

University of Wollongong

Research Online

Faculty of Law, Humanities and the Arts -
Papers (Archive)

Faculty of Arts, Social Sciences & Humanities

1-1-2017

Challenges for Sustainable Communities in Solomon Islands: Food Production, Market Sale and Livelihoods on Savo Island

Nichole Georgeou

Western Sydney University, ncg611@gmail.com

Charles Hawksley

University of Wollongong, charlesh@uow.edu.au

Follow this and additional works at: <https://ro.uow.edu.au/lhapapers>



Part of the [Arts and Humanities Commons](#), and the [Law Commons](#)

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

Challenges for Sustainable Communities in Solomon Islands: Food Production, Market Sale and Livelihoods on Savo Island

Abstract

This article highlights the challenges of community sustainability in the emerging market economy of Solomon Islands. It examines the ways in which Solomon Islanders from Savo Island engage with the Honiara Central Market (HCM), the largest fresh food and vegetable market in Solomon Islands. We focus on the produce sold and income earned by the farmers from Savo Island. Data from five focus groups from three villages on Savo Island reveals the critical importance of cash income from market sales at the HCM. The article also demonstrates the mix of logistical and environmental challenges for long-term community sustainability on Savo Island that arise when trying to earn money by selling food.

Disciplines

Arts and Humanities | Law

Publication Details

Georgeou, N. & Hawksley, C. (2017). Challenges for Sustainable Communities in Solomon Islands: Food Production, Market Sale and Livelihoods on Savo Island. *Portal: journal of multidisciplinary international studies*, 14 (2), 67-86.



UTS
ePRESS

PORTAL Journal of
Multidisciplinary
International Studies

Vol. 14, No. 2
September 2017

Communities Acting for
Sustainability in the Pacific
Special Issue, guest edited by
Anu Bissoonauth and Rowena
Ward.



© 2017 by the author(s). This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) License (<https://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

Citation: Georgeou, N. and Hawksley, C. 2017. Challenges for Sustainable Communities in Solomon Islands: Food Production, Market Sale and Livelihoods on Savo Island. *PORTAL Journal of Multidisciplinary International Studies*, 14:2, 67-86. <http://dx.doi.org/10.5130/portal.v14i2.5411>

ISSN 1449-2490 | Published
by UTS ePRESS | <http://portal.ePRESS.lib.uts.edu.au>

RESEARCH ARTICLE

Challenges for Sustainable Communities in Solomon Islands: Food Production, Market Sale and Livelihoods on Savo Island

Nichole Georgeou^{1*}, Charles Hawksley²

¹Senior Lecturer, Humanitarian and Development Studies, School of Social Sciences and Psychology, Western Sydney University, Locked Bag 1797, Penrith NSW 2751, Australia

²School of Humanities and Social Inquiry, Faculty of Law, Humanities and the Arts, University of Wollongong, Northfields Avenue, Wollongong NSW 2522, Australia

***Corresponding author:** Dr Nichole Georgeou, Senior Lecturer, Humanitarian and Development Studies, School of Social Sciences and Psychology, Western Sydney University, Locked Bag 1797, Penrith NSW 2751, Australia. n.georgeou@westernsydney.edu.au

DOI: <http://dx.doi.org/10.5130/portal.v14i2.5411>

Article History: Received 12/02/2017; Revised 02/05/2017; Accepted 26/06/2017;
Published 05/10/2017

Abstract

This article highlights the challenges of community sustainability in the emerging market economy of Solomon Islands. It examines the ways in which Solomon Islanders from Savo Island engage with the Honiara Central Market (HCM), the largest fresh food and vegetable market in Solomon Islands. We focus on the produce sold and income earned by the farmers from Savo Island. Data from five focus groups from three villages on Savo Island reveals the critical importance of cash income from market sales at the HCM. The article also demonstrates the mix of logistical and environmental challenges for long-term community sustainability on Savo Island that arise when trying to earn money by selling food.

Keywords

Savo Island; community sustainability; Honiara Central Market; Solomon Islands

DECLARATION OF CONFLICTING INTEREST The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. **FUNDING** This research was made possible through funding from the Australian Catholic University and the University of Wollongong.

This article examines the challenges of community sustainability on Savo Island, some 35 kilometres from the capital of Solomon Islands, Honiara. It examines tensions of rapid urbanization in and around Honiara, and then describes research on community sustainability conducted on Savo Island during 2015. An analysis of the data obtained through focus groups on Savo Island, and other data gathered through observation of sales at Honiara Central Market, highlights the key challenges to food production, export crops and the sustainability of Savo Island communities. We argue that economic linkages between city and village are vital to communities on Savo Island and in Honiara, as the Islanders require cash to sustain their livelihoods, and the urban dwellers require fresh vegetables.

Community Sustainability in Solomon Islands

Community sustainability can be defined as ‘the long-term durability of a community as it negotiates changing practices and meanings across all the domains of culture, politics, economics and ecology’ (James *et al.* 2012: 9). Broadly this definition refers to people who are aiming to feel confident about their long-term prospects of safety and security. The capacity of a population to obtain food for itself and for future generations without destroying the environment is a key feature of community sustainability, and it integrates the political, economic, environmental and resource factors within the wider concept of human security. A population’s ‘food security’ requires both sufficient quantity and nutritional quality of food, but it also depends on the availability and accessibility of food. Threats to food security, and therefore community sustainability, include political instability and conflict, weather-related shocks, natural disasters, food price volatility and climate change, while factors that may enhance food security include a growing and equitable economy, growth of agricultural productivity, and the growth of domestic and international markets (FAO 2015a: 26).

The FAO Hunger Map 2015 ranks most of Oceania as having a very low (<5 percent) threat of undernourishment, however two states have moderately low (5–14.9 percent) levels of undernourishment, with higher percentages of their populations classed as undernourished: Vanuatu (6.4 percent) and Solomon Islands (11.3 percent). As far as the statistical collection in Oceania goes, Solomon Islands appears to be the most at-risk state for food security and undernourishment (FAO 2015b). In some ways this is no surprise as Solomon Islands experienced five years of conflict between 1998 and 2003. Since then the country has enjoyed a period of peace and continued economic growth. The Regional Assistance Mission to Solomon Islands (RAMSI) was deployed in July 2003, and RAMSI worked on the principle that stability will lead to investment and growth in Solomon Islands. Since 2003 the GDP has quadrupled from SBD\$1,790 million in 2003 to SBD\$7,202 million in 2014 (ADB 2016).

While Solomon Islands is the second largest recipient of Australian aid in the Pacific, Australia’s aid program now gives less aid as a percentage of Gross National Income (GNI) than at any time since the 1970s. Australia is now looking to the market to provide the spark for development in the Pacific, especially through initiatives such as ‘Aid for Trade’ (Georgeou & Hawksley 2016). The growing emphasis on the market as a means of lifting people from poverty articulates with UN Sustainable Development Goal (SDG) 17 (Development Partnerships), while encouraging small farmers to produce articulates with UN SDG Goal 2 (End hunger, achieve food security and improved nutrition and promote sustainable agriculture) through labour and land productivity increases, as these flow directly to increased food availability and family incomes (FAO 2015a: 26). In short, smallholder farming is seen as a path from poverty, yet food security remains elusive in Solomon Islands.

