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International Agricultural Research**

# Final report

*project*

## **Identifying opportunities and constraints for rural women's engagement in small- scale agricultural enterprises in Papua New Guinea**

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## 2 Executive summary

This project examined the factors explaining women's low level of engagement in small-scale agricultural enterprises and identified key pathways facilitating women's move into managing their own small-scale enterprises. The goal was to gain new knowledge to design strategies to assist women to increase their involvement in small-scale rural enterprises.

Rural women in Papua New Guinea (PNG) are keen to increase their cash incomes. Whilst research among smallholder households has demonstrated the important role of women in the production and sale of agricultural produce, few studies have focused on the opportunities or barriers to women engaging more strongly in the agricultural sector, especially as managers of small-scale agricultural enterprises. This project addressed these knowledge gaps by drawing on and building on previous ACIAR socio-economic studies (ASEM/2006/127; ASEM/2008/036; ASEM/2010/052; ASEM/2012/072; ASEM/2014/095) to develop a detailed understanding of the enabling factors contributing to the success of entrepreneurial women in the agricultural sector.

The main achievements and impacts of the project are:

- Successful trial and evaluation of the Village Savings and Loans Association (VSLA) model to develop rural women's financial and business management skills. There are now eight VSLA groups established in PNG, two piloted under this project, four subsequently established by CARE and two established by Coffee Industry Corporation (CIC) with CARE support. Women's savings levels, access to credit, and rates of establishment or expansion of micro/small-scale enterprises all improved
- Better understanding of the role and effectiveness of gender-specific agricultural extension programs for improving women's economic empowerment and participation in export cropping.
- Greater knowledge of the main socio-cultural and economic factors affecting women's participation in agribusiness and the key processes and pathways that facilitate women's involvement in agribusiness.
- Identification of new and emerging entrepreneurial opportunities and risks for women in fresh food trading as intermediaries and wholesalers with the growth in volume and complexity of domestic commodity markets.
- Capacity building of three PNG Early Career Researchers through postgraduate studies at Curtin University and Unitech, PNG.
- Completion of a range of scientific and industry publications.
- Enhanced collaboration between research institutions, private sector and NGOs in the coffee and oil palm industries to enable more collaborative and gender-inclusive approaches in agricultural extension.

Further information on the project and outputs can be accessed from the Pacific Livelihoods Research Group website: [www.pacificlivelihoods.com](http://www.pacificlivelihoods.com)

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### 3 Background

Women play a central role in agricultural production both for home consumption and for cash income. For most rural women, local marketing of garden foods and the sale of export crops are their two main sources of income (Koczberski et al. 2001; Koczberski 2007; Curry et al. 2007; Inu 2015; Curry et al. 2019). Previous ACIAR research among cocoa, oil palm and coffee smallholder households examined in detail the socio-economic and cultural factors influencing household decision-making and agricultural practices (ASEM/2002/014; ASEM/2008/036; ASEM/2012/072; ASEM/2016/100). Whilst these studies identified the significant labour contributions of women to cash crop production and their limited access to the income derived from their labour, female entrepreneurs in these export and domestic market crops were not investigated and nor were the factors facilitating or restricting female entrepreneurship.

In contemporary PNG, women are becoming more involved in establishing and managing small-scale agribusiness enterprises, and many are keen to grow their incomes. Some pioneering women are beginning to engage more strongly in domestic and international markets as large-scale producers and retailers and are forging new pathways that are increasing women's income (see Sharp et al. 2015; Macintyre 2017; Spark et al. 2020). For example, there are women in the coffee, cocoa and coconut industries who have started small businesses purchasing coffee for export, establishing cocoa nurseries or producing coconut oil products. In the oil palm growing areas of WNB, some women have used the oil palm income to seed-fund micro-enterprises. There are also growing numbers of women, especially in the highlands, engaging in large-scale production and trade of food crops, at a scale of production that was previously the domain of men (Curry et al. 2019; Sharp 2021). The large-scale production and trading of crops like betel nut, pineapples and European vegetables as well as other economic livelihood activities like money lending, livestock and transport-related businesses are attracting a new type of entrepreneurial women.

Although they are few in number, little is known of what underpins these women's capacity to engage in successful enterprises. It is not well understood how these women transition from subsistence production supplemented with modest income from small-scale local marketing of vegetables to managing larger-scale enterprises. What is known is that increasing women's income and the economic opportunities open to them is very difficult in a country such as PNG, where gender inequalities are stark (Drucza & Hutchens 2008; Ganster-Breidler 2010, World Bank 2012; Ryan et al. 2017; Hamago 2021). For example, women have/are:

- Lower average education levels than men
- Higher levels of illiteracy than men
- Poorer health indicators than men
- Limited access to savings and credit
- Fewer economic opportunities than men
- Often occupy less remunerative roles than men
- Receive a disproportionately lower share of export cash income for their labour than men
- Experience very high rates of gender-based violence
- Heavy workloads
- Limited access to household income derived from export commodity crops
- Less likely than men to have access to agricultural extension training & advice
- Less likely than men to own a business or large assets

Despite the vast literature on small-medium enterprises (SMEs) generally, and reports written on SMEs in PNG, there has been very limited detailed research on how women, particularly rural women, have made the transition to managing their own small/micro rural enterprises. Nor is there much information in this literature on the barriers that make it difficult for other rural women to make this transition. Many of the reports and studies on SMEs in PNG are aid donor reports and often based on rapid assessments of women in business, focused largely on SMEs operating in the formal sector in urban/peri-urban areas (see for example, Ganesh et al. 2015; Mishra & Smith 2016). Moreover, they do not adequately deal with the village socio-cultural context in which many small rural enterprises operated by women are embedded. Furthermore, whilst reports often recognise the high labour demands on women, few explore the socio-cultural context of these high labour demands and how they interact with women's capacity to expand entrepreneurial activities.

Furthermore, SME research in PNG has overlooked the nexus between the indigenous economy and entrepreneurship. However, the authors of this report have conducted research on how the indigenous economy, which remains strong in rural PNG, determines people's level of engagement in the market economy. They have argued that much of the labour deployed in export cash cropping, for instance, is recruited through labour exchange relationships based on kinship following labour models from the subsistence economy, rather than on wage labour (e.g. Curry & Koczberski 2012). Social returns on investments in cash cropping which add to social capital are often very important, and influence people's level of engagement in the market economy. Similarly, research in PNG has revealed that business enterprises vary in their capacity to accommodate the demands of the indigenous exchange economy. For example, demand sharing can undermine retention of recurrent income to meet business operating costs and build capital to support the long-term sustainability of enterprises (Curry 2005; Barclay and Kinch 2013; Bainton and Macintyre 2013; Sengere et al. 2019). Research has also documented how social embeddedness has shaped agricultural trade networks (Sharp 2013; 2016). Therefore, it is important to bring the socio-cultural context of business enterprises into the analysis, especially in environments where the demands of the exchange economy are high.

Comparisons with other developing countries indicate that the contribution of the SME sector to PNG's national economy is far below what it could be (DNPM 2018). To correct this imbalance to create more entrepreneurial opportunities for Papua New Guineans, the PNG government and donors are assisting growth in the SME sector. The Government aims to achieve sustainable economic growth outside of the extractive resources sector, and distribute economic wealth more equitably by increasing the number of businesses owned by Papua New Guineans. However, as noted above, there is a substantial knowledge gap to overcome before a well-informed understanding of the SME landscape in PNG can be developed. It remains unclear what types of development/policy interventions and enabling environments are required to facilitate women's engagement in SMEs in rural PNG. With a strong focus on female entrepreneurship this project contributes to filling this gap by generating knowledge of the enabling factors that explain the success of entrepreneurial women and the barriers and challenges they have encountered. This new knowledge will assist donor agencies and relevant private and public-sector organisations in PNG to design more evidence-based strategies to raise women's engagement in agribusiness.



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## 4 Objectives

The project objectives were to:

1. Identify the enabling factors and individual characteristics associated with successful entrepreneurial rural women.
2. Identify the key pathways and processes to facilitate the transition of smallholder women into successful entrepreneurs in agribusiness.
3. Improve the capacity of women to engage in successful enterprises in agribusiness through better access to networks and business development services and a more conducive policy environment.

Until this project, little was known about rural women's engagement in micro small-scale enterprises, the pathways of successful female entrepreneurs, or the barriers and constraints that limit women moving into managing their own small-scale enterprises.

The project aims addressed this gap in our knowledge through:

- i) developing new knowledge of the factors that explain women's low level of engagement in small-scale agricultural enterprises;
- ii) identifying the processes and pathways that facilitate their move into agribusiness; and
- iii) piloting/scaling out identified pathways for women to move from Tier 1 and 2 to Tier 3.<sup>1</sup>

These aims were underpinned by three main research questions that guided the project activities and data collection. These were:

- What factors have enabled some rural women to establish and manage successful agribusinesses in the main export crops and fresh food produce?
- What are the key enabling and constraining factors determining rural women's transition from Tier 1 and Tier 2 producers to Tier 3 producers, traders and managers of small-scale agricultural enterprises?
- What opportunities exist locally for women to become more engaged in commercial agribusiness and how might these opportunities be enhanced?

The aims and objectives of the project were informed by the everyday experiences of many rural smallholder households in the cocoa, coffee and oil palm growing regions of PNG. Income from export tree crops alone is often insufficient to meet households' rising demands for cash to meet the growing needs of household members. This is for two reasons: 1) in many rural areas population and land pressures are resulting in family holdings of export crops being subdivided/shared among adult and married children; and 2) people's demand for cash is rising in line with increasing costs of living relative to income and rising material expectations such as mobile phone ownership and rural electrification. Moreover, often as the competing demands on household income grow, women lose out to male members of

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<sup>1</sup> Tier 1 and 2 are levels where women earn a small and irregular income from subsistence and cash cropping activities. Tier 3 level is where the main income is earned from small enterprises in the informal and formal economy.

the household who are better positioned to appropriate household income. Given the increased demand for cash, more women, and other household members are keen or compelled to explore other farm and non-farm cash earning opportunities – one avenue being micro-enterprises.

The rising demand for cash and the increased livelihood pressures on smallholder households are trends known to the current PNG and Australian project team members as many have worked together on previous ACIAR-funded socio-economic research among cocoa, coffee and oil palm smallholders, and market sellers (e.g. ASEM/2008/036, ASEM/2012/072 and ASEM/2014/095). This project builds on the findings from these previous projects, with some field sites and communities in the current project being involved in previous research. This brought a longitudinal perspective to the research by adding a richer and deeper perspective to the data.

Finally, the project objectives reflect a broadening of the research and extension activities of the PNG partner organisations. The sole research focus on a specific export crop (such as oil palm or coffee) is being replaced by an approach that recognises smallholders (both men and women) are involved in a wide set of livelihood activities to maintain household income and food security and household well-being. This has led some of the organisations to work with smallholders on food security, savings and financial literacy, and income diversification. Thus, this project is closely aligned with this shift in emphasis in research and extension amongst the partner organisations.

## 5. Methodology

The research was carried out among rural women/households and private and public sector organisations in cocoa, coffee, oil palm and fresh food. Women are involved to varying extent in the production and marketing of these crops. Fieldwork was carried out amongst communities in rural and some peri-urban areas, and at local and urban markets, across seven provinces. The field sites were:

- Eastern Highlands Province (EHP): Coffee growing areas, particularly the Bena and Asaro areas near Goroka.
- West New Britain Province (WNB): Oil palm growing areas around Hoskins and Bialla.
- East New Britain Province (ENB): On the Gazelle Peninsula and Bainings area.
- Autonomous Region of Bougainville (ARoB): In the Arawa, Tinputz and Buka Districts
- Western Highlands Province (WHP): Mt Hagen.
- Morobe Province: Lae
- National Capital District: Port Moresby



Figure 5.1: Map of Papua New Guinea showing provinces and provincial capitals. Map reproduced with the permission of CartoGIS Services, Scholarly Information Services, The Australian National University. <https://creativecommons.org/licenses/by-sa/4.0/>

The breadth of fieldwork sites enabled the research to capture different socio-cultural, economic and agricultural contexts, and to uncover the range of barriers and opportunities faced by women and communities across PNG.

### Research Framework

At the start of the project a one-day workshop was held at CIC with the project partners to design and develop a research and methodological framework and prepare draft interview guide sheets to inform objectives 1 and 2. The framework and interview guide sheets were further developed during fieldwork during 2017. The methodological and analytical research

framework was structured around the main components of the livelihoods framework (i.e. assets, structures and processes that influence livelihood outcomes) and drew on pathway approaches to map and analyse the range of constraining and enabling factors that influence women's involvement in small agricultural enterprises (Box 5.1). Pathway and livelihood approaches are complementary approaches and provided a solid framework for structuring and analysing the research data (see CARE n.d.; DFID 1994; Scoones 1998).

Box 5.1. The study's methodological and analytical frameworks
<p><b>Sustainable Livelihoods Framework</b></p> <p>Vulnerability Context</p> <p>Livelihood Assets</p> <p>Transforming Structures &amp; Processes</p> <p>Livelihood Strategies</p> <p>Livelihood Outcomes</p> <p><b>Pathways Approach</b></p> <p>Pathway Contingency</p> <p>Multiple Pathways</p> <p>Constraining &amp; Enabling Pathways</p>

## Data Collection

Data collection was carried out at various levels (Table 5.1):

- Individual level
- Household level
- Institutional, and
- Local/national level

The purpose of multi-level research and data collection was to gain a broad understanding of the constraints and opportunities influencing peoples' involvement in small-scale agricultural enterprises. Constraints and opportunities operate from the individual and household levels (e.g. an individual's literacy skills and the household's access to resources such as land and labour), through to the institutional and local/national levels. For example, the new SME policy of the National Government aims to promote small business development. However, inadequate government upkeep of roads, lack of training support for women and law and order problems in some areas are barriers to developing small businesses; and intra-household gender relations and expectations may limit the time and resources available for women to take on additional income-earning activities. Thus, collecting data at various levels enabled the team to identify and understand the many layers of influence that shape livelihood opportunities, people's capacity to take up those opportunities, and the path-contingent nature of developing particular livelihood options for women.

Interviews, focus groups and questionnaires were, in most cases, carried out in Tok Pisin.

Table 5.1: Summary of data collection

Data collection Focus	Sample Group	Data collected	Study Sites
<b>INDIVIDUAL</b>	<p>Women and men operating successful MSEs</p> <p>Female smallholders and members of women co-operatives/farmer groups/saving groups</p> <p>Male smallholders and members of farmer groups or savings groups.</p> <p>Village &amp; group leaders (female and male)</p>	<p>Individual face-to-face interviews (activities 1.2, 2.1, 2.3, 3.1 and 3.3)</p> <p>Questionnaire surveys (activities 2.2 and 3.1 )</p> <p>Focus groups (activities 2.1, 2.2, 2.3, 3.1 and 3.3)</p> <p>VSLA savings and loans records (activity 3.1)</p>	<p>WNB ENB EHP WHP Morobe ARoB Port Moresby</p>
<b>HOUSEHOLD</b>	Household heads (female & male)	Individual face-to-face interviews (activities 2.1, 2.2, 3.1)	<p>WNB ENB EHP ARoB</p>
<b>LOCAL/ NATIONAL LEVEL</b>	<p>Private Sector organisations (exporters)</p> <p>NGOs and church leaders</p> <p>Women's organisations/cooperatives Farmer groups</p> <p>Local service providers</p> <p>Local marketing authorities</p>	<p>Individual face-to-face interviews</p> <p>Formal/informal meetings (activities 2.2, 2.3, 3.1, 3.4)</p>	<p>WNB, ENB EHP ARoB</p>
<b>INSTITUTIONAL</b>	<p>CIC CCI OPIC &amp; PNGOPRA ENB Provincial Market Authority FPDA Formal Financial Sector institutions (banks, microfinance) Tertiary educational institutions Provincial Government Departments</p>	<p>Individual face-to-face interviews</p> <p>Formal/informal meetings (activities 2.2, 2.3, 3.1, 3.4)</p>	<p>WNB ENB EHP ARoB</p>

### Objective 1: Identify the enabling factors and individual characteristics associated with successful entrepreneurial rural women

#### Small business interviews

A total of 115 women were interviewed across seven provinces (Table 5.2). The sample comprised of two groups: Women operating a range of small-medium and micro rural-based enterprises (n=70) (see below) and women operating in the fresh food market trading sector, either as producer-sellers, resellers, or informally renting land for garden production (n=45). A different interview guide sheet was used for each group.

