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Fieldwork 1 Report: IFAD and Fiji Ministry of Agriculture

***A sustainability study of the agricultural supply-chain
between highland farm communities and the growing
tourism industry in Fiji.***

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Introduction:

Communities of indigenous Fijians made the decision generations ago to move into the remote highlands of Viti Levu— Fiji's largest island— with the sole intention of protecting themselves from other fierce warring tribes. Today, this self-inflicted isolation does little more than promote the hardships associated with poverty. Villagers who were once solely subsistence farmers now have been forced to become commercial farmers to support their families, but struggle to access markets with a high enough demand. With the tourism industry stronger than ever in the Republic of Fiji, there are potential linkages to be made to support these forgotten highland communities. This study will examine the sustainability of the agricultural supply-chain between highland farm communities and Fiji's growing tourism industry on the Suncoast region.

Numerous studies over the years have examined the issue of high volumes of imported agricultural products supplying the tourism industry in Fiji. The majority of the resorts and hotels import vegetables from New Zealand and Australia during Fiji's off-season from November to April, completely overlooking the unique advantage that the microclimates of the highlands offer. The varied geographical zones of the highlands allows farmers to continue to grow vegetables into the off-season, while the rest of the island must rely on imports from abroad. If resorts focused sourcing these off-season vegetables locally, there would be a potential to reduce import costs by \$24 million FJD (IFC, 2018). Better organisation and a stronger partnership between the buyers and the sellers has the potential to provide income generation opportunities for indigenous farmers, in addition to increasing sourcing opportunities for the island's tourism industry.

A research gap exists on how to best approach this proposed partnership, and how to work with farmers and buyers to strengthen planning, communication, quality assurance, and collective marketing tools. The following research study has been developed and carried out to reach the following objectives:

- **Assess the feasibility of potential agricultural supply-chain** between highland farms to Suncoast region resorts.
- **Identify the market opportunities for highland farmers**, based on both a) their growing capacity and b) demand of Suncoast resorts.
- **Identify the barriers highland farmers face**, in which appropriate government bodies, NGO's, and private-sector businesses can help develop solutions.

Background:

Fiji Ministry of Agriculture and the FAPP Project:

Recent efforts by the Fijian government have been committed to reducing its dependence on imported food, with the Ministry of Agriculture (MoA) attempting to increase local food production as substitutes for imported items. In collaboration with the MoA and IFAD (International Fund for Agricultural Development), the Fiji Agricultural Partnership (FAPP) project focuses on assisting highland communities in expanding their range and access to markets for their agricultural goods. Due to their altitude and climate, these highland farms are able to grow high-value fruits and vegetables that are highly in demand by businesses and consumers who normally rely on imports. FAPP involves a considerably large scale of around 9,600 individuals living within the project area, which has led to scaling issues with organising effective supply-chains and identifying viable market opportunities. This is despite the fact that in the FAPP project area alone, about 60% of the arable land is lying idle (MoA, 2016). There is great opportunity to take advantage of this productivity in the FAPP highlands, in order to feed the hundreds of thousands of tourists that visit Fiji every year. One of the main objectives of FAPP includes creating linkages between farmers and potential markets, meaning this agricultural supply-chain must be strengthened with the identification of the demand from nearby tourism markets.



Figure 1: The four main challenges outlined by the IFC that prevent a working partnership between highland farmers and markets on Fiji. (Source: IFC, 2018)

Existing Research on Tourism Industry in Fiji:

According to a report released by SPTO (South Pacific Tourism Office), air and cruise ship arrivals to Fiji in 2018 accounted for 33.5% of total tourism to the South Pacific islands. Out of the 3,156,732 international arrivals to Polynesia, Micronesia, and Melanesia, 1.06 tourists visited at least one of the 330 Fijian islands (SPTO, 2018). This growing market has put pressure on the whole of the Fijian tourism industry to ensure that growth happens at a sustainable rate, and in a manner that will benefit as much of the local population as possible. A study conducted by the World Bank's International Finance Corporation (IFC) revealed that around 54% of the fresh produce used by resorts and hotels in Fiji is imported, and \$24 million FJD could be saved each year if that percentage was greatly reduced. The report found that these imports are driven largely by products that are not originally found or cultivated on the island, including beef, pork, and dairy. But the high-volume of imported produce could be easily reduced, as there are select areas of the island that manage to grow this produce year-around. The two productive sectors of agriculture and tourism offer great opportunity for economic growth and prosperity for all communities in Fiji. Linkages between the two

industries could create jobs, build resilience in rural and impoverished communities, and offer an opportunity to build sustainable, “green” economies. Regardless, the two sectors have been pursued independently by the Fijian government, with institutions and organisations not focusing on fostering positive linkages between the two.



