



Policy Brief: Tourism market potential for local fresh produce in the Pacific Islands

Farmer organisations and realising the potential of the tourism market for fresh fruit and vegetables

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List of acronyms

ACIAR	Australian Centre for International Agricultural Research
CTA	Technical Centre for Agricultural and Rural Cooperation
CIF	Cost, Insurance and Freight
EU	European Union
FJD	Fijian Dollar
FO	Farmer Organisations
MT	Metric tonne
PICs	Pacific Islands Countries
PIFON	Pacific Island Farmers Organisation Network
PAPP	Pacific Agriculture Policy Project
PARDI	Pacific Agribusiness Research for Development Initiative
PARDI2	Pacific Agribusiness Research in Development Initiative Phase 2
SPC	Pacific Community



Background

The value of non-commodity agricultural exports (including horticultural products and spices) remains low and is yet to reach USD 100 million from Pacific Islands countries (PICs) to export markets. This situation is particularly worrying considering the large trade imbalances (importing far more than they export) of island countries, with the exception of Papua New Guinea. Even for the relatively large Fijian economy, the value of imported goods is nearly twice that of exports. At the extreme end of the spectrum are the microstates. For example the Cook Islands imports around 35 times more than it exports. Tonga, Samoa and Vanuatu, respectively, import some 13, 6, 4 times more than they export. For all Pacific Islands countries (PICs), food makes up the lion's share of these imports.

This overall poor performance of the agricultural sector is disappointing considering that: in varying degrees PICs have rural based economies, often have highly suitable agro-ecological conditions; and, in contrast with the impressive global growth performance of a number of other developing countries in the export of horticultural and other high-value agricultural products.

The disappointingly poor export performance can be explained by a combination of factors, including: small size; lack of access for many farmers to international sea ports and/or airports; the non-availability of air and sea freight capacity to target markets at reasonably competitive freight rates; inadequate private sector marketing capability; and, inability to resolve phytosanitary and other market access issues. Export barriers are proving to be stubborn and sometimes intractable. Thus alternative approaches to market development for agricultural produce needs to be explored. The selling of high value products to tourists, rather than exporting to their home markets, is one such approach.

Nearly all PICs are experiencing an upward trend in tourist numbers. For some, the number of visitor arrivals approaches or even exceeds the resident population. Prominent examples include:

- Cook Islands - annual visitor arrivals are about 150% of the local population.
- Fiji - annual visitor arrivals are about 90% of the local population, and rising.
- Vanuatu - annual visitor arrivals (including cruise ships) are 120% of the local population

Other PICs such as Samoa and Tonga also have significant and growing tourist arrivals.



The substantial opportunity to link agriculture to tourism has long been recognised, with the Hawai'i experience often presented as an example. The development of Hawai'i's large papaya and floriculture export industries was a direct bi-product of the outward freight capacity at reasonable cost created by tourist arrivals into Hawai'i. For some high value products, tourism can provide a domestic demand base upon which an industry can be established. Hawai'i's macadamia nut industry, the largest in the world, is built around 'suitcase' exports by tourists. Supplying hotels is the basis of Hawai'i's anthurium, orchid, and other floriculture industries. The Kona coffee industry is based entirely on selling the ambience of Hawai'i to visitors and former visitors.

Working together, Pacific Island tourism operators and farmers can promote locally sourced food and other agricultural as an integral part of the tourism experience. This can be in three broad forms:

- Selling local fresh fruits and vegetables to feature on resort menus.
- Developing the "flower culture" in the tourism sector so locally grown flowers and floriculture products are featured in hotel rooms, foyers and restaurants.
- Tourists taking locally value-added primary products back home as 'suitcase' exports.

To realise these opportunities linkages need to be built or strengthened between agriculture and tourism. It is necessary to simultaneously ensure that local products meet the demands (volume, consistency, quality and convenient delivery times) of the tourism operators and these operators appreciate the commercial value of using local products. High quality local products often do not make it to the "mouths and hands" tourists because of gaps and weaknesses in the value chain for these products. Identified priorities that need to be addressed include:

- Bridging the fresh produce 'supply gap' between October and March (known as the Pacific off-season).
- Gaining acceptance by hotel operators that flowers and floriculture products are a necessary part of the quality PIC tourism product.
- Enhancing the quality, packaging/labelling/story-lines and availability of value added products suitable for tourists to take home.

Farmer Organisations (FOs) are now starting to play a pivotal role in improving the linkages between farmers and tourism operators in all of these areas. The focus of this policy brief is on FOs and bridging the fresh produce supply gap. Other policy briefs in this series will look at FOs in the:



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- Development of the “flower culture” in the tourism sector - with particular focus on Fiji’s Floriculture Support Association
- Development suitcase exports – with particular focus on Vanuatu spices and coffee

These policy briefs look at what FOs have achieved and the lessons learned.

