
Solomon Islands blooming flower industry.

A smallholder's dream



November 2009

Agriculture for Growth: learning from experience in the Pacific

Solomon Islands Flower Case Study

Prepared by

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Acknowledgements

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Acronyms

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
CBSI	Central Bank of Solomon Islands
FSI	Floriculture Solomon Islands
NGO	Non Government Organisation
RLP	Rural Livelihoods Program
SBD	Solomon Islands Dollar
SDA	Seven Day Adventist
SISAS	Solomon Islands Smallholder Agriculture Study
VCED	Value Chain Enterprise Development

Executive summary

Key elements of the Solomon Island economy are the pivotal role played by logging, the search for a replacement for logging, the deteriorating foreign reserve cover, the easing of inflation, the unlikely continuation of the relatively high rate of domestic economic growth, and low levels of formal employment.

The overwhelming feature of the agricultural economy of Solomon Islands is the lack of balance in terms of size, natural advantage, expertise, focus of government attention, and commercial involvement.

Fiscal policy of the Government of Solomon Islands is focused on six priority areas: reconciliation and rehabilitation; national security and foreign relations; infrastructure development; social services sector; economic and productive sector; and civic affairs. These are a mixture of short term and long term objectives. The Government's *Medium Term Development Strategy 2008 – 10* provides priorities related to rural development and natural resources management. These are: increase the contribution of sustainable agriculture; plantation forestry, and related downstream processing and marketing to GDP growth; increase the number of people in formal and self-employment in rural areas; increase the proportion of people, especially from rural communities, reporting year-on-year improvements in their economic circumstances; and increase in the number of people accessing financial services including micro-finance opportunities in both the rural and urban areas.

Floriculture as a commercial industry is relatively new to Solomon Islands. This is not to be confused with the notion that the use of flowers is novel as flowers have had a multiplicity of uses for centuries. Commercial production began in Honiara around 15 years ago. Today around 40 floriculture producers market through the Honiara Central Market on a regular basis. Around 500 households are involved with the regular production of flowers for commercial purposes. Honiara has around 20 part-time florists. Commercial trade in orchids from some of the more distant provinces into Honiara is beginning.

The study was based on extensive interviews as there has been little written on the industry and even fewer statistics collected. No one in government is tasked with assisting the industry.

A value chain approach was used to analyse the industry. This allows us to identify the consumers of floricultural products in the Honiara area as householders, churches, businesses, government, villages, producers, and “special occasions”. Government is a very large buyer. Hotels away from Honiara tend to grow their own supplies. The overwhelming supply of flowers at the Honiara Central Market are tropicals – heliconas, gingers, and cut flower orchids of *Vanda*, *Dendrobium*, and *Arachnis*. Interviews with regular buyers at the Honiara Central Market report disappointment with the lack of variety in plant types and colours. There are small and occasional supplies of temperate plants. There are increasing supplies in terms of volume and variety of foliage, especially nut-based plants

Buyers can acquire floricultural products directly from producers, from the Honiara Central Market, and from florists. Product arrives to buyers from trucks / taxi, canoes, ships, and, to a very small extent, planes.

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As far as could be established, no Solomon Islanders depends on just the sale of flowers for their entire household income. Over 500 households were identified as producing flowers for sale on a regular basis. Land is not an issue for the production of floricultural products because production occurs mainly on the household plot. There is zero mechanisation of flower production. Labour is supplied nearly solely by the producer with there being just a little family labour. Flower production is low input and thus low cost. Business skills are poorly developed. There is a high price discrepancy between arrangements sold at the Honiara Central Market and those sold by florists. For florists, transport costs are very high. Florists also seem to confuse the labour costs of their input and the profit component.

It is considered that the high price of flowers at the Honiara Central Market could be inhibiting the growth of the local industry. This argument is based on two aspects (a) the growth of the floricultural industry in Fiji has been due to the purchases by local people and not the tourism sector (b) the relative price of flowers in Solomon Islands is high compared with Fiji. Convincing producers of the need to reduce their prices in order to increase their sales locally will be a hard ask. To be successful it must be balanced with gains in other areas, especially in higher yields, that is, more blooms per stem, and/or more stems per plant.

Three key success factors are identified: small scale nature of production, land is not an issue, and low capital requirement.

Commercial flower production and marketing in Solomon Islands is an ideal crop for smallholders: production requires little capital, land issues usually common in Melanesia and even with the plantation crops in Solomon Islands are not relevant to flowers, most Solomon Islanders have good production knowledge, and there is a widespread appreciation for flowers throughout the country.

There are three potential growth paths for the Solomon Islands floricultural industry: follow the route of Kenya and Ecuador by concentrating on developing the export industry; follow the route of Hawai'i by concentrating on developing the tourism sector; and follow the route of Fiji by concentrating on developing the domestic industry.

It is recommended that Solomon Islands concentrate at the moment on developing local sales. This is because exporting is currently handicapped by limited airline capacity, non-existence of cool storage to ensure post-harvest preservation, CITES conditions surrounding the exporting of indigenous orchids, and the quarantine hazard caused by the shape of the heliconia and gingers that makes them ideal places for insect. The tourism sector is not seen as an outlet because the resorts tend to grow their own.

Recommendations to develop the local industry relate to increase production especially increasing the stems per plant and increasing the blooms per stem. Increased productivity will enable producers to reduce their prices without suffering a loss in gross income. The role of sun/shade, the role and making of compost, and row spacing need attention. A common nomenclature should be established and promulgated. There is a major need to increase the varieties, shape and colour being offered to the buyers. Thought should be given to developing access to specialist extension advice which should operate on a fee-for-service basis.

Techniques to improve shelf life are needed. Improved quality upon arrival at the buyer could be achieved by developing better transport packaging; currently the use of cardboard boxes is being trialed for the movement of flowers from the more distant production sites. These trials must be

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conducted in consultation with Solomon Islands Airlines to ensure that the box size is compatible with the quite limited space in the cargo holds of the Twin Otter.

Four aspects of marketing need to be addressed to advance the sector. (a) To encourage greater sales of floricultural products, we argue that Solomon Islands' producers must reduce their prices, but this has to be off-set by higher productivity. (b) Wholesale and retail marketing has to be developed. (c) Selling skills of the actual sellers has to be improved. (d) Market exposure of the floral art display skills of producers / florists must be improved.

Over-arching all of the above recommendations is the need to improve the business skills of producers. Specifically, small-holders need training in many areas: costing, negotiating skills, attribute identification, business planning, and floriculture as a business.

1. Introduction

Solomon Islands is typified by contrasts. Large and small are the norm. Some examples are a few resource-rich islands are juxtaposed with a number of resource-scarce ones. In some parts of the country overcrowding is contrasted with areas of very low population densities. Just five products provide around 95 percent of export earnings. Over 80 percent of the population lives in the rural areas. Around 10 percent of the GDP is spent on the public service.

This section sets the scene for the study that follows. It outlines the country's economy and the role played by the agricultural sector. It also introduces the floriculture industry.

1.1 Case study background

A number of industries in Solomon Islands have been the subject of studies of varying intensity. A synopsis of these studies was presented in the seminal *Solomon Islands Smallholder Agriculture Study* (SISAS, 2006). Although the SISAS studied a number of small crops,¹ it did not mention flowers.

Nevertheless, commercial flower production and marketing in Solomon Islands is an ideal crop for smallholders:

- Production requires little capital
- Land issues usually common in Melanesia and even with the plantation crops in Solomon Islands are not relevant to flowers
- Most Solomon Islanders have good production knowledge
- There is a widespread appreciation for flowers throughout the country.

The major plantation crops in Solomon Islands have a dichotomy between production and marketing. Flowers, in common with the fruit and vegetables sectors, allow for the easy entry into the sector by smallholders either as producers or as sellers. Further, the small scale nature of the production and marketing of flowers allows small holders to be florists.

Flowers are also a very new commercial industry in the country. Expansion has been quite rapid. Based on observations from Fiji, the industry can continue to expand for some time yet.