Figure 2: The top five destinations for tourists visiting the South Pacific in 2018, with over 40% of them visiting Fiji. (Source: SPTO, 2018)

Linking the FAPP Project Highlands and the Suncoast Region:

The majority of international tourists to Viti Levu frequent the larger resort chains in populated areas such as Nadi and Denerau, in addition to the nearby smaller islands off the Western coast. These multinational corporations have much stricter produce sourcing guidelines and requirements, and tend to prefer importing agriculture products at a cheaper price. This has resulted in an opportunity for the MoA to focus on linking rural highland farming communities with smaller, “boutique” resorts elsewhere on the island. The Suncoast region is a 25 kilometre stretch of pristine beachfront along the Kings Highway, on the northern coast of Viti Levu (see Figure 3). While generally more remote and less accessible, resorts on the Suncoast cater to a more adventurous clientele who take advantage of the world-class SCUBA diving destinations. Accommodation on the Suncoast have a considerably smaller overall capacity and procurement requirements in comparison to the larger tourist destinations around the island. This, in addition to their proximity to the FAPP project area highlands, means these resorts have been identified as viable market opportunity for farmers to sell their fruits and vegetables. While the tourist industry on the Suncoast has made conscious efforts to localise their menus with advice from their head chefs, they still struggle to source all of the needs of the restaurants locally. This report will identify the specific demands of the main Suncoast resorts, the growing capacity of the FAPP highland farms, and give recommendations on how to better link these two markets and strengthen the overall agricultural supply-chain.

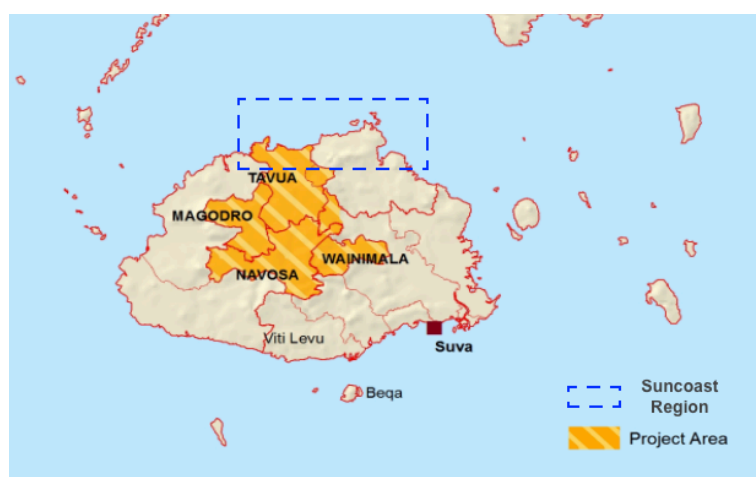


Figure 3: A map of Viti Levu, Fiji’s largest island and the hub for economic and political activity. The FAPP project area and the Suncoast region, the two groups of the study, are labelled.

Methodology:

Due to the diverse cultural composition of the population on Fiji, this study builds upon the strengths of both contemporary Western and traditional indigenous methodologies. Within those two methodologies, a mixed-methods approach is utilised in quantitative and qualitative data collection and analysis. While the Western methodological approach proved helpful in the framing of the overall research project, it was equally important to employ an indigenous methodology for data collection in the rural villages of the highlands. Unlike the Suncoast region, the remote interior highlands are relatively untouched by *vulagis* (foreigners) and the tourism industry, making it even more necessary to observe the traditional culture and values when collecting data there.

Utilising a purely Western-centric methodology in research amongst indigenous people automatically instils an unsavoury power dynamic that could prove counterproductive to data collection. As a result of the indigenous renaissance of the second half to the 20th century, there has been a call to “decolonise” traditional research methods and methodologies. Data collected within indigenous communities must take into account local knowledge protocols and philosophies, and be conducted with the intention of benefitting the community that is being involved. This is especially necessary for researchers who are not a part of the indigenous community but wish to be granted permission to join it, such was the case in this research study. Employing an indigenous form of methodology is a commitment to following the philosophies of the communities being surveyed, and respecting their culture by actively preserving their methods of knowledge creation and transfer.

The Fijian Vanua Research Framework (FVRF) was created in 2005 by Nabobo-Baba. *Vanua* is the Fijian word for “homeland” or “village”, with the framework indicating how a researcher should conduct him or herself in a traditional Fijian village. As is the case with most indigenous methodologies, the methods of data collection in FVRF have been practiced for generations through their own versions of knowledge transfer, but have only been recently identified when written into concrete frameworks such as Nabobo-Bababa’s. Principles of FVRF focus on conducting research to directly benefit the communities participating, respecting existing power relations within the villagers, reciprocating villagers’ support and kindness, and gaining permission to conduct research from the chiefs. Nabobo-Baba outlines nine steps of *Vanua* research, which are detailed below in Figure 4.