Smallholder agriculture is the main source of incomes and food security for Solomon Islanders, and those in rural areas produce as much as 60 percent of their own food (SISO 2015). Agriculture (crops and livestock) accounts for 14.5 percent of GDP (SIG 2014: 20); however, there is a decline in traditional crop production as agricultural land and natural resources have become limited. Food production in Solomon Islands is facing threats from pests and disease, while intensification of land use in several provinces is leading to soil degradation, which now challenges subsistence viability (FAO 2012: 125). Solomon Islands is also vulnerable to climate change and sea level rise, earthquakes, tsunamis and extreme weather events such as floods and cyclones (ABM & CSIRO 2014: 260–279).

In Solomon Islands national waged employment is less than 20 percent of the population, and around 80 percent of people still live semi-subsistent lifestyles in rural areas. The capital Honiara is home to two-thirds of all urban Solomon Islanders, and is a natural centre for the sale of agricultural produce. Honiara City Council (HCC) staff estimate there are now 85,000 residents within the Honiara city limits (Fieldnotes 2014), and in 2012 former RAMSI Special Coordinator, Nicholas Coppel (2012: 8) estimated an additional 15,000 people were residing on the boundaries of the HCC area in the peri-urban settlements of White River, to the West of the CBD, and Burns Creek, to the East. Together, this urban and peri-urban population now numbers at least 100,000. Many rural communities in and around Honiara, both on Guadalcanal and on the neighbouring Islands of Malaita, Savo and Ngella, gain cash income from the sale of their produce to these urban residents, who produce as little as 10 to 15 percent of their own food (SISO 2015).

Household consumption patterns have changed, and there has been a rise in the consumption of cheaper processed foods as a proportion of diet (FAO 2012). In Honiara, estimated household spending on cereal and cereal products was steady at approximately 23 to 25 percent of household income between 2005/6 and 2012/13 (SISO 2006; SISO 2015). In the same time period spending on bread and biscuits was 11 percent, compared with 16 percent on fruit and vegetables. Most significantly, during this period people in rural areas spent up to 50 percent of their income on cereals and cereal products, almost twice as much as those in urban areas (FAO 2012: 125; SISO 2015). Rice is a major staple across Solomon Islands, comprising of between 12 to 19 percent of all food expenditure. Traditional dietary staples such as potatoes and tubers comprise 21 to 40 percent of food expenditure across all provinces, except in urbanized Honiara, illustrating a decline in the consumption of traditional foods in urbanized settlements (SISO 2015: 40).

The largest fresh food market in Solomon Islands is the Honiara Central Market (HCM), which is the main market supplying fresh produce to the urban residents of Honiara (UNW 2014).¹ Farmers transport fresh vegetables, fruit and fish to the HCM by both road and boat. Solomon Islanders who sell at market are facing increased competition from cheaper alternative imported food products, especially rice (FAO 2012: 131) and instant food, such as two-minute noodles. At the same time, evidence from ADB figures (2016: 4) supports the contention that food prices rose around 11 percent between 2009 and 2015. While this creates a greater need for cash income to purchase fresh food in Honiara, it provides opportunities to those who can deliver fresh food to the market of Honiara. There is however, a lack of

¹ HCM and is one of two HCC managed markets in Honiara. Betel nut sellers dominate the other market, Kukum market. HCM is centrally located, and has space for around 1,200 stalls. There are other smaller unregulated markets at Talise, Borderline, and Fishing village. Some farmers use these markets to sell produce that would spoil quickly (for example, seasonal Savo apples), or if HCM was difficult to access, either through the volume of marine vessels or because the HCM is full.

coordinated commercialization of fresh food among Solomon Islands' farmers (Georgeou *et al.* 2015), and limited use of formal market contracts and market facilitation undertaken by farmers' organizations.

Bringing fresh food to market is difficult, as the transport infrastructure is poor, expensive and often results in damaged produce. At the time of the study the quality of food supply at HCM was affected by poor food storage facilities, particularly a lack of affordable refrigeration spaces. Other issues that affected food safety standards for fresh produce were overcrowding, and inadequate water and sanitation facilities.² Tensions between farmers and re-sellers (discussed below in this article) have been identified as a potential risk to income generation (FAO 2012: 128; Georgeou *et al.* 2015).

Despite the sign at the entrance noting trading days as Monday to Saturday, the Honiara Central Market (HCM) actually operates seven days per week. It is the city's main source of fresh vegetables, fruit and fish, drawing produce and sellers from Guadalcanal and neighbouring islands.³ Vegetables and fruits come to the HCM by road from both East and West Guadalcanal. Most larger fruits (melon and pineapple), and some marine foods such as crabs and shellfish, come by boat from Malaita. Isabel Island supplies HCM with reef fish, lobster, and squid, while the islands of the Central Province (particularly Savo and Ngella Islands), contribute fruit and vegetables. Large whole fish (including tuna) are available for purchase. Farmers from more distant provinces, such as Temotu, engage less frequently with the market due to the distances involved, and make only seasonal visits as the quantity of crop (such as taro) required to make a profit means frequent travel is not viable (Fieldnotes 2014; Fieldnotes 2015).

Savo Islanders sell most of their market crops through the HCM; however, selling occurs at other sites including Kukum (in Honiara), Fishing Village (to the east of the Central Business District [CBD]), White River (to the West of the CBD), Borderline (in the hills above Honiara), and Talise markets. HCM is centrally located about one kilometre from the main shipping and ferry wharf at Point Cruz, and it has space for 1,000 to 1,200 stalls, around 500 of which are under cover. There are specific areas for vegetables and fruit, whole fish, chicken, seafood, and for handicrafts such as carvings, jewellery, printed sarongs and flowers. Products such as fertilizer, firewood and hot food (particularly fish and chips) are available. Honiara residents, including restaurateurs, comprise the bulk of the customers. Like Honiara itself, the HCM is crowded, with up to 2,000 vendors rotating through the many stalls. Women comprise approximately 90 percent of vendors of fresh fruit and vegetables at HCC (Hedditch & Manuel, 2010: 2), while fishmongers are predominantly male.

HCC charges fees to sellers based on the type of goods being sold, as well as on the area of ground space occupied, based on a cost per metre squared. Extra fees are charged for overnight storage of produce in lockups. Agricultural produce can be sold in single units (for example one mango), or in bunches, such as beans or peppers. Seafood such as reef fish, lobster, bugs, prawns and squid, are sold by weight (Genova *et al.* 2010). Large fish such as tuna are only sold by unit, with a price per whole fish. Second class frozen tuna sourced from (dominantly)

2 HCM has since installed water tanks, and improved sanitation and food storage areas.

3 Given the initial construction of the 1998–2003 tensions along ethnic lines (Braithwaite *et al.* 2014: Ch 7; Hawksley & Georgeou 2015: 135–139), it is quite possible that HCM has similar tensions, and that specific groups dominate specific trades, areas of sale at the market, and even the blackmarket trade, however the Savo Island sellers we spoke with referred to blackmarket sellers as a group, and the only Savo Islander to comment on the ethnicity of blackmarket sellers (in this article) noted they were 'a mix of Islanders from everywhere.'