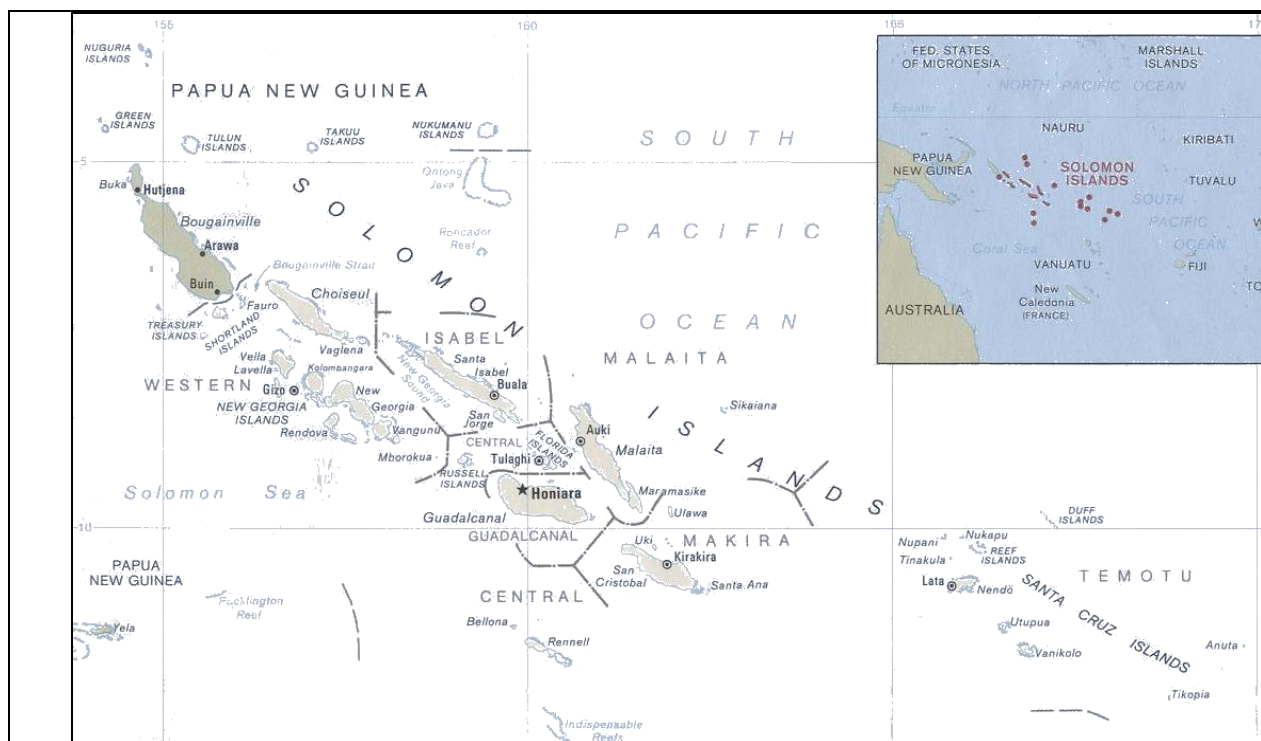
Given the unique aspects of suitability to smallholders and the newness of the commercialization of the industry, it was decided to include flowers as part of the study of learning from experience.

¹ Major crops studied were coconut, oil palm, cocoa, rice. Smaller crops studied were indigenous tree nuts, vanilla, chilli, pepper, ginger, turmeric, noni, coffee.

1.2 Country economy and agriculture sector

Solomon Islands is an archipelagic country. There are nine provinces, see Figure 1: Guadalcanal, Honiara Central, Western, Isabel, Choiseul, Malaita, Makira/Ulawa, Temotu and Renbel.

Fig.1 Solomon Islands



1.2.1 Country economy

Key elements of a description of the Solomon Island economy must include the following:

- A. The pivotal role played by logging
- B. The search for a replacement for logging
- C. The deteriorating foreign reserve cover
- D. The easing of inflation
- E. The unlikely continuation of the relatively high rate of domestic economic growth
- F. Formal employment is very low.

A. LOGGING

Logging dominates the economy of Solomon Islands. In 2007, logging accounted for a quarter of economic growth, 16 percent of recurrent government revenues, and two-thirds of export earnings. Given this size, movements in logging's prosperity rebound on the economy as whole. All the portents are that the previous boon due to government revenues derived from logging is now busting. With the decline in the industry, the implications for foreign reserves and government revenues are serious (CBSI 2008). In the short term, the global financial crisis has led to a reduction in the demand for logs. In the longer term, the approaching depletion of commercially viable forests will adversely affect the supply of logs. However, the imprecise "longer term" appears to be happening right now. Whilst logging exports were expected to weaken in 2010, early data for 2009 indicates that the weakening is occurring sooner and more rapidly than previously expected (ADB

2009). The marked slowdown in export earnings growth in 2008 compared with 2007 will continue. What needs to be recognized is that Solomon Islands' logs are priced at the low end of the price continuum. The Solomon Islands Central Bank (CBSI) cites the World Bank as stating that the average international price for logs in 2007 was US\$292 / m³: in contrast the average export price of Solomon Islands logs was US\$97 / m³ (CBSI 2008). Thus, the CBSI's favourable noting of the Forestry Department's planned program to target small-scale family owned plantations and small-holder downstream processing is not likely to adequately replace the contributions made by the current large scale logging enterprises.

Whilst these grim forecasts relating to the demise of logging have been cited by the Asian Development Bank (ADB), it is noted that the *2008 State of the Environment Report* by the Ministry of Environment, Conservation and Meteorology also supports the prognosis of serious concern for the future if the current trends of commercial exploitation of logs are continued.

B. REPLACEMENT FOR LOGGING

Currently, and in the mid-term future, there are no projects that are likely to replace logging as an equivalent supplier of export earnings for the country and revenue for the government. The government is trying to attract investment into macro projects such as developing the oil palm-related projects at Bina Harbour, the Aulata Basin and Waisis; and a major fisheries project at Suava Bay all on Malaita. However these have attracted little success but considerable criticism (*Solomon Star*, 17 August, 2009). The planned re-opening of the Gold Ridge gold mine has not materialized.

C. FOREIGN RESERVES

International reserves are becoming precarious. As of April 2009, reserves were around 2.5 months of import cover. Ideally, the level should be at least four months. With the decline in logging exports, the level of cover will deteriorate even further. The major export earners in 2008 were fisheries, palm oil, copra, and cocoa. Serendipitously, all four exported in 2008 into surging world prices. This boon buffeted surging import demand for goods and services, resulting in a current account deficit of \$573 million. The high-price commodity boom has now disappeared, indicating an increase in the deficit. The ADB states that there is likely to be a balance of payment crisis in 2009 – 2010 (ADB 2008).

D. INFLATION

Inflation in 2008 was a high 20-24 percent, comprising domestic and imported inflation with the latter being nearly double that of the former. Even though it is high, inflation does appear to be easing, reflecting the slowing of economic activity.

E. ECONOMIC GROWTH

The country experienced a relatively high rate of 6.7 percent in 2008 in domestic economic growth. However the ADB stated that the bulk of the country's economic growth came from the "momentum built up by logging revenues and from the global commodity boom". The Bank predicts that a 30 percent decline in logging in 2009 will reduce GDP growth to zero. Current indications are that that forecast is likely to be realized. Government revenues for 2009 are very likely to be less than forecast.

F. PROSPECTS

ADB forecasts growth in 2010 to be 1.7 percent (ADB 2009). A lower rate of decline will occur if there is a further reduction in the decline of logging. The ADB states that the CBSI must take strong action to slow the rate of depletion of foreign reserves and maintain macroeconomic stability. The government can help by reducing its recurrent expenditure, especially the wage bill of the public service that is budgeted at 10 percent of GDP in 2009.

1.2.2 Agricultural economy

The overwhelming feature of the agricultural economy of Solomon Islands is the lack of balance. This is shown in five basic areas:

- A. Size
- B. Natural advantage
- C. Expertise
- D. Focus of government attention
- E. Commercial involvement

A. SIZE

The income and welfare of the majority of the population comes from agriculture. Around 80 percent of the total population depends on subsistence farming, cash cropping, livestock, agro-forestry, and their related transport and processing activities. These activities provide only limited income that is used to provide supplementary foodstuffs, consumables, educations, and health needs. Despite the involvement of the vast majority of the population, the agricultural sector contributed only 17 percent to the overall GDP in 2008.

B. NATURAL ADVANTAGE

The country has natural advantages in the production of livestock, coconut, cocoa, and small crops (SISAS, 2006). Despite this, the government continues to focus on crops such as oil palm and rice for which there appears no natural advantages. Rice in particular has had a very poor history of production over a lengthy period of time (Burke, 2008). Nevertheless, the Government still continues to press for a domestic rice industry.

C. EXPERTISE

Nearly the entire population has some association with the production of traditional crops. Despite this, the government provides more expertise to the non-traditional sector of rice, cocoa and coffee than it does to the traditional crops such as a series of rootcrops, a number of greens, and fruit.

D. FOCUS OF GOVERNMENT ATTENTION

In 2008, the big five agricultural industries (logging, fisheries, copra, palm oil, and cocoa) provided over 95 percent of all exports. Thus they gather most of the government's attention. Nevertheless, Vinning et al (2009a) show that the retail value of four common food items – fresh fruit, fresh vegetables, fish, poultry – is greater than the exports earned by fish, palm oil, copra, and cocoa. Because the fresh produce sector is not export oriented, it receives little attention from government.

E. COMMERCIAL SIZE

Broadly, in Solomon Islands, the bigger the agricultural industry, then the fewer the number of operators. Logging production and exporting activities are undertaken by a few large companies. The commercial fishery and palm oil industries have only a few operators and exporters. Whilst production in the cocoa and copra industries is dominated by small-scale producers, the marketing, especially exporting, is in the hands of a small number of exporters: in the case of cocoa, there is the one effective exporter. In contrast, with the fresh produce sector, small holders dominate all aspects of the value chain – production, processing, transporting, and marketing.

COMMON MISCONCEPTION

It is common to state that agriculture in Solomon Islands has the basic problems of an inadequate transport system that brings fresh produce to market, and an inadequate marketing system that inhibits the efficient marketing of fresh produce (for example, see SISAS 2006). However, the retail value of fresh fruit and vegetables, fish and poultry is estimated at SBD\$472 m (Vinning et al 2009a). This suggests that the transport and marketing systems must be relatively efficient. This is not to say that the transport and marketing system cannot be improved (see Vinning and Sale 2009a).