An important step of the FVRF was utilised throughout the FAPP project highlands portion of the data collection, also known as *na talanoa/veitalanoa*. *Talanoa* is the method of story-telling between two or more persons, and in this study was an informal tool in data collection that followed the traditional rules of the *vanua*. It is a term that is shared between both Fijians, Tongans, and Samoans. Conversational methods of data collection are extremely important in indigenous research, as much of indigenous knowledge is based upon the oral tradition of story-telling and intergenerational “remembering” (Kovachs, 2010). This would prove extremely relevant and important in all future data collection for this study.

Steps of Fijian Vanua Research Framework (FVRF) <i>Adapted from Nabobo-Baba (2005)</i>			
Fijian	English	Definition	Methods
<i>Na navunavuci</i>	Conception	The theorising, preparation, and conceptualisation of the proposed research.	Identifying the research problem within the village.
<i>Na vakavakarau</i>	Preparation and planning	The physical, psychological, methodological, and spiritual preparation for research.	Obtaining permission from village chiefs; ensuring necessary leaders and elders are consulted.
<i>Na i curucuru/na i sevusevu</i>	Entry	The norms for requesting entry into a <i>vanua</i> . To be conducted on a continual basis.	Gift-giving, partaking in ceremonial kava welcoming session.
<i>Na talanoa/veitalanoa</i>	Data Collection	The process of story-telling and knowledge-sharing in the traditional Fijian context.	Both parties sharing stories or conducting interviews around a <i>yaqona</i> bowl during a kava session, called <i>talanoa</i> .
<i>Na i tukutuku</i>	Reporting/Writing	The data analysis guided closely by <i>vanua</i> values.	Responsible data collection of the researcher that will benefit the local community.
<i>Na vakavinavinaka</i>	Gifting/Thank-you's	The reciprocal and continuous behaviour of showing gratitude and trust between parties.	Giving money for accommodation; utilising expressions of <i>vinaka</i> at every opportunity.
<i>I tatau</i>	Departure	As per Fijian customs, a lifelong association is formed upon departure.	Giving the thank-you gift; insinuating that this relationship is to be continued.
<i>Vakarogotaki lesu tale/taleva lesu</i>	Reporting back/Informing community	The important Fijian protocol of honouring those who have given something of value to you.	Returning to the village to inform chiefs of project completion.
<i>Me vakilai/me na I vurevure ni veisau se na vei ka e vou ka na kauta mai na bula e sautu</i>	Transformative process	The change as the result of the research findings.	Research must inform practice of communities and benefit them.

Figure 4: The nine steps of the Fijian indigenous framework (FVRF), as was followed in this research project. (Source: Ashley Shak)

Research Design and Methods:

The research study involved data collection between two separate groups: the farmers in the FAPP project highlands, and those employed by resorts in the Suncoast region. The following section on research methods and design will be split up according to the two different groups surveyed over the course of two and a half months.

Suncoast Resorts:

Four separate trips for data collection were taken to the Suncoast region, each one focusing on a different major resort. The Suncoast Tourism Group (STG) is a collective of resorts and hotels located along the northern coast of Viti Levu, in addition to the several smaller resorts situated on neighbouring islands. The capacities and accommodation styles varied greatly amongst the nine members of the STG, and for this sample set the three largest resorts were chosen: Volivoli Beach Resort, Wananavu Beach Resort, and Tanoa Rakiraki. These three resorts had the largest guest capacities and individual catering restaurants, making them the main buyers of produce in the nearby market town of Rakiraki. Volivoli Beach Resort had 13,942 guests in 2018, Wananavu Beach Resort had 4,090, and Tanoa Rakiraki had 6,986. GIS data was collected to map out the location of each member of the STG, both in relation to each other and to Rakiraki (see Figure 5).