Recommendations are made on the way forward for FOs, together with private sector operators and government policy makers, to enhance the benefits accruing to farmers from tourism.

Bridging the Supply Gap

THE SUPPLY GAP IN THE PACIFIC ISLANDS OCCURS DURING THE OFF-SEASON which is during the wet, summer months October to March.

Why & what are tourism operators importing

Crops that are in demand all year round by hotels, can be divided into two types:

- **Those which can’t grow, or are difficult to grow economically in most parts of the Pacific Islands**
For example, temperate climate fruits and vegetables, including apples, potatoes, carrots, broccoli, cauliflower, celery and strawberries.
- **Those which can be economically grown in the region, but are often in short supply during the off-season**
For example, pineapples, watermelon, cabbage, lettuce, tomato and capsicum. Throughout the main season, these same products are available in abundance and at a low price. During this period, hotels are usually happy to purchase these products if they have ready access to them. This particularly well demonstrated in Fiji where there is a well-established network of farmers and traders. However in other PICs this often not the case.

What we want to encourage?

Do’s



- The tourism industry to revamp menus, using a local equivalent of fresh fruits and vegetables that they usually import in order to reduce import levels during the off-season
- Encourage farmers to plant and maintain high quality crops which they can economically produce, and which are needed for the menus in resorts,
- Encourage the understanding of the role and contribution made by traders and marketers, managing resort/hotel procurement procedures and complying with food safety requirements.

Don'ts

- Encourage farmers to plant crops which they cannot produce economically.
- Encourage entrepreneurial farmers to take on the role of the middleman



Benefits of locals supplying tourism operators

- Keeps money within the local and national economy



- Boosts livelihoods and employment in the agriculture sector
- Reduces cost for tourist operators
- Tourism sector can promote locally sourced foods and local cuisine as part of the tourist experience
- Using local suppliers and reducing imports will be essential to meet the increasing demand for ecotourism which has seen to better support local communities.
- Provides a foundation for future exports by gaining experience in meeting the quality standards of resorts.

Current Situation & Challenges

- Local producers, usually because they are smallholder farmers, are only capable of meeting the needs of small tourist establishments rather than the large resort hotels. Thus traders and marketers play a critical in consolidating supply to the hotels – but often they are either missing or ineffective. As a result, there is a supply gap, and demand which for the hotels is most conveniently met by imported food. This situation is most pronounced in the off season when products are much more difficult to commercially produce.

Fiji Case Study

Fiji research carried out by Young and Vinning (2007) noted the potential for import substitution within the Tourism sector. Fiji receives over 600,000 tourists staying an average of 9.4 days each in more than 300 hotels spread across Fiji. This represents almost 17 million meals consumed, at three meals per day. At that time, 80% of fruits and vegetables consumed by the tourism sector were imported. Loze and Low (2008) estimated that in 2006, the Fijian tourism industry spent FJD \$35 million on imported vegetables alone.

Young and Vinning's survey found the tourism sector's purchasing decisions favoured imports, for example, an estimated 660 tonnes of tomatoes were used by the sector in 2007, the majority of which was imported. The report observed that if local producers could secure even half of this demand, they could double the market size for locally produced vegetables.

McGregor (2014) noted that Fiji imports approximately 140 MT capsicum, 165 MT tomatoes, 200 MT celery, 175 MT cauliflower/broccoli and 75 MT English cabbage annually. The respective cost, insurance and freight (CIF) of these imports was FJD725,000, FJD685,000, FJD530,000, FJD485,000, and FJD190,000.



- Much of the supply gap is for selected temperate fresh fruits and vegetables (potatoes, carrots, broccoli, cauliflower, celery, strawberries) which are very difficult for farmers to grow economically in lowland tropical Pacific locations. The exception is the Highlands of Papua New Guinea, alongside sub-tropical locations such as Tanna in Vanuatu, Nadarivatu in Fiji and southern Tonga islands (Tongatapu and 'Eua).



Figure 1: High quality onions grown on Tongatapu, Tonga



Figure 2: Locally grown carrots grown at a Tanna market

- Temperate vegetables which can be grown in the region, are usually in short supply during the off-season because it is not economical for farmers to grow them. This is due to climatic constraints during this period - high temperatures, rainfall and relative humidity.
- The challenge is to mitigate constraints farmers are facing during the off-season - the respective FO's are addressing these matters, but subject to resource constraints.
- In other countries where sufficient quality produce is available, gaps and weaknesses in the supply chain may impede such produce reaching resort hotels in good condition. Identified problems include a lack of support for producers in terms of marketing and training, steady markets to supply to, and poor transportation for getting produce to markets (Veit, 2007)
- The notion that farmers can be directly linked to hotels without the need for traders and marketers is usually misplaced. There is a need to enhance the entire value chain with an emphasis on product quality and continuity of supply with involvement of competent, appropriately resourced and dedicated local traders.