1.3 National Policy Framework

Fiscal policy of the Government of Solomon Islands is focused on six priority areas:

- 1) Reconciliation and rehabilitation
- 2) National security and foreign relations
- 3) Infrastructure development
- 4) Social services sector
- 5) Economic and productive sector
- 6) Civic affairs.

These are a mixture of short term and long term objectives. Government debt has been reduced to around 36 percent of GDP. This now provides the government the budgetary space with which to address its priority areas. Health and Education sectors receive around 40 percent of the recurrent budget because in the Government's opinion these are necessary conditions for the sustainability of the long term development of Solomon Islands. Monetary policy is geared to:

- Containing inflation at 10 percent or below
- Preserving foreign reserves to at least three months import cover
- Stabilizing the exchange rate against the US dollar in order to encourage exports.

Reflecting its economic, social and political importance, rural development is the central priority of the current, and previous, Solomon Islands Governments. The current Coalition for National Unity and Rural Advancement Government's Mission Statement is to further strengthen development through a bottom up and holistic approach that encompasses the empowerment of people through rural advancement strategies, the pursuit of the Millennium Development Goals, and the revitalization of the economy.

The Government's *Medium Term Development Strategy 2008 – 10* provides priorities related to rural development and natural resources management. In turn, these priorities are guided by the Solomon Islands Government *Agriculture and Rural Development Strategy*. The two documents seek to:

- ✓ Increase the contribution of sustainable agriculture, plantation forestry, and related downstream processing and marketing to GDP growth
- ✓ Increase the number of people in formal and self-employment in rural areas
- ✓ Increase the proportion of people, especially from rural communities, reporting year-on-year improvements in their economic circumstances
- ✓ Increase in the number of people accessing financial services including micro-finance opportunities in both the rural and urban areas.

The fiscal policy goal of reconciliation and rehabilitation is given real presence in the rural sector. It must be appreciated that the ethnic tension between 1998 and 2003 had its roots in, *inter alia*, the limited access to resources, information, services, and economic opportunities outside of Honiara / Guadalcanal that resulted in migration to Honiara and the Guadalcanal plains; fear regarding the erosion, even loss, of customary tenure over land; and the clash between customary and introduced system of authorities.

A number of programs are addressing these issues, but according to some, implementation has not matched the aspirations (RLP, 2009). Projects are relatively small scale and fragmented. Penetration of the programs into the more remote rural areas is slow. Development of rural livelihoods is constrained by:

- Remoteness that means poor access to markets, and limited access to financial and social services
- Very poor infrastructure such as transport (especially roads), water, sanitation, education, and marketing infrastructure
- A general lack of employment and social opportunities
- Poor energy supply
- Poor communications

A number of programs have been introduced to address these issues. Some of the major ones are:

- **Forest Management Program.** An AusAid supported program that focuses primarily on increasing the capacity of the Ministry of Forestry to oversee the sustainable management of forests while maximizing Government revenue.
- **Community Sector Program.** A five-year program to build capacity for self-reliance within communities, civil society organizations, and service provider. The program has been praised for its established staff presence, logistical capacity in all Provinces, wide range of stakeholder relations throughout the country, and strong emphasis on implementation. At the same time it has been criticised for its relatively weak links with government and the fact that its programs are delivered through what is considered a parallel structure. Three of the program's five components will be wound up by the end of January 2010. A successor program, Rural Livelihoods Program, is currently under consultation with the government.
- **Solomon Islands Rural Development Program.** Another five year program funded by the EU, World Bank and Australia. It is aimed at the delivery of rural services based on the *Agriculture and Rural Development Strategy*. The program does not appear to address private sector led development, food security, and natural resource management.
- **Pacific Land Initiative.** Program concentrates on the central role that land resources play in customary ownership, customary leadership, and economic development.
- **Solomon Islands NGO Partnership Agreement.** Another five year project delivered by six Australian NGOs and their Solomon Islands partner NGOs. Five of the sub-project relate to rural livelihoods.

1.4 Floriculture sector in Solomon Islands

Floriculture as a commercial industry is relatively new to Solomon Islands, but this should not to be confused with the notion that the use of flowers is novel. Flowers have been utilised for centuries in Solomon Islands for a multiplicity of uses: personal decoration, ceremonial use in the large number of rites of passage, and home beautification. The latter included gingers that were valued for their pleasant bouquet. Whilst custom differed amongst the 70-odd cultural linguistic groups in the country, growing flowers around the houses was very common. These supplemented flowers that were wild harvested. It was common for travelers who saw a flower that they did not have to take cuttings back to their home and try to raise it, albeit after receiving permission from the landowners to take the cuttings.

Flowers grown for sale began in Honiara around 15 years ago. There were two imperatives. One was from producers who grew flowers for their calming and healing properties. Patients in the main hospital were the beneficiaries of this belief-in-action. The other was from some expatriates who purchased flowers for home beautification from producers close to Honiara. Production was quite ad hoc and sales were made on an irregular basis. Nevertheless, the making of floral arrangements for the likes of weddings, birthdays, and special events was growing in popularity. Makers of wreaths also became more professional with some attending training in floral art display in nearby Pacific countries. It is noted that the Solomon Islands Government provided assistance to some florists to attend floricultural-events in Fiji, New Zealand, and Vanuatu.



Honiara Central Market



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The development of the commercial flower industry in Solomon Islands has several drivers. Without question, a major influence was the training given by the late Jimmy Montu from Fiji. Mr. Montu provided training in floral art and ornamental horticulture through his role with the International Labour Organisation. When funding through that avenue ceased in the late 1990s, Mr. Montu continued his activities through local educational units. Mr. Montu visited Solomon Islands in the late 1990s. In early 2003, the Institute for Research Extension and Training in Tropical Agriculture and the Centre for Tropical Agriculture provided further floricultural training. In mid-2006, the Honiara City Council allocated space at the Honiara Central Market to flowers. Business started very slowly with just the four producers. The situation was improved in mid-2008 when the Market Manager fenced in the area between the roadway/pathway and the flower area, thereby improving security and enhancing the notion of a clearly defined dedicated space.

Today around 40 floriculture producers market through the Honiara Central Market on a regular basis. Around 500 households are involved with the regular production of flowers for commercial purposes. Honiara has around 20 part-time florists. Commercial trade in orchids from some of the more distant provinces into Honiara is beginning.

BOX 1: Anne Maedia

Anne Maedia's fascination with flowers started with the late Jimmy Montu from Fiji and classes he gave in floral art and ornamental horticulture. After that visit Anne started planting flowers in her garden.

At the time Anne was a nurse in the diabetic section of the Central Hospital in Honiara. She started taking flowers into her section of the hospital. Philip, Anne's husband, also worked in the hospital. He also started taking Anne's arrangements into his part of the hospital. From this experience grew an appreciation of the role of flowers in the healing process of patients. Soon the bringing of flowers into the hospital changed to bringing in floral arrangements. This was done for free. But it did not take long for Anne to realize that making arrangements was a good way of Anne promoting her evolving skills as a floral display artist. After five years Anne resigned from the Hospital to concentrate full time of floral art. At this stage she started charging for her arrangements.

The wedding of Anne's daughter was a great boon to Anne's business as the wedding gave her a wonderful opportunity to show her skills as a floral artist. A number of guests at the wedding saw what Anne could do and gave her orders. Business grew. Her church then asked her to decorate the Cathedral. Not long after that she and her late sister were invited to make floral art presentations at the National Museum.

In a bold move, in 2005 Anne and her late sister paid their own way to visit Fiji. When they arrived they knew no-one but were soon befriended by Fijians. They were able to visit some flower producers and had a most profitable visit to Tadra Flowers in Nadi that opened their eyes to floral presentations.

The visit to Fiji proved to be pivotal. In 2007 Anne returned to Fiji. Her participation in the Melanesian Art Exhibition in Suva was funded by the Solomon Islands' Government. By this stage Anne was a regular supplier of arrangements to different government ministries. In 2008 Anne's activities were featured in a local television show. From that came an invitation to visit Vanuatu as part of National Women's Week. After that visit Anne tried to revive the Solomon Islands Grassroot Women in Self Employment. This has been an active group formed in the 1990s but had lapsed due to the Tension. Tellingly, the organization received no government funding. Anne then decided to form her own business. Even though Grassroots had lapsed, it embraced a number of principles that Anne admired. These became incorporated into Anne's new business. The name, Solomon Islands Art and Crafts, recognised the number of ways by which grassroot women in the Solomon Islands could earn money. It was for this reason that the business was registered in 2008 as a charitable organization through the Solomon Islands Career Development Centre.

Arts and Crafts started in 2008 with just three people – Anne, her late sister Primrose, and Anna.

There was no joining fee. Today the group has more than 400 members who pay a membership fee. The fee is a complex one that recognizes the plethora of women in business in Solomon Islands. The fee relates to a group and is irrespective of the number of members in the group. At the same time some individuals pay separately.