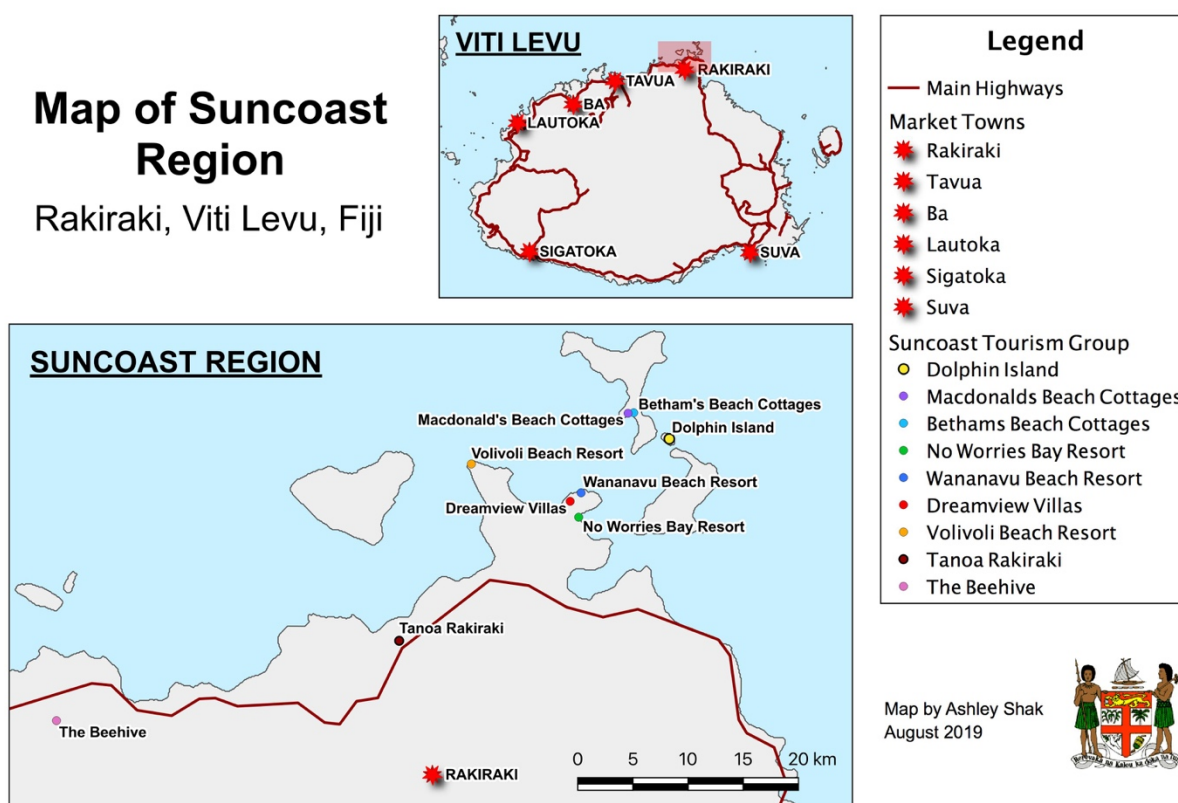


Figure 5: A map of the Suncoast region of Viti Levu, and the nine resorts that were part of the official Suncoast Tourism Group.

Multiple in-depth interviews were held with the general managers, head chefs, and a culinary consultant for the region in order to gauge opinions on sourcing agricultural produce locally. In addition, these interviews served as opportunity to gain baseline knowledge on what the employees in the Suncoast knew about the various barriers highland farmers faced. The employees working at all three resorts were all formally educated past secondary-level school, which meant everyone

taking part of the research study was fluent in English. This removed the need for a translator, which meant that more qualitative methods of data collection could be utilised in comparison to in the FAPP highlands. In addition to qualitative interviews, quantitative surveys were given to each head chef in order to learn more about the produce quantity demands of each restaurant. This enabled the researcher to later determine the feasibility of this partnership, by cross-referencing these numbers with the growing capacities of the highland farmers.

FAPP Highland Farmers:

Two trips for data collection were taken to the FAPP project area highlands. The first trip served as an opportunity to introduce the research project to the gatekeepers in each district, where the previously mentioned *na talanoa/veitalanoa* method of the FVRF was utilised. The researcher was welcomed into the *vanua* (village) through a traditional kava (*vaqona* plant) drinking session, centred around a ceremonial wooden bowl. This presented itself as the ideal opportunity to introduce the research and how it would benefit the local farmers, opening the floor for others to relay their opinions regarding the proposed partnership. After asking various questions about the villagers' knowledge on indigenous farming practices, the researcher was asked to share their own knowledge on the agricultural creation stories of their Hawaiian culture. Many of the native crops grown in Hawai'i are linked to other South Pacific indigenous mythology, such as mankind being born from *dalo* (taro root). This knowledge exchange between the two South Pacific cultures touched on the importance of reciprocity and trust that is needed between the researcher and *vanua* members.