Table 5.2: Sample selection locations

Province	<i>n</i>
ARoB	22
ENB	32
WNB	15
EHP	30
WHP	8
Morobe	6
NCD	2
total	115

The sample selection criteria for women operating a range of rural-based enterprises (n=70), was based on women whose enterprises were:

- Independently controlled & managed by the interviewee, or jointly with a partner (with the interviewee taking the lead).
- Owner taking full responsibility for daily business decisions and finances
- Operating either in a rural area or with links to or servicing rural communities
- Linked to the agricultural sector
- Operating in the formal or informal economy or both
- Operating at least 4 days a week
- Generating a regular and reasonable income for the owner
- Providing self-employment and/or employing between 1 and 20 people (paid or/and unpaid)
- In operation for at least 6 months at the time of the interview

The study sample captured a broad range of different types of enterprises operating in both the formal and informal economies. Sample recruitment used the following categories:

Category 1: Small-medium enterprise (high turn-over, mostly formal economy) (n=29)

Category 2: Commodity Crop Agro-enterprise (n=10)

Category 3: Micro enterprise operated by an individual or by a family (largely retail & in the informal economy) (n=11)

Category 4: Market traders/producers (small operators) (n=8)

Category 5: Market traders/producers (high turnover) (n=1)

Category 6: Mixed Micro-enterprises – more than one main income generating business operating in the formal/informal economy or both (n=11)

Interviews were guided by a semi-structured interview sheet, comprised of four main sections:

- *Personal background*: socio-demographic data, work and business experience, educational status, personal traits and attributes.
- *Business background*: overview of business, size of business, how it was started, access to resources/capital to start business, role of social and kinship networks, motivation to start business
- *Business management: success and constraints*: Business management strategies, role of key people in business success, biggest barriers and challenges, response to

challenges, enabling factors, relationships, support from husband and family, pathways of success

- *Socio-cultural issues*: socio-cultural context, cultural expectations, gender norms, balancing business and cultural obligations/ work demands/jealousies, attitudes of men and women towards business, values and beliefs.

The use of a semi-structured interview guide sheet aimed to enhance a level of consistency and allow comparisons to be made across the interviewee data.

### **Fresh food market sector interviews**

Interviews with women operating in the fresh food market sector comprised of two groups: market traders and resellers (n=35) and women informally renting gardening land for commercial crop production (n=10). The interview guide sheet outlined above formed the basis of interviews with market traders and resellers, but with adjustments to capture more information on the changing nature of trading in informal markets and emerging opportunities and constraints faced by women in the domestic market trading sector. Interviews were conducted in ENB, WNB, EHP, WHP and Port Moresby. Interviews with informal land renters were conducted in four villages in the Daulo district – lower Asaro LLG and one village in Goroka District. Interviews focussed on the economic and social dimensions of land rentals, role of social and kinship networks and gender relations within the household.

Except for a few interviews, all interviews were recorded and transcripts entered into Excel for categorisation, coding and the identification of themes for analysis.

### **Objective 2: Identify the key pathways and processes to facilitate the transition of smallholder women into successful entrepreneurs in agribusiness.**

Data collection under Objective 2 gathered information on four key areas:

1. Household and local level factors determining rural women's transition from small producers to traders and managers of small-scale agricultural enterprises.
2. Local and provincial level opportunities for women to strengthen their engagement in agribusiness, with a focus on marketplaces
3. Gender-targeted extension policies/programs
4. Identification of key enabling factors and constraints in women's economic pathways

Many of the interviews conducted under Objective 1 also informed and complemented the findings and outputs for Objective 2. In particular, interview data collected from women operating in the fresh food market sector were analysed to obtain an understanding of the new opportunities emerging in domestic food markets (Section 7.3).

A range of methods was used, namely:

- Semi-structured interviews with cocoa, oil palm and coffee smallholder households.
- Interviews with female oil palm and cocoa smallholders.
- Focus group discussions with local women's and community groups in the cocoa, oil palm and coffee growing areas of ENB, WNB and EHP.
- Semi-structured interviews with agricultural extension officers, community leaders, and relevant personnel in private and public sector agricultural and financial organisations

- Informal interviews with relevant personnel in provincial market authority organisations and FPDA.
- Questionnaire surveys among women who were oil palm smallholders and cocoa farmer group members.

Raylin Gena (Unitech MA student) also conducted 75 detailed questionnaires, and five interviews with female resellers at the Lae Urban Market as part of her thesis titled “Examining the success and constraints of women fresh produce resellers at the Lae Urban Market in Morobe Province, PNG”.

### Women in the agribusiness value chain in export commodity crops

A major area of data collection focussed on examining women in the agribusiness value chain in the cocoa, oil palm and coffee sectors and evaluating gender-targeted extension policies/programs in these export commodity crop sectors. Data were collected to:

1. Evaluate the *Mama Lus Frut* Scheme in the oil palm sector. This was a successful extension scheme introduced 21 years ago in WNB to facilitate women’s involvement in oil palm production by providing more secure access to oil palm income.
2. Examine the role and impact of female extension officers on the participation of women in export crop production in EHP, ENB and WNB.
3. Assess the effectiveness of a private sector extension model for female and male cocoa farmers in ENB. Three core groups were selected for this study and they were: smallholders, extension officers and extension managers.

#### 1. Oil palm sector. *Mama Lus Frut* Scheme (MLFS)

To assess the impacts and outcomes of the MLFS, the evaluation adopted five key indicators of change and impact, namely:

- Women’s access and control over household oil palm income;
- Household well-being;
- Household and social relations;
- Women’s individual agency; and,
- Institutional environment.

Data were collected in the oil palm growing areas of Hoskins and Bialla of WNB in 2017 and 2018. The team used a mixed methods approach that included informal face-to-face interviews, focus groups and household survey questionnaires. Most of the data were collected at Hoskins. *Lus Frut Mamas* (female *Mama* card holders) were randomly selected from the three main categories of smallholders: residents of the Land Settlement Schemes (LSS); Village Oil Palm (VOP) growers; and, those residing on Customary Rights Purchase (CRP) blocks. Data collection entailed:

- Questionnaire surveys with 100 registered *Lus Frut Mamas* in the Hoskins area. The survey covered ownership of the *Mama* Card, access to the income, use of the income, and benefits or problems with the *Mama* Card.
- One-on-one informal interviews with 25 *Lus Frut Mamas* in the Hoskins area. Interviews focused on the impacts of the MLFS at the individual and household levels, decision making and intra-household relations.
- Four focus groups at Hoskins and Bialla. Discussions explored changes resulting from the MLFS and the impact of emerging land and population pressures on the use and control of the *Mama* Card by women.



- Numerous interviews/meetings with male and female Extension Officers (EOs) at Hoskins and Bialla. Interviews aimed to assess officers' perceptions of the impact of, and future sustainability of, the MLFS.
- Secondary data. Smallholder production records held by the company and industry reports were analysed. Interview data collected in 2000, which informed the report by Koczberski et al. (2001) were also consulted.

## 2. Roles and impacts of female extension officers in coffee, cocoa and oil palm:

The roles and experiences of female extension officers working in the coffee, oil palm and cocoa sectors were assessed. Data collection was undertaken in 2017-2018 in EHP, WNB and ENB – the major producing areas of these export crops. The study used a mixed method approach, which included questionnaire surveys, semi-structured and informal interviews, focus groups, observations, and secondary data such as government, organisational and industry reports.

Much of the data collected formed part of a MPhil thesis (Hamago 2019). Data collection focussed on obtaining information from female and male extension officers, female smallholders, coffee exporters and relevant personal at the three major agricultural export commodity organisations in PNG (Table 5.3).

Interviews with female officers focussed on their experiences of working with women farmers in export crop production, community acceptance of female extension officers working with male farmers, promotion and training opportunities and the main challenges and socio-cultural constraints faced in the workplace. Information collected from interviews with male extension officers related largely to understanding male views of the involvement of women as female extension officers, and women's involvement in export cash crop production. All interviews were audio-recorded and transcribed for analysis.

Table 5.3: Data collection on women in agricultural extension.

Respondents	Methods
Female Extension Officers (FEOs)*. n=12 Coffee = 3, Cocoa = 3, Oil palm = 6	Structured interviews using oral history and individual testimonies.
Male Extension Officers (MEOs). n=17 Coffee = 8, Cocoa = 3, Oil palm = 6	Structured interviews through standardised questionnaire.
Successful female smallholder farmer groups n =27 individuals. Coffee = 4, Cocoa = 4, Oil palm = 19	Three focus group meetings were used to form 3 case studies
Female agriculture graduates from CARE International (PNG) Graduate Program. n=3	Structured interviews using oral histories and individual testimonies as an approach.
Supervisors from partner organisations taking part in the CARE Graduate Program n=1	Structured interviews and focus group with coffee exporters
CARE staff: The Graduate Program Coordinator. n=1	Formal interview

\*There are very few female extension officers employed in the three industries. At the time of the study, the sample represented 60% of the total number of female extension officers employed in the coffee, cocoa and oil palm industries.

## 3. Cocoa sector: Private sector extension model

New extension strategies in response to the devastating impact of the insect pest, Cocoa Pod Borer (CPB), were assessed as part of an MPhil thesis (Peter 2021). The fieldwork was

undertaken on the Gazelle peninsula, ENB in 2019-2020 among smallholder farming families in three farmer groups/cooperatives:

1. Kadaulung Butam Farmer Group located in Kadaulung #2 Village.
2. A women's farmer group named Sandaon Cooperative Society located within the Burit council ward and within Sandaon Village.
3. Suina Cooperative Society in Karo Village.

Data were collected from smallholder households (n=54), extension officers (n=15), and extension managers (n=7). Data collection focused on assessing the effectiveness and impact of the new private sector smallholder partnership model from the perspective of smallholders themselves. Qualitative and quantitative data were gathered through formal and informal interviews/discussions, farmer group meetings, CPB training observations, and questionnaire surveys. Areas of extension explored in interviews/questionnaires included leadership and management, coordination and training support, gender inclusion, resource support, the impacts of CPB on smallholder livelihoods and CPB training packages.

**Objective 3: Improve the capacity of women to engage in successful enterprises in agribusiness through better access to networks and business development services and a more conducive policy environment.**

A substantial component of the research and data collection in Objective 3 was trialling and evaluating a pilot Village Savings and Loans Association (VSLA) model in Bena area (EHP). Data collection from 2018-2021 included:

- Household livelihood surveys with 50 households as part of ASEM/2016/100 (which shares the same field site) in 2018 and 2019, and in 2019 a further 27 household surveys were conducted under the present project. These surveys collected data on household composition and characteristics (age, gender, education, etc), income, assets and financial inclusion. These data are being compiled under the ASEM/2016/100 project and are yet to be analysed.
- A basic numeracy assessment, targeted at the forms of numeracy needed for VSLA participation, conducted in late 2019 and early 2020 with 73 VSLA members.
- VSLA passbook records accessed, with the permission of the group members. These records include data on member savings (in the form of share purchases), loan taking and repayment information for the 2018 and 2019 cycles. We were also granted access to the record keepers' books.
- Short end-of-cycle questionnaires with individual VSLA members following the share-outs for the 2018 and 2019 saving and loans cycles. The questionnaires collected data on use of loan money, use of share-out returns and repayment challenges. These were undertaken with 42 of the 50 group members in 2018, and 76 of the 79 group members in 2019.
- Focus groups following the end of the 2018 and 2019 cycles recording information on challenges faced by individuals and groups, changes in the community and within households, and on member achievements and aspirations. 15 focus groups were conducted, with typically four members in each focus group.
- Observational data at group meetings and share-out events. Video and audio recordings were taken at the 2018, 2019 and 2020 share-out events.
- A small number of interviews with group leaders, in addition to many informal conversations.

The project had planned to do focus groups, collect passbook data, and conduct end-of-cycle questionnaires and evaluation surveys following the end of the 2020 cycle, however, the Covid-19 situation in PNG through early 2021 prevented this from being completed by the end of the project. However, the CIC researchers are continuing to collect data on the 2020 round (in particular the collection of 2020 passbook data) and these data will be incorporated into the final VSLA evaluation report which will cover the period 2018-2020.

## 6 Achievements against activities and outputs/milestones

**Objective 1:** To identify the enabling factors and individual characteristics associated with successful entrepreneurial rural women.

No.	Activity	Outputs/ milestones	Completion date	Comments
1.1	<i>Review of international and PNG literature</i>	Draft review of factors affecting successful involvement of women in agribusiness in PNG.	Year 1, Q2	<p>Reviews of Literature achieved:</p> <p>Fort, W. &amp; Koczberski, G. (2020). <i>Women's Savings (and Loans) Groups in Developing Countries. A review of the literature</i>. Discussion Paper 1. Pacific Livelihoods Research Group, Curtin University, Perth.</p> <p>Fort, W. &amp; Koczberski, G. (2021). <i>Women's Involvement in Small Medium Enterprises and Agribusiness in Papua New Guinea</i>. Discussion Paper 3. Pacific Livelihoods Research Group, Curtin University, Perth.</p> <p>Also relevant:</p> <p>Harris, S. (2017). <i>Moralising Money: The Dilemma of Saving in Papua New Guinea</i>. Honours' thesis, Curtin University Perth.</p>

1.2	<i>Conduct interviews with 90 successful female entrepreneurs in agribusiness</i>	Report containing detailed case-studies of successful entrepreneurial women	Year 4, Q4	<p>115 interviews achieved. Conducted interviews in Eastern Highlands, East New Britain, West New Britain, Bougainville, Western Highlands and Morobe provinces, and the National Capital District</p> <p>Raylin Gena (Unitech MA student) conducted 75 detailed questionnaires and 5 interviews surveys with female resellers at Lae Urban market.</p> <p>Selected case studies provided in Appendix A. Report in draft form. The basis of the draft report is provided in Section 7 and Appendix A of this report</p> <p>Published articles: Spark, C., Sharp, T.L.M. &amp; Koczberski, G. (2021). <i>Relationality and economic empowerment: The role of men in supporting and undermining women's pathways</i>. The Journal of Development Studies 57(7), 1138-1153. doi: 10.1080/00220388.2020.1850697</p> <p>In progress Raylin Gena PNG UniTech Masters Thesis. <i>Examining the Success and Constraints of women fresh produce resellers at the Lae Urban Market in Morobe Province, PNG</i>. Expected submission date July 2021.</p>
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**Objective 2: To identify the key pathways and processes to facilitate the transition of smallholder women into successful entrepreneurs in agribusiness in PNG**

No.	Activity	Outputs/ milestones	Completion date	Comments
2.1	<i>Conduct 75 household interviews &amp; focus groups with women &amp; smallholder households</i>	Identification of the main socio-cultural & economic factors, gender & household dynamics affecting women's transition to Tier 3.	Year 4, Q4	<p>Achieved:</p> <p>WNB. 25 semi-structured interviews, 7 focus groups and 100 survey interviews with oil palm households. Four Interviews with male business owners in WNB completed.</p> <p>ENB 54 semi-structured interviews with cocoa smallholder households conducted.</p> <p>EHP 15 focus group discussions completed as part of Activity 3.1.</p> <p>Together with interview data from Activity 1.2 a good understanding of the main socio-cultural and economic factors affecting women's transition to Tier 3 has been gained, together with a better understanding of how gender norms and household relations influence the pathways to women's economic empowerment.</p> <p>Publications:</p> <p>Busse, M. &amp; Sharp, T.L.M. (2019). <i>Marketplaces and Morality in Papua New Guinea: Place, Personhood and Exchange</i>. Oceania 89(2), 126-153.</p> <p>Busse, M. &amp; Sharp, T.L.M. (ed.) (2019). <i>Marketplaces and Morality in Papua New Guinea. Special Issue of Oceania</i> 89(2).</p> <p>Curry, G.N., Koczberski, G., &amp; Inu, S.M. (2019). <i>Women's and Men's Work: the Production and Marketing of Fresh Food and Export Crops in Papua New Guinea</i>. Oceania 89(2), 237-254.</p> <p>Sharp, T.L.M. &amp; Busse, M. (2019). Cash crops and markets. In: Hirsch, E., and Rollason, W. (eds) <i>The Melanesian World</i>. Abindon: Routledge, (pp 194-222).</p>

2.2	Review & assess current & recent range & types of services & training programs in public & private sector organisations & NGOs.	Identification of the types of training programs/ interventions to facilitate women's engagement in agribusiness.	Year 3, Q1	Achieved: Hamago, M. 2019. <i>The role and impact of female extension officers on the participation of women in export crop production in Papua New Guinea</i> . MA Thesis. Curtin University, Perth Australia. Available at: <a href="https://espace.curtin.edu.au/handle/20.500.11937/76109">https://espace.curtin.edu.au/handle/20.500.11937/76109</a>
		Report outlining assessment of private & public sector programs assisting women.	Year 4, Q1	Hamago, M.R. (2021). <i>Experiences of Female Agricultural Extension Officers in Papua New Guinea. A Study of the Coffee, Cocoa and Oil Palm Sectors</i> . Pacific Livelihoods Research Group, Curtin University, Perth. Available at: <a href="https://pacificlivelihoods.com/publications/">https://pacificlivelihoods.com/publications/</a>
		Identification of pathways that must be in place for women to move to Tier 3.	Year 4, Q1	Peter, E.T. (2021) <i>The assessment of the effectiveness of a private sector extension model for smallholder men and women in Papua New Guinea</i> . MA Thesis, Curtin University, Perth Australia (submitted & under examination)  Sengere, R.W., Curry, G.N. & Koczberski, G. (2019). <i>Forging Alliances: coffee grower and chain leader partnerships to improve productivity and coffee quality</i> . Asia Pacific Viewpoint. doi:10.1111/apv.12222.  Data collection for the evaluation of the <i>Mama Lus Frut</i> Scheme in WNB is complete. Survey and interview data have been analysed and a written report is well advanced.