Apart from forming SI Arts and Crafts in 2008, Anne participated in the Pacific Art Festival in Pago Pago, American Samoa, and a trade fair in New Zealand. Her involvement was through the Artist Association of the Solomon Islands. The New Zealand trade fair was unusual in that Anne could not take down any flowers from Solomon Islands due to quarantine restrictions. As a result she had to use New Zealand flowers. These were sold and thus helped off-set costs. Anne said that the New Zealand experience was invaluable in two ways. First, it linked her many other women from the Pacific. Second, Anne learned different floral display approaches. For example, in Samoa the style is to concentrate on vertical arrangements with very few flowers at the bottom of the display. Use is made of dried flowers and quite colourful leaves. In Vanuatu, the style is to use nearly solely flowers with very little foliage. In the Solomons, the style is influenced by the Americans with arrangements having essential two suites of colours on either side of the display.

One of Anne's marketing tools is workshops on floral arrangements. These are conducted on a fee-for-service basis. However, most of the fee is absorbed by Anne having to purchase and supply floral art material such as oasis, plastic containers, ribbon, and wire. The profit margin was quite small. For Anne, the exposure she got was more important. For example, it was through one of very first workshops that Anne got to know the suppliers from Areatakiki. Her personal and professional relationship with them has continued to this day.

2. Study methodology

Floriculture in Solomon Islands has received little attention. Even the country's orchids, usually the subject of most writings on floricultural products in tropical countries, have had comparatively little written about them. This is despite Solomon Islands being contiguous to Papua New Guinea that is considered to have the world's greatest supply of indigenous orchids. Four writings are noted - Cribb 2008, Lewis and Cribb 1991, Hunt 1969, Pakacha 2007.

Nothing appears to have been written on the commercial aspects of the country's flower industry until 2008. Late that year, Stice and Sale undertook a value chain mapping exercise of the Betikama flower marketing group (Stice and Sale, 2008). This was part of the Value Chain Enterprise Development Program (VCED) that is a component of the Agricultural Livelihoods Program that is Component Three of the Community Sector Program. VCED commenced in November 2008 – the first value chain mapped was the Betikama flower marketing group. That was followed by a more generic study of the ornamental industry that also included comments on the Matana Ara Women Association at Kakabona [aka Kakabona], (see Stice and Sale, 2009). Vinning and Sale provided an overview of the country's floricultural industry (Vinning and Sale, 2009) and Vinning et al provided a value-chain perspective (Vinning et al., 2009b).

It is noted that there are no official statistics relating to the floricultural sector. It is also noted that no one in government is tasked with assisting the industry.

This study also follows the same approach of Vinning and Sale of using extensive informal interviews and observations at the Honiara Central Market, and feedback from floricultural-based marketing skills training sessions and floral art display training conducted around Honiara, in Kiarkira on Makira/Ulawa, at Auki on Malaita, and at Munda and Ugheli in Western Province. Over 400

producers have attended these training courses that have been funded by VCED. This generous support to the floricultural industry is readily acknowledged. It is noted that the interviews included:

- buyers at the Honiara Central Market
- some of the larger uses of flower products in Honiara
- a number of florists in Honiara.

Formal interviews were conducted with a number of resorts in Western Province and Guadalcanal to assess the demand for floricultural products by the tourism sector.

3. Key findings and discussions

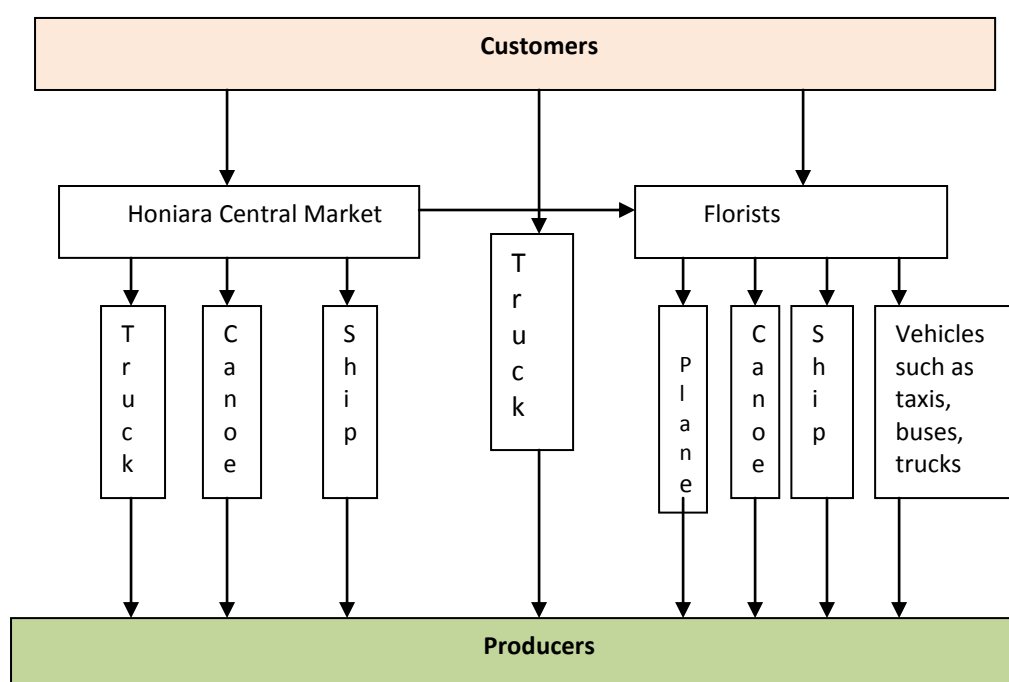
In the paper, the term “floriculture” is used to embrace the following products:

- cut flowers: this includes products such as helicon and the gingers as well as orchids as cut flowers;
- potted plants: these include palms and whole orchids; and
- planting material.

3.1 Value chain

A representation of the value chain for floricultural products in Solomon Islands is shown in Figure 2 below.

Fig. 2: Solomon Islands floricultural value chain



Expanding on Figure 2 now occurs.

A. CUSTOMERS

Customers of floricultural products in the Honiara area are:

- **Householders.** There are several forms of householder purchases. One group buys for home beautification. Vinning and Sale (2009b) state that the two main reasons for home purchases are to beautify the house and to provide a pleasant bouquet. Most purchases are cut flowers that must be replenished after less than a week. Another group buy whole products such as orchids and pot plants for extended use. Another group buys planting material to grow out in their own gardens.
- **Churches.** In Solomon Islands, buying for the churches is very big business. It is estimated that each week around five church groups each buy around \$200 worth of flowers. Concomitant with this are individuals who buy on their own volition flowers for their churches.
- **Businesses.** Many business houses, including hotels, buy floricultural products in the form of floral arrangements.
- **Government** is a large scale buyer of flowers. Buying is based on events – the opening of a conference / seminar / building. Flowers are also purchased to decorate an event when the chief guest is an overseas dignitary. This is particularly true when the chief quest is from a donor agency. The Ministry of Provincial Government is perhaps the biggest buyer of all the ministries. Purchases are in the form of arrangements rather than individual flowers.
- **Special occasions.** These are customers who buy for special occasions. The special occasions can be for individuals buying for birthdays, wedding, funerals, and celebrations. Customers can be individuals, business houses, and large scale organizations, including governments and international organizations, who buy to celebrate the opening of a particular event. Consistent “special occasions” include:
 - National holidays, especially Independence Day.
 - Certain national day celebrations.
 - ANZAC Day.
 - Mothers Day.
 - Fathers Day.
 - St Valentine’s Day.
 - United States Remembrance Day.
 - Christmas.
- **Villages.** One florist in Honiara supplies floral displays back to villages. Some of the villages are around Honiara but some are at Tulagi, Tubela and Oluvaga (Central Province).
- **Producers.** Producers of floricultural products are relatively energetic buyers of other floricultural products. They seek to buy unusual varieties or colours in order to breed them to enhance their own stocks for better market penetration. The majority of the products are wild harvested. Orchids from Bellona are particularly sought by producers. Gella in Central Province, around Mundah in Western Province, and Ulawa/Makira are other popular sources of unusual orchids.

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Whilst some of the hotels in Honiara purchase flowers, both as cut flowers for the buyer to arrange and as completed arrangements, hotels away from Honiara tend to grow their own supplies. This is especially true for most of the resorts. The practice of resorts in Solomon Islands growing their own flowers parallels the findings for Fiji where the tourism sector is a surprisingly small buyer (McGregor and Stice, 2008).

A major weakness of the industry is the skill of those charged with actually selling the product at the Honiara Central Market. These are usually the teenage daughters / nieces of the producer. They are invariably reactive in their marketing, content to state the price (when asked) and take the money when offered. Salesmanship is missing – there is no effort to engage the customer to establish what she/he is seeking, and no effort to extol the virtues of their products. The very few who have engaged in pro-active marketing report sales at a higher price and repeat sales.

Supplies to market are remarkably consistent throughout the year. Heliconas and gingers arrive on a near-even basis throughout the year. The three main orchid types, *Vanda*, *Dendrobium*, and *Arachnis*, tend to be less evenly supplied, with production declining in July. Nearly all floriculture products are in heavy supply between October and January.