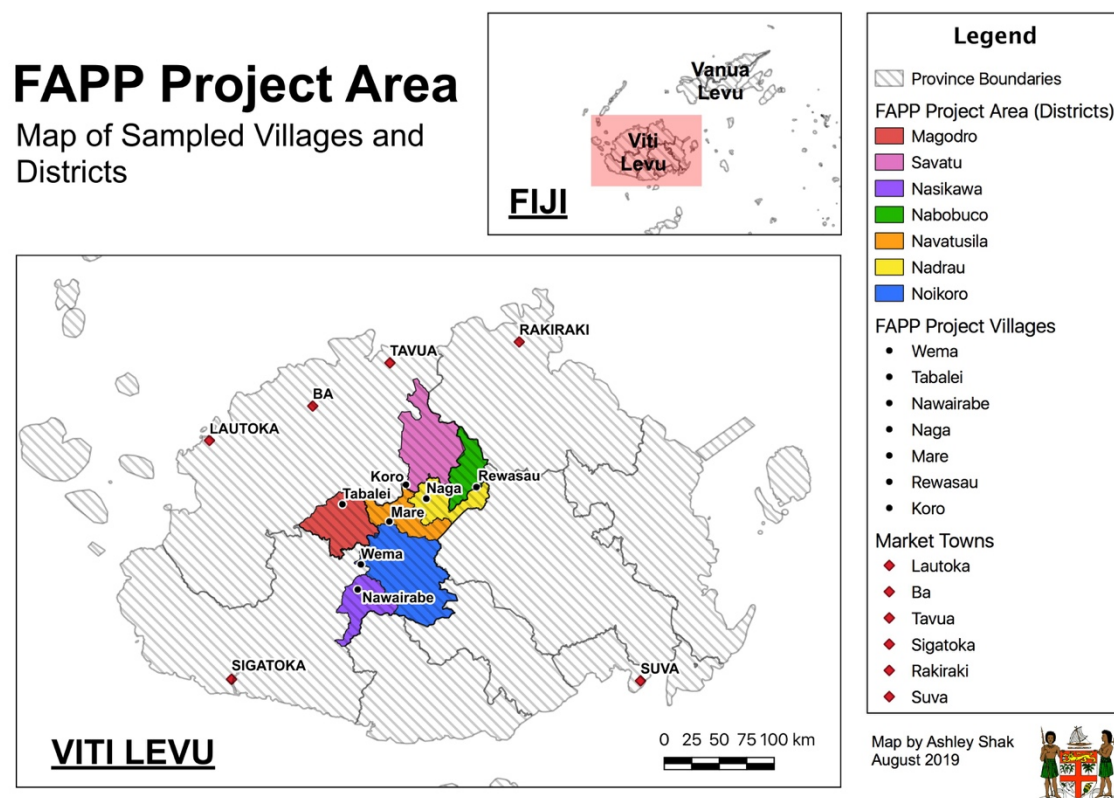


Figure 6: A map of the FAPP project area— including the seven villages surveys and the nearest market town for selling produce.

The second trip was structured around visiting one randomly selected village in each of the seven districts (see Figure 7). Before departing for the second trip, GIS data was collected to map out all of the districts within the project area (see Figure 6), in addition to identifying the nearest market

towns for selling produce. While the first trip focused on informal qualitative data collection, the second trip involved more structured, quantitative questionnaires for focus groups. These questionnaires were created to further understand the growing capacity specific to each village, in relation to the produce demands of the Suncoast resorts.

FAPP Highlands Population (Based off of 2018 Census)							
PROVINCE	Ba		Nadroga/Navosa				Naitasiri
DISTRICT	Magodro	Savatu	Navatusila	Noikoro	Nasikawa	Nadrau	Nabobuco
CHOSEN VILLAGES	Tabalei	Koro	Mare	Wema	Nawairabe	Naga	Rewasau
REMAINING VILLAGES	Bukuya	Nadala	Nabutautau	Namoli	Korovou	Nadrau	Nasoqo
	Tabuquto	Lewa	Nanoko	Nukuilau	Navola	Nabawaqa	Roma
	Tabuquto	Marou	Nasauvakarua	Nakoro	Matokana	Qalinasavu	Navai
	Nasivikoso	Nagatagata		Vatubalavu			Nasiriti
	Nadevo	Buyabuya		Nabuyanitu			Naqelewai
	Navaga	Naiyaca		Darubuta			
		Drala		Korolevu			
	Koro		Wema				

Figure 7: A list of all villages in each of the seven districts in the FAPP project area. One village was randomly selected (green row) for sampling.