2.3	<i>Conduct interviews with local women's &amp; community groups &amp; public &amp; private sector organisations</i>	Improved understanding of the capacity of local organisations to provide effective services to women and the local constraints & enablers to link women to market opportunities	Year 4, Q4	<p>ENB &amp; WNB. Completed 32 interviews and 15 meetings in the cocoa and oil palm sectors</p> <p>EHP. Completed 20 interviews with public &amp; private sector organisations in the coffee sector and among NGOs.</p> <p>EHP. Completed 15 Focus groups &amp; 4 interviews with female and male members of the VSLA (Activity 3.1)</p> <p>Interview data has provided valuable insights into the constraints operating at the individual, local and institutional level that both enhance and limit economic opportunities for women.</p> <p>Sharp, T.L.M. (2019). <i>Haggling Highlanders: Marketplaces, Middlemen and Moral Economy in the Papua New Guinean Betel Nut Trade</i>. Oceania 89(2), 182-204</p> <p>Sharp, T.L.M. (2021). <i>Intermediary trading and the transformation of marketplaces in Papua New Guinea</i>. Journal of Agrarian Change 21(3), 522-544.</p> <p>Publications from Activity 2.1 also relevant.</p>
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PC = partner country, A = Australia

**Objective 3: Improve the capacity of women to engage in successful enterprises in agribusiness through better access to networks and business development services and a more conducive policy environment.**

No.	Activity	Outputs/ milestones	Completion date	Comments
3.1	<i>Pilot &amp; evaluate a 'business development package' to assists T2 women transition to T3 managers of small-scale agricultural enterprises.</i>	Round 1 <u>financial training</u> completed	Year 1, Q2	<p>The initial pilot Village Savings and Loans Association (VSLA) groups at Bena with a total of 50 members in 2018 expanded to four VSLA groups and 119 active members regularly savings and taking out small loans. From initial plans to establish VSLAs in two communities, VSLAs are now operating in eight communities.</p> <p>Most members of the initial groups received training from CARE International PNG on: Family Business Management; Financial Literacy and The VSLA Methodology.</p> <p>Savings have increased substantially among women and many identify enormous benefits both individually and at the household/community level. See sections 7 and 8 below.</p> <p>A report on the first savings loan cycle: Koczberski, G., Sharp, T., Wesley, J. &amp; Ryan, S. (2019). <i>Village Savings and Loans Association: Eastern Highlands, Papua New Guinea</i>. Preliminary Report. Curtin University, Perth, Australia. Can be downloaded from <a href="https://pacificlivelihoods.com/">https://pacificlivelihoods.com/</a></p> <p>A more substantial report is in draft form. It draws on data collected from 2018 – 2021 and focuses on the economic, social and community impacts of the VSLA groups.</p>
		Round 2 <u>financial training</u> completed	Year 2, Q2	
		Round 1 <u>organisational development training</u> completed	Year 2, Q2	
		Round 2 <u>organisational development training</u> completed	Year 3, Q2	
		Round 1 <u>Women's savings scheme</u> completed	Year 1, Q4	
		Round 2 <u>Women's savings scheme</u> completed	Year 2, Q4	
		Round 3 <u>Women's savings scheme</u> completed	Year 4, Q4	
		Report on first evaluation of training and savings scheme	Year 2, Q4	
			Year 4, Q4	



3.3	<i>Collaborate with private sector to establish a women's resource centre in WNB to improve women's livelihoods though enhanced opportunities to establish small-scale agribusiness</i>	Women's resource centre established in Pata Painave community.	Year 1, Q4	The Resource Centre is now operating but suitable programs relevant to this project have yet to be established by Hargy Oil Palm's Community Affairs section. Discussions were held with the relevant staff at Hargy in June 2019 and the two potential initiatives that were identified last year have been postponed due to COVID-19 and staff changes.
		Training programs delivered by local NGO.	Year 2, Q2	
		Women's group income stream from oil palm established & sustainable.	Year 2, Q4	
		Report evaluating the resource centre & its activities completed.	Year 4, Q4	
3.4	<i>Collaborate with extension &amp; private sector organisations &amp; NGOs in cocoa, coffee, oil palm &amp; fresh food produce to develop policies &amp; programs to empower rural women &amp; create agribusiness opportunities for them</i>	<p>Polices &amp; programs developed (written up as reports)</p> <p>Some components of this activity will be initiated as part of Activities 3.1-3.3</p>	Year 4, Q4	<p>Information collected as part of Activities 2.1, 2.2, 2.3, 3.1 and 3.3 is working towards meeting the proposed outcomes for Activity 3.4</p> <p>The series of workshops in PNG to further this activity were not held due to COVID. Plans are in place for online meetings with the PNG teams to finalise collating the information gained from each of the sectors to report on the results.</p>

PC = partner country, A = Australia

## 7 Key results and discussion

This section is in four parts, each addressing the key results linked to the main objectives of the project.

### 7.1. Rural women's transition into small and medium enterprises: What are the key enabling and constraining factors determining this transition?

Women interviewed in this study were operating a wide range of micro and small-scale rural business (Table 7.1). The range of businesses operated by women – from SMEs largely based in the formal economy to market traders and micro-mixed enterprises – enabled the study to capture women with very different backgrounds and experiences.

Most women operating small micro-enterprises are partly engaged in the subsistence economy which they augment with earnings from micro and small-scale enterprises in the informal economy. Generally, their businesses have the following defining features:

- Small-scale
- a high level of informality
- many start very small with tiny amounts of capital and grow through time and/or by diversifying income sources
- hold minimal business assets (equipment, buildings, financial capital)
- heavy reliance on family and social/personal networks for access to resources (e.g. labour, capital, transport and customers)
- many are prone to closure for a range of reasons, particularly for non- or delayed payment for goods sold on credit
- enterprises often operated periodically and may be purpose orientated and operate for a short period until the goal is achieved (e.g. accumulate funds for purchase of housing materials or to make customary payments)
- most had low turnovers and generated low incomes (of less than K100/day)
- self-employment for owner, with a reliance on paid or unpaid (family) labour.
- often socially driven motivation to operate the business (e.g. goal is to assist family/kinship group and community)
- sometimes enterprise is solely a means of survival – an economic necessity
- strongly embedded in the local cultural and social context.

Table 7.1: Interviewee sample by enterprise type

Enterprise category	Number
Category 1: Small-medium enterprise	23
Category 2: Commodity Crop Agro-enterprise	10
Category 3: Micro enterprise operated by an individual or by a family	7
Category 4: Market traders/producers (small)	8
Category 5: Market traders/producers (large)	1
Category 6: Mixed Micro-enterprises	11

Note: see Methodology Section for category details.

For most women, their enterprise was their primary source of cash income, which benefitted them in several ways. Apart from providing a regular source of cash, the business afforded opportunities to improve household well-being and to strengthen kinship and family relationships. Women placed much importance on earning income to pay for school and university expenses and to better meet their socio-cultural obligations. For example, despite

the very different contextual settings, most women were interested in supporting the social and indigenous economy, including through contributions to, and support for, community, church and kinship-related events and celebrations. For some women, their enterprise was important because it provided the basis to overcome financial hardship (e.g. widows and single mothers). For other women running a micro/small enterprise was one of the few options they had due to their low literacy levels and limited access to resources such as land, finance and labour. For example, in WNB in the oil palm growing areas where land is short, small non-farm enterprises such as small-scale retailing of store goods and managing transport were ways to overcome land shortages.

An overview of the main results from the interview data is presented below. The discussion is in two parts. The first discusses the enabling factors underlying business success. The second part summarises the challenges and obstacles women face in establishing and operating small businesses. These challenges have been identified by women themselves. Seven case studies are presented in Appendix A to illustrate the range of experiences and pathways women travel on to establish and manage their own enterprise.

### **Enabling pathways and factors underlying business success**

Several pathways and factors were identified to explain women's success in business. These were categorised into seven main groups.

1. Assets
2. Social and community relations
3. Adaptive capacity
4. Personal traits and attributes
5. Business knowledge and skills
6. External linkages
7. Location and accessibility

There is substantial overlap and strong linkages/relationships amongst these categories. Each is discussed below.

**Assets:** Access/control/ownership of livelihood assets that shape and create opportunities to move into or expand a business.

Our use of the term 'assets' draws on the sustainable livelihoods framework which recognises five sets of assets: natural, physical, financial, human (health, knowledge, skills and work experience), and social (kinship network, household relations, social and community networks, mentors, village/community leadership, social status and prestige) (Scoones 1998; Johnson et al. 2016). This section focuses solely on women's access to education and savings to illustrate how these assets affected the type of enterprise women could pursue. The important role of kinship networks, household relations and business skills are discussed separately below.

In PNG women have less access to key assets than men (Macintyre 2008; World Bank 2011; Curry et al. 2019). Thus, establishing and sustaining a successful business often reflected the ability and skills (human capital) of women to overcome their disadvantaged position. For several of the women we interviewed, the ability to start and sustain a successful business was influenced greatly by the availability and access to key assets such as education, markets, land, labour, finance, vehicles, and social and kinship networks. However, ease of access to various assets varied considerably amongst women and this determined the types of businesses they were able to pursue. For example, as expected, most of the women with vocational and tertiary qualifications were predominantly those operating small-medium enterprises (Category 1) (Figure 7.1). These women also differed

greatly from women in the other business categories (especially those operating solely in the informal sector) in terms of their access to critical assets such as market linkages, formal finance, work experience, and community leadership roles.

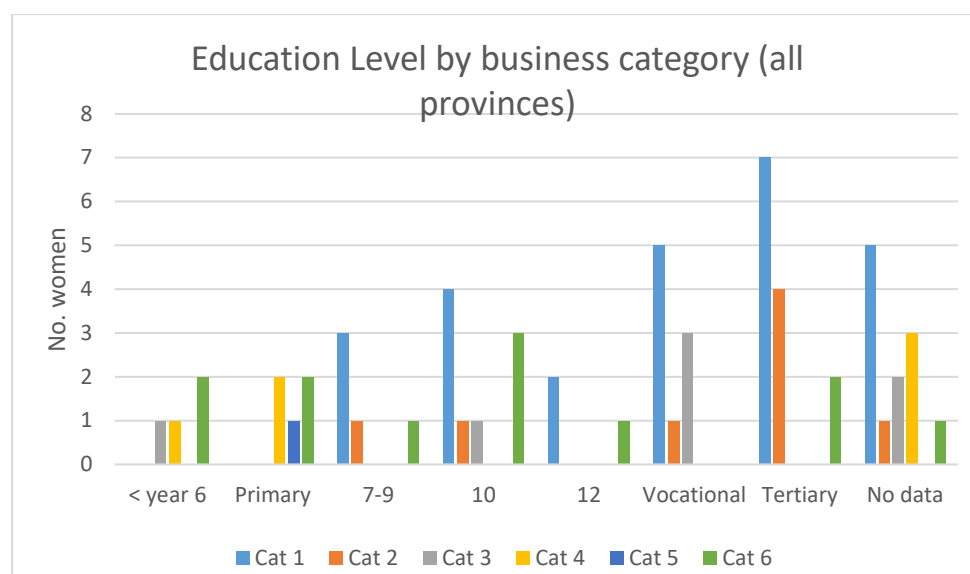


Figure 7.1: Education level by business category

Personal savings (financial capital) were an important asset referred to by women when explaining their ability to start and sustain a business through difficult times. To finance the establishment of their businesses, nearly half of the women used their own personal savings and several other women used a combination of their own personal savings and support from family and friends (Figure 7.2). Accumulating sufficient personal funds to invest in a small enterprise is a major accomplishment in a country where savings levels among women are very low, and was a necessity given women's restricted access to formal credit channels (World Bank 2011; Banthia et al. 2013). However, as discussed further below whilst many women lacked access to formal sector credit or tertiary education, they were able to draw on resources through social and kinship networks to establish and sustain their businesses.

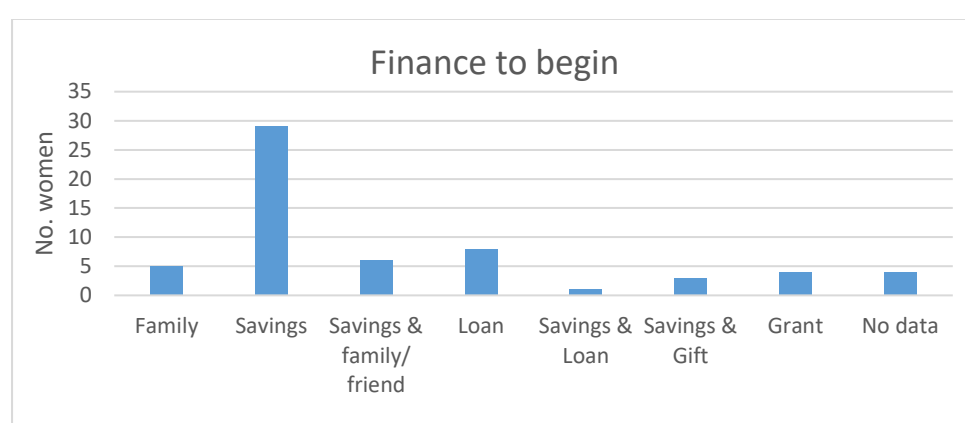


Figure 7.2: Women's source of finance to start their enterprise

**Social and community relations:** The social and relational contexts that facilitate opportunities to establish and sustain businesses.