Korean tuna fishing boats is widely available and competes with fresh tuna supplied by local fishermen.

Honiara Central Market stall rental and storage costs (2015)	
Daily price (SBD\$)	
Item	Value
Crops	\$13.00
Esky Fee Fish	\$31.00
Coconut Sale	\$17.00
Cooked Food	\$25.00
Clothing Stall	\$13.00
Clothing Storage	\$17.00
Handicraft	\$13.00
Esky Fee Coconut	\$25.00
Esky Chicken	\$13.00
Fire wood	\$18.00
Large Building Material	\$18.00
Parking Fee	\$7.00
Medium Esky Storage fee	\$17.00
Small Esky Storage	\$15.00

Figure 1 Source: Fieldnotes (2015)

The market is managed by the Honiara City Council (HCC) and, depending on the volume of trade, the fees raised from the HCM is the second or third largest source of revenue for HCC (Fieldnotes 2014; Fieldnotes 2015). The busiest market days are Friday and Saturday, when HCC can collect up to SBD\$22,000 (AUD\$4,000; USD\$2,750) in market fees.⁴ For some years HCM has been operating at full capacity, and there is no adjacent space available for expansion. HCC is aware of this problem and is seeking solutions.

Methodology

A United Nations Women (UN Women) baseline survey of the HCM conducted between July and October 2013 identified Savo Island as a common source of agricultural produce, and it is likely that Savo Island vendors represent around 12 to 15 percent of all vendors at HCM (UN Women 2013: 10). Savo Island, therefore, was selected as the site for this study because of its proximity to Honiara, and because it contains all of the elements in the rural-urban nexus: food production by small-holder farmers, sale at market and income generation, and food security for urban areas. In addition, Savo Islanders transport their produce to market by boat, a feature common to other farming communities on nearby islands. The analysis of data presented in this article therefore identifies some of the main issues and features of food production, market sale and income generation as they relate to community sustainability on Savo Island.

⁴ An exchange rate of 5.50 SBD to the Australian Dollar (AUD), accurate during July 2015, has been used for this article. For USD, a simple conversion rate of 8 SBD to 1 USD would give an approximation.

Description of the research site

Savo Island is located some 35 kilometres north-northwest of HCM. By outboard motor boat⁵ (OBM, also referred to as a ‘canoe’) the trip to Honiara takes around an hour. An alternative route is to take produce by OBM 14 kilometres due south from Savo Island across to Vila on Guadalcanal, and then to load this onto a truck or car and drive along the sealed road to Honiara, 34 kilometres to the west. Data were drawn from three villages in the north and east of Savo Island: Panueli—a large village of over 45 households in the north of the island; Paibeta—a medium sized village of approximately 20 households in the east of the island, and host to the island’s only secondary school; and Leboni—a small village of approximately 10 households on the east of the island (Fieldnotes 2015).⁶

There are no roads on Savo. All transport is either on foot, or by OBM. Some people use diesel generators to create electric power. At the time of the study there were no banking services on the island. In the one shop we observed, transactions are in cash, but some barter was accepted for megapode eggs, which were exchanged for canned or processed food such as noodles. The eggs were then cooked in the volcanic pools and taken to HCM to be sold (Fieldnotes 2015).⁷

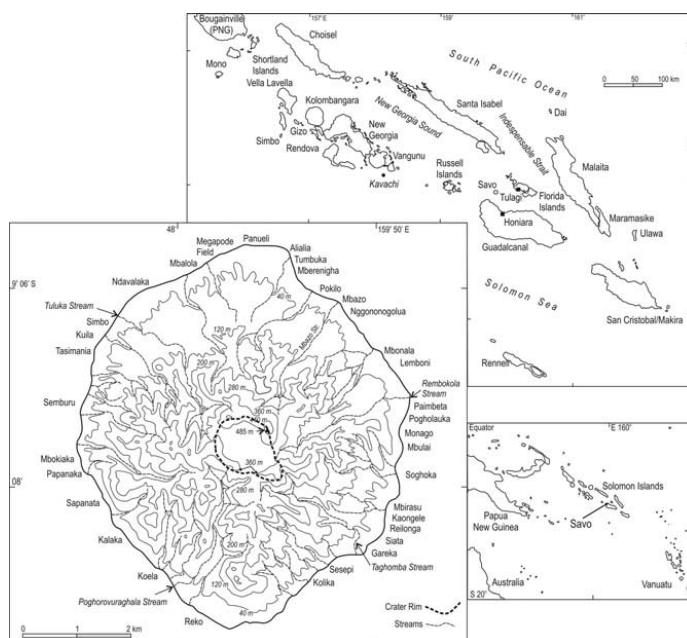


Figure 2 The location of Savo Island within Solomon Islands, and of villages on Savo Island (from Cronin et al. 2004: 107). Panueli is the northernmost village, while Leboni (Lemboni) and Paibeta (Paembeta) are to the east.

⁵ An outboard motor boat (OBM) is a flat-bottomed fibreglass craft of around 5.5 to 7 metres with a small storage hold at the bow. It is powered by a single petrol driven engine and can carry six passengers comfortably, but often carries many more.

⁶ The spelling of village names varies. For this study we have adopted Panueli, Paibeta, and Leboni, as these are how local people spell the names of their villages. The south of Savo Island was not considered for this study due to concerns of ‘survey fatigue’ following the extensive surveys conducted by the Geodynamics energy company as part of its proposed geothermal power development to supply Honiara with electricity generated from Savo Island’s volcanic superheated water (Geodynamics 2014).

⁷ A megapode egg is around twice the size of a chicken egg and sells for around SBD10–12 per egg. Savo Islands from Panueli have a highly organized system of ownership and rights to the main megapode laying field close to the shoreline. Nests of birds in the interior used to be protected by *tambu* (taboo) and *kastom* (local customary practice), but these prohibitions are breaking down.

Research design and data collection

After seeking permission from village leaders in each of the three communities, we sought to convene separate focus groups for men, women and youth, to explore their different roles in agricultural production and marketing. Separate focus groups for men and women are vital to discovering the gendered experiences of actors as Solomon Islands society has separate spheres of action for women and men, with different levels of influence on decision making (Kruijssen *et al.* 2015: 31), and women often do not speak freely in front of men, or contradict them in public.

Focus groups were large (over 20 participants) and took the format of community meetings comprised of the representatives from the majority of households in each village. In total the research involved five focus group discussions (FGDs): in Paneuli, one group for men and one for women; in Paibeta and Leboni, one combined group of men and a separate combined group of women. A FGD for the youth of all three villages was facilitated from the Island's only secondary school to identify how young people articulate with production for market, as while young people are also engaged in market production, they are rarely involved in key decision making due to *kastom* (local customary practice).