Results:

Suncoast Resorts:

1. Main Produce Buying Trends

The results from the first table are the main produce buying trends, as taken from the surveys given to the head chefs at Volivoli Beach Resort, Wananavu Beach Resort, and Tanoa Rakiraki. These surveys were used to gain a better insight into the type of produce and the quantities needed by each resort. Questions were asked about the sourcing methods for nine popular agricultural products, and the results indicated that only four crops were imported at some point in the year. All three head chefs mentioned that sourcing locally was the main focus of each of their restaurants, but they were forced to import certain vegetables that could not be found in the local market during the off-season period (November to April). Those four vegetables are listed below:

	Quantities Purchased	Local?	Imported?	Purchase Frequency	Key
Tomatoes	<ul style="list-style-type: none"> 10-20 kg/week 520-1040 kg/year 	50%	50%	Daily	Volivoli Beach Resort
		60%	40%	Twice a week	Wananavu Beach Resort
		100%		Twice a week	Tanoa Rakiraki
Capsicum	<ul style="list-style-type: none"> 10-20 kg/week 520-1040 kg/year 	50%	50%	Twice a week	
			100%	Once a week	
		70%	30%	Twice a week	
Carrot	<ul style="list-style-type: none"> 30 kg/week 1560 kg/year 		100%	Twice a week	
			100%	Once a week	
			100%	Twice a week	
Lettuce	<ul style="list-style-type: none"> 20-30 kg/week 1040-1560 kg/year 	50%	50%	Daily	
		60%	40%	Twice a week	
			100%	Twice a week	

Figure 8: Results from the surveys given to Suncoast head chefs about their produce-sourcing needs. Out of nine fruits and vegetables, the four included here are the ones that were most likely imported at one point in the season.

In these quantitative surveys, tomatoes and capsicums were listed as the top two crops in which chefs and sourcing teams struggled to find a consistent, high-quality supply of during the off-season. In efforts to support the local community and to keep the menu completely Fijian-inspired, 100% (all three) of the resorts claimed that consistent quantity and quality was more important to them than a low price.

2. In-depth Qualitative Interviews

After the responses to the quantitative surveys were collected and analysed, they were followed up by in-depth interviews with either the general manager or the culinary consultant of the resort. These follow-up interviews were used to elaborate on the results on the surveys, and allowed for opportunity to ask further about the resorts' individual views on sourcing locally versus importing. 100% (all three resorts) sourced their produce directly from Rakiraki market, and would cease all off-season imports should a consistent, year-around supply of produce be made available. This proved that in comparison to the larger resort chains, there was more potential in working with

smaller Suncoast resorts as they had more procurement flexibility. Lastly, the head chef from Wananavu Beach Resort believed that the largest area of improvement should be in post-harvesting processing, such as with clearer labelling on herbs. Because there is little-to-no labelling on produce sourced from the highlands, the chef strongly believed that imported herbs were more reliable in both quantity and quality.

FAPP Highland Farmers:

All three tables below include data collected during the second trip to the highlands, where quantitative surveys were conducted with focus groups in each randomly selected village. As previously mentioned, the focus group surveys for the farmers were created based off of the responses from the Suncoast produce sourcing surveys. The purpose of these highland surveys were to determine if the growing capacities of the farmers matched the needs of the restaurants in the three Suncoast resorts. Because of their importance to Suncoast restaurants and difficulty in finding local substitutes during the off-season, the following results will focus mainly on data collected for tomatoes and capsicums.

1. FAPP Project Highlands Focus Groups

This first table includes basic information for each village sampled, including: village name, number of active farmers, focus group size, main crops sold to market, and main market sold to. Farmers were asked which crop they believed was the most financially lucrative, with their top answer being the bolded and in red (see Figure 9). Most of the farmers listed kava (yaquona plant) as one of the most lucrative crops to grow, while only one focus group mentioned off-season tomatoes. These responses showed that despite the World Bank and MoA releasing studies on the financial benefits of growing off-season vegetables in the highlands, the farmers living there were not aware. This is mainly due to lack of dissemination of information, which is understandably exacerbated by the farmers rurality and isolation. Kava is a root crop that is ground into a powder and made into a drink, with sedative effects meant to relieve stress and anxiety. Recently, drinking kava has become a niche, exotic activity in Western countries, causing the traditional root to become one of Fiji's largest exports (Murray, 2002). Because farmers can earn large amounts of money selling exported kava, they see this as a more valuable than growing off-season vegetables for the local tourism market.

Village	# of Farmers in Village	Focus Group Size	Main Crops Sold	Main Market Sold To
Rewasau	300	12	Taro, kava , cassava	Tavua
Naga	72	12	Kava , taro, cassava, tomato, capsicum, cabbage	Ba, Tavua, Rakiraki
Koro	30	10	Cassava , kava, taro, tomato, cabbage	Lautoka, Tavua
Mare	81	13	Tomato , kava, watermelon, capsicum, cabbage	Nadi
Wema	48	5	Kava , taro, cassava, banana	Lautoka, Nadi, Sigatoka
Nawairabe	141	3	Peanut, watermelon , corn	Sigatoka
Tabalei	126	3	Kava , taro, cassava, tomato, banana	Ba, Lautoka

Figure 9: Results from the focus groups surveys with highland farmers, indicating which crops they perceived would fetch the highest price in the markets (bold in red).