Interviews with regular buyers at the Honiara Central Market report disappointment with the lack of variety in plant types and colours. Gingers and heliconas invariably comprise 70 percent of all cut flowers presented each Saturday:

- **Heliconia:** *Heliconia stricta*, *H.collinsiana*, *H.bibai*, *H.orthotricha*, *H.rostrata*, *H.hybrid*, *H.psittacorum*



- **Ginger:** *Alpinia purpurata*, *Etilingera elatior*



There are small and occasional supplies of temperate plants. There are increasing supplies in terms of volume and variety of foliage, especially nut-based plants

B. METHODS OF ACQUIRING FLOWERS

In Honiara, customers of floricultural products can purchase their products through the following sources:

- Directly from producers. This can occur in several ways:
 - Driving out to the production centre
 - Having the producers deliver directly to them
- Buying from the Honiara Central Market in an ad hoc manner
- Buying from the same producer at the Honiara Central Market
- Buying from florists.

Betikama requires comment. “Betikama” refers to the Seven Day Adventist College at Betikama just on the outskirts of Honiara. Around 50 households within the complex produce floricultural products, mainly cut flowers and cut orchids. Because they are SDA, they cannot visit the Honiara Central Market on a Saturday. For this reason, their main source of business comes from customers who drive out to the college on a Sunday. Whilst the community does sell arrangements, most of its sales are as cut flowers.

BOX 2: Anne's story

Anne started marketing at the Honiara Central Market in mid-2006 for the clear business reason that the market represented an easier place for her to meet more potential customers. If she was to stay at just her home she depended too much on word of mouth for customers to come to her. By being at the Market, more people could see her and her business could improve. Anne was able to get three ladies to join in the initial foray into the Market.

Prior to appearing at the Market, Anne sought the cooperation of the Market Master to have a space allocated to flowers. Her approach was through the Honiara Council of Women which fully supported her initiative. The space allocated to her was at the front of the Market adjacent to the main road. At the time, there was a gas supplier using part of the space. Once the flowers started, he moved out. That space has continued to be the exclusive domain of flower sellers ever since.

The three that joined Anne were from Areatakiki, a community about 30 kms to the west of Honiara from whom Anne drew her supplies of flowers when she was unable to supply from her own garden. If the producers from Areatakiki could make sales, it would encourage them to grow surpluses which in turn would help Anne. People did visit Anne at the Market. These were customers of hers. The word spread and so did Anne's business.

Once Anne, her two close colleagues, and three ladies from Areatakiki started selling at the Market, there was a rapid growth in others using the same market outlet. The first to follow were producers from Honiara city itself. After all, the Market was affectively in the centre of town and was a cheap taxi fare to bring their flowers to. Today, about 40 vendors use the Market on a Saturday. There is a mixture of producers from Honiara city and those from out of town: there is a large number from Kakabona, just to the north of the city but also a large number from communities from the Guadalcanal Plains.

C. FLORISTS

Florists are defined in Solomon Islands as people who take raw floricultural products and turn them into arrangements that can be either wreaths, one-sided, or all-round arrangements. They do not own shops like florists overseas do. There are around 20 florists in Honiara. Many florists have full-time jobs with their florist activities being done out of interest and for part time income rather than as a major source of income. Just the one florist, Orchid Art, appears to be formal in that it is registered as a business and is operated on a full-time basis.

A major issue for all florists is the lack of working capital. Normally they are required to pay producers cash for their flowers well before the florist is paid by the arrangement buyer. The cash-on-delivery to growers is eased a little when there is a social relationship between the florist and the producer(s). The lack of working capital inhibits the use of computers to assist in recording details of transactions and even storing photos of arrangements made by the florist that could assist their subsequent marketing. The finance required is well less than the lower limit set by the formal lending institutions in Solomon Islands.

Because most florists already have a job, they tend to be better educated. Most have secondary school education. A very few have excellent computer skills and are regular users of the Internet searching for ideas for floral art material and different arrangements. However, the computers are invariably part of their full-time job. Generally, florists have poor business skills:

- Little record keeping occurs
- Costs are not properly identified
- Customer preferences are not recorded
- Marketing tends to be reactive rather than proactive.

Most florists keep looking for new material or unusual floral products in order to differentiate their arrangements and thus make higher sales. They appear willing to purchase products from more distant production areas even though supply is infrequent and transport costs high.

Because florists are intermediaries rather than end-producers, they tend not to be included in most donors funding.

D. TRANSPORT

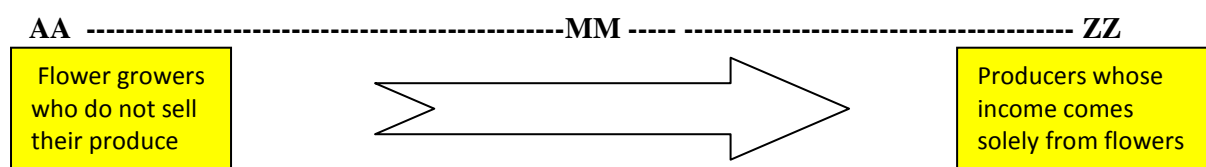
Producers deliver their produce to the three customers of (i) central market (ii) florists (iii) end customers through several routes.

- Trucks / taxi. These are used by producer in and around Honiara. They can be ad hoc hires or regular hires. Most produce from producers to the markets and florists, and from florists to end customer in this manner. For producers close to Honiara these costs are relatively small – up to \$5 per passenger with their flowers. Costs rise significantly as one moves away from Honiara: producers at Tenaru, about 30 kms from Honiara pay up to \$30 per passenger for a seat on a bus or truck. At the same time the handling of the flowers is very poor – the flowers are usually exposed to the elements during transportation and are subjected to unnecessary multiple handling. Marketers of potted plants and planting material pay much more because of the need to transport their products in a horizontal manner compared with flowers that can be transported in some vertical form.
- Canoes. Produce from Central Province – Savo, Tulagi and Oluvaga – comes by “canoes” with these some form of vessel powered by an outboard motor. Journey are made on-demand. Most flowers arriving in this way will be accompanied by the seller. The journey from the islands of Central Province to Honiara is about an hour. As with road transportation, the flowers are exposed to the elements and are subjected to unnecessary multiple handling.
- Ships. Ships run on schedules or at least an intended schedule. Produce arriving by ship come from the more distant provinces. Malaita is the main origin. Produce may/not be accompanied by the seller. At the moment packaging for overnight (and longer) sea voyages is very poor.
- Plane. This is a very infrequent form of transport. Flowers from Makira can arrive in this manner. They may/not be accompanied by the seller. Orchids from Bellona are nearly always carried as hand luggage. Such orchids are only supplied very infrequently. The lack of protective packaging is handicapping the development of using planes as freighters.

E. PRODUCERS

A continuum has been developed to describe the role of selling flowers as a source of income by Solomon Island producers, Figure 3 (see Vinning and Sale, 2009).

Figure 3: Solomon Islands Floricultural Income Continuum



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At **AA** are growers of floricultural products who do not sell their produce, for example householders only interested in home beautification or maybe donating to the church. This is a common activity in Solomon Islands. At **ZZ** are the likes of Dutch flower producers whose income is derived solely from selling flowers. No one was identified in Solomon Islands as being at **ZZ**.

Most Solomon Island flower producers fall around **MM**. Most producers are women whose husbands have a source of income through either a job or as a farmer. Some single women use flowers to supplement their income from other sources. For some women the income earned from their flower activities is an important source of income.

Producer groups on Guadalcanal known to produce flowers for sale on a regular basis are located at:

- Areatakiki - east Guadalcanal, 10 households
- Malanago - east Guadalcanal 10 households
- Tenaru -east Guadalcanal, unknown number
- Burns Creek - east Guadalcanal, 20 households
- Aruligo - west Guadalcanal 6 households
- Vatusi - west Guadalcanal, 5 households
- Tiaro Bay - west Guadalcanal, 200 households
- Betakama - east Guadalcanal, 50 households
- Kakabona - west Guadalcanal, 50 households

Other known groups of producers who grow flowers for sale are located on

- Isabel (Isabel Province) - around 40
- Auki (Malaita Province) - around 15
- Bellona (Central Province) - around 20
- Savo (Central Province) - around 35
- Munda (Western Province) - around 20
- Kirakira (Ulawa/Makira Province) - around 50.

F. LAND

Land is not an issue for the production of floricultural products. This is because production occurs mainly on the household plot with the use of this land being at the discretion of the householder. For orchids and potted plants, soil fertility and water availability are virtually irrelevant issues. For cut flowers, these can be issues. Heliconas and gingers are grown on very poor swampy soil as a means of absorbing excess water and thus reducing the area for mosquito breeding. Any sale of these products is an added bonus.

G. LABOUR AVAILABILITY

There is zero mechanisation of flower production. Labour is supplied nearly solely by the producer with there being just a little family labour. The latter tends to occur when there is suddenly a big order for flowers for a wedding or special event. Little allowance is made for the labour costs of the producer and family labour with the result that flowers tend to be underpriced compared with their true value.

H. FINANCE

Flower production is low input and thus low cost. The biggest cost tends to be the timber to build the "fences" for orchids and the cost of constructing shade houses for those working with potted plants. The cost of pots for potted plant producers tends to be around 50 percent of the final sale price: some producers stated that the higher the costs of the pot, the more reluctant they are to

add the same absolute margin because they consider that the final price will be too high for most potential consumers.

