, venereal diseases and convulsive disorders (Duva, 1976; Singh, 1992 cited in Davis and Brown, 1999, p. 10). Specific kava lactones (e.g. kavain) treat human maladies including unrest, nervousness, mental distress, 'inner excitement', psychological stress and lack of concentration caused by Fungi (Davis and Brown, 1999, p. 10). Folk medicine suggests that kava also may "treat sleeplessness and tension/anxiety, headaches, colds, rheumatism, menopausal symptoms, venereal diseases, menstrual and genitourinary tract problems" (Bilia et al., 2004).

Kava has considerable potential as a source of pharmaceutical compounds (Davis and Brown, 1999, p. 9). Western medical industries have identified kava's effects as narcotic, hypnotic, diuretic and muscle -relaxant (Mc Donald and Jowitt, 2000, p. 218). Kava roots contain kava lactones which are used for treatment for people with anxiety and stress disorder (Fiji Ministry of Agriculture, 2011, p. 25). Kava's "lactones act as anaesthetics and muscle-relaxants" (Davis and Brown, 1999, p. 9). Pharmaceutical capsules containing kava root extracts treat nervous tension and sleeplessness and promote muscular relaxation (Davis and Brown, 1999, p. 9). Kava is also used as an effective antibiotic to control minor skin infections (Davis and Brown, 1999, p. 9).



American Botanical Council described kava as follows:

The roots of kava are made into a recreational relaxing drink. It has no addiction potential or significant intoxicating effects, despite its genus name “*methysticum*” (Greek for “intoxicating”)....the relative safety of kava products is one of the reasons for its popularity in Europe, where kava extracts have benefitted from official marketing authorizations as medicinal products for the treatment of stress-related anxiety. (Yoshida, 2018).

A recent WHO risk assessment of kava products has found that kava has a “history of relatively safe use, with liver side effects never having arisen in the ethno pharmacological data” and concludes that “clinical trials of kava have not revealed hepatotoxicity as a problem” (WHO, 2007 cited in IKEC, 2010, p. 3). Based on available scientific information, it can be inferred that kava as a traditional beverage is safe for human consumption (WHO, 2007 cited in IKEC, 2010, p. 3). An effective dose of kavalactones is 70–250 mg which is beneficial to health.

However, overconsumption of kava is hazardous to health. Kava is considered as a drug, so abuse and excessive consumption of kava has many detrimental health effects such as elevated cholesterol and decreased albumin level (Nemecz and Lee, n.d). It is a “cerebral depressant beverage” (Sofer, 2007, p. 234). Overconsumption of kava may cause dermatological side-effects, oral and neurological manifestations (Ernst, 2000; Abebe, 2002; Spinella, 2001; Meseguer et al., 2002 and Sibon, 2002 cited in Maria et al, 2007). Kava itself produces toxicity. Consumed in combination with other pharmaceuticals, kava may raise the risk of toxic hepatitis (Maria et al, 2007). Kava has been seen to decrease glutathione in the liver and liver toxicity is greatly enhanced under this condition (Hentze et al., 2000; Clouatre, 2004 cited in Maria et al. 2007). Interaction between kava and alcohol has important clinical consequences, such as, increased central nervous system depression (Maria et al, 2007). Whether this combination leads to liver damage are conflicting views (Maria et al, 2007).

### ***Environmental Role***

Kava has various environmental implications. Kava crops promote conservation of soil and environment as the roots bind the soil and prevent soil erosion and land degradation. Jones et al. (2012, p. 55) found that kava cultivation does little

damage to the environment. Kava has very limited nutrient requirements; its main requirements are a lot of water and space and it grows in the wild, bushes, forests, on hill slopes and even on infertile soils. When kava is inter-cropped, it helps to minimise environmental impacts. Kava is “highly environmentally sustainable because of its relatively low demand on soil ecosystems and the great possibilities for rotational production” (Murray, 2000, p. 361). However, prevention of soil erosion along hill sloping land, soil fertility and sustainable land management are important issues. Pesticides and herbicides are used minimally in kava production; therefore, kava is largely an organic and environment-friendly product. Niche production potential of kava increases especially if it is certified as an organic product.

### ***Political role***

Kava is a product that is used in private and public spheres in Fiji. The kava ceremony in formal functions is a political affair, with individuals being served with kava according to their ranks. Kava in talanoa sessions acts as a platform for decision-making and helps in resolving social, cultural and political differences.