A key factor dominating discussions with women when explaining their success was the importance of social and community relations/networks. Women often talked about their strong relationships with their immediate and extended family, clan members and church and community groups. Harmonious household and social/community relations were seen as critical, not only for establishing a small business but for providing a stable, supportive and secure environment for the business to thrive. Further, women relied heavily on family and social/personal networks for access to a range of resources critical for establishing, sustaining and expanding a business. These included land, unpaid labour, finance, transport, technical skills, expert knowledge and customers. Good social and community relationships also helped build women's status and prestige which was important especially in terms of establishing a solid customer base. Thus, business success was embedded in relationships – at all levels – husband, immediate family, extended family, clan, village, community, church and workplaces.

The majority of women said their husbands were among the main reasons why their businesses were successful. Most claimed that without a supportive husband it would not be possible to establish a business or to get through tough economic downturns. Indeed, some women said that when the support of their husband was withdrawn, the viability of the business was often threatened. As women expressed:

*“When we women start businesses, we depend on capital from our husbands...but there are a lot of women now venturing into business... Women at home are managers. They look after the kitchen, food and everything...so women can be successful [business owners] ..if given the opportunity and have a supportive husband or family”*

As mentioned above, husbands, in particular, were pivotal in their success in terms of improving women's access to land for commercial use, labour and finance. Thus, whilst many women lacked access to formal sector credit or tertiary education, they were able to draw on resources through social and kinship networks to establish and sustain their businesses.

**Adaptive capacity:** The capacity and willingness to implement adaptive economic strategies in response to changing social and economic contexts, risks or opportunities to start, sustain or expand a business.

Given the highly variable, constantly shifting and difficult economic context in which most enterprises exist in PNG, many women referred to their capacity to adapt and modify their business strategies as a factor explaining their success in business. Strategies included shifting business locations, diversifying income sources, adopting new ways to access land or learn new skills. Such strategies/techniques were often in response to dealing with an altered business operating environment (e.g. disputes with relatives) or to address ongoing challenges to their business (e.g. high levels of customer debt).

Some women identified more individual concepts of adaptability. Here women referred to how at a personal level they adopted new gender roles, actions or mindsets to venture into small business or to respond to changing circumstances such as widowhood, divorce or new economic opportunities. For some women, the opportunity or necessity to start a small enterprise meant they had to reassess their capacity to run a business, embrace new strategies to balance work and household responsibilities and manage both cultural obligations and business profits. Thus, successful women were highly adaptive and willing to try new practices at both a business and at an individual level.

**Personal traits and attributes:** The enabling personal character traits and qualities necessary for starting and managing a business.

Several common personal characteristics were shared by most of the women interviewed. They were strong, highly motivated, stoic, resourceful, determined and had an ability to identify opportunities. Despite the challenges of operating a small enterprise, the women shared a readiness to tackle obstacles (e.g. cultural barriers) and were rarely discouraged by the many set-backs they experienced (e.g. law and order problems and family issues). They sought solutions to the problems they encountered and strove to re-open their businesses after a major disruption. Many of the women had less than Grade 10 education.

Women themselves put a lot of value on personal attributes such as determination and drive. When asked what personal attributes were important in explaining their success, or what personal attributes they considered necessary for women to do well in business, just over 40% identified that being confident, strong and determined were key to success (Figure 7.3). Several women mentioned that much of their motivation, confidence and determination was driven by their desire to pay for their children's school fees, improve family living standards and be a model community member who could assist their community when necessary. Furthermore, when women were asked what was the source of their strength and drive, often they talked about their supportive husbands and families and the importance of their faith/religion.

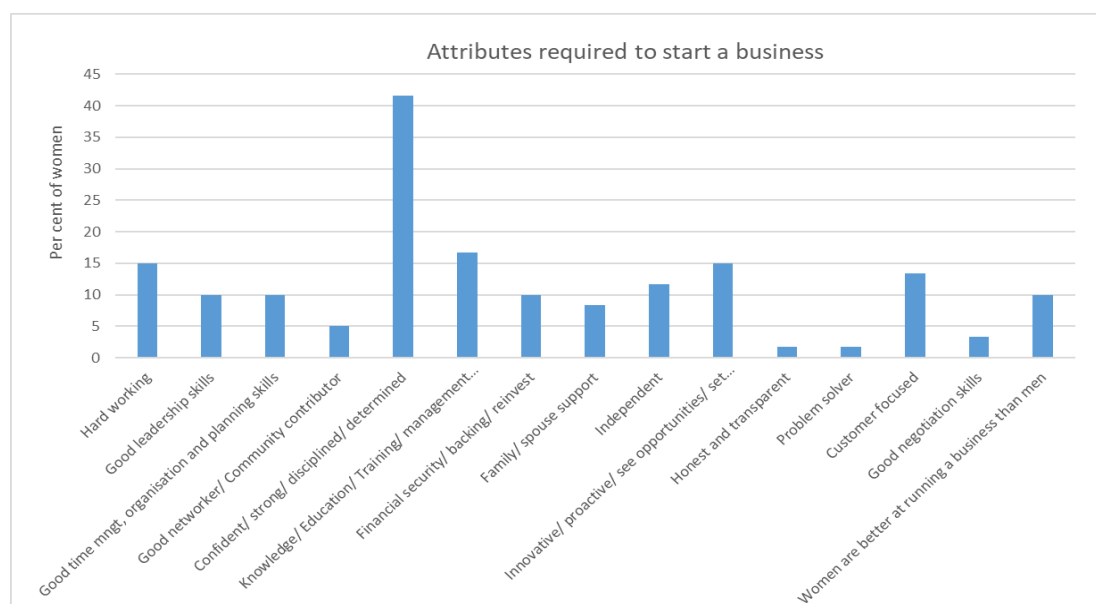


Figure 7.3: Personal attributes women identified as essential for enterprise development

**Business knowledge and skills:** Effective and creative business management and financial strategies used to sustain a business in a challenging operating environment. Women recognised that to operate an enterprise successfully women required skills in balancing their business responsibilities and finances, with their domestic responsibilities and indigenous and community obligations and expectations. Given that enterprises operated by women (and men) were embedded in the local cultural and social context, business management required more than the standard business skills considered essential for successful business operations in a western context. Instead, core business skills such as finance, customer and time management must be balanced with 'traditional' demands on their enterprises. Meeting traditional obligations and community expectations, not only bestows individual prestige and status, but can help ensure business success through

facilitating access to key resources (e.g. land and unpaid labour) and support (e.g. customers, security and networks), especially during difficult times.

There were several strategies women employed that helped create a workable balance between business principles and meeting traditional demands and expectations. These included: (i) having a separate account/purse for money for cultural obligations; (ii) operating a small side business, such as selling goods from a roadside or market to fund community and traditional activities; (iii) avoiding accepting money from relatives for start-up business funds (to reduce future debt obligations); (iv) not recruiting extended family as paid employees; and alternatively (v) paying for labour so they are not indebted to kin, as indebtedness can lead to requests that may impact the business.

**External networks:** Extra-village networks (local, national, international) that provide opportunities and access to resources and markets.

External networks beyond women's traditional local networks of family and friends were important in helping establish businesses or supporting fledgling enterprises. External networks ranged from access to trading contacts in different locations, local community organisations, local and regional NGOs, government extension services, private sector organisations, training and learning institutions to global networks such as international donor agencies. These networks provided some women with access to new opportunities such as new markets, new support services, information and seed capital. For example, some women interviewed in Bougainville reported on how the flow of donor funds and personnel into the province following the end of the ten-year civil war, provided them with access to training and/or seed funding that facilitated their move into small business management. Some women took advantage of the lack of accommodation in several rural towns in Bougainville and opened guest houses for the increasing number of donor personnel and consultants visiting the island following the 10-year civil conflict.

**Location and accessibility:** A favourable local biophysical, social, economic and institutional environment that fosters healthy business conditions.

A significant factor explaining business success was location. Most of the women operating their rural enterprises were located within one or two hours' drive of an urban centre, where road and communication linkages to urban facilities and populations were relatively good. Other local biophysical and economic factors that were important included, for example, in the Asaro valley the fertile soils, relatively good transport infrastructure and close access to the provincial capital of EHP. This was helping to drive the growth of commercial-scale vegetable production that enabled women to take up new entrepreneurial and marketing opportunities in domestic food markets. Similarly, in the oil palm growing areas of WNB the presence of two large oil palm milling companies, good road infrastructure, access to grid electricity and a large plantation and smallholder population with regular and relatively high incomes provides a favourable local economy and strong customer base for women to enter a range of micro/small-scale enterprises.

In PNG, lack of, poor quality or unreliable road and telecommunication infrastructure, limited market access, together with remoteness and poor land quality have long been recognised as key obstacles to economic and business development (Scales 2010; ADB 2014).



## Challenges women face in establishing and operating small businesses

Despite women's successful performance in small business, nearly all faced ongoing challenges to business sustainability. As one woman running a fast-food takeaway business in AROB said, *"people perceive business owners as having a lot of money; in reality they are struggling"*.

The challenges women raised were often related to family commitments, heavy workloads, family or village conflicts, jealousies, family illness and death. Women spoke about the constraints on their enterprises and their capacity to expand, as well as what they recognised as the wider constraints on women, generally in PNG. These challenges women face sit within broader macro constraints, such as law and order problems, access to capital, transportation and infrastructure development constraints, a cumbersome business regulatory system, low human resource capacity and poor information flows. These all serve as major disincentives for women (and men) to move into the SME sector.

These major challenges identified included the following.

## Societal/community/cultural attitudes, norms and expectations

Women highlighted a range of societal, community and cultural attitudes and norms that deterred them from initially moving into business and which at times threatened the financial viability of their businesses. The major challenges women faced were largely related to their prescribed gender roles that created heavy daily workloads for them and societal expectations of what work and activities were considered culturally appropriate for women. Women carry much of the work burden associated with childcare, domestic and household tasks and subsistence gardening. Data collected from 42 of the interviewees found that the mean number of children was 4.3. Thus, many women explained the tireless difficulties of constantly trying to find a balance between the demands of their business (e.g. profit, personal gain and time commitments) and their day-to-day family and kinship responsibilities and expectations (e.g. income generation, childcare, socio-cultural obligations). For some women, maintaining this balance created personal moral conflicts and burdens, which at times were very discouraging.

Social and cultural norms about what are considered appropriate roles and activities for women in the modern economy, also pose challenges for women. In PNG, large-scale commercial activities continue to be viewed primarily as the preserve of men, and beyond the skills and capacity of women (Finney 1973; Hemer 2013; Sharp 2013; Macintyre, 2017; Spark et al. 2020). Whilst such beliefs are changing, as evidenced in many interviews, they remain obstacles that many women experience. Some women recalled how such perceptions led to them receiving little support from their husbands, families or communities, and underpinned community jealousies and security threats to their businesses.

Moreover, a major impediment women identified resulting from such culturally prescribed gender norms and perceptions was the lack of self-confidence and willingness among women to move into the male domain of business. As one woman in ENB explained:

*"many women lack the confidence to venture into business....and some give up because of demands put on them by their husbands and other family members"*.

One very common term used by women (and men) when asked why there were so few women in their community running small enterprises, was the term "women's mindset". By this, they were referring to how women themselves have internalised gendered cultural attitudes and beliefs about their position in society and their lack of ability and decision-making skills to perform certain roles in the modern economy. As a result, many women lack confidence in themselves or believe that they are not capable of succeeding in male-dominated economic spheres such as small businesses. When discussing with one of the interviewees why few women move into establishing small enterprises, she replied:



*... it's the mentality women have. They don't trust in themselves. They think business is for men. ....They always think that if they run something they will fail. But if you are willing and try again, try again, maybe you can do something... Women themselves they don't try... they don't have trust in themselves.*

Both men and women identified this 'mindset' as one of the key reasons why so few women enter into small rural businesses. However, as the many interviews with women operating successful small enterprises revealed, a growing number of women are prepared to challenge normative values and beliefs about male dominance in business.

### Limited human capital

Several women identified human capital limits as deficits in education and literacy, and business and work experience as significant barriers to establishing or expanding businesses. A few women, especially those whose enterprises were in the informal sector, initially struggled to establish their enterprise as they had very limited understanding of business management. Also, their lack of access to information and business advisory services meant they had to learn by their mistakes and find solutions to the challenges they faced. It was their drive and determination to succeed, together with support from their husbands and families as outlined above, that enabled many to succeed.

Women's limited education and literacy levels relative to men also meant that they had a more restricted range of business types open to them: largely retail, baking, poultry and vegetable sales. This created a competitive business environment in some areas where, for example, there were several women operating small poultry businesses, but with a limited customer base.

Finally, women also recognised limited human capital in the wider rural population as a constraint on their business. This related largely to the difficulty of accessing a skilled and educated labour force and people with work experience and a suitable work ethic. The latter was a problem with transport-related businesses where drivers in a monopoly position often overcharged or scheduled transport to suit themselves rather than their clients.

### Local business operating environment

The local business operating environment presented women with a range of challenges that frequently put their enterprise at risk and/or impeded expansion. Some of the key local challenges women identified included:

- Lack of infrastructure and poor transport & distribution networks
- erratic and long delays in business supplies
- credit given to customers not being repaid
- high levels of competition, limited models of potentially viable enterprise and 'copy-cat' behaviour (imitative entrepreneurship)
- unreliable electricity and telecommunications
- high operating costs (e.g. labour, rentals, transport and transport maintenance costs)
- lack of skilled staff
- theft and security
- cash poor population
- land disputes

The range of overlapping challenges outlined in the list above make establishing and managing a micro/small enterprise very difficult. As one woman succinctly put it:

*There is opportunity [for small business development], but no markets and money to kick-start a business.... Fertile agricultural land [exists], but road access, markets, funding, technical expertise, and infrastructure are all much needed in rural communities.*

The extent to which the above constraints affected the operations of an enterprise varied spatially and by type of enterprise. Several factors, especially relating to infrastructure and operating costs, are highlighted in other SME studies in PNG as major impediments (World Bank 2011; Sanday 2013; Mishra and Smyth 2016). Operating an enterprise, especially in the island provinces, makes accessing goods and services both difficult and costly to the point that businesses can be highly vulnerable to closure. These issues can be compounded in rural areas where the population is cash poor and incomes are seasonal or intermittent, such as in the coffee and cocoa growing regions.

For women operating retail enterprises such as tradestores and poultry sales, a major problem they faced was delayed or non-payment of goods supplied on credit to their customers. In PNG requesting credit for goods and services from village or locally-based enterprises, especially those operated by relatives, is widely practised with an expectation that the request will be granted (see Brooks 1996; Curry 1999). Business operators are under enormous social pressure to supply goods on credit, and if they do not, they can face social censure in their communities (Curry and Koczberski 2013). Supplying good on credit often undermines the financial viability of enterprises (Curry 2005; Curry and Koczberski 2013). In WNB, several women operating small poultry enterprises said their biggest challenge was the delayed payment or non-repayment of credit by their customers. Some women had been forced to close their enterprises due to non-payment of credit given to customers, and most women knew of other similar enterprises that had become insolvent due to outstanding customer debt.

Whilst women were aware of problems of extending credit and the potential of non-payment, most felt culturally obligated to meet such requests. The indigenous socio-economy of demand sharing remains strong in most rural communities, and for many community members such demands on local businesses are legitimate. A business operator who does not permit sales on credit, risks losing the support of the community which can mean the customer base contracts, the community will be less supportive during economic downturns and the business may experience heightened security risks. At a personal level the operator can lose status in the community if she becomes perceived to be 'greedy' (for a fuller discussion see Curry and Koczberski 2013).

The competitive environment some women referred to as reducing their potential revenue and profits, was the phenomenon of several female-led enterprises offering the same goods and services within a very small area – such as sales of bread, chickens, cooked food or European vegetables. Two main factors explain this problem. First, women's lower levels of literacy, savings, mobility and work experience, together with prescribed gendered roles, limits the range of enterprise types they can engage in. Fewer business options means that several women are likely to operate the same types of business locally, thereby sharing what is already a limited customer base. One woman briefly identified the cause of the limited range of business opportunities to which women could aspire: *"women can advance from small roadside markets to other bigger enterprises but financial literacy/book keeping [skills] are needed"*. Second, compounding this problem was the 'copy-cat' phenomenon. It is common in some areas where the choice of economic activities is limited for people (especially women) to duplicate an enterprise or economic activity that appears to be successful. However, their desire to emulate the success of another woman in the community undermines the financial viability of the business, again by reducing the size of the customer base for each business (see Bainton & Macintyre 2013).