I. BUSINESS SKILLS

Business skills are poorly developed. Like florists, producers tend not to keep records, have a poor idea of their costs, and their marketing tends to be reactive rather than proactive.

J. PLANTING MATERIAL

Many producers appear willing to buy unusual planting material in order to increase the range of flowers they grow. Some imported phalaenopsis sell for SBD\$400 per plant. Taiwan is the major origin of imported orchids although a few have come from Thailand.

K. PRICING

Three elements of pricing are noted:

a. *Price discrepancy*

There is a high discrepancy between arrangements sold at the Honiara Central Market and those sold by florists. Arrangements at the Market sell for SBD\$25 (small) and SBD\$50 (large). Florists' arrangements sell for around SBD\$200. Depending on special requirements, such as shape (predominately heart shaped), and incorporating special flowers, the price can be as high as SBD\$400. Part of the discrepancy is related to the pricing of labour. Interviews indicate that most who make arrangements do not factor in an allowance for their labour costs.

b. *Component pricing*

For the biggest commercial arrangement florist gave the following cost parameters.

a. Purchase price of flowers from grower	\$100
b. Transport costs	\$ 70
c. Labour	\$ 30
Selling price	\$200

The above illustrates two issues:

Transport. These costs are very high. The quoted price of \$70 is for the hire of a taxi for over an hour. Florists are conscious that the flowers / arrangements must arrive in pristine condition. By hiring a taxi for a dedicated task, the need to cram as much cargo into the vehicle to justify the costs of the high is avoided. If the journey takes more than an hour then transport costs rise to \$140 for the return journey. Under these conditions, there is a major imperative to work with number of arrangements to become cost effective. At the same time, the high transport costs tend to favour producers who are closer to town.

Labour. There is confusion between the labour costs of the florist making the arrangement and profit component. The issue of costing for florist's labour has been raised in a number of venues but the lessons have not been adequately inculcated.² More training in simple cost identification is needed.

² See *The business of flowers in Solomon Islands*, a photobook report presented to AusAid, September 2009.

b. Actual price level

It has been argued that the high price of flowers at the Honiara Central Markets could be inhibiting the growth of the local industry (Vinning and Sale, 2009). This argument is based on the claim that the growth of the floricultural industry in Fiji has been due to the purchases by local people and not the tourism sector (McGregor and Stice, 2008).

In Suva, the bulk of cut flowers sell for FJ\$3.00 – FJ\$5.00 per bunch, CIRCA May – July 2009. In Honiara bunches are priced between SB\$5.00 – SB\$10.00. In terms of relative purchasing power, the prices in Solomon Islands are three times more expensive compared with Fiji. Table 1 compares the Asian Development Bank’s estimate of GDP Per Capita at Purchasing Power Parity (PPP) between the two countries and the normal range of prices expressed in US\$ equivalent.

Table 1: Fiji and Solomon Islands. Comparison of flower prices and purchasing power

Comparison	Fiji	Solomon Islands
GDP Per Capita at PPP	US\$4613 ^A	US\$1870 ^A
Average price per bunch	US\$1.96 ^B	US\$0.95 ^C

^A Asian Development Bank Annual Report, Table 2.2, p139

^B The average of FJ\$3.00 and FJ\$5.00 converted at FJ\$1.00 = US\$0.477

^C The average of SB\$5.00 and SB\$10.00 converted at SB\$1.00 = US\$0.126

The table shows that the purchase of an average priced bunch of flowers in Fiji takes a lower proportion of an average salary at PPP compared with the Solomon Islands.

Convincing producers of the need to reduce their prices in order to increase their sales locally will be, as they say, a hard ask. To be successful it must be balanced with gains in other areas, especially in higher yields, that is, more blooms per stem, and/or more stems per plant.

3.2 SWOT

A SWOT analysis of the floriculture industry in Solomon Islands is shown in Table 2.

Table 2: SWOT analysis of Floriculture Sector in Solomon Islands

<p><i>Strengths</i></p> <ul style="list-style-type: none"> ▪ Suits small scale land holdings ▪ Production requires little capital ▪ Good general skills basis for production ▪ Good skills for display ▪ Very colourful heliconas, gingers, and indigenous orchids ▪ A national interest in flowers ▪ Availability of techniques and genetic material from other countries 	<p><i>Weaknesses</i></p> <ul style="list-style-type: none"> ▪ Market limited to those able to service Honiara easily ▪ Damage in transport ▪ Low productivity ▪ Limited array of colours and variety ▪ No wholesaling operation to spread the days of selling ▪ Lack of credit by suppliers ▪ Government is big customer but slow payer ▪ High price of limited array of floral art material ▪ Lack of an industry voice ▪ Lack of commercialisation with selling being on an ad hoc basis that disguises true costs ▪ Financial system not geared to financing the small scale nature of the floricultural industry ▪ Poor business skills ▪ Poor division of labour with too many tasks being undertaken by the one person ▪ Information of the cultivation of tropical plants is relatively scarce
<p><i>Threats</i></p> <ul style="list-style-type: none"> ▪ Poor quarantine surveillance may result in pest and disease invasions ▪ Destruction of forests destroying availability of native orchids ▪ General antipathy towards middlemen and profit ▪ General antipathy towards women in business 	<p><i>Opportunities</i></p> <ul style="list-style-type: none"> ▪ Exporting of genetic material of heliconas and gingers ▪ Exporting of tissue cultured orchids ▪ Quick improvements available in on-farm production techniques ▪ Improved demand from lower prices ▪ Greater use of floricultural products in urban landscaping ▪ Use of packaging to allow for protective transportation ▪ Internet selling ▪ Have Government pay on time

Key success factors

Three key success factors are identified:

- Small scale nature of production
- Land is not an issue
- Low capital requirement.

The land issue needs clarification. Under customary arrangements in some communities, it is usual for women to have the approval of men when using land. However, flower production can occur on the small plot of land that surrounds the household. Use of this land is the prerogative of the householder. In a number of the country's socio-linguistic groups, women have their own land beyond the household plot upon which they can grow whatever they choose.



Mr Don Burness undertaking production walks in Guadalcanal and Malaita



It is recognized that whilst general production techniques are widely known, there is a large gap between these and more scientific production. As Mr Don Burness has shown on his production walks, the main areas where production techniques could be improved are³:

- Planting techniques for the three main orchids of *Dendrobium*, *Vanda*, and *Arachnis*
- The role of sun for each of the three orchid types
- Transplanting techniques by cutting at the third aerial root
- Bed sizes for orchids
- Feeding orchids
- The selection and use of coconut husks
- The invasive nature of grass and clovers
- Harvesting and treatment of cut flower orchids
- Cross pollination techniques.

³ In May and July 2009 Mr Don Burness of South Seas Orchids in Fiji undertook two consultancies funded by VCED where he conducted what are called “production walks” where he walked through the flower production areas of a number of communities and commented on what he saw: he also pruned, transplanted, removed, and shifted different plants. Production walks were undertaken at several sites around Honiara and at Auki on Malaita. Over 200 people attended the production walks.

One area Mr Burness identified as being actionable was that local producers tended to build too high fences for orchids. Lower fences would result in more rapid flowering of orchids and also be less costly.

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In an effort to identify interventions that could assist the development of the local industry, an analysis of the Fiji floricultural industry using McGregor and Stice (2008), Stice and Sale (2009), extensive discussions with the Burnesses, and extended observations of the flower section of the Suva Central markets.⁴

The main drivers of success there appear to be:

- ✓ Improvement in quality, especially post-harvest preservation. This means addressing the issues of pests and diseases affecting floriculture. In turn, this means identifying the existence of such factors.
- ✓ The selection of varieties that result in longer shelf life. In turn this means considerable work on vase life.
- ✓ The identification of appropriate agro-climatic regimes for preferred floricultural products.
- ✓ The development of a wholesaling system that allows producers to concentrate on production whilst assuring retailers of a reliable supply of product of a known consistent quality.
- ✓ Improvement in production techniques that allow producers to reduce their costs whilst improving their yields especially in blooms per stem.
- ✓ Development of appropriate quarantine protocols that allows for the easy importation of genetic material.
- ✓ A pricing regime that encourages locals to buy the product.

Table 3 assesses the Fijian drivers of success against the potential role for smallholders in Solomon Islands.

Table 3: Fiji success drivers and implications for smallholders in Solomon Islands

<i>Success drivers in Fiji</i>	<i>Implication for smallholder floricultural producers in Solomon Islands</i>
<i>Pests and diseases</i>	Could be a problem
<i>Red Ginger Decline</i>	Could be a problem but not yet reported
<i>Extension</i>	Share with each other
<i>Strong shelf life</i>	Could do own experiments and selection
<i>Agro-climatic regimes</i>	Good traditional knowledge
<i>Productivity</i>	Can be improved at smallholder level
<i>Production costs</i>	Low inputs
<i>Retail outlets</i>	Out of smallholder's hands
<i>Wholesaling system</i>	Out of smallholder's hands
<i>Quarantine protocols</i>	Out of smallholder's hands
<i>Pricing regimes</i>	Could address

In view of the status of these various factors, Table 4 indicates what actions could be taken to advance the Solomon Islands floricultural sector. The suggested actions are based very much on the ACIAR floricultural development project that is underway in Fiji.