Kava trading becomes an element in international and regional politics. Kava trading involves bilateral external relations between Fiji and Pacific island states and other countries. The Pacific kava ban by European countries led to intense competition at the regional scale during 2004-2005. Vanuatu kava, for example, created competition for Fiji kava. Trade liberalization between Vanuatu and Fiji led them to protect their value-laden niche products. When the international demand for Fiji kava dropped, farmers had enough supply in the local market to meet the demand. The competition coupled with the belief that Vanuatu kava had various health implications led Fiji to ban Vanuatu kava. As a consequence, Vanuatu banned the importation of Fiji's biscuits. The kava-biscuit politics between Fiji and Vanuatu had strained the bilateral relations between the two countries.

In the past, the ‘kava ban’ imposed by some European Union countries such as Germany on health grounds had affected the export of Fiji kava. The German health agency known as BfARM imposed a ban for fears over kava's toxicity. However, the ban on kava exports to Germany was lifted in 2015, thus opening the German and other European Union markets for export of Fiji kava. The International Kava Executive Council (IKEC) focused on re-establishing the kava

trade between the kava producing South Pacific Island States and the countries of the European Union (IKEC, 2012).

### **Issues and Challenges**

Kava consumption however, has both merits and demerits. Kava consumption raises several social-cultural issues and challenges. It has many educational, health and other socio-cultural ramifications.

Kava production and processing have other challenges. The incidence of dieback disease is the single most challenge to kava growing in Fiji (Davis and Brown, 1999; p. 13). Although kava is not susceptible to pests and diseases, kava dieback and root nematodes pose problems to kava farming (PHAMA, 2018). However, these diseases can be controlled through crop hygiene practices.

Climate change variability and natural disaster events such as increased temperature, water stress, droughts, cyclones and strong winds pose serious threats to kava farming. Tropical cyclone Winston in 2016 for instance, caused widespread damage to kava plantations, which lowered the supplies and increased kava prices. However, appropriate soil and water management and agricultural practices can minimise water stress and drought conditions, and other local climatic effects.

Fiji adopts more export-led and import substitution growth strategies today and kava remains to be one of the niche products in the export-led growth strategies. Augmenting the kava production to meet the growing demand and improving kava quality to compete in the global market are, however, the major challenges. The Fiji Kava Council (FKC) worked closely with the Secretariat of the Pacific Community (SPC) to improve the quality of kava being planted in the country (Fiji Times, 22 May 2013). Processing of quality kava in meeting the growing international demand is a major challenge.

Another pertinent issue is that Fiji lacks a regulatory mechanism for kava business. The government controls of small and micro enterprises in Fiji through its taxation policies affect the kava business as well. There is thus a greater need for state legislation that would protect kava producers, middlemen, retailers, wholesalers, exporters and importers.

The Kava Bill needs to be enacted as a Kava Act. The bill aims at establishing a Fiji Kava Council for the purpose of the regulation and the management of the kava industry and its related matters, to protect the interests of kava growers, processors, exporters and importers and to safeguard the export of Fiji brand kava. The Standing Committee on Natural Resources in its report on Kava Bill, 2016 stated that:

The Kava Industry in Fiji is a major contributor to the national economy and the demand for kava has increased in both the local and overseas markets. Since kava is generating millions of dollars in the Fiji economy, there is a need for a proper legal framework to establish an authority that will manage, administer and assist the growth of the kava Industry in Fiji. (Government of Fiji, 2018)

Kava quality and standard are of utmost importance to Pacific Island countries to fetch good prices and to capture the competitive world market. Various steps are being taken by a number of governments, industry groups and technical partners such as DFAT's Pacific Horticultural and Agricultural Market Access Program (PHAMA) and SPC (Intra- ACP Agriculture Policy Program) to put in place quality standards, manuals, legislation and training to ensure that the kava industry has a strong base to produce consistent quality (SPC, 2018). The Pacific Horticultural and Agricultural Market Access (PHAMA) Program, an Australian and New Zealand-funded aid-for-trade Program launched in 2011, has partnered with governments in Fiji, Samoa and Vanuatu to develop national kava quality standards (Fiji Times, 11 July 2018). The Fiji Market Access Working Group (MAWG) which was established through PHAMA and MOA is now focusing on improving kava quality. PHAMA's support for Fiji and Vanuatu's kava industries has resulted in the protection of approximately F\$26.5m of annual kava exports and 39,000 farm livelihoods (Fiji Times, 11 July 2018).