### Limited access to formal finance

The large majority of women sourced their start-up finance outside the formal financial sector (see Figure 7.2). Those women who were interested in sourcing loans, complained of the inability to access formal financial channels. Given many women operate their enterprise in the informal sector, they are unable to meet standard credit criteria such as business registration details and business financial statements. Even women operating businesses in the formal sector were critical of the difficulty of obtaining small loans and the high interest rates and bank fees charged in the formal banking system. Thus, despite PNG's commitment to address financial exclusion through a number of policies (e.g. the National Financial Inclusion and Financial Literacy Strategy 2014-2015, National Financial Inclusion Strategy 2016-2020 and the National Informal Economy Policy 2011-2015) and several reports identifying financial exclusion as a critical barrier for women moving into or growing their business (Hedditch & Manuel 2010; Banthia et al. 2013; World Bank 2014; ADB 2018; Kopel 2020) the problem continues to exist.

### Weak institutional & policy environment

The vast majority of women operating in the formal sector complained about the weak institutional and policy environment in hindering their business or acting as a disincentive to expand. Complex business regulations, poorly funded government supporting institutions (e.g. agricultural extension organisations) and/or a lack of suitable local/national government policies and initiatives to support business growth were among some of the barriers identified. Many of these difficulties have been identified in other studies on small enterprise development in PNG (see Sanday 2013; Blackden & Dominic 2014; DNPM 2018; ADB 2018).

For women operating largely in the informal sector, their concerns related more to the lack of access to training and information to improve their business skills and poor provincial and local government support to help reduce the multiple challenges small operators experience which undermine their financial viability.

The multiple barriers women experience both in establishing and operating a small enterprise are summarised in Table 7.2 and based on interviews with women in WNB.

Table 7.2: The constraints women experience in establishing and operating small enterprises in WNB

Constraints	
Establishing a Business	Operating a business
Lack of start-up capital	Inadequate finance and working capital
Low self-confidence	Poor administrative skills
Limited entrepreneurial skills	Combining work & family
Combining work & family	Lack of family support
Lack of family support	Lack of training opportunities to improve business skills
Gender bias	Mental & physical stress
Limited business awareness & knowledge	Competitive operating environment
Finding supportive contacts & mentors	High cost of production
Lack of access to good advice & guidance	Transport & mobility problems
Difficulty finding suitable business premises	Marketing constraints
Cultural beliefs/obligations	Customary obligations
Fear of failure	Transportation bottlenecks
	Lack of skilled workforce
	Workplace difficulties
	Fear of failure

Despite the challenges, women highly value their enterprise, not solely for the regular income it provides but for a range of personal and family/kin-related reasons, including:

- The opportunity to improve household income and well-being of the family
- A place to develop entrepreneurial skills and be creative
- A place to discover their abilities and capacities
- An avenue to chase their dreams and goals
- The opportunity to overcome hardships (e.g. widows) and survive (necessity)
- The opportunity to provide needed services/goods to the community, and assist their kin, village, community
- An opportunity to meet cultural obligations and strengthen kin and family relationships
- a level of financial independence
- the opportunity to practise agency: be their own boss and make their own decisions

By managing their own enterprises women were also able to use their skills and develop new skills and capacities. Women were often their own 'boss', and able to make business decisions, exercise leadership, pursue their goals and be more financially independent. Thus, for many, their enterprise provided an avenue to practise agency, build self-confidence and to discover their potential and the possibilities open to them. These opportunities and processes of self-awareness were often curtailed for many women.

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## **7.2 Changes in marketplaces in PNG: emerging opportunities and risks for rural women's engagement in agribusiness**

The sale of fresh food and betel nut in open air marketplaces are important for rural, and increasingly urban, livelihoods in PNG, and to the country's food security. From the 1960s to the late 1990s marketplaces in PNG had the following characteristics: most vendors were women, and were the producers of the items sold; wholesale trading and intermediaries were very uncommon; marketplace sellers were generally non-specialists and were not dependent on marketplace earnings for their livelihood (they generally had access to enough land to meet their household food needs); and marketplaces were dominated by fresh food and betel nut, with imported or manufactured goods uncommon. There were certainly exceptions (see Bourke 1986; Benediktsson 2002; Sharp 2021), but the above list gives a reasonable representation of the character of trading in most marketplaces. Since the early 2000s, however, the organisation and dynamics of marketplace trading in PNG has change considerably. These changes have important implications for rural women's engagement in marketplaces.

The present project has drawn together recent research on marketplaces in PNG to firstly document the importance of marketplaces for women in PNG, particularly for rural women, and secondly, to document the changes occurring in PNG's marketplaces. The findings and discussion presented here also draws on further analysis of marketplace data collected under *Strengthening livelihoods for food security amongst cocoa and oil palm farming communities in Papua New Guinea* (ASEM/2012/072), and on interviews with marketplace producers, small-scale resellers and wholesale traders. Together this material highlights that the changes occurring in particular locations are part of wider trends. Some of these changes have been documented in greater detail in publications (Curry et al. 2019; Sharp 2019; 2021; Busse and Sharp 2019; Sharp and Busse 2019).

The following discussion focusses on the changing structure and dynamics of marketing and distribution networks. It is important to recognise that these changes are shaped by the social context (for recent discussions of the social aspects of marketplaces see Busse and Sharp 2019; Curry et al. 2019; Rooney 2019; Hukula 2019; Gregory 2019; Barnett-Naghshineh 2019; Busse 2019; Sharp 2019; 2021).

### Marketplaces are important to rural and urban incomes and to food security

More people earn money from the sale of fresh food and betel nut in marketplaces than from any other source (Table 7.3). In the past many rural houses earned higher incomes from the sale of export cash crops (coffee, cocoa, copra and oil palm), and fresh food sales provided supplementary income. This remains the case for oil palm smallholders, however for many coffee, cocoa and copra smallholders, marketplace earnings have grown in importance and for many households the marketplace is a more important source of income, particularly when cash crop prices are low and between seasonal fluctuations in export cash crop production. In 2015, in parts of West New Britain and East New Britain, copra producers were choosing to sell their coconuts at roadside markets rather than process copra (ASEM/2012/072). In the highlands, close to main urban centres, coffee has been neglected and, in some cases, replaced with commercial fresh food production.

Fresh food sales also support households during periodic shocks to household incomes. In the late 2000s marketplace earnings were critical to the incomes of cocoa smallholders in East New Britain who had their cocoa incomes devastated by the arrival of Cocoa Pod Borer (Curry et al. 2012). Marketplaces also help sustain incomes during seasonal low income periods, such as in the Bena area of the highlands, where large-scale production of pineapple, and other fresh foods, sustain incomes during the coffee off-season (Inu 2015, Curry et al. 2019). Marketplaces also provide an important regular, often daily, income to support households between periodic export crop payments, such as the fortnightly oil palm payments cycle. The rise of reselling since the early 2000s (discussed below), has also meant marketplaces have become an important place for urban residents to earn an income.

Table 7.3: Households earning income from selected agricultural sources.

Source	Year	Fresh food	Betel nut	Coffee - Arabica	Cocoa	Copra (Coconuts)	Oil Palm
Mapping agricultural systems project	1994	94%	35%	45%	27%	17%	4%
2011 Census	2011	66%	45%	43%	24%	(36%)	3%

Sources: Allen et al. 2009; PNG NSO 2015.<sup>2</sup>

Marketplaces are also critical to the supply of fresh food to urban centres. Fresh food marketplaces are the most important source of fresh food for most urban residents by a considerable margin. Unlike many other areas of the developing world, supermarkets have not supplanted open air markets in terms of fresh food supply, and so marketplaces remain vital to urban food security.

### Women remain the most numerous vendors, but more men are selling in marketplaces

Women remain the most numerous vendors in PNG's marketplaces (see Table 7.4). The proportion of women vendors is slightly lower in the large urban marketplaces of Port Moresby and Lae, compared with the main markets of smaller urban centres, but even there women far out-number men. Male involvement in marketplaces occurs on a gradient. The larger in scale the trade, the greater the distance travelled, and therefore the more potentially lucrative it is, the more male involvement is evident. In Sharp's surveys at the Kaiwei betel nut marketplace in Mt. Hagen, most (76%) of the large wholesale traders were men, but men made up a much smaller percentage of small wholesale sellers (17%) and

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<sup>2</sup> Differences between the two sets of figures reflect differences in methodology and should not be interpreted as a change over time. Some concerns exist about the reliability of the 2011 Census.

were a very small proportion of the smallest scale vendors (5%) (Sharp 2021). Male involvement in the sale of sweet potato also increases with distance from the point of production (Benediktsson 2002:197–198). Men also tend to be more involved in trading at large urban marketplaces than at small rural roadside marketplaces. In 2015, in one-day spot surveys in West New Britain, 14% of vendors in the urban Kimbe market were men, but there were no men among the 67 vendors selling in the small roadside marketplaces (Klin Wara, Kulungi and Mai) surveyed (ASEM/2012/072).

Although men have long had a level of involvement in larger-scale production and sale for domestic marketplaces, men's involvement in small-scale vending has historically been very low. There are now indications men are becoming increasingly engaged in small-scale vending (see Chang et al. 2014 for Mt. Hagen, and Barnett-Naghshineh 2019 for Goroka). When men are involved in this small-scale vending, they are more likely to be vendors of higher value items such as introduced crops (e.g. tomatoes, potatoes, carrots), rather than traditional crops (sweet potato and local leafy greens), and with long-distance commodities such as, in the highlands, coconuts and peanuts (Barnett-Naghshineh 2019). Men also represent a higher proportion of resellers than they do of producer-sellers, based on spot surveys in Lae (Raylin Gena) and Kimbe (ASEM/012/072).

Male involvement in the marketplace appears to be growing. Nevertheless, women continue to make up the vast majority of vendors in marketplaces at all scales across the country. Men are making inroads into the more lucrative, and perhaps prestigious roles, however, in almost all of these roles women still outnumber men.

Table 7.4: Proportion of marketplace vendors that are women at the main markets in selected PNG towns (post-2000)

Marketplace	Year	% of vendors who are women	Source
Goroka	2014	88%	Barnett-Naghshineh 2019
Kimbe	2015	86%	ASEM/2012/072
Kokopo	2009 2015	96% 96%	Scales 2010 ASEM/2012/072
Mt Hagen	2013	87% (10 key crops)	Chang et al. 2014
Lae	2020	78%	Raylin Gena, ASEM/2014/054
Port Moresby (combined, selected market sample)	2016	76%	Kopel et al. 2017
Madang	2013	81%	JICA 2013

Marketplaces provide a particularly important source of income for women. Even in those locations heavily engaged in export cash cropping of cocoa and coffee, fresh food marketing is for many women their most important source of income (see Table 7.5; Curry et al. 2019). For most women in oil palm producing households, marketplaces were an important supplementary source of earnings. While income from export cash crops is often controlled by men, women generally have a higher level of control over earnings from fresh food sales, and women have often responded to this by withdrawing their labour from the export crops to focus more on fresh food production.

Table 7.5: Most important income source for cocoa, coffee and oil palm smallholders by gender (per cent of households)

Income Source	Cocoa households ENBP (%)		Coffee households EHP (%)		Oil Palm households WNPB (%)	
	Male	Female	Male	Female	Male	Female
Export cash crop	86	36	81	33	84	73
Fresh food marketing	1	51	8	59	4	22

Source: Curry et al. 2019

The high proportion of women involved in fresh food marketing also means that the marketplace is an important place where people develop entrepreneurial skills, though few women in PNG progress with their businesses beyond the marketplace. Many of the most successful women interviewed within the project are no longer closely engaged with marketplaces, but for many it was where they started out.

### Growing complexity of supply chains

The most significant development in fresh food marketing has been the increasing prominence of reselling, both by larger wholesale traders and by small marketplace vendors. In PNG's fresh food marketplaces, intermediary trading was virtually absent in the 1960s (Epstein 1982), just starting to emerge in the 1980s (Bourke 1986), and still rare in the early 1990s (Benediktsson 2002). Reselling has, however, proliferated since the early 2000s (Table 7.6). The rise of reselling has been greatest in the large urban centres of Port Moresby, Lae and Mt. Hagen where resellers now outnumber producers. Reselling is less common in the smaller urban centres, though the numbers there are growing. Small rural marketplaces generally remain exclusively producer markets. The rise of reselling throughout the country, and the drivers of this development, are discussed in detail in Sharp (2021), and so are not repeated here.

Table 7.6: Resellers as a proportion of vendors in selected PNG marketplaces, post 2010.

Marketplace	Year	% of vendors who are resellers	Source
Goroka	2014	7%	Busse 2019
Kimbe (fresh food)	2015	14%	ASEM/2012/072
Kokopo (fresh food)	2015	10%	ASEM/2012/072
Mt. Hagen	2012	80% (est.)	Chang et al. 2013
Lae	2020	73%	Raylin Gena
Port Moresby (selected market sample)	2008 c. 2013	55% 51%	FPDA 2009 Wang 2014

The emergence and rise of reselling is a very significant transformation of the country's marketplaces with implications for rural and urban livelihoods and for food security. This trend has received very little research attention. In association with the present project, Raylin Gena undertook her masters' research at PNG Unitech on resellers in the Lae Main Market (Box 7.1). This research is the first research in PNG to examine the characteristics of marketplace resellers and it offers important insights into a rapidly growing and increasingly important economic activity.



***Box 7.1: Resellers in the Lae Main Market – Raylin Gena (Unitech)***

In 2020, Gena conducted a rapid market wide survey, and detailed questionnaires with 75 resellers. The research documented that 73% of fresh food vendors in the Lae Main Market were reselling produce, 74% of whom were women. The great majority of the vendors (84%) were originally from the Highlands region of the country, and most (68%) lived in Lae's urban informal settlements. Amongst the resellers there was a high level of dependency on the market, with reselling the sole source of income for 60% of resellers, and with just over half of the women resellers being the sole income earner for their family. An overwhelming majority (88%) of resellers sold in the market as a full-time occupation, trading 6 days per week. Two thirds of resellers reported to earn K20-K50 on a typical day, however earnings were highly variable. Concerningly, a substantial proportion (59%) of female resellers cited concern for their personal safety and security while trading in the marketplace. The majority of the women had low literacy with no formal training but developed skills in bargaining and conducting business from their reselling activities. The most frequently cited motivation for women resellers was to support and sustain their families.

**Overwhelmingly fresh food, but more 'store' goods being sold**

Most of what is sold in PNG's marketplaces is domestically produced fresh food. However, in the past decade there has been an increase in the sale of imported and manufactured 'store goods'. This includes items such as rice, salt, oil, candles, cigarette lighters, soap, lollies, soft drinks, cigarettes, plastic bags, second-hand clothes, and mobile phone credit. In some marketplaces, items such as thongs, pirated DVDs, medicines, and torches are also sold. Cooked food produced from store goods such as sausages, lamb flaps and rice and flour balls is also common. The prevalence of store goods differs substantially between markets, with store goods remaining a very minor feature in some marketplaces, and in some cases mostly excluded by market authorities. By contrast, a one-day spot survey at Kimbe Market in 2015 found 27% of vendors were selling non-fresh food items (store goods, second-hand clothes, handicraft) and 18% were selling cooked food (most of which was made with imported ingredients) (ASEM/2012/072). In most urban marketplaces store goods are more visible today than they were in the recent past.