All FGDs were facilitated in Solomons Pijin (Pidgin), but some explanations were given in Savo Savo, the local language of Savo Island. In their comments most Savo Islanders used Pijin, although some participants expressed themselves in English. The FGDs were facilitated by two Solomon Islands' research assistants, both of whom lived in Honiara. The female researcher (MK) was the chief facilitator for all focus group sessions; she spoke English, Pijin, and two other languages from her place of birth to the West of Honiara on Guadalcanal. The male researcher (WT) was originally from Savo Island and spoke Savo Savo, Pijin and English. Three non-indigenous researchers took notes during the FGDs, and followed up on specific points made during later one-on-one semi-structured interviews. One of these (AR) has lived in Honiara for over six years and is fluent in English and Pijin. Chief Investigator 1 (NG) conducted interviews in Pijin and English with MK, while Chief Investigator 2 (CH) conducted interviews in Pijin or English, depending on which language the respondent chose to speak. The separate FGDs for men, women and youth attempted to facilitate Savo Islanders to express their views and concerns. The diversity of views provided nuanced insight into the production and sale of crops. Triangulation of data was achieved by cross-reference to existing literature, and subsequent community follow-up discussions for data crosschecking.

Data were collected using a standard interview schedule for each focus group. The interview schedule comprised of thematically organized, open-ended exploratory questions, which were based on a literature review of peer reviewed publications and grey literature on agricultural production, food security and gender in Solomon Islands. The note taker/observers made written notes about key concepts that arose during focus group discussions and identified points for later discussion and clarification. Notes assisted with subsequent data coding and analysis.

Research comprised a total of three visits to Savo during 2015, with the research team returning to the research sites to provide feedback to focus group participants, and to cross-check data findings identified by the researchers. The first visit to Panuei from 15 to 18 February was a data gathering exercise, during which we held a general information session, and then separate FGDs for men and women. The second visit to Paibeta and Leboni from 18 to 20 March convened focus groups for men and women. During this visit, a separate focus group with youth was held at the Paibeta Community High School. Youth were asked to draw

pictures on paper in response to questions, and to then discuss their drawings. A third visit to all sites on Savo Island occurred between 14 and 15 July and aimed to cross-check the data and the validity of the research analysis with the research participants.

Data analysis

The qualitative methodological approach chosen for this study was Interpretive Phenomenological Analysis (IPA) as it can provide rich and detailed data from focus groups and semi-structured interviews. Researchers were conscious of their outsider positionality and engaged in critical self-reflection throughout the data analysis phase of the research process (Elliot & Timulak 2005: 152). This involved checking and auditing all steps of the analysis and careful archiving of each step of the analysis for later checking, as well as cross-checking of data analysis by other team members. Recordings of FGDs were listened to and workshopped by the research team within two days of each focus group being held. Recordings were then transcribed from Pijin and Savo Savo directly into English (WT, MK and AR). Data were then independently and manually coded (AR). During this initial reading, emerging insights and understandings were recorded as memos. The data were then divided into distinctive meaning units, which were constantly compared (Glasser & Strauss 1967) to each other and to other emerging categories, to develop codes and categories, later organized within broader thematic domains. NG and CH independently reviewed the coded data to ensure the rigour of the study, at times asking the other researchers to double check specific points and translations.

To assess the validity of the analysis, the main findings from this study were discussed with invited participants from Solomon Islands Government and donor agencies on Monday 13 July 2015 at a briefing workshop held in Honiara. This was followed by a third visit to all sites on Savo between 14 and 15 July, to relay the content of the discussion with government to the study participants in the villages, and to conduct a final audit of preliminary research findings. The final visit sought both to confirm the interpretation of data, and to discuss how the research could be used by Savo Islanders to address the concerns they had themselves identified. Once preliminary findings were confirmed, they were disseminated in report form in late August 2015 to community chiefs, government departments, non-government organizations and the Honiara City Council.

Results

The research team explored food production, market sale and income generation on Savo Island by examining trade with the HCM. A total of 76 participants spoke in the Savo Island FGDs about production for market, getting goods to market, and sale at market. They provided a sample that is large enough to be indicative, although it is clearly not an exhaustive survey. The survey should be read as a snapshot of how one part of one island in one province links directly into the food needs of Honiara residents. The following section presents the study findings in the words of Savo Islanders. It highlights several common trends relating to community sustainability, particularly issues of food production, market sale and income generation for Savo Islanders. Key findings from the study concern the issue of asset creation as Savo Islanders in the three sites surveyed transition from subsistence lifestyles to greater engagement with markets.

Gathered data indicates that the production and sale of agricultural produce on Savo Island is primarily subsistence-based and organized by household, with husband, wife and children

deciding what will be grown and working together. Some focus group participants reported working with other families at harvest times or employing young men to assist in the harvest. All of the youth in the sample group had been involved in harvest of produce and had been to the HCM with their parents to sell goods.

Respondents at the three sites sold the following products at HCM, or at other markets in Honiara: slippery cabbage; cacao; cassava; chickens; corn; eggplant; kumara (sweet potato); mango; megapode eggs; watermelon; nuts (betel nut, cut nut, ngali nut); pawpaw; peanuts; pineapple; pumpkin; savo apple; tomato; and several varieties of beans and capsicum. We have divided these products into two categories and defined them as follows: export crops—crops grown specifically for export and sold in bulk to companies in Honiara for processing (on Savo Island there are two products: cacao and copra);⁸ and market crops—which fall into two categories: crops grown specifically for sale at market, such as melons and peanuts; and crops taken to Honiara for sale when there is a surplus. While most produce is sold at the HCM, some is taken directly to purchasers, or sold in smaller markets.

Savo Islanders grow particular crops such as melon and peanut specifically to sell at market. Other harvested products (Savo apple and nuts) are sold when in season. Crops such as cassava and kumara are generally staple foods for Savo Islanders, but are also sold at HCM if there is sufficient surplus. Tomatoes, beans and cabbage are low cost items and are mostly grown for local consumption, or sold to other villagers on Savo Island. Vegetables are only sold at HCM when farmers have a surplus. Producers sell cash crops (watermelon and peanuts), as well as seasonal fruit and vegetables, and there is some specialisation in production between villages. Panueli residents were the most engaged with the HCM, with many specifically growing watermelon and peanuts for market sale, while people from Leboni and Paibeta on the whole engaged less with the market.

At the time of the first and second field visits during February and March 2015, it was the wet season, and many participants were concerned about lower production during this time. Cassava was identified as a crop that could still be grown, harvested and marketed in the rainy season, while other crops (such as peanuts) can spoil in wet weather and were not being sold.

Factors affecting livelihoods

The participants' comments below concerning selling produce at HCM can be generally divided into: general conditions at the HCM; the operation of blackmarket/resellers; personal security at HCM; and transporting goods to market.

CONDITIONS AT HCM

The market site itself is perceived by farmers as a necessary evil. While the site allows Savo Islanders to sell their produce, there are numerous issues that make it a less than attractive destination, a factor that is largely responsible for the interest in selling to 'blackmarket,' and at smaller markets. FGDs of men, women and youth in all communities noted security at HCM was poor:

It's not safe to stay at night in the market; you see women lying down, pickpockets come, people cry, that's how it is. (Female Farmer, Leboni)

⁸ Copra is the dried flesh of the coconut, pressed to extract coconut oil, with the remaining solid shredded for use in cooking, including as desiccated coconut.