The Fiji Government launched two key documents; the "Fiji Kava Standard" and "Fiji Kava Quality Manual" in March 2017 (SPC, 2018). The "Fiji Kava Standard" (2017) provides information along with other requirements to ensure that kava meets minimum safety standards that include moisture content (less than 12 per cent), age (at least 3 years), aroma (non-foul smell), ash (less than 6 per cent) and others (SPC, 2018). In addition, kava must comply with international CODEX standards. The "Fiji Kava Quality Manual" (2017) identifies the range of Fiji kava varieties, how they are distinguished and suggested agronomic methods for cultivation (SPC, 2018).

One of the major challenges is the transportation of kava from remote, outer islands and inaccessible hilly areas in the rural areas where it is washed and dried before being transported to the urban markets. Kava theft especially in Taveuni and other parts in Fiji is another concern. Other issues include economic problems such as low investment and inflation that influence the kava business in Fiji. Moreover, the land tenure complexities adversely affect the kava crop production and the supply of kava for trading in the domestic and global markets in a sustained way.

## **Conclusion**

Globalization and localization are more integrated today than ever before. Small island developing states such as Fiji are linked to global markets by their unique entrepreneurial and niche products. Fiji kava is an example of such a product. Fiji kava is a multipurpose commodity- a cash crop, and social, business and entrepreneurial product. Kava is a highly demand-dependent product. It plays a critical role in the social, cultural and economic life of Fiji. Kava trade clearly depicts the export-led growth and import substitution policy of Government. Nevertheless, there exists a great potential of Fiji kava as a “niche” product in the global market. Much of kava business expansion depends on internal as well as external growth dynamics. The domestic demand for Fiji kava is growing significantly. Fijian diaspora and communities living abroad help in expanding kava export markets. The expansion of health and pharmaceutical uses of kava in international markets especially in European countries, USA and Australasia has created opportunities for expansion of kava related entrepreneurial activities in Fiji. However, the global competition, global market volatility and crisis, and above all, the global climate change through temperature and rainfall variability and climate induced events such as droughts and cyclones pose serious threats to the sustainability of Fiji kava.

## References

- Aporosa, S. G. (2008). *Yaqona (Kava) and education in Fiji: A clash of cultures?* Saarbrücken, Germany: VDM Verlag.
- Baldacchino, G. (1999). Small business in small island nations: A case study from Fiji. *Journal of Small Business Management*, 37 (4), 80-84.
- Baldacchino, G. (2002). A taste of small island success: A case from Prince Edward Island. (Global Perspective). *Journal of Small Business Management*, 40 (3), 254-259.
- Bilia, A.R., Scalise, L., Bergonzi, M. C., & Vincieri, F.F. (2004). Analysis of kavalactones from *Piper methysticum*. *Journal of Chromatography, B* (812), 203-204.
- Burns, C., and d'Abbs, P. (1997). *Draft report on inquiry into the issue of kava regulation*. Retrieved from <http://www.nt.gov.au/lant/parliamentary-business/committees/kava.pdf>.
- Davis, R. I., & Brown, J. F. (1999). *Kava (Piper methysticum) in the South Pacific: Its importance, methods of cultivation, cultivars, diseases and pests*, Australian Centre for International Agricultural Research, Canberra, Australia. Retrieved from [http://ageconsearch.umn.edu/bitstream/113917/2/tr046\\_pdf\\_19769.pdf](http://ageconsearch.umn.edu/bitstream/113917/2/tr046_pdf_19769.pdf).
- FAO/WHO (2016). Kava: a review of the safety of traditional and recreational beverage consumption, *Technical Report*, FAO/WHO: Rome. Retrieved from <http://www.fao.org/3/a-i5770e.pdf>.
- Fiji Bureau of Statistics (2012). *Key statistics: Primary production-selected agricultural products*, Suva, Fiji: Fiji Bureau of Statistics.
- Fiji Bureau of Statistics (2018). *Kava statistics, economic division*, Suva, Fiji: Fiji Bureau of Statistics.
- Fiji Ministry of Agriculture (2010). *Annual Report, 2010*, Suva, Fiji: Fiji Ministry of Agriculture.
- Fiji Ministry of Agriculture (2011). *Fiji Agriculture Investment Guide: Discovering Opportunities Harvesting potentials*. Retrieved from <http://gallery.agriculture.org.fj/pdf/FIJI%20AGRICULTURE%20INVESTMENT%20GUIDE.pdf>.

Fiji Ministry of Primary Industries (2011). *Yaqona production by province- 2011*, Economic Planning and Analysis Section, Suva, Fiji: Ministry of Primary Industries.