2. Weekly Sales Per Village: Tomatoes and Capsicums

The data from the following table examines the quantities of tomatoes and capsicums being sold in each village, and how much profit is made at the market (in \$FJD). The questions on the surveys asked whether or not the farmers grew the crops during the normal growing season (May to October), during the off-season (November to April), or year-around. Six out of the seven villages grew tomatoes to sell during the off-season, as the farmers correctly understood that they fetched higher prices than selling during the normal growing season. This means that although farmers preferred growing kava, there is still be an understanding of the potential for growing off-season tomatoes. Regardless, only two out of seven villages saw the value of growing capsicums during the off-season. This again indicated lack of dissemination of vital information, as both the MoA and resorts have previously identified capsicums as one of the most valuable off-season vegetables.

Village	Tomatoes		Capsicums		Reasons for None Grown
	# Crates Sold Growing Season (May to Oct)	# Crates Sold Off-Season (Nov to Apr)	# Crates Sold Growing Season (May to Oct)	# Crates Sold Off-Season (Nov to Apr)	
Rewasau	0	0	0	0	Not lucrative enough of a crop to sell
Naga	2-3 (\$50/crate)	16 (\$150/crate)	5 (\$50/crate)	30 (\$150/crate)	Not the right climate
Koro	2-3 (\$30/crate)	5 (\$60/crate)	0	0	Will start growing soon
Mare	25 (\$20/crate)	50 (\$80/crate)	0	50 (\$150/crate)	
Wema	0	10 (\$100/crate)	10 (\$80/crate)	0	
Nawairabe	0	5 kg (\$100/crate)	0	0	
Tabalei	0	8-10 (\$100/crate)	0	0	

Figure 10: Results from the highlands focus groups, on whether or not they grow the off-season vegetables needed by Suncoast resorts. Rewasau was an outlier as they relied on tourist visits for income, not on commercial farming.

3. Biggest Barriers Per Village: Growing and Selling

The final table focuses on survey questions asking the farmers about barriers they face in both growing agricultural products, and selling these products to local markets:

Five options for *barriers to growing* were given: Limited accessibility to farms, Soil quality, Lack of land, Watering difficulties, and Lack of supplies (eg. seeds, shovels). The responses for biggest *barriers to growing* were tied between 1) Limited accessibility to farms, 2) Lack of supplies, and 3) Watering Difficulties.

Five options for *barriers to selling* were given: Market is far, Bad roads, Not enough demand, Transport (eg. availability and affordability), and Price. The responses for biggest *barriers to selling* were tied between 1) Market is far, and 2) Transport.

Village	Biggest Barrier to Growing	Biggest Barrier to Selling
Rewasau	Soil quality; Supplies	Market is far; Bad roads
Naga	Supplies; Watering	Market is far; Price
Koro	Watering; Supplies	Market is far; Transport
Mare	Supplies; Limited accessibility to farms	Price; Market is far
Wema	Soil quality; Watering	Transport; Market is far
Nawairabe	Limited accessibility to farms; Soil quality	Bad roads; Transport
Tabalei	Limited accessibility to farms; Watering	Transport; Price

Figure 11: Results from highlands focus groups on the biggest barriers farmers face in growing and selling vegetables in the highlands.

Certain growing and selling barriers outlined in the survey are already being acknowledged by the appropriate government agencies and organisations. For example, a grant from IFAD was approved in July 2019 to build 22 farm roads in the FAPP project area. As one of the main *barriers to growing* was listed as “Limited access to farms”, these new roads will greatly reduce difficulty in accessing farms. The roads leading in and out of the highlands are unpaved and often in poor condition, which very often leads to damaged produce from the long journey down to the markets. This issue of transport and accessibility will be a consistent issue in the future not only due the rural nature of the highlands, but also because of the increased occurrences of storms. The responses to these questions clearly outline the areas in greatest need of funding in order to promote linkages between highland farmers and potential markets.

Discussion:

The results of this study found that while there is potential for highland farmers to grow adequate quantities of vegetables demanded by Suncoast resorts during the off-season (November to April), there are still linkages missing in order to cement this viable partnership. Because of the remoteness of these farms, the highland communities in the FAPP project area struggle to trade both information and produce with outsiders living in more populated areas. But with ample outside assistance from government organisations such as the Ministry of Agriculture, these linkages are more likely to be made.