**More specialists and growing dependency on market earnings**

Marketplace vendors are increasingly selling as a full-time occupation and are increasingly dependent on market earnings for their livelihood. One-day spot surveys in 2015 found that at Kimbe Market (WNB) 35% of vendors, and at Kokopo Market (ENB) 16% of vendors, had sold on 5 or more days in the previous week (ASEM/2012/072). Another study, in 2016, of Port Moresby marketplaces reported 60% of vendors sold on 5 or 6 days (Kopel, Hukula, Kutan, & Iwong 2017, pp. 16–19). The growth in the number of vendors selling as a full-time occupation is closely associated with the rise of reselling. This is evident in Kokopo where 53% of resellers sold 5-7 days the previous week, whereas 88% of producer-sellers had sold 1-3 days. In Lae Market, the great majority of resellers (88%) had sold on 6 days in the week (Raylin Gena – ASEM/2014/054).

**Growing numbers of small marketplaces**

The first central urban marketplaces were established in most urban areas in the 1950s and 1960s. Soon after smaller marketplaces began to emerge. Over time these smaller marketplaces have continued to grow in number and size and in the diversity of produce offered. Some smaller marketplaces, often called 'corner markets', have only a few vendors, although others can have dozens of vendors. Some vendors resell produce purchased in the main urban marketplace, while others are producers. These marketplaces are busiest in the



afternoons when people are returning home from work, and some operate in the late afternoon and evening when the central marketplaces are closed. The number of house-front stalls (*haus maket*) in urban areas has also grown (see Rooney 2019).

Roadside selling in rural areas has also increased. Over the past decade there has been a noticeable rise in the number of roadside markets along the Highlands Highway. Spot surveys of roadside marketplaces in ENB and WNB (ASEM/2012/072) show that although market earnings are generally lower in rural roadside markets than in the main urban marketplaces, earnings can still be good. Roadside sellers at Mai and Klin Wara near Kimbe in WNB reported to have earned just over K30 on their last day marketing. Although incomes are lower, by selling close to their homes there are lower costs, and although many of the vendors sold daily, roadside selling offered more flexibility, and allowed women to carry out other activities throughout the day. Rural producers at times find it difficult to find selling locations in the large urban marketplaces and in some case feel excluded and unsafe in these marketplaces, and so the rural roadside provides a place in which they feel safe and confident. Roadside marketing has reportedly further proliferated in 2019 and 2020, in response the PNG government regulations related to the Covid-19 pandemic (Bourke 2020) which have at times closed central urban marketplaces and restricted inter-provincial travel.

### Increase in commercial production

Closely associated with the changes in marketplaces described, there has been an increase in commercial vegetable production. Fresh food production for marketplace sale remains for many producers closely entangled with fresh food production for home consumption, however, particularly in areas of the central highlands close to urban centres, production is increasingly market oriented. In these areas people are replacing coffee gardens with vegetable gardens. Commercial plantings are often larger-scale, and are typically of a single crop planted for a single harvest (rather than a staggered harvest) (see also Kanua and Bourke 2017). To ensure sufficient volume is ready for harvest at the same time, in parts of the highlands producers are also renting small parcels of land for single cropping cycles. A key reason for the increase in commercially oriented production is the growth in demand for fresh food, stemming from both urban growth and the increasing cost of imported staples such as rice, particularly relative to domestically produced fresh food such as sweet potato (see Figure 7.4, Sharp 2021).

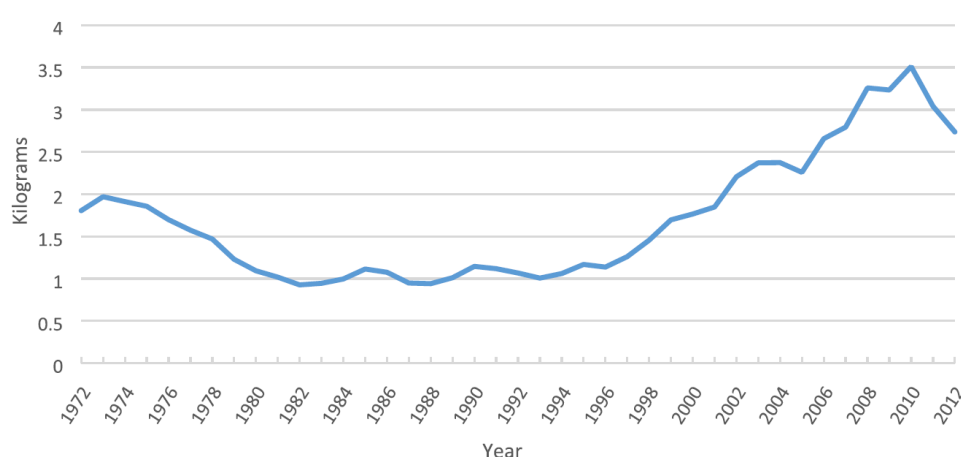


Figure 7.4: How many kilograms of sweet potato can be purchased for the price of a kilogram of rice? Port Moresby, 1972-2012. Data source: PNG National Statistics Office (Sharp 2021).

## **Women well positioned and finding new opportunities, but risk being pushed into more peripheral and less remunerative roles**

The transformation of PNG's marketplaces and fresh food distribution networks presents both opportunities, and challenges and risks for women in PNG. The growing demand for fresh food, and resulting increasing returns from marketplace selling, has led to increased marketing of fresh food. This presents an opportunity for women to earn money by responding to this demand and producing for the growing market. Women are present at all levels of the marketing and distribution networks. Women, as noted, are the overwhelming majority of small marketplace vendors, but a much smaller number of women also trade at a large-scale and coordinate complex networks.

For some time, observers have noted that many women are prioritising local marketing over export cash crop production, and there are substantial financial advantages for women in doing so (Overfield 1998; Koczberski et al. 2001). In fresh food marketing, women are more able to make independent farm decisions regarding the timing and types of food crops to cultivate, they have firmer claims to the income earned from the crops they plant and sell, and it is easier for them to access land for short-term garden food production than for long-term export crops. These benefits for women have become greater with fresh food selling becoming more remunerative.

The growing prevalence and social acceptance of reselling means the resale of both fresh food and of store goods offers a source of income that, for the seller, is not dependent on access to land. Many of the resellers in the urban markets are urban resident migrants, however, reselling also presents an opportunity for women in rural areas where land availability is constrained, or for women who have difficulty in accessing sufficient land. Reselling also offers a potentially regular source of income. This allows women to earn money to support their families during either seasonal or periodic breaks in export crop incomes. The purchase and resale of fresh food and store goods can also give women an income when their crops are not yet ready to sell.

The growth of smaller urban and rural marketplaces also gives women greater flexibility in the places they sell, and the times they sell. Selling in the main urban markets generally entails the commitment of a full day, whereas selling at an urban corner market may only entail the commitment of a few hours in the afternoon. Rural roadside marketplaces that are close to the vendors' houses also enable the vendor to come and go throughout the day, and to attend to other activities, including childcare.

Increased specialisation of the production and distribution networks can improve efficiency. Producers often spend long periods in the marketplaces selling small volumes of produce, so by passing their produce to resellers they can reduce their time spent marketing, and they can reduce the risk they will have unsold produce. The potential is there for these changes to benefit women producers, but, as discussed below, these benefits are not always realised.

Women are well positioned to benefit from the expansion of markets and from the changes taking place because the production and marketing of fresh food is a domain which they have historically dominated. As more men become engaged in the marketplace, and as the gendered divisions of labour become less stark, the economic significance of marketplaces may receive greater recognition, and greater attention by policy makers.<sup>3</sup>

The transformation occurring in the country's marketplaces does, however, present some challenges and risks for women. As is common globally, men commonly occupy the most financially lucrative parts of the economy. In the highlands, men vacated the marketplace when they saw higher returns from growing coffee. However, low coffee prices and

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<sup>3</sup> On the other hand, that marketplaces are strongly feminized spaces has led to marketplaces attracting the attention of the donor community.

improving returns from fresh food has for some rural people reversed this. There is then a risk that if men see greater return in producing for the domestic market that they will displace women, particularly from more lucrative trading roles.

There is also a risk that, although the returns from fresh food have improved, certain markets are becoming saturated. Over 80% of the national population live in rural areas, so although the demand for fresh food is growing, there are a lot of people prepared to meet that demand. In interviews with fresh food traders, many commented that marketplaces were over-supplied. One woman trader commented:

*Everyone has land. Everyone plants food. The same food we plant here... they also grow elsewhere in Hagen. So in the market, these same crops are well supplied, and there isn't lots of money around. So who will buy it?*

The increasing dominance of resellers in the country's marketplaces also has risks for rural women. Reselling has emerged as an important source of income for urban residents, and as such it is critical to urban food security. But at the same time rural producers have often found themselves squeezed to the periphery of urban marketplaces, into areas of the marketplaces with few customers. Producers are also reporting being compelled to sell their produce to resellers. Increased specialisation in production and distribution can benefit producers, however, at present few rural producers have reorganised their production to realise these benefits. Most producers sell their produce to resellers at the marketplace, and so producers still take on the cost and risk of transport. There are good opportunities for women to benefit from the expanding and transforming domestic fresh food market, however there are also risks rural women may find themselves in increasingly peripheral and less remunerative roles.

### **Renewed development interest, but limited data on contemporary marketplaces**

There has been renewed development interest in marketplaces in PNG, and the wider Pacific, in recent years. Many of the main urban marketplaces have been redeveloped by either international donors or by urban authorities. Market redevelopments have focused on food security and the livelihoods of vendors, and marketplaces have also been seen as a vehicle for other development agendas including women's urban security. It is, however, important that development and policy interventions in marketplaces, as well as those related to food security are based on a solid understanding of these spaces and their associated trade networks. At present this has not occurred.

The current changes occurring in marketplaces necessitate that policy makers and development practitioners engaging with marketplaces support and plan for marketplaces and fresh food networks that, firstly, create equitable income earning opportunities for rural and urban people, producers and resellers, women and men, and, secondly, sustain and improve urban and rural food security. To do so they will need to understand: who are the key marketplace actors, and what are their roles? How are producers connected to marketplace traders and vendors, and ultimately consumers? Where does the produce come from, and how does it move? How and to what extent are different marketplaces connected? How do socio-cultural factors shape market access and participation? How is production changing? What are the current prices? What is happening outside the large marketplaces, in those small rural, roadside and urban corner marketplaces? Various recent studies provide snapshots of what is going on in particular locations, within particular market segments, with particular crops, and at particular moments, but often the detail is lacking, as is its relationship to the whole.

### 7.3 Women in the agribusiness value chain. What opportunities exist for women to become more engaged in commercial agribusiness?

This section evaluates the *Mama Lus Frut* Scheme (MLFS). It was a major component of the work conducted under Objective 2. The MLFS was introduced in WNB in 1997 by the oil palm milling company, New Britain Palm Oil Limited (NBPOL), to address the very high rate of loose fruit (the fruitlets dislodged from the main bunch during harvesting) wastage among smallholders. Conservative estimates suggested between 60-70% of loose fruit was not being collected (Lewis 2000). Prior to the scheme, the men, as the registered plot owners, received the payments from the milling company for both the oil palm fruit bunches and loose fruit. However, few men adequately remunerated their wives for loose fruit collection. Over time, most women withdrew much of their labour from oil palm production and directed it more to activities such as food gardening for local markets where they had greater control of the income from their labour. From 1997 the company issued women with their own harvesting nets and harvest payment cards (known locally as the 'Mama Card'). This enabled women to sell loose fruit directly from their family oil palm plots to the oil palm milling company and to be paid directly by the company. The success of the scheme was immediate with loose fruit collection by women increasing substantially within the first twelve months of the scheme (see Figure 7.5 and Koczberski et al. 2001).

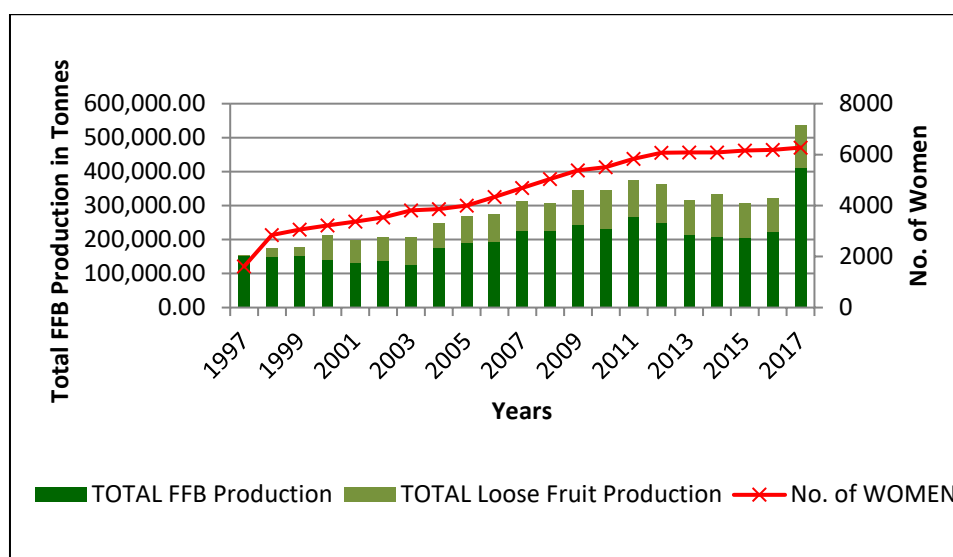


Figure 7.5: FFB and loose fruit production at Hoskins by number of women: 1997-2017

By 2017, the wives of most registered plot owners at Hoskins had access to a Mama Card and were benefiting from the scheme (Box 7.2). Currently 6,469 and 2,794 women at Hoskins and Bialla, respectively, have a Mama Card. The evaluation of the MLFS (for methods see Section 5) focused on the scheme's effectiveness from 1997-2017 and its long-term impacts on household production and social and economic outcomes for women and families. Emphasis was given to assessing changes from the perspective of the women and their own values. The study focused on how women experienced changes in terms of their financial independence; household and social relations; access to livelihood assets; agency and their integration into extension delivery. Nearly all women identified significant long-term improvements in their material well-being following the uptake of the MLFS. A brief discussion on each indicator of change is below.

Box 7.2: *Mama Lus Frut* Scheme: twenty years on

In 2017, in the oil palm growing areas of Hoskins where the MLFS was introduced 20 years ago:

- 73% of women claim their primary income source is from oil palm
- Over 6,280 women have their own Mama Card.
- The majority (69%) of women have had their own Mama Card for more than fifteen years
- 97% of women claim that they have control over the income and how the Mama Card is used
- Women share their card with other female members of their immediate family and extended family, allowing 82% of women access to the Mama Card
- Average income earned per mama in 2016 was K238/ fortnight. This is a very reasonable fortnightly income in rural PNG. In 2016 the minimum hourly rural wage rate was K3.50.
- Women earn 33% of total household oil palm income
- Almost 90% of women agreed that the introduction of the Mama Card has benefited them and other women co-residing with them (e.g. single/married daughters, daughters/sisters-in-law)
- Around 70% of women have their own personal bank account and just over half of them reported being able to save some of their oil palm income.

### Access and control over household oil palm income

Women have experienced significant income benefits from the scheme and many reported saving some of the income (Box 7.2). Returns to labour are excellent relative to other income sources: based on post-harvest surveys on the Hoskins LSS, Koczberski et al. (2001) reported an average harvest round (one per month) was 1.5 to 2 days per loose fruit harvest per person, with an average number of labourers per harvest round being 2.5. That over 70% of women now rank income from loose fruit as their primary income source, indicates that women have recognised the financial advantages of shifting some of their labour from the sale of fresh produce and other livelihood activities to loose fruit harvesting.

Guaranteed access to household oil palm income explains why the MLFS was rapidly adopted and why women were willing to divert part of their labour from food marketing to oil palm production. However, what maintained women's interest in the scheme was their control over the disbursement of the income and the reduced reliance on their husbands for money to meet family needs. Greater financial autonomy provided women with the ability to better look after their families, diversify livelihood activities and expand their economic choices. Women have used their income in multiple ways (Table 7.7). For women, this has been a significant transformation of their financial situation and daily lives prior to the introduction of the Mama Card. Women have moved from a state of relative powerlessness to one of financial independence.