⁴ Grant Vinning lives in Suva, Fiji, and has an extensive photo library of flowers at the markets in Suva.

Table 4: Solomon Islands: Addressing the drivers of floricultural success

<i>Success drivers</i>	<i>Suggested action</i>
<i>Identification of pests and diseases</i>	Access ACIAR project
<i>Red Ginger Decline</i>	Undertake necessary survey
<i>Extension</i>	Develop private sector extension training specialist to be funded on a fee-for-service basis.
<i>Strong shelf life</i>	Undertake research: has already begun with May VCED consultancy (Stice, 2009).
<i>Agro-climatic regimes</i>	Undertake survey
<i>Productivity</i>	Access ACIAR project
<i>Production costs</i>	Access ACIAR project
<i>Retail outlets</i>	Depends on private sector initiative
<i>Wholesaling system</i>	To be developed
<i>Quarantine protocols</i>	Work with Quarantine to develop specialist office. Will require Post Entry Quarantine facilities.

3.3 Technical, institutional and policy issues

Three aspects are explored:

- Production
- Pathways to commercialization
- Market innovation.

3.3.1 Production

The industry lacks access to two lots of production inputs:

- **Physical inputs.** These are seed, fertilizers, and appropriate nursery tools such as secateurs. These should only be addressed through the private sector.
- **Extension.** There is no dedicated florist advice available to producers. A short term solution is the one currently utilized by VCED, that is, the hiring of short term consultants to provide the necessary advice.

3.3.2 Pathway to commercialization

Smallholders can enter the commercial flower industry through two routes.

a. PRODUCER

A distinctive feature of the Solomon Islands floricultural value chain is the multiplicity of roles played by the single chain actor. Flower value chains in Kenya identify at least input suppliers, processors, specialist marketing organizations, freight forwarders, auction houses, wholesalers, supermarkets and florists (Mitiambo, 2008). For the Ecuadorian cut flower export trade a comparable number of value chain actors and their precise functions are identified (Blumthall and Gow 2008). In the Solomons, the chain is exceptionally short: it is either the producer who is also responsible for transport and selling to the end customer or the producer selling to a florist who sells to the end customer. As Figure 2 showed, there are no other intermediaries such as marketing organizations, processors, auction houses, or different forms of retailers.

This suggests that the pathway for commercialization by smallholder producers marketing into the main central market is relatively simple with few barriers. Production is based on their

own decision, transportation is at their own discretion, pricing is their own decision, even the decision to supply the market is at their own discretion.

If a smallholder chooses to market through a florist then there are some implications in terms of meeting standards, pricing, and delivery. However these are commercial arrangements and do not reflect any form of government policy.

Using the central market as a sole outlet must be considered a limited option for producers. Whilst there is no regulation requiring flowers to be sold on just the Saturday, this has become the trend. Buyers who do not use florists and who do not drive out to the production areas have become used to buying on just the Saturday. It could be argued that their demand is limited to a once-a-week purchase.

b. FLORIST

Smallholders can become florists. Only the one florist in Honiara has a full time office. All the others either work from home or even use the office. Thus the need to spend money on an office / shop is not an issue.

Smallholders becoming florist face a number of inhibitions to financial success:

- Large of business skills
- Lack of marketing skills to find and secure new sales
- Cash flow dislocation having to pay producers cash on delivery of product then waiting for the payment for the arrangement
- Access to affordable floral art display material
- The continual input of new ideas in the presentation of floral arrangements.

Box 3: Staying ahead

Anne has gone from being nearly the sole florist in Solomon Islands to having a large number of part-time competitors. As part-time florists, they do not carry the same costs as Anne – most work from their work-office and have access to free phones and, for some free computer and internet access. Having a full time job they have the financial backing to handle the cash flow dislocation associated with paying cash to producers upon delivery of the flowers and waiting for payment from the arrangement buyer.

Anne's has adopted several techniques to address the competition.

Suppliers. Aware of the role of social relations in Solomon Islands, Anne invests considerable time and effort with her suppliers. They are phoned and visited frequently, even those in distant Bellona in Central Province and on Isabel.

Customers. Anne works very hard on her client relations. They are visited frequently and their requirements are met as soon as she feasibly can. When there is a rush of orders, Anne will pay some-one to provide an arrangement to her specifications. Whilst this reduces her profit, it maintains her clients.

Floral art display. Anne has funded her own way to Australia and other countries to learn new techniques in floral art display. She visits floral art suppliers to acquire material that will enhance her presentations.

Business skills. Anne is fully aware of the importance of business and marketing skills. She has actively sought training in these fields. VCED has offered a number of opportunities for mentoring with business specialists from the region – Anne has made sure that she is aware of these opportunities and is able to access them.

3.3.3 Market innovation

The greatest market innovation that could occur for flowers in Solomon Islands is the development of a wholesaling outlet in Honiara. Such an outlet would make flowers available to florists on a 6-day week basis. The consensus is that whilst flower sales at the Market on a Saturday would decline, there would be an overall increase in the weekly volume of flowers sold.

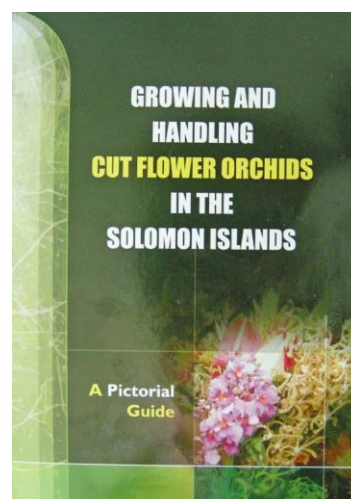
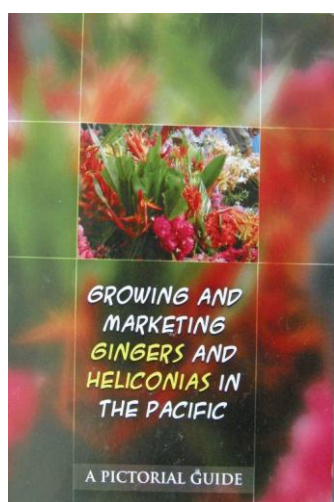
3.4 Maintaining a competitive advantage

Interviews revealed a common response to the question “what is needed to maintain a competitive advantage?”: knowledge.

There have been several streams to the types of knowledge required.

Production

Whilst nearly all Solomon Islanders know how to grow flowers, far fewer know how to grow them in a highly productive and commercially successful manner. Training in production is required. The production walks conducted by Mr. Don Burness and funded by VCED have been a wonderful innovation and highly welcomed. More of these would be greatly appreciated. VCED funded the publication of *Growing and handling of cut flower orchids in the*



Solomon Islands: a pictorial guide and *Growing and marketing gingers and heliconias in the Pacific: a pictorial guide*. Both of these were saleable publications – both have required reprints.⁵



Producers receiving production training using *Growing and handling of cut flower orchids in the Solomon Islands: a pictorial guide* and *Growing and marketing gingers and heliconias in the Pacific: a pictorial guide*

⁵ Actual writing and publication was organised through Koko Siga (Fiji) Limited and South Seas Orchids of Fiji.

Floral art arrangement

The key to successful floral art arrangements is having new and innovative displays. Within the fixed confines of the Solomon Islands access to new and fresh ideas is hard to achieve. Those with access to Internet can search for new ideas. But for the vast majority of Solomon Island florists, this



avenue is not available and thus their access to new ideas is limited. A number of Solomon Islanders flower producers and florists have been fortunate to travel overseas. This is particularly true for the wives of Parliamentarians. This exposes them to new ideas. A very small number such as Anne Maedia have spent their own money to go to Australia and New Zealand to find new ideas.



The action by VCED of bringing the expertise of South Seas Orchids and Tadra Flowers from Fiji to the Solomons to provide training in floral art display is well appreciated.



VCED also funded members of Floriculture Solomon Islands (FSI) to provide training in floral art display in Western Province. For FSI to continue to provide new ideas then it too must receive appropriate training. To assist the promulgation of ideas VCED produced *The art of floral display – Solomon Islands*. This is also a saleable publication which is likely to go to a reprint.



Floral art display training



Business training

Nearly all Solomon Islanders lack business skills. Those in the floriculture industry are no different. There is a strong demand for business training. Some business training has been provided by VCED around Honiara and in the Province of Ulawa / Makira:

- Budgeting, making profit, financial literacy
- Marketing skills
- Business planning and business development.



VCED staff providing financial literacy training

South Seas Orchids also provided specific training in the economics of floral art in Honiara and Malaita.

Nevertheless, the consensus is that far more business training is needed and that it should be provided in as many locations as possible.

Marketing

As noted in 3.2 a major weakness of the entire floriculture sector is marketing skills. Sellers tend to be reactive: prices are proclaimed on a piece of paper and the seller waits for the buyer to react. Some flower sellers trained by VCED have taken a more proactive approach – prices are not publicized and when potential buyers asks the price the seller tries to engage them in conversation to better assess what the buyer is looking for (colour? bouquet? bunch size? Occasion? stem length based on vase size?). Much more proactive marketing skills training is sought. Proactive marketing skills is considered equally useful for producers who sell in markets as well as those who sell *in-situ*.