Recommendations:

All of the following recommendations aim to assist the highland farmers in eventually becoming self-sufficient and no longer reliant on the MoA for financial support. They are aimed to provide adequate foundation and investment within the community, and not to act as a crutch preventing farmers from creating their own businesses and fostering their entrepreneurial spirit.

1. **Promote usage of a middle-man.** Although using middle-men reduces the profit margin for farmers, the majority surveyed were willing to work with middle-men who came into the remote interior to collect produce. This would eliminate wasted time spent travelling, as 100% of farmers had to take at least a 2 hour drive down to the market every few days. In addition, middle-men could coordinate their growers to maximise productivity on farms during the off-season. None of the villages surveyed sold mainly to Rakiraki due to distance, which indicates that usage of a middle-man would further promote a partnership with Suncoast by reducing travel difficulties.
2. **Creation of more MoA Collection centres.** There are two MoA collection centres currently operating in the FAPP project area, with the largest one located in the Nasikawa district. These centres allow farmers to take a much shorter ride to meet middle-men and other traders bringing produce to the markets. 100% of farmers surveyed said the two biggest barriers to selling produce were “the market is far” and “transport is unavailable”. It is unknown as to why the MoA has not created more collection centres to assist farmers.
3. **Creation of a business-training unit.** The MoA must give farmers the tools to learn how to find new markets depending on demand. For example, only one village surveyed understood that off-season tomatoes and capsicums were the most valuable to grow. Business-training programmes must show farmers their potential profit from focusing on growing what is currently in demand. This could be done using simple infographics, harvesting calendars, and other training guides that are easily understandable regardless of education. The MoA must reiterate that although kava is lucrative in the international market, it is in the communities’ best interest to focus on supporting local industries too.
4. **Post-harvest support.** Information must be made available to highland farmers on how to properly package and transport produce that is being sold to the markets. This will help the farmers compete with imported produce that already follow strict post-harvesting guidelines from abroad. Two out of three chefs on the Suncoast suggested that implementing these more rigorous guidelines would encourage more trust between buyers and sellers regarding quality.

5. **Involvement of outside organisations.** Certain recommendations listed cannot be undertaken by the MoA alone, and external assistance will be necessary with program organisation, implementation, and funding. This could take form in collaboration with local and international NGO's focusing on rural development, sustainable markets, and "green economies". Additionally, there is sufficient market potential for the private-sector to become involved with assisting these farmers, as the agricultural business development sector is a young market in Fiji.

Conclusion:

This study examined the sustainability of an agricultural supply-chain between highland farm communities in the FAPP project area, and Fiji's growing tourism industry on the Suncoast. The research tested the hypothesis that smaller resorts could take advantage of their flexible procurement guidelines to rely solely on local produce, all whilst supporting rural farming communities in the highlands. A research gap existed on how to best approach this proposed partnership, in order to strengthen planning, communication, quality assurance, and collaboration between the sellers and the buyers. Through mixed-methods data collection and analysis, the results confirmed ample market opportunities, a healthy demand, and the growing capacities necessary for a potential agricultural supply-chain between the two groups. In addition, barriers that farmers faced in both growing and selling produce were outlined in the report, with sufficient recommendations and guidance on how to develop training programmes and target MoA funding.

Limitations:

Due to geographical restraints and a short time frame, the focus groups for the highlands were only conducted in one village per district. For future research, it is recommended that the data set be expanded by surveying at least two villages per district, to ensure a wider sample size. Although the sample size for the Suncoast was much smaller than that of the highland farmers, those three chosen resorts were in fact a more representative spread of the population than with the FAPP project area. This is due to the fact that three out of nine members of the STG were interviewed, resulting in a large sample size of 33% of the population. In addition, the only Suncoast resorts with fully catering restaurants and produce demands were the three surveyed, meaning 100% of the possible population were covered.

Implications:

Although larger resort chains have traditionally stricter procurement guidelines limiting their ability to source locally, there has been an increasing demand for businesses to be held accountable for their carbon footprint. In the near future, these resorts and hotels will be forced to reduce imports in efforts to become more environmentally friendly, and will have to learn from the successes of smaller businesses in the industry. In addition, there is great potential for expanding this study to other highly-trafficked tourist areas in the rest of the South Pacific. The majority of the island nations have indigenous communities living in similarly rural areas, relying on small-scale farming to provide food and money for their families. These same island nations are experiencing increased numbers of international visitors, allowing for the opportunity for both the agriculture and tourism sectors to grow in tandem and support each other's sustainable development.

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