*Fiji Sun* (8 March 2017). Fiji Lucky 13 Kava Varieties Consumable. Retrieved from [http://fijisun.com/fj/2017/03/08\\_fiji\\_lucky-13-kava-varieties-consumable/](http://fijisun.com/fj/2017/03/08_fiji_lucky-13-kava-varieties-consumable/)

*Fiji Times* (3 September 2007). The Good and Bad of Kava, The Fiji Time. Retrieved from <http://www.fijitimes.com/story.aspx?ref=archive&id=69753>

Fiji Times (4 May 2012). The Benefits of Kava. Retrieved from <http://www.fijitimes.com/story.aspx?id=200248>

Fiji Times (22 May, 2013). Kava exports to boost economy. Retrieved from <http://www.fijitimes.com/story.aspx?id=234646>

Fiji Times (11 July 2018). A New Kava High. Retrieved from <http://www.fijitimes.com/a-new-kava-high/>

Gounder, R. (2006). Kava consumption and its health effects. *Pacific Health Dialog*, 13(2),131-135.

Government of Australia (2018). *2016 Census Quickstats*. Retrieved from [http://quickstats.censusdata.abs.gov.au/census\\_services/getproduct/census/2016/quickstat/1502\\_036](http://quickstats.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/1502_036)

Government of Fiji (2018). Standing committee on natural resources: Report on Kava Bill, 2016. *Parliamentary Paper 14 of 20*, Suva, Fiji. Retrieved from <http://www.parliament.gov.fj/wp-content/uploads/2018/03/kava-bill-2.pdf>.

Government of New Zealand (2013). *2013 Census Quick Stats about national highlights*.

Retrieved from <http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-national-highlights/cultural-diversity.aspx>.

Healthline (2018). *Kava Kava: Benefits, side effects and dosage*. Retrieved from <https://www.healthline.com/nutrition/kava-kava#section6>

IKEC (International Kava Executive Council) (2010). Discussion Paper on the Development of a Standard for Kava, *FAO/WHO Coordinating Committee for North America and the South West Pacific, Eleventh Session*, Nuku'alofa,

Tonga 28 September -1 October 2010. Retrieved from [http://www.ikec.org/sites/default/files/Codex%20alimentarius%20kava\\_draft\\_0.pdf](http://www.ikec.org/sites/default/files/Codex%20alimentarius%20kava_draft_0.pdf)

IKEC (International Kava Executive Council) (2012). *Home page*. Retrieved from <http://www.ikec.org/>

Jones, C. (2012) *Weaving niche production into pacific economies: The social, economic and environmental impacts of Fiji Water on local communities*. Retrieved from <http://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/2503/thesis.pdf?sequence=1>.

Jones, C., Murray, W, E., & Overton, J. (2012). Placing the Pacific in the global economy: Carving sustainable niches for economic development, *AusAID Final report*. Retrieved from [http://www.aid.govt.nz/webfm\\_send/475](http://www.aid.govt.nz/webfm_send/475).

Kava, R. (2001). The adverse effects of kava. *Pacific Health Dialog*, 8 (1), 115-118.

Kumar, S., Kaitetara, T., & Mudaliar, T. (1998). Opportunities for the production of yaqona in Fiji for export. Situation analysis No. 1. *Fiji Ministry of Agriculture, Forestry and Fisheries and Soil and Crop Evaluation Project*. Suva, Fiji: AusAID.

Lebot, V., Merlin, M., & Lindstom, L. (1992). *Kava the Pacific drug*. Newhaven: Yale University Press.

Lebot, V., Merlin, M., & Lindstom, L. (1997). *Kava the Pacific elixir*. Rochester, Vermont: Healing Arts Press.

Maiava, S., & King, T. (2007). Pacific indigenous development and post-international realities. In A. Ziai (ed), *Exploring post-development: Theory and practice, problems and perspectives*, (pp.83-98), New York: Routledge.

Mangal, J. (1988). The marketing of yaqona. In J. Overton (ed.), *Rural Fiji*, (pp. 59-70), Institute of Pacific Studies, Suva, Fiji: The University of the South Pacific.