If you go and come back in morning, things are lost; storage at the market is not good. Well, at the moment there is no storage—people lay produce all about— that's why people sleep at the market. (Female Farmer, Leboni)

We also want to have lights—it's there but it doesn't turn on. When drunken people enter the markets at night we are afraid, but there's nothing we can do, and security would not do anything. So we would sometimes stay [to guard produce] and wait until daylight. (Female Farmer, Panueli)

The market is a place which takes a lot of revenue for the Town Council, so the place should be safe. Women hear men fight and run away. They are frightened, then [they] come back and their food is gone (Male Farmer, Leboni)

When you go to market, pickpocketers and beligas [thieves] come too. Another problem too is \$100 flies from your pocket [either stolen or spent]. (Male Farmers, Paibeta)

Uniformly across communities, market fees were identified as a problem faced by both farmers and sellers, but for different reasons. For some the prices were too high:

Sometimes, you pay the fees for the market table and storage fees and then you are hungry, and you do not have money to pay for food for yourself. You go hungry. (Female Farmer, Leboni)

I have a question: Town Council use the fees for what? There is no building of other markets, or improvement at the markets. What is the use of it? (Male Farmer, Paibeta)

For others, the problem was the variety of fees charged for those who required long stays in the market, as well as differing fees for different crops:

I want to tell about the Market fee. We pay three times a day—in the morning you pay market fee, and in the afternoon a storage fee, and you have different fees for different crops. Coconut and root crops and melon, different fees.

Suppose you line up your goods—cassava, peanut, coconuts, whatever—there is a different fee. If you take melon, pineapple and coconut, sometimes you pay a total of three to four hundred dollars. (Male Farmers, Paibeta)

Participants across the different communities suggested that fees should be collected once a day or be charged for a particular time period, and that fees should only be charged by area and not by type of product sold:

They [HCM] do not follow the crops that people take. Some take a lot, some not so much, but on the ticket it doesn't put how many crops you take. For example, those on the Guale [Guadalcanal] plains take a lot of potato compared to her two to three baskets, but the ticket is the same price, it's not right. (Male Farmer, Leboni)

The men at the market should have a standard fee across the board, for everyone. Then they should also look at the timeframe. Some people just go for one day. Look at these areas and make a fee which fits everyone. Why not make one fee only across the board. Or a one-week fee, or a three-day fee. But when you sit down with melons sometimes it takes five or six days. (Male Farmer, Paibeta)

Space at HCM was identified as very limited, which led to negative effects for consumers and market sellers:

If we can't find any space then we can't sell our goods, so then we usually wait for the next day and this would force us to remain overnight, where our products can turn bad. So to spend the night we will pay an overnight fee. When it rains we will remain there and just bear it; we live like we're in a pigpen. (Female Farmer, Panueli).

The market house is too small, compared to the population that comes to the market. It's crowded inside and hard to get around to do what you need and do your market. The current market house does not cater for it. (Male Farmers, Paibeta).

The problem with sales and the market is there is only one place—people are squeezed up, then you see sales are low, demand is low; supply high, demand low. If there are two to three market outlets, that would be better. (Male Farmers, Paibeta).

The organization of market space and facilities, particularly water and sanitation, was also criticized:

I would like to stress to the City Council that they should have separate buildings for the sale of fish and for the sale of the crops. This is because of hygiene, because it is very bad at the moment. The foreigners would also hate the smell that it gives out. (Female Farmers, Panueli)

The toilets at the markets are also in very bad condition. There are some people that just shit on the floor and the water doesn't come every day. They would even shit at the wharf. They would not bother to find water and flush, and the toilet would fill up. (Female Farmers, Panueli)

Tell the Town Council to get fresh water for the market sellers. (Female Farmers, Panueli)

The lack of secure and suitable places to store food meant it was necessary for market sellers to sleep at the HCM with their produce. Participants said the lack of storage facilities negatively impacted sales and food quality:

Storage affects the quality of produce; storage at Honiara Market is like a copra dryer [too hot]. (Male Farmer, Paibeta)

Sometimes, this market house, I see something that is not right; it's full up with blackmarket people, and people who stay in the sun pay the same fee—they should have a lower fee. Town Council should improve or extend on this house to make the fee fair for everyone, all farmers; those outside face the rain and sun, but the fee is the same. Produce is not good to sell for the customers after it's been out in the sun. Everyone should have shelter. (Male Farmer, Leboni)

RESELLERS ('BLACKMARKET')

If HCM was crowded or difficult to access due to weather, or if Savo farmers had items that might spoil quickly (such as seasonal Savo apples), alternative market sites could be used at

Kukum, Fishing Village, White River, Borderline, and Talise markets, or farmers might sell the entire crop to a 'blackmarket' buyer:

Blackmarket people conduct another way of paying. When there is lots of produce they will buy and sit down with it—whatever people want to get rid of as soon as they reach the market. They will take especially things like banana that need to be sold quickly; then blackmarket is used. (Male Farmer, Paibeta)

A more accurate term for blackmarket sellers, and the term preferred in Honiara as the activities undertaken are legal, is 'resellers.' These people are not themselves farmers but are, rather, wholesale purchasers who buy an entire crop from a farmer and then sell the produce in smaller quantities at HCM. Resellers often live at the market and sell all year round, so have fewer production costs and overheads (such as fertiliser, labour, transport, or accommodation) than farmers; however, they do need to pay all selling fees and storage, if used.

People from Panueli village complained about intimidation and arguments resulting from disagreements between farmers and blackmarket/resellers. Such complaints mainly concerned the monopolization of stalls and space at the HCM, and to some extent the way resellers profit by selling smaller quantities of produce than farmers, but at the same price.

The blackmarkets always chase away us growers from the markets—we would tell them that we pay our fees, but they wouldn't even be considerate and give us space. (Female Farmers, Panueli)

The blackmarkets are a mix of Islanders from everywhere. We would like to have the blackmarket practice to stop. They would be there as if they live there. They have their mattresses, pillows and sometimes they have sex there. (Female Farmers, Panueli)

The blackmarkets should be taken out from the main market and allocated to another place. Some of them would buy parcels of nuts from the collectors and they would, in turn, take out some of the nuts from the parcels and then sell them for the same price with fewer nuts. There is no need for blackmarkets at all. (Female Farmers, Panueli)

When I go market, the blackmarket spoils us people who pay and sell there. They put a high price; if we lower the price they are cross. I fight them, because I have harvested at home. (Male Farmer, Leboni)

In the smaller community of Paibeta, however, blackmarket activity was not seen as such a problem. In fact, some Savo farmers even reported dabbling in the reselling trade themselves, buying produce from others from Savo on arrival in Honiara, and then selling the combined crop to resellers (Fieldnotes 2015).