Table 7.7: *Mama Card* income economic uses

	N	Per cent
Contribute to church activities	115	94.8
Contribute to <i>kastom</i> events	115	90.4
Pay education fees	115	89.6

Purchase kitchen equipment	116	82.8
Purchase items for the house	115	79.1
Help solve a 'hev' in the family or extended family	114	77.2
Pay travel costs of family member/relatives to other provinces	115	74.8
Pay travel costs for oneself to other provinces/countries	115	66.1
Purchase mobile phone	115	54.8
Purchase livestock	115	40.0
Start a small business	114	37.7
Purchase items to build permanent/semi-permanent house	115	36.5
Pay training costs for oneself	115	31.3
Purchase sewing machine	115	23.5
Take out a bank loan	115	9.6
Purchase a car/truck/boat/engine	115	6.1
Purchase land	115	6.1
Other	110	13.6

When women were asked to identify the main long-term benefits of the scheme, 56% claimed greater financial independence. There were several dimensions to how women expressed their financial independence, the most common of which were:

- A greater sense of financial self-reliance as they were no longer dependent on their husband's income;
- More control over their ability to meet family needs and to assist family members;
- Less 'struggle' as women had an independent income stream;
- Greater 'freedom' and 'voice' on how income is spent;
- Greater ability to overcome barriers that previously made some goals unattainable;
- Capacity to save money in their own bank account;
- Ability to use savings as capital for other income earning activities; and,
- Growth in self-confidence knowing that they had a secure income and could be self-reliant.

Women's comments showed the importance they placed on their new-found financial autonomy. Being free of the need to request money from their husbands and not needing their permission to purchase items gave women a greater sense of financial security and control over their lives.

### Improved family welfare

By gaining control over a regular income source made it easier for women to care for their immediate family members and kin. This is demonstrated in the expenditure and uses of the *Mama* Card income. Table 7.8 shows that the majority of women regularly directed their income towards family and kin through the purchase of food, clothes for family members, household items and school fees. Similarly, Table 7.7 above also shows that the expenditure items women used their income were related to improving living standards and family well-being, contributing to customary and church events and diversifying income. To some extent such results are not surprising. Research in many countries show that women are more likely than men to direct their earnings to improve their family's well-being (Quisumbing & Maluccio 2000; Duflo 2012). As a result, the welfare of the family generally improves (Kay 2002; Wrigley-Asante 2012).



The purchase of food was by far the most important use of income. Given that land for food gardening has been declining over the past two decades and many families have very limited and insecure access to land for food gardens (Koczberski et al. 2001; Koczberski, et al. 2018), it is probable that women's increased purchasing power to buy food has improved the status of household food security and child nutrition.

Table 7.8: Three most regular uses of loose fruit income

Most important	%	2 <sup>nd</sup> most important	%	3 <sup>rd</sup> most important	%
Purchase of food	88	Purchase of clothes for family members	41	Education costs*	33
Payment of labour	3.4	Purchase of household items	16	Purchase of clothes for family members	20
Purchase of household items	2.6	Education costs*	14	Purchase of household items	13

n=117 \* Includes school bus fares and items for school

Women valued and emphasised the positive impact the Mama Card has on their capacity to contribute to customary obligations and to look after their immediate and extended family, especially when they are facing hardships. As one woman explained:

*I give them [the family] the card when they are going through hard times. I then withdraw the money – K100, K150 - I withdraw and give to them. Similarly, my other children, those that are married, they also can share my card – I support them all.... Also, if a problem arises back in my home village, I can send money back home. From my experience, it [Mama Card] has helped us a lot. If I didn't have the Mama Card, I would find it hard.*

Helping family and kin can be through temporarily allocating the Mama Card to family members, using their bank account saving or sharing the oil palm income earned from a harvest. The former is commonly practised by allocating the card for one or two harvests to assist a family member or relative to meet unusually high cash demands such as school fees, travel, church retreats or customary payments. These common mundane exchanges not only form the basis of maintaining family and kin relationships (social reproduction) but are also an avenue through which women exercise their status and identity. Indeed, in interviews, women inferred that with more money to improve the welfare of their family and assist family members or relatives out of financial difficulty, their sense of self-worth was strengthened through their improved ability to be a good mother, wife, sister and in-law: roles that are culturally valued in PNG (see Strathern 1972, Strathern 1988; Koczberski 2007).

### Household and social relations

With women's greater capacity to fulfil their gender roles through their own income, they were better able to maintain family and social relationships. Intra-familial disputes, especially with the husband over the oil palm income, decreased substantially following the introduction of the Mama Card. Women often spoke of their 'struggles' before the Mama Card and what they saw as the irresponsible spending of oil palm income on personal consumption by their husbands. This constrained women's capacity to adequately care for their families and to assist relatives in need. This was a source of regular conflict on pay-days. Many women recalled the disputes that erupted on oil palm paydays over their husband's disbursement of the income (Box 7.3).

Extension Officers also observed a drop in domestic violence following the introduction of the *Mama Card* (Lewis 2000; Koczberski et al. 2001). Furthermore, as the quotes in Box 7.3 indicate, disputes over the oil palm income were not merely between husband and wife but among other family members as well. The reduction in household disputes was largely

linked to two main factors:

1. Greater intra- and inter-household cash flow; and
2. Opening up new income distribution mechanisms.

Box 7.3: Women's experiences of disputes over the oil palm income

*Before the Mama Lus Frut was introduced the family was always arguing with the father, but this stopped after its introduction (Kapore).*

*Before, women were not given their share of the income, causing arguments and violence among the family. The introduction of the card reduced such problems and brought harmony (Sarakalok).*

*Before the Mama card was introduced, life was difficult because my husband often spent the income unwisely and without my knowledge, causing arguments. After the mama card, it was good as I no longer needed to worry if he drank beer or bought something else as I had my own money to spend on the children (Gaungo).*

Prior to the MLFS, both men and women struggled to fulfil their domestic and social obligations (see Koczberski et al. 2001). In part, this stemmed from the difficulties in spreading the oil palm income across the increasing number of families co-residing on LSS blocks who relied on the oil palm income earned from the 6-ha block. Since 1975, the average population per LSS block at Hoskins has almost tripled from 7.2 persons per block, to a mean of 19.3 persons per block in 2015 (Ploeg 1972; Koczberski et al. 2018). Now, there is a mean of 3.75 households per LSS block at Hoskins as the children (mostly sons) of the original settlers marry and raise their own families on their parents' block. Prior to the introduction of the MLFS when there was only one oil palm payment available for co-resident households to share, conflicts occurred regularly, not only between husbands and wives but also between adult brothers as they competed for control of the oil palm income.

Thus, prior to the Mama Card, husbands receiving the oil palm income not only had wives demanding a share of the income for household expenses, but also adult sons who assisted with harvesting and sought remuneration for their work (Koczberski & Curry 2016). There were additional financial pressures on men to meet social obligations with immediate and extended family members and friends, join drinking parties following payday, cover school expenses, and repay loans from the oil palm company. In this environment where financial and social demands on the Papa Card were great, women often missed out on receiving what they perceived to be their fair share. This caused family arguments and undermined interpersonal relationships. The introduction of the Mama Card helped reduced these disputes.

The Mama Card was able to address disputes over the household oil palm income because it created new ways to share oil palm income between men and women, and among family members. The female head of the oil palm holding, typically the wife of the registered plot owner, most often shares the Mama Card and its income with co-residing family members, largely single and married daughters and daughter-in-laws. In 2017, the Mama Card was shared on average between two women, although on more populated LSS blocks, a slightly higher number of women shared the card.

Mama Card sharing was done in several ways. The most common methods were for:

- two or more women to work together (*wok bung*) to collect the loose fruit and split the income between them;



- or for the card to be rotated fortnightly or monthly (*markim mun*) among co-resident women with loose fruit collection and income allocated to the individual whose turn it is to harvest (Figure 7.6).

On some blocks, the women use a mix of *markim mun* and *wok bung* as a strategy to share the income of the *Mama Card*. On some 6-hectare family oil palm plots where the plot has been informally sub-divided between family members (*skelim* hectare), women use the card within their family's allocated two hectare area, often sharing the work and income with other female family members.

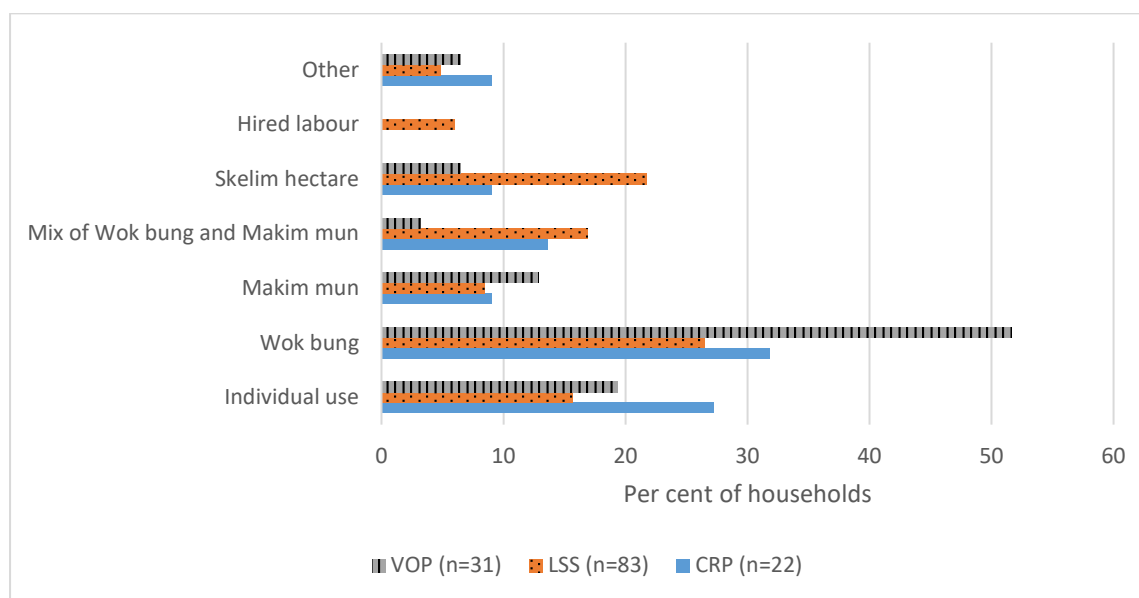


Figure 7.6: Most common methods of using the Mama Card in 2017 by block type.

The MLFS has become an important way for women to organise their own cash and labour transactions with other women. This has allowed more flexible and cooperative labour practices and payment arrangements to emerge within and among families and reduced potential conflicts over the oil palm income.

### Individual and household livelihood advancement

One of the important benefits of women's greater access and control of the oil palm income through the *Mama Card* has been the improvement in the livelihood asset base of households. Women's access and control over household assets is central for poverty reduction, increasing agricultural productivity and for improving long-term household and individual well-being (see Meinzen-Dick et al. 2011; Quisumbing et al. 2014; Johnson et al. 2016).

One of the most immediate and noticeable impacts of the MLFS reported by Koczberski et al. 2001 was the improved quality of living as women initially directed their income to purchasing durable household goods such as cooking utensils and bedding. With a regular income and greater access to store credit women have continued to purchase (or contributed funds) assets to improve living standards, such as house building materials and other household items (Table 7.7). However, only a very small proportion of women have used their income to help fund the purchase of large assets such as vehicles, boats and land (Table 7.7). In part this reflects the daily high demands on women's income. Other assets purchased with the *Mama Card* income have included mobile phones, livestock and sewing machines (Table 7.7).

Most women now have their own bank account (Box 7.1), allowing them access to store credit, savings and training. Some women have used their improved monetary wealth to develop new skills and knowledge. Approximately 31% of women have used Mama Card income to attend skills training (Table 7.7), and many women had attended training in the two years prior to the study in 2017 (Table 7.9).

Table 7.9: Training/loan scheme undertaken over previous two years

	N	Per cent
Attended OPIC/company field days	138	54
Financial literacy training	138	29
Alternative income training	138	24
Additional skills training	138	22
Joined savings/loan schemes	138	16

For a few women their increased financial independence, greater access to training, and confidence in managing money resulting from the MLFS, encouraged them to establish small enterprises and/or other supplementary income earning activities. Some used their Mama Card income as seed capital to invest in other income-earning activities. In 2017, almost 38% of women claimed that they had used their Mama Card income to help start a small business (Table 7.7). Among the most common small enterprises were poultry production, tailoring, trade stores and other small-scale retail businesses. Reselling of store goods was a common source of additional income. Although less than 10% of women listed income from small enterprises as their main source of income, 42% and 53% of women listed their second and third most important sources of income respectively coming from their own small-scale trading activities.

For many women, establishing small-scale business was impossible to contemplate prior to the MLFS. Women were limited financially and did not have the skills or confidence to found small businesses. As noted above, in PNG business and entrepreneurial activities are generally perceived to be male domains and men tend to dominate in these activities (see Hemer 2013; Sharp 2013; Macintyre 2017;). With improved access to capital, credit, skills training, and support from the *Mama Lus Frut* OPIC Officers, some of the key barriers were lowered considerably.

### **Institutional environment**

Despite women's significant contributions to export crop production, many agricultural extension programs in PNG remain gender-blind and few offer women opportunities to improve their access and control over household income (Hamago 2021). This was the case in oil palm prior to the introduction of the MLFS; women farmers were largely ignored in agricultural extension and training (see Koczberski et al. 2001). The MLFS with its emphasis on ensuring women also benefited from oil palm production, created financial incentives for women to participate more fully in the industry. Over time there have been several significant institutional changes within the extension organisation (OPIC) and the milling companies that have ensured the majority of female smallholders benefit from the scheme and they have good access to household oil palm income. Among the most important initiatives have been:

1. Employment of female extension officers;
2. Ensuring men accepted the MLFS and gaining their assurance that women would have access to harvesting nets and wheelbarrows;
3. Issuing women with their own harvesting card;

4. Facilitating the opening of bank accounts for women to ensure women had access and control over the income;
5. Creating a *Mama Lus Frut* desk within OPIC to allow women easy access to information and advice, and a space where women could voice their grievances or problems. The desk fostered a community of oil palm ‘*mamas*’ and strengthened the overall effectiveness of the extension services;
6. Appointing a female farmer to the Local Planning Committee, which oversees extension.
7. Incorporating women into agricultural field days. Initially, at Hoskins there were regular field days specifically for women. In 2017 a *Mama Lus Frut* stall for women at all field days was established to provide women with information on upcoming skills training programs and other events organised by the *Mama Lus Frut* Group (see below). Field days often have training and information sessions provided by representatives of the financial sector and occasionally from private or public sector organisations.
8. Since 2014 the oil palm growers associations in Hoskins and Bialla have had *Mama Lus Frut* representatives on their committees.
9. Formation in 2015 of the Hoskins *Mama Lus Frut* Group. The group facilitates and conducts livelihood skills training and income diversification initiatives for women.
10. In 2016 Hargy Oil Palms linked Mama Card holders to Nasfund, the national PNG Superannuation Fund and have assisted in transferring a percentage of the oil palm income earned on the Mama Card to women’s individual superannuation account. Over 10% of Mama Card holders have opened an Eda Supa Savings account. From 2016 to May 2021, K388,542 was deposited with Nasfund.
11. Starting in 2017, Mama Card holders in Bialla have been receiving oil palm certification (RSPO) bonuses. Over the period 2017 to 2020, women have received K2,657.444.

Women’s greater involvement in oil palm production has changed their attitudes to oil palm production and their own perceptions of their role in the industry. In an OPIC report prior to the introduction of the MLFS at Hoskins, it was noted that among women, there was an “underlying ‘his block, his business’ attitude”, which resulted “in an obvious lack of sense of partnership in the business” (Lewis 2000:3). This attitude no longer exists. Bringing women together for agricultural extension field day training and expanding their public role through representation on planning committees has had a positive impact on women’s human and social capital and mainstreaming gender into agricultural extension.

The multiple ways in which the *Mama* Card has improved the livelihood choices and asset base of women and households are summarised in Table 7.10.