How are Farmer Organisations addressing supply gap?

1. Through key interventions to promote off-season production such as:

- Applied research and training in support of off-season production technologies such as: better adapted varieties, seedling production, pest and disease management, protective cropping and irrigation.
- Access to key inputs required for successful off-season production of vegetables such as: appropriate seeds, nursery and organic fertiliser supplies, staking equipment, irrigation and protective cropping materials.

Building Capacity in Off-Season Production

Fiji, 2015. The Pacific Island Farmers Organisation Network (PIFON) hosted a EU-funded regional consultation with participants from Papua New Guinea, Fiji, Samoa, Solomon Islands, Tonga and Vanuatu. Participants gathered to exchange and learn new methods in overcoming off-season constraints, help grow temperate crops all year round and capitalise on the market opportunities. Organisations represented included Solomon Island-based Kastom Garden Association, Samoa Farmers Association, Tongan Growers Federation, Teitei Taveuni, Papua New Guinea Women in Agriculture, as well as small-holder farm owners from the Participatory Guarantee System (PGS).

During the consultation, farmers learned about protective cropping structures and the options available for smallholder production including creating nurseries, crop management, pests and disease identification and management as well as the benefits and challenges of protective cropping systems. The participants also engaged in extensive field visits (farmer-to-farmer learning) around Sigatoka, Nadi, Lautoka and Tavua to view specially-designed protective greenhouse structures made possible through the ACIAR/PARDI research project.

Protective cropping is especially critical for tropical climate conditions, reducing the impacts of strong winds and solar radiation, whilst enabling air flow and moderated crop temperatures and vertical trellising whilst, reducing pests and diseases. There are also simple village-made structures of bamboo material and thatching, tunnel houses, greenhouses, raised-bed cultivation, staking, and use of plastic tunnel houses, that can be used by farmers.

Participants also learned that farming approach during the off-season is different from the main season. Off-season production requires the building of protective structures, proper nurseries with proper shelter. Hydroponics is another option farmers can use for crops which have been protected from overhead rain.



Participants were also advised about the dangers of excessive pesticide use which may lead to lower yields over time and insects developing resistance to the pesticide chemicals. Alternative approaches like organic farming and integrated pest management were discussed.

Field visits to farms and demonstration sites were made, including newly devised protective structures in Sigatoka, Koronivia, and Tavua. Participatory hands-on training was also given on assembling and using drip irrigation and on pruning and trellising crops. Discussions also include the management of pests.

Another field visit was to the Low Valley farm of Qereqere Company Ltd which is part of the Participant Guarantee System (PGS) Project. Made up of 15 farmers, planting pawpaw and tomatoes, the farmers sell their high value fruit and vegetables to leading resorts - the Fijian Shangri-La Resort and Intercontinental in Nadi – receiving FJD4 per kilogram during the main season and FJD7.50 during the off season.

The visit to Sant Kumar's Bula Agro farm was an eye-opening experience for participants who witnessed first hand various locally-devised techniques to grow his seedlings, especially in times of natural disasters. For instance, he used a 20-foot container as a temporary shelter for seedlings during the cyclone season. When Cyclone Evan struck in December 2012, he saved 30,000 seedlings in the container. After the cyclone he had all of these seedlings ready for immediate planting.

On the final day, participants visited the Nadarivatu Highlands region to learn of vegetable production under tropical highland conditions and observe the ideal environment for offseason vegetable and sub-tropical fruit production.

FO's are also playing an important role in:

2. Facilitating value chain analysis and training, helping to address key inefficiencies and improving relationships through a greater mutual understanding of each person's role in the chain.
3. Promoting the value chain 'way of thinking' among farmers. A significant tool used to help farmer organisation deliver this work is the publication 'Agricultural Value Chain Guide for the Pacific Island: Making value chain analysis a useful tool in the hands of farmers, traders and policy makers', a collaborative publication produced by the Pacific Community and Technical Centre for Agricultural and Rural Cooperation (CTA).



Understanding the Value Chain

An Agricultural Value Chain documents the different 'links' required to take a product from the farm to the end consumer, and the value added at each step.

Value chain actors: these are the people at each link along the chain required to alter/add value and move a product from the farm to the end consumer.