SECURITY AT THE HCM

Focus group participants were concerned by the unregulated flow of people through the market during both daytime operating hours and after the market closed at night. Theft of produce and money also featured prominently as a concern, but as they explained, the problems faced at HCM were not only from those in the market to buy and sell, but extended to the conduct of security staff employed by HCC to guard HCM. Significantly, two thirds

of the comments on unsafe conditions at HCM noted security staff were part of the problem. Stealing and harassment of women were also noted. Villagers identified the two most commonly cited problems with security staff as drinking alcohol with *wantoks*,⁹ and not doing their jobs:

Security staff should look after the market and the people; they should check on us every now and then. There are times they would flirt with the girls or the women. (Female Farmers, Panueli)

Securities should be there the whole day, and a supervisor should be there to monitor the securities to make sure that they are doing their jobs. (Female Farmers, Panueli)

When drunken people enter the markets at night we would be afraid, but there's nothing we can do, and the securities would not do anything. (Female Farmers, Panueli)

Security staff are not doing good work, and then the fee is high, then there are many thieves around the market ... the market, it's not good—security is not doing their job; people go around to steal. (Male Farmers, Leboni)

Also, lots of people use the place to sleep, but it's not safe. People fight and security is slack and people who stay ... then others come and steal ... so problems come up. It is not safe. The youths use marijuana and *kwaso*¹⁰—drunken people ... they need good security there, to tighten it up, to take out these people. The farmers are the ones that buy [pay] fees for the market, not the marijuana and *kwaso* people (Male Farmers, Leboni)

Women were particularly vulnerable to violence, sexual harassment, theft and intimidation. Most women felt that they could do little about this, with one woman commenting that making a formal complaint meant she felt she could become a victim of violence at the hands of security staff:

One time I reported security staff at the Honiara Market. I went to the policeman and reported two to three security guards. I paid the storage fee and they stole my food. They [HCC] sacked them because they were drunk, but then I was frightened and came home. (Female Farmer, Leboni)

Others had witnessed HCM authorities try to intervene, but to no effect:

The Market Manager tried to do something; one time I heard him say to those drinking and smoking marijuana “you must go out”. So, they tried but it's hard. So they need good security and law enforcement ... “If you do not have work in the market, get out” they say, “if you pay, come—it's not a place for rest.” They say it on the speaker, but it does not happen. (Male Farmer, Leboni)

⁹ *Wantok* (literally ‘one-talk’) denotes a reciprocal social relationship between people with linguistic, kinship or other area village or island ties.

¹⁰ *Kwaso* refers to any illegally distilled alcoholic spirit. It can have a particularly high alcohol content. Solomon Islands Government has attempted to combat *kwaso* production and consumption through an intensive public education campaign since 2012.

TRANSPORTING GOODS TO MARKET

Transport of agricultural produce to market is the highest cost item incurred by Savo Islanders when selling goods at HCM. At the time of the research there was no port or jetty on Savo Island that would facilitate the transfer of produce to and from the HCM. Previously a ship had regularly serviced Savo Island but this was no longer the case, so the only means of transporting goods to market is by OBM. Savo Island farmers claimed they were at a distinct disadvantage compared to people in neighbouring provinces, who enjoy subsidized passenger and produce shipping.

OBM owners and operators are exclusively male, and there is a lack of competition on the pricing of OBM charters. Smaller communities also reported a lack of competition with respect to prices and routes. A charge of SBD\$100 per person per trip (Savo-Honiara, or Honiara-Savo) is a set price among transport providers, despite other variations in the costs related to running a boat, such as fuel. Freight is charged per bag, and prices vary depending on weight and volume. The charter price for a full boat of produce is generally SBD\$1000:

It's better if petrol is down like this month; they should lower the fare for the canoe, then it would be good for us. I complain to the owners of the canoes "you should talk to us"; every time we go market, costs are the same. Suppose we had a ship, then it would be good. (Female Farmer, Leboni)

While transport is the highest cost item in getting produce to market, it is also a risk, for both farmers and their produce. Participants commonly mentioned that using OBMs to transport goods to market often resulted in spoiled produce, and noted that the journey can be a dangerous one:

Transport is a sad problem because the boat is not safe to transport goods to market. No matter if you cover it with plastic, produce can get spoiled. Big waves can come and if the water spills on melons or peanuts it's OK, but for other crops like cassava it lowers the quality and there will be a smell on the produce. (Male Farmer, Paibeta)

When the sea gets rough, we would have to throw away [overboard] some of our bags because we would be afraid for our lives. (Female Farmer, Panueli)

While the most commonly mentioned problems regarding transport were cost and spoiling of produce during the sea journey, some participants, particularly those in the smaller communities, mentioned the absence of a schedule of boats. Produce that is ready for market requires immediate transport, but if the transport is not available at that time the produce begins to spoil, and farmers cannot then charge full price at HCM.

Most villagers prefer to go directly to Honiara rather than to Vila and then by road. HCM is however a difficult location at which to berth, due to the wrecks situated near its landing area, as well as the volume of vessels, rough seas, and rubbish and debris on the docking areas. A more common drop off point for Savo Islanders is the small sandy beach adjacent to the Point Cruz Yacht Club. Transporting produce then requires a taxi ride to HCM, which further reduces profit:

Some taxis charge \$100, I said to them, how can it be \$100 to get a boat from Savo then \$100 to get from the yacht club to the market? Sometimes men insist we give these prices, so we give it. (Female Farmer, Leboni)

Seafare [by OBM] spoils the market, you have to pay for everything you take, melon, cassava, pineapples, fares—you must give for everything, your money will be down. You get to market, then you need a taxi or anything, you've already spent your money on sea fare; it downs the profits. (Male Farmer, Paibeta)

Women in Panueli also noted OBMs could run out of fuel and deliver passengers to areas outside Honiara (such as Mamara River, 7 kilometres west of Honiara), which then required them to take a longer taxi ride to the HCM. The above comments suggest that taxis take advantage of farmers who need to get their food to market, especially when considering a standard per person fare for foreigners with luggage to travel the 11 kilometres (about 20 mins) from Henderson airport to Honiara CBD is SBD\$100. Despite the problems of transporting produce to market by OBM, Paibeta farmers mentioned that maritime transport sometimes provided Savo people with a competitive advantage at HCM. For example, during flooding and damage to roads on Guadalcanal (April 2014) it was still possible for Savo Islanders to bring produce to market, and to profit from the reduced competition.

While the bulk of Savo farmers take their produce to the HCM, some have found a profitable alternative is selling produce directly to buyers in Honiara:

I don't market very much, so what I do is I sell chickens. I contact first the buyers on mobile phone and ask the Chinese [shopkeepers/restaurateurs], "How many chickens do you want?" [The Chinese answer] 10 [chickens]. I say "I will sell [chickens] for \$70 [each]," they say "that's too much: \$60." "No," I say, "Us here at home will pay \$100." So, I go and sell them [directly to the Chinese in Honiara for \$70] and it's good, to take sideline pay. Chickens are good. (Female Farmer, Leboni)

One farmer in Panueli liaised with office workers in government to provide bulk produce (melons) on a specific pre-arranged date (coinciding with a pay day), and would charter a boat and a taxi to deliver the goods. He would collect all the money on the same day (Fieldnotes 2015). Several participants noted that what they earned from sales at HCM is an issue directly linked to the incomes of Honiara residents, a factor that requires further investigation for long-term food security of Honiara residents. The lack of disposable income, blackmarket price fixing and low quality produce are factors that could affect the diet of Honiara residents, and the profits of farmers on Savo Island.

Income generation

Savo Islanders traditionally practice matrilineal property inheritance, however as political decision-making and economic systems are dominated by men (Hedditch & Manuel, 2010: 140), women's traditional power as landowners is weakening. This pattern of changes in attitudes and policies with respect to land management results in women's loss of power, and has occurred in other parts of Solomon Islands. The drivers appear to be market demand for land and large-scale development such as logging, mining and plantations (Hedditch & Manuel, 2010).