Table 7.10: Changes to individual and household livelihood assets

<b>Financial Capital</b>	<ul style="list-style-type: none"> <li>▪ Access to a more regular income</li> <li>▪ Greater control over household finances</li> <li>▪ Opening of bank account</li> <li>▪ Savings/increased savings</li> <li>▪ Access to store credit and bank loans</li> <li>▪ Financial training</li> <li>▪ Establishment of small business enterprises</li> <li>▪ Income diversification</li> </ul>
<b>Social Capital</b>	<ul style="list-style-type: none"> <li>▪ Contributions to church and community</li> <li>▪ Contributions to customary activities</li> <li>▪ Strengthened family and community relations</li> <li>▪ Greater ability to solve family problems</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Stronger links with women in the community through the <i>Mama Lus Frut</i> Group</li> <li>▪ Improvement in women's participation and role in oil palm production</li> <li>▪ Improved attitudes to women in the oil palm industry</li> </ul>
<b>Physical Capital</b>	<ul style="list-style-type: none"> <li>▪ Increased purchases of house building materials</li> <li>▪ Increased purchases of durable household assets such as utensils and sewing machines</li> <li>▪ Use of mobile phones</li> <li>▪ Purchase of tools</li> <li>▪ Increased livestock numbers</li> <li>▪ Greater access to transportation</li> </ul>
<b>Human Capital</b>	<ul style="list-style-type: none"> <li>▪ Children's education</li> <li>▪ Training for women</li> <li>▪ Expanded role in household and farm decision-making</li> <li>▪ Improved knowledge of oil palm production through farmer field days</li> <li>▪ Improvements in family well-being</li> <li>▪ Greater ability to engage hired labour</li> <li>▪ Greater sense of agency, self-achievement and pride</li> </ul>
<b>Natural Capital</b>	<ul style="list-style-type: none"> <li>▪ Purchase of land</li> </ul>

### Challenges to the sustainability of the MLFS

While women have clearly benefited from the MLFS, socio-economic and demographic changes over the last fifteen years have created a new context in which the MLFS now operates. This has created new challenges to the continued success of the scheme. Notably, these challenges relate to demographic and socio-economic changes occurring in the oil palm growing areas, which include:

1. Deceased estates. When the registered male plot owner dies and the adult married sons take over management of the family oil palm holding, the daughters-in-law often claim ownership of the Mama Card, sometimes leaving the mother (the original Mama Card holder) without access to the oil palm income. The ageing and death of the original oil palm plot owner and spouse has led to frequent disputes amongst second generation women of co-resident households over the 'ownership' of the Mama Card. Widows of the original plot owners are increasingly losing control of the Mama Card to their sons, daughters-in-law, sons-in-law, and, in some cases, to their granddaughters. Similarly, many sons dispute their unmarried sisters holding the Mama Card following the death of the mother. The sons argue that the card should go to their wife and not to their unmarried sister.
2. Population pressures. The number of family and extended family members relying on the income from the family's oil palm holding has increased over time (see above). Thus, among some families where the Mama Card is rotated monthly, a woman may now only gain access to the *Mama Card* every 3-4 months.
3. New uses of the Mama Card. Over 40% of households have found additional ways to use the Mama Card. Where several co-resident families rely on one oil palm holding for their main income, they often now informally sub-divide the 6 ha plot and manage separate 2 ha portions of the block. The Mama Card is then used as a payment mechanism for a family managing one part of the block while the papa card is used for another 2 ha section of the plot. All the oil palm fruit harvested (loose fruit and fresh fruit bunches) from the portion with the Mama Card is weighed on the Mama Card

while all the fruit from the other part of the block is weighed on the Papa Card. This enables oil palm income to be shared more equitably among co-resident families. The income earned on each card is shared between husband and wife on each portion of the block according to the amount of fruit they contributed to the harvest. Whilst this is a positive move for some families through relieving income pressures, family disputes have increased in frequency over the misuse of the Mama Card, and on some blocks women no longer have control of the card.

Whilst many of these new challenges bring into question the future long-term benefits of the MLSF for women, there are efforts by OPIC to address these problems. With female extension officers continuing to work closely with the *lus frut mamas*, they can monitor new problems as they emerge and address the needs of women. Finally, despite these new challenges, the MLFS illustrates the critical role that extension can play in addressing the gender inequities that commonly arise in commodity crop production in PNG and elsewhere. It also illustrates that by incorporating women into extension, considerable progress can be made in improving the economic and social circumstances of women and oil palm growing households more generally.

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#### **7.4. Piloting pathways to facilitate women's move into agribusiness enterprises: The VSLA case study.**

##### **Overview**

In 2018, the first pilot Village Savings and Loans Associations were established in PNG. The pilot involved CARE International in PNG as implementers, and researchers from PNG's Coffee Industry Corporation (CIC) and Curtin University. The wider research project has sought to identify the enabling factors that have assisted women entrepreneurs in PNG, and the pathways followed by successful women entrepreneurs in the agricultural sector. One factor that has been shown to assist women entrepreneurs, to expand their enterprises, and build women's economic agency is access to financial services. Although improving access to savings facilities and credit does not automatically translate into broader forms of women's empowerment, these can be important stepping-stones.

The Village Savings and Loans Association (VSLA) model was established by CARE International. The VSLA model has been very successful throughout Africa and in South and South-East Asia, however the model had not been trialled in PNG. Under the current project, VSLAs were established in two communities in the Eastern Highlands Province (EHP). In the early phases, CARE expanded their activities under their Coffee Industry Support Program to include, in 2018, a total of ten VSLAs, across five locations, in the EHP and Simbu Province. The present report presents findings and discussion of the VSLAs in one of the pilot communities in the Bena area (EHP). The findings from this site do not necessarily reflect the experiences of VSLA in the other PNG communities where VSLA was established. Data collection at the second pilot site faced several setbacks and was ultimately cancelled due to Covid-19.

##### **The pilot field site**

The Bena community was also involved in an earlier ACIAR-funded project *Improving livelihoods of smallholder families through increased productivity of coffee-based farming systems in the highlands of Papua New Guinea* (ASEM/2008/036) (for details of livelihoods and coffee farming in this community see Curry et al. 2017; Inu 2015; Kiup 2017; Koczberski et al. 2021; Kiup et al. 2021; and Curry et al. 2021). The community at Bena comprises four neighbouring rural villages, relatively close to the urban centre of Goroka. The two most important sources of income are coffee growing and the sale of fresh food in local marketplaces. These sources of income are gendered, with coffee generally more significant for men, and marketplace selling more important for women. As in other coffee growing

areas close to towns, in recent years people have lost some interest in coffee and have become increasingly engaged with, and dependent on, fresh food marketing (see 7.2 above). The community, compared to many other areas of PNG is less disadvantaged (Hanson et al. 2001), though it is still relatively poor. Asset ownership is low. Education levels are low, with men on average having 4.5 years of schooling, and women 2.7 years of schooling; and only one third of households had a member with a bank account (Curry et al. 2017).

### **The VSLA model and local modifications**

The VSLA model has been adapted to different contexts by CARE, and under other names by other organisations. It is designed to be malleable within certain parameters, and the VSLA rolled out in PNG is not significantly different to that elsewhere. The following describes the model's broad features (for a more detailed description of the model see CARE 2012; Koczberski et al. 2019).

VSLAs are self-selected groups of up to 30 members. Members meet regularly, over a typically 9-12 month cycle, to save and draw loans. The groups set out their own constitutions and are managed by an elected committee.

At fortnightly meetings small amounts of money are saved through the purchase of shares. Members may purchase between 1 and 5 shares each meeting, with the share price set by each group at the beginning of each cycle and fixed for its duration. Share purchases are recorded in individual members' passbooks using a stamp. Members also make fixed contributions to a 'social fund' which members can draw on in periods of hardship. This report does not analyse the use of the social fund, though it is known a substantial number of members accessed the fund to meet medical expenses.

At loans meetings (typically every four weeks), members may take out small loans to a maximum of three times the member's accumulated savings, and can also make loan repayments. The loan repayment period is 12 weeks. Loans attract a fee/interest, set by the group for each cycle, which is ultimately repaid to the collective membership at the end of the cycle. Loan withdrawals and repayments are recorded in each member's passbook, as well as in the record keeper's books. All loans are drawn from the group's collective savings. Funds, along with member passbooks and the record keeper's book, are stored in a heavy-duty metal box secured by three locks.

At the end of each 9-12 month cycle, groups hold a 'share-out' in which all members receive their savings along with their share of any profits accumulated by the group from loan fees and fines (issued for breaches to the group's rules). The different Bena savings groups have come together to conduct their share-outs as community events. The time-bound cycles with periodic share-outs give people an opportunity to leave or join the group, for groups to revisit their constitution, change the share value, adjust interest and fee rates, and establish a new committee. Groups are intended to become self-propagating through 'village agents' – members of an existing group who assist in the establishment and mentoring of new groups.

All groups received training from CARE PNG in the VSLA methodology. CARE also ran Financial Literacy Training and Family Business Management Training. The latter focused on household communication, decision-making, sharing of workloads and goal setting. Some groups, including the Bena group had also previously received Organisational Strengthening Training focused on good group governance. CARE PNG initially had a strong mentoring presence, which was gradually reduced as the capacity and confidence of groups grew. CIC researchers also had an informal mentoring role.



The following presents selected findings from the first two cycles in 2018 and 2019 at the Bena pilot site. The Covid-19 pandemic delayed most data collection on the 2020 cycle. Preliminary findings for the Women's A group in 2018 are reported in Koczberski et al. (2019).

### Expansion of membership at Bena

Over the first four cycles, the collective of VSLA groups at Bena expanded considerably, and there remains strong community interest in joining. In 2018, two VSLA groups were established in the Bena field site, one women's group (Women A) and one mixed gender group comprised mostly of men but included two women (Men A). In 2019, a second women's group was established (Women B), and the two women from the mixed gender group moved into the Women's A group. In 2020 a third women's group was established (Women C). The number of members in each group has also expanded over time (see Table 7.11). Between 2018-2021, 145 people (109 women and 36 men) have been a member of one of the Bena VSLA groups. Composition of members within each group has remained relatively stable from cycle to cycle.

Table 7.11: VSLA group member numbers, Bena, 2018-2021

	Men A	Women A	Women B	Women C	Total
2018	25	25	-	-	50
2019	26	27	26	-	79
2020	30	30	30	30	120
2021	29	28	31	31	119

### VSLA savings: has it helped promote a savings culture?

The VSLA has been embraced by members as a means to save money and has contributed to establishing a savings culture amongst members and within their households. Each group at Bena has used a deliberately conservative K2 share price in their first cycle, and have increased the share price in subsequent cycles (see Table 7.12).

Table 7.12: Share price and maximum fortnightly savings for VSLA groups, Bena, 2018-2021.

	2018 Share Price	2018 Max. fortnightly savings	2019	2019 Max. fortnightly savings	2020	2020 Max. fortnightly savings	2021	2021 Max. fortnightly savings
Men A	K2	K10	K5	K25	K5	K25	K20	K100
Women A	K2	K10	K5	K25	K5	K25	K20	K100
Women B	-	-	K2	K10	K3	K15	K5	K25
Women C	-	-	-	-	K2	K10	K5	K25

In the first cycle in 2018 there was some initial hesitancy in acquiring shares. However, after the first few weeks most members purchased the maximum or near the maximum number of shares available to them. In the 2019 cycle, members of Women's A collectively purchased 96% of the available shares, Women's B purchased 97%, and Men's A purchased 91%. The increasing share price and the high share purchase rate indicates both high levels of trust in the group and scheme, and the higher saving potential amongst members. A small number of members purchased far fewer shares than the majority.

At the end of each savings and loans cycle, each member's savings are returned to them along with their share of group profits. The group profits come primarily from interest paid on loans – 30% interest over a 12-week loan period for the Bena group.<sup>4</sup> This is a very high interest rate, however, the money is ultimately returned to group members, and is therefore an effective means to make additional savings. The profits earned by the group are distributed amongst members based on the number of shares each member has purchased. This, effectively, increases the value of each share purchased. For example, in the Women's A group in 2019, members purchased shares for K5.00 each but at the share-out received K6.20 for each share they purchased. For women who purchased the maximum number of shares (100 shares in 2019), at the share-out they received K620 – K500 of their own savings plus K120 as their share of profits.

For members with higher incomes, the amounts received in the share-out are not huge (Table 7.13). For some members, the ability to save these amounts was important. The share-out was also important as a relatively large lump sum, as many members had previously struggled to save such amounts.

The amounts saved are significant at the individual level. The funds amassed are particularly impressive at the group and community levels. In 2019, the collective membership of the three groups accumulated just over K35,000.

Table 7.13: The mean amount received by members of each group at the share-out.

Group/Year (share price)	Minimum share-out amount received (Kina)	Mean share-out amount received (Kina)	Maximum share-out amount received (Kina)	Share-out share value (Kina)	Per cent increase in share value	Final share-out value (Kina)
Men A – 2018 (K2)	136	219	245	2.90	45	4591
Women A – 2018 (K2)	131	193	206	2.60	30	4625
Men A – 2019 (K5)	0	523	648	6.50	30	13,598
Women A – 2019 (K5)	118	554	621	6.20	24	14,956
Women B – 2019 (K2)	0	257	313	3.10	55	6683

Members in the groups highly value how the VSLA has provided a way for them to individually save money within a supportive collective. Because VSLAs operate in cycles, and at the end of each cycle all money is disbursed to the members, this reduces the capacity of VSLA to be a means for ongoing saving of money. Nevertheless, the development of a culture of saving is evident in the substantial proportion of members who reported saving or intending to save part of their share-out money, rather than spending it (Table 7.14).<sup>5</sup>

<sup>4</sup> Equivalent to a 130% annual interest rate.

<sup>5</sup> The higher rate of saving in the 2019 cycle, compared to 2018, is in part due to the timing of the surveys. The surveys for the 2018 share-out occurred several months after the share-out, whereas the surveys for the 2019 share-out occurred several days after the share-out. Due to the timing, the 2019 surveys asked people if they had allocated any of their share-out to savings. It therefore cannot be determined from that data that savings rates increased between the two cycles, but it is evident that in both cycles a substantial number of members sought to save some of their share-out funds. The average and maximum share-out funds were substantially higher in 2019, so members did have a greater capacity to save. The development of a savings culture was a common point of discussion in the focus groups.



Table 7.14: Proportion of members by VSLA group who saved/assigned to savings a portion of their share-out funds.

	2018 Men A (n=19)	2019 Men A (n=25)	2018 Women A (n=19)	2019 Women A (n=26)	2019 Women B (n=24)
Savings	21	52	21	58	50

In focus groups members spoke about how their efforts to save money prior to their involvement in VSLA were often unsuccessful. They also spoke about how in their own individual practices, and amongst the group as a whole, there had been clear shifts in approaches to saving. It is not possible to present a detailed analysis of the focus groups here, but the following quotes are indicative of what was reported by VSLA members in focus groups. These quotes from women speak of how the group had motivated them to save, had encouraged them to budget, and helped them amass a lump sum of money.

*If she gets all [five shares], and I get two [shares], it pushes me. It motivates me. So next time I will get all of them.*

*[Now], when I market, I think, this [money] I will put into the [VSLA] group. This [money] is for me to buy cooking oil and soap... Before, I brought [money] back [home], I would take it without purpose... now my husband and I have agreed... in the second cycle, when we get money, we'll think carefully and use it, so we do something [good] with it.*

*Money, we'd see it, but... we'd use it and it would be gone... Now, we come put it here [in the VSLA], and eventually, we received K619 cash [at the share-out]. This was the first time in our lives we'd taken this amount [of money] to the house.*

### Loans: have people gained greater access to credit?

Participation in the VSLA has improved people's access to credit. Prior to joining the VSLA, only 9% of households reported to have taken out a loan from a financial institution in the past. In the 2018 cycle, 76 loans with a total value of K8000 were issued to members of the two Bena groups. In the 2019 cycle, 172 loans with a total value of K27,332 were issued across the three Bena groups.

VSLA members can take out loans of up to three times the value of their purchased shares. The