Maria, F. D. et.al (2007). The controvertible role of kava (*Piper methysticum* G. Foster) an anxiolytic herb, on toxic hepatitis. *Revista Brasileira de Farmacognosia*, 17 (3), 448-454. Retrieved from <http://www.scielo.br/pdf/rbfar/v17n3/19.pdf>



- McDonald, D., & Jowitt, A. (2000). Kava in the Pacific Islands: A contemporary drug abuse ?. *Drug and Alcohol Abuse*, 19 (2), 217-227.
- Minchinton, E. J., & Brown, J. F. (1989). Kava and kava diseases in Vanuatu. In J. F. Brown (ed), *Kava and kava diseases in the South Pacific*, ACIAR Working Paper, No. 24, (pp 51-62), Canberra: ACIAR.
- Murray, W. E. (2000a). Neoliberal globalization, “exotic” agro-exports, and local change in the Pacific Islands: A study of the Fijian kava sector. *Singapore Journal of Tropical Geography*, 21 (3), 355-373.
- Murray, W. E. (2000b). The roots of progress? Challenges for the Fiji kava export sector. In M. Reddy and B. C. Prasad (eds), *Agriculture and Development in Fiji*, Fiji Institute of Applied Studies, Suva, Fiji: The University of the South Pacific.
- Naidu, R. (1983). Kava: problem or panacea?. *Island Business*, 9 (2), 34-37.
- Narsey, W. (2004). The kava kerfuffle and regional integration. *Island Business*, 30 (10), 52-54.
- Nemecz, G., & Lee, T. J. (n.d). *Kava Kava*, Retrieved from [http://web.campbell.edu/faculty/nemecz/George\\_home/references/Kava.html](http://web.campbell.edu/faculty/nemecz/George_home/references/Kava.html).
- Nosa, V., & Ofanoa, M. (2009). The social, cultural and medicinal use of kava for twelve Tongan born men living in Auckland, New Zealand. *Pacific Health Dialog*, 14(1), 96-102.
- PHAMA (Pacific Horticultural & Agricultural Market Access Program) (2018). *Fiji Kava Value Chain Analysis Report*, PHAMA, Suva, Fiji.
- Pollock, N.J. (ed.) (1995). The Power of Kava. *Special Volume of Canberra Anthropology*, 18 (1/2).
- Pollock, N. J. (2009). Sustainability of the kava trade. *The Contemporary Pacific*, 21 (2), 265-297.
- Prasad, N., & Raj, S. (2006). The perils of unmanaged export growth: The case of kava in Fiji. *Journal of Small Business and Entrepreneurship*, 19 (4), 381-394.
- Reddy, M., Naidu, V., & Mohanty, M. (2003). The urban informal sector in Fiji: Results from a survey. *Fijian Studies: A Journal of Contemporary Fiji*, 1 (1), 127-154.

- Rowe, D. (n.d). *Kava: Elixir of the Pacific*. Retrieved from <https://www.nzgeo.com/stories/kava-elixir-of-the-pacific/>
- Samy, S. (2011). Small business strategies and challenges. The Fiji Times, 29 September.
- Sarris, J., Adams, J., & Wardle, J. L. (2009). Time for a reassessment of the use of kava in anxiety? *Complementary Therapy in Medicine*, 17(3), 121-122.
- Shani, C., & Chalasani, S. (1993). Exploiting Niches Using Relationship Marketing. *Journal of Business and Industrial Marketing*, 8(4), pp. 58-66.
- Singh, Y. N. (ed.) (1986). *Kava: A bibliography*, Suva, Fiji: Pacific Islands Centre, The University of the South Pacific.
- Singh, Y.N. (1992). Kava: an overview. *Journal of Ethnopharmacology*, 37(1), 13-45.
- Singh, Y. N. (ed.) (2004a). *Kava: From ethnology to pharmacology*. Boca Ratan: CRC Press.
- Singh, Y. N. (2004b) *Kava: Production, marketing and quality assurance*. USA & Canada: Taylor & Francis.
- Sofer, M. (1985). Yaqona and peripheral economy. *Pacific Viewpoint*, 26 (2), 415-436.
- Sofer, M. (2007). Yaqona and the Fijian periphery revisited. *Asia Pacific Viewpoint*, 48(2), 234-249.
- SPC (Secretariat of Pacific Community) (2018). *Kava in Fiji*. Retrieved from <Http://Pafnet.spc.int/resources/newsroom/849.kava-in-Fiji>.
- Urquhart, B., & Thomson, N. (2008). Review of the misuse of kava among indigenous peoples. *Health Bulletin*, 9 (3), 234-250.
- Yoshida, Z. (2018). *German kava ban lifted at last*. Retrieved from <https://www.takimai.com/german-kava-ban-lifted-at-last/>