The primary purpose of agricultural production for market and small-scale animal husbandry on Savo Island is to obtain money. The profits made by market sellers and farmers from the HCM were generally spent and not saved. In the smaller communities, people usually sold at market to raise funds for a specific purpose, such as contributions after a death, or for the church.

Production of some agricultural products for market is heavily gendered. For example, peanut, a product commonly grown for sale at HCM for between SBD\$2 and \$5 a stack, was predominantly grown and harvested by women. Watermelon, a high value crop fetching prices from SBD\$50 to \$100 a unit, was predominantly grown and harvested by men. Men and boys do the bulk of the work to prepare copra for sale, including taking it to Honiara. The very heavy weight of the sacks of copra (between 70 and 100 kilograms) was cited as a major reason for men being responsible for the copra trade.

Some Savo Island men enjoy large profits from their market trade, particularly through the sale of melon. Indeed, in Panueli, people said ‘farmer winnim wokka’ (a farmer could make more money than a person working for wages), and there was a particular focus on generating profit from sale at market whenever possible. This was in contrast to the dominant pattern in Paibeta and Leboni, which favoured sale at market to meet a specific purpose, such as to pay school fees or other community-related obligations. In the discussions with youth, while both young men and women said it was likely they would take produce to market in the future, young women were less keen than young men to do so, citing the labour-intensive work of growing, harvesting and selling crops as being harder than paid employment.

When it came to selling, most participants noted that only immediate family (spouse, children) were trusted to handle money, and they did not rely on extended family in the selling of produce. Women are the principal vendors at HCM of most agricultural produce from Savo Island.

There would be times when the men would go, when the women do not feel up to it. But usually it is the women that would do the marketing. (Female Farmers, Panueli)

Usually it is the women who sell the produce at the market because the men are not brave enough to do it. Most men are not used to doing the marketing. (Female Farmer, Paibeta)

Male farmers in Paibeta indicated that the issue of who sells produce at market is organized, and sometimes negotiated, within the family unit:

They will decide at the home, “you wife will go” and the woman will go, and no matter if it’s heavy or not the women will go. Or sometimes the man will go, “I’ll go” like that, they’ll decide in the home now. (Male Farmers, Paibeta)

Sometimes ... the family will identify themselves [who should go to market]—the man is not good to sit down at market, so the women will go; sometimes women are not good at it, so the man will go. (Male Farmers, Paibeta)

My experience at the market is that some men have bad luck, some women too. No sales will come. So people decide “father will go” or “mother will go”; they will decide who will go. (Male Farmers, Paibeta)

If the food is heavy, then men will go, or men and women together. (Male Farmers, Paibeta)

Women were generally perceived as being better at managing the money earned at market, and the men in all of the male focus groups stated that women were better at saving the money from sales at the HCM to bring back to the village, rather than spending it in Honiara.

When the women travel to the market they would go with the mentality of the price that they would aim to get for that day. When the amount is taken and the money returned, then the father and mother would discuss about the household goods that they would need to buy, including the children's welfare and the church as well. (Female Farmer, Panueli)

Women know how to budget—a man if he wants to go six [buy a six-pack of beer], he does it. (Male Farmers, Leboni)

Some men are ashamed ... [of misusing money when they go to market], some men go to market; everyone is not the same, but women are better at the market. (Male Farmers, Leboni)

In many families how to spend money gained from market sales was negotiated by the husband and wife, and in other cases the wife managed the household expenditures.

In my case, my wife holds the money from market, not me. That's the idea. When she comes back from the market we sit down with the family and then say "ok, this is for this, this is for that". That's what we do, I mean for my family. (Male Farmer, Paibeta)

The wife is the boss of money. (Male Farmer, Panueli)

When asked about the positive and negative impacts of gaining revenue from market, the youth focus group reported that men were more likely to spend market profits on alcohol and gambling than to return cash to Savo:

The good side is we can get money for food, another one is school fees, money for school fees and satisfying our needs, clothes, plates, teaspoon, cup, pots, things like that. Bad impacts of it [cash money] is sometimes people use it for alcohol, to drink beer. The other thing is gambling—some fathers take money and just use it for gambling. This is what we think. (Males in youth focus group)

Ok the good impacts we see are food, clothes, uniform and house building. When you make good money you can build a good house, then household things, plates, cups, things like that. Bad effects are alcohol, smoking, playing casino ... ok a likely example—when a man from here dies we spend money on that time, deaths okay? Playing casino, when men take money from melon or peanut they take money and misuse it, go play cards, casino and stuff. Another one too is when they take money to buy cigarettes, same as alcohol. (Females in youth focus group)

Gender and asset creation

The data reveal important implications for community sustainability on Savo Island, which is clearly linked to effective transport of agricultural surplus, ease of marketing and income generation. Significantly, our findings from Savo Island are in line with broader patterns of gendered agricultural production in Solomon Islands, where women are responsible for the production of the majority of subsistence foods and also make up the majority of market vendors, while men tend to be more involved in the production, sale and marketing of more financially lucrative cash crops, such as watermelon (Hedditch & Manuel 2010).

Cash gained from the sale of agricultural produce at HCM is the primary source of income for most Savo Islanders. It is therefore important to highlight that as women were primarily responsible for the marketing of agricultural produce, the money they raised from this activity was typically the only source of cash for the family, and thus an important feature of community sustainability as Savo Islanders engage with the market economy. Women's position as the primary source of cash flow to the household provided them with access to and control over resources necessary to pay basic household expenses, such as school fees and food, cited as areas of most common spending. No participant in this study mentioned having a bank account, and money was spent soon after its collection. Several said banking and saving might be more desirable than dealing only with quick flows of cash.

The profitability of farming is further affected by the type and cost of transport available to Savo Islanders, as well as by market fees. The costs of transport and the length of time spent at HCM clearly affect the profitability of farming. The absence of a wharf or wharves on Savo Island means that OBM is the only way to transport produce to market. This has resulted in a fixed price among OBM owners, who benefit from every voyage. Storage and market fees also eat into costs for all farmers who do not sell their crop to resellers. Some farmers volunteered the information that they might get as little as SBD\$200 from an entire crop of peanuts, after all costs were deducted. Melons are a large cost item, but are also heavy, and several boats may be required to take a crop of 800 to 1000 melons to market.

While some participants in the study sold to resellers, the majority of farmers felt that blackmarket was monopolizing the best lots at the HCM, which they felt affected their profits at the market. Resellers were seen as intimidating, and Savo Islanders felt they were responsible for pushing up the price of fresh food, and reducing value for money for the customer by charging more for smaller quantities of produce. The overcrowding of HCM presents problems for farmers wishing to gain access. Farmers also linked the presence of resellers to overcrowding and security issues in the market.

Farmers, especially women, are overwhelmingly concerned about hygiene and sanitation in HCM, their personal security and the security of their produce. Savo Island women stay overnight in the HCM, often for up to a week at a time, which broadly affects village life and precludes them from engaging in alternate income generating activities. They go to HCM to sell the produce, and in the process are exposed to a range of security and health problems, including the risk of assault and poor sanitation. The gendered roles in the provision of transport, selling of produce at HCM and managing of household income have repercussions for economic development on Savo Island, and for community sustainability, particularly as women are central to securing and managing the income essential for household expenses.