Another area where the competitive edge can be maintained is in the introduction of new genetic material. As noted, some buyers have complained a high degree of sameness in the floriculture products available throughout the year. There is some variation in colours but basically it is the same types of heliconia, gingers, and cut flower orchids. New material is needed to boost the range of colours, types, shapes and sizes. This requires imports.

At the same time, any imports need to be accompanied by a stiffening of quarantine protocols. Concern has been expressed at the lack of consistency in the application of quarantine inspection procedures. These must be made uniform for all arrivals that bring in genetic material.

3.5 Options for future growth

There are three potential growth paths for the Solomon Islands floricultural industry:

- Follow the route of Kenya and Ecuador by concentrating on developing the export industry
- Follow the route of Hawai'i by concentrating on developing the tourism sector
- Follow the route of Fiji by concentrating on developing the domestic industry.

It is recommended that Solomon Islands concentrate at the moment on developing local sales.

3.5.1 Exporting

There seems little prospects in the near future for the exports of cut flowers from Solomon Islands. This is stated whilst being fully conscious of the opinion of South Seas Orchids that the heliconia and gingers of Solomon Islands are particularly vibrant and would find a ready market in Australia.⁶ Further, Solomon Islands appear to have excellent orchids that would also meet a ready market in Australia as either a cut flower or as a whole plant.

Using Mitiambo (2008), and Blumthal and Gow (2008) case studies as guides, some of the reasons for the assessment of poor prospects are:

- Limited airline capacity.
- Non-existence of cool storage to ensure post-harvest preservation.
- CITES conditions surrounding the exporting of indigenous orchids.⁷
- The shape of the heliconia and gingers make them ideal places for insect and thus they would attract great quarantine attention in Australia. However, heliconia and gingers have not yet even begun the excruciatingly slow journey for quarantine acceptance into Australia.

Notwithstanding the above, the potential for the exporting of foliage should be explored.⁸

3.5.2 Tourism sector

McGregor and Stice (2008) have analysed the demand for flowers by the Hawai'i and Fiji tourist sectors. They concluded that in Fiji, the South Pacific's largest tourism destination, the tourist sector has played only a small role in the industry's considerable growth in the early 2000's. They point out that the tourism sector in Hawaii finds it more economic to import orchids from Thailand and Singapore rather than purchase locally. In Fiji, most tourism resorts have their own gardens with specific housekeeping staff tasked with "looking after the flowers" (McGregor and Stice, 2008).

Only one hotel in Honiara is a regular buyer of flowers at the Honiara Central Market (Vinning and Sale, 2009). In May 2009, Vinning and Sale undertook a quick survey of the tourism sector in the Marovo Lagoon of Western Province, the centre of the country's tourism sector away from Honiara. Their survey encompassed the Province's largest resort and four smaller resorts. The survey was to establish the usefulness of bringing out to the Lagoon a floral art designer to help their business. There was no demand. The resorts echoed the findings of McGregor and Stice (2008) with the resorts having their own gardens and using house-keeping staff to "look after the flowers".

⁶ Pers.comms. Mr Don Burness, South Seas Orchids, Honiara, July 2009.

⁷ Pers.comm. Dr Dick Watling, Honiara, August 2009.

⁸ See Vinning and Sale (2009) for comments on the increasing appearance of foliage at the Honiara Central Market.

3.5.3 Local sales

The significant growth in the Fiji flower industry is attributed to local sales (McGregor and Stice, 2008). It is considered that this is the most appropriate route for industry to pursue in the short term.

Recommendations to develop this sector are now explored.

The value chain approach provides a methodology to guide the further development of the floricultural sector in Solomon Islands.

a. PRODUCTION

Several aspects of production need to be addressed. These can be grouped into two basic streams of activities:

1. **INCREASE IN PRODUCTIVITY.** These activities have to address increasing the stems per plant and then increasing the blooms per stem. Increased productivity will enable producers to reduce their prices without suffering a loss in gross income. The role of sun/shade, the role and making of compost, and row spacing are other topics still needing attention.
2. **INCREASE IN VARIETY.** Vinning and Sale have conducted informal survey of buyers at the Honiara Central Market and with some buyers of arrangements in Honiara, Kirakira, and Gizo. Buyers indicated that there is a very limited range of floricultural products available. Essentially, and with the exception of some seasonal plants, there is a very high degree of sameness in the products presented to the market. Buyers have said that they would buy more if there were more varieties available to be purchased. Greater diversification could be achieved by cross-pollination of local varieties as well as the importation of new varieties. It is also recommended that posters / pamphlets be developed with proper varietal names and their commonly known names. This way producers and buyers would know the product by the same name.

In addition it is recommended that thought be given to developing access to specialist extension advice. Further, that the extension system be on a fee-for-service basis.

b. DISTRIBUTION

Techniques to improve shelf life are needed. The product that arrives at the Honiara Central Market is quite poor. Because of the size of the industry it is most unlikely that specialist transport or specialist cool storage facilities will become available in the near to medium term future. However, a start can be made by developing better methods of transport facilities. The use of cardboard boxes is being trialed for the movement of flowers from the more distant production sites. These trials must be conducted in consultation with Solomon Islands to ensure that the box size is compatible with the quite limited space in the cargo holds of the Twin Otter.

Information regarding shelf life is very poor. A beginning in the recording of data commenced with the Koko Siga Mission in May 2009. This needs to be continued with the objective of selecting those lines that demonstrate greater shelf life. Particular attention should be paid to the flowering gingers (pink and white types) that are valued for their bouquet but which have a very short shelf life.

c. MARKETING

Four aspects of marketing need to be addressed to advance the sector:

1. **PRICES.** It has been noted earlier that in terms of relative purchasing power, the prices of flowers in Solomon Islands are three times more expensive compared with Fiji. To encourage greater sales of floricultural products, they argue that Solomon Islands' producers must reduce their prices. However, they also argue that for this to occur, Solomon Islands producers must become more productive through the likes of increased blooms per stem, greater stems per plant, increased shelf life, and access to greater varieties.
2. **WHOLESALE SYSTEM.** The Solomon Islands floricultural sector needs a wholesale – retail system. As Figure 2 shows, the stunningly short value chain for flowers in Solomon Islands means that if the producer is not actually selling then consumers have reduced access to supplies. Whilst it has not been tested in Solomon Islands, it is a strong hypothesis that if consumers had greater access to flowers throughout the week then they would most likely be inclined to buy more. This is particularly true for the short shelf-life flowers that have a good demand. A prime example of this is the gingers that are valued for their bouquet.
3. **SELLING SKILLS.** The main contacts for most floricultural buyers are the actual sellers at the Honiara Central Markets. Selling is invariably undertaken by the daughters, nieces, and neighbours of the producers. The skill set of these sellers is considered to be very poor. This needs to be addressed through salesmanship training.
4. **MARKET EXPOSURE.** In the main, Solomon Island floricultural producers are very re-active in their marketing. For example, they wait at their production sites for buyers to arrive, and they wait behind their displays at the Honiara Central Market for buyers to show an interest. There are some exceptions but these are just that – “some exceptions”. The Inaugural Solomon Islands Independence Day Floral Art Display show-cased the skills of local floral artists. The business reaction to the display was muted. Some business was conducted at the Display and some producers were invited to hold further discussions with potential buyers. However, an assessment of the Display is that the marketing of the event was not as good as it could have been. Another display would be appropriate in order to for the sector to have its products exposed to the business community.

Over-arching all of the above recommendations is the need to improve the business skills of producers. Specifically, small-holders need training in three areas:

- Costing, the difference between revenue and profit, negotiating skills, and attribute identification.
- Business planning.
- Floriculture as a business.

4. Conclusions

The commercial floricultural industry of Solomon Islands is quite young, only about 15 years old. In that time the industry has grown to around 40 full time sellers at the Honiara Central Market, 20 florists, and involving 500 households. The buyers are churches, businesses, householders, and producers. The government is probably the biggest buyer but it has a reputation for being a poor payer. Keys to the growth of the industry have been its small scale nature, the fact that flowers can be grown on small parcels of land, for producers at least finance is not a problem, and the very short supply chain. The small scale nature of production and the low capital requirement are also incentives for smallholders to become florists. However, finance is an issue for florists. Both smallholder producers and smallholder florists suffer from the lack of business skills.

The industry is unusual in that it has grown to its current size without input from government. This opens the prospect that future growth can also occur with minimum call upon government. The sale of three different floricultural books raises the prospect of the industry's willingness to pay for privately provided extension advice.

Of the three options for the industry's growth, that is, exports, servicing the tourism sector and domestic sales, the most likely one is the latter. For this to occur it is considered that prices must be lowered but with a commensurate increase in productivity.

The industry is aware of the need to provide variety in the colour and variety of flowers it offers for sale. This can only come from imported stock. At the same time there is the prospect of the exporting in the F2 hybrid form some of the country's orchids. This suggests that the government has a major role to play in quarantine protection and certification of the adherence to international CITES conventions.

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