Why is value chain important?

- Can identify all of the people (actors) involved in getting the product from the farm to the consumer,
- Can identify the contribution, (the share of value added) and the risks faced by each actor involved,
- Can identify weaknesses that prevent progress and suggest actions that can be taken, and
- Identify who benefits and by what amount?

Farmers – Accurate and understandable value chain analysis equips farmers to make better business decisions that are in their best interest and helps them to decide where to focus their limited resources (time, land and funds).

Traders – Helps traders understand the requirements of their buyers and needs of their suppliers and therefore enables them to function better.

Consumers – Value chain analysis is ideally focused on the market and what end-consumers want. Accurate and understandable analysis of consumers will lead to their needs being passed onto downstream actors in the chain. If the actors act on this information, the result is more satisfied customers buying more of the product being produced by the value chain.

Policy makers – Accurate analysis of the value chains and the identification of weaknesses and bottlenecks will assist government policy makers to introduce policies and programs that enhance the performance of the value chain.

Development Assistance Partners: Accurate analysis of the value chain and the bottlenecks can assist donors to identify programs that enhance rather than hinder the performance of the value chain.

(McGregor and Stice, 2014)

The Way Forward



Across the value chain, farmer organisations, agribusiness, government agencies, tourism organisations and resorts must:

- Work together to put in place strategic policies that will bring together the tourism and agriculture industries.
- Support farmers with more applied research and training on technologies supporting off-season production of vegetables for the tourism sector. These technologies include: appropriate varieties, seedling production, pest and disease management and protective cropping.
- Work holistically to understand the role of actors in the fresh produce value chain, so that key issues/bottlenecks can be addressed to improve the flow of fresh produce from the farm to the resort/hotel.
- Improve links and communication between demand and supply sides.
- Improve relationships and the flow of information along the value chain which are critical in establishing trust.
- Respect and appreciate that all links in the value chain play a critical role and all actors must have a sufficient margin to stay in business.
- Work together to enable all actors to get a bigger piece of pie – focusing on the bigger, overall picture, rather than competing to increase the share of small pieces.

Farmer organisations

The way forward, specifically for farmer organisations, includes the following elements.

- Continue to actively promote and facilitate a value chain ‘way of thinking’ among members.
- The notion that farmers can be directly linked to hotels without the need for traders and marketers is often misplaced - FOs must work to enhance the entire value chain with an emphasis on product quality and continuity of supply.
- Encourage farmers to work collaboratively in order to meet the demands of the tourism sector (and indeed all markets).
- Facilitate capacity building for farmers on new and innovative ways of mitigating challenges of growing vegetables during the off-season.



- Inculcate in farmers the need to treat farming as a business – including that in order to generate future revenue farmers must invest wisely in their operations.
- Raise awareness within the tourism industry on the availability of local produce and the benefits of sourcing locally.

Government

The way forward, specifically for governments, includes the following elements.

- PIC Governments' policy needs to encourage farmers to grow products they can economically produce and matched to their knowledge, environments and resources. Policy attempting to address the tourism 'supply gap' must not promote the planting of temperate-zone crops which PICs farmers cannot produce competitively.
- Support Farmer Organisation efforts to mitigate constraints faced by local farmers in off-season vegetable production.
- Provide appropriate technical support to farmers through both FOs and Government Extension services.
- Encourage tourism operators and chefs to make much greater use of local foods and recipes.
- Support events linking local agriculture and farmers to the tourism industry
- Raise awareness within the tourism industry and associated restaurant/chef domain on the availability of local produce and the economic, environmental and taste benefits of sourcing locally.

Private Sector | Traders & Marketers

The way forward, specifically for traders and marketers, includes the following elements:

- Play a key role in linking the agriculture and tourism sectors, facilitating increased market access and opportunities, as well means to collectively lobby for support.
- Raise awareness within the tourism industry around the availability of local produce and the benefits of sourcing locally.
- Collaborate with Farmer Organisations in their efforts' to mitigate constraints faced by local farmers in off-season vegetable production, and other produce in demand (including especially sub-tropical/warm-temperate fruit crops)



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- Establish collection centres for fruits and vegetables in rural areas, handling transportation, marketing and distribution to hotels and supermarkets.
- Understand and facilitate the role of agribusinesses to pull products up through the value chain, opposed to farmers or farmer groups pushing products from below.
- Support local producers meet quantity and service demands of the tourism sector.

Tourism Operators

The way forward, specifically for tourism operators, includes the following elements.

- Design and execute marketing and promotions strategies based on the use of local fresh fruits and vegetables on menus
- Work more closely for FOs, marketers and traders to enhance their uptake of local produce.

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