Conclusion

The aim of this article has been to unpack the challenges and tensions inherent in engaging with an emerging market economy while building sustainable communities. It provides evidence-based research that can inform government and donor responses to economic issues of rural food production, transportation to market, and the articulation of farmers with consumers in Honiara. The emphasis placed on market sale by Savo Islanders points to the growing importance of the cash economy for rural communities, and on removing transport and safety barriers that hamper wider and more effective market engagement.

Acknowledgements

This research was made possible through funding from the Australian Catholic University and the University of Wollongong. Ethics approval for the research was gained through the Australian Catholic University: HREC Registration No: 2014 251N. The authors thank the villagers of Panueli, Leboni and Paibeta on Savo Island for their participation and involvement, and Mr Charles Kelly and Mr Ronald Amigo of Honiara City Council for their support of this study of the Honiara Central Market. We acknowledge the assistance of Dr Anouk Ride with research design, and for her coordination of the local research team of Melinda Ki'i and Walter Ben Turasi.

References

- Asian Development Bank (ADB) 2016, 'Key Indicators for Asia and the Pacific 2015: Solomon Islands.' Online, available: <https://www.adb.org/sites/default/files/publication/204091/sol.pdf> [Accessed 12 January 2017].
- Australian Bureau of Meteorology (ABM) and CSIRO 2014, 'Climate Variability, Extremes and Change in the Western Tropical Pacific: New Science and Updated Country Reports. Pacific-Australia Climate Change Science and Adaptation Planning Program Technical Report,' Australian Bureau of Meteorology and Commonwealth Scientific and Industrial Research Organisation, Melbourne, Australia.
- Braithwaite, J., Dinnen, S., Allen, M., Braithwaite, V. & Charlesworth, H. 2010, *Pillars and Shadows: Statebuilding as Peacebuilding in Solomon Island*. Australian National University Press, Ebook, Canberra. Online, available: <http://press.anu.edu.au/publications/series/peacebuilding-compared/pillars-and-shadows> [Accessed 30 January 2017].
- Coppel, N. 2012, 'Transition of the Regional Assistance Mission to Solomon Islands,' State, Society and Governance in Melanesia Discussion Paper, October. Australian National University, Canberra. Online, available: http://pacificinstitute.anu.edu.au/outrigger/wp-content/uploads/2013/02/SSGM_DP2012_101.pdf [Accessed 30 January 2017].
- Cronin, S. J., Petterson, M. G., Taylor, P. W. R Randall, B. 2004, 'Maximising Multi-Stakeholder Participation in Government and Community Volcanic Hazard Management Programs: A Case Study from Savo, Solomon Islands,' *Natural Hazards*, vol. 33, no. 1: 105–136. doi: <https://doi.org/10.1023/B:NHAZ.0000035021.09838.27>
- Elliott, R., & Timulak, L. 2005, 'Descriptive and Interpretive Approaches to Qualitative Research,' in *A Handbook of Research Methods for Clinical and Health Psychology*, (eds) J. Miles & P. Gilbert. Oxford University Press, London: 147–159.
- Food and Agriculture Organization (FAO) 2012, 'Solomon Islands Country Programming Framework (CPF) 2013–2017, in Pacific Multi-Country CPF Document 2013–2017: 124–137.
- Food and Agriculture Organization (FAO) 2015a, *The State of Food Insecurity in the World (SOFI)*, Division: Agriculture and Economic Development Analysis Division.
- Food and Agriculture Organization (FAO) 2015b, *FAO Hunger Map*. Online, available: <http://www.fao.org/hunger/en/> [Accessed 23 October 2016].
- Fieldnotes 2014, Authors' Fieldnotes, November.
- Fieldnotes 2015, Authors' Fieldnotes, February.

- Genova, C., *et al.* 2010, 'Market Analysis of Fresh Vegetables in Solomon Islands,' AVRDC: The World Vegetable Center, Shanhua, Taiwan.
- Geodynamics 2014, Savo Island Geothermal Power Project Update. Online, available: <http://renuenergy.com.au/wp-content/uploads/2016/09/20140212-Completion-of-ESIA-FINAL.pdf> [Accessed 23 August 2016].
- Georgeou, N., Hawksley, C., Ride, A., Kii, M. & Turasi, W. 2015, Human Security and Livelihoods in Savo Island, Solomon Islands: Engaging with the Market Economy: A Report for Honiara City Council. Australian Catholic University and University of Wollongong. Online, available: <http://ro.uow.edu.au/lhapapers/2090/> [Accessed 23 August 2016].
- Georgeou N. & Hawksley, C. 2016, 'Australian Aid in the Pacific Islands,' *Australian Outlook*, 26 July. Online, available: http://www.internationalaffairs.org.au/australian_outlook/australian-aid-in-the-pacific-islands/ [Accessed 23 August 2016].
- Glasser, B. G. & Strauss, A. L. 1967, *Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine de Gruyter, New York.
- Hedditch, S. & Manuel, C. 2010, Solomon Islands: Gender and Investment Climate Reform Assessment in partnership with AusAID, International Finance Corporation. Online, available: http://www.ifc.org/wps/wcm/connect/0465238049fb0beca26eebd1a5d13d27/IFC_Gender+and+Inv+Climate+Reform+Assessments+_solomonislands.pdf?MOD=AJPERES [accessed 19 August 2016].
- James, P., Nadrarajah, Y., Haive, K. & Stead, V. 2012, *Sustainable Communities, Sustainable Development: Other paths for Papua New Guinea*. University of Hawaii Press, Honolulu. <https://doi.org/10.21313/hawaii/9780824835880.001.0001>
- Kruijssen, F., Albert, J.A., Morgan, M., Boso, D., Siota, F., Sibiti, S., & Schwarz, A. J. 2015, 'Livelihoods, Markets, and Gender roles in Solomon Islands: Case Studies from Western and Isabel Provinces,' *SPC Women in Fisheries Information Bulletin*, no. 26: 24–36. Online, available: <http://pubs.iclarm.net/resource/centre/AAS-2013-22.pdf> [Accessed 23 October 2016].
- Solomon Islands Government (SIG) 2014, Solomon Islands Budget 2014 Budget Strategy and Outlook, Budget Paper: Volume 1.
- Solomon Islands Statistics Office (SISO) 2006, Household Income and Expenditure Survey 2005/6: Provincial Report, Part Two. Online, available: <http://www.statistics.gov.sb/statistics/demographic-statistics/household-income-and-expenditure-surveys> [Accessed 23 October 2016].
- Solomon Islands Statistics Office (SISO) 2015, Household Income and Expenditure Survey 2012/13: Provincial Analytical Report: Volume 2. Available at: <http://www.statistics.gov.sb/statistics/demographic-statistics/household-income-and-expenditure-surveys> [Accessed 23 October 2016].
- United Nations Women (UNW) 2013, A Survey of Honiara Marketplaces, Solomon Islands, July–October.
- United Nations Women (UNW) 2014, Markets for Change Project in Solomon Islands: Market Profiles. Online, available: <https://www.unwomen.org.nz/sites/default/files/wp-content/uploads/M4C-SOI-Project-sites.pdf> [Accessed 23 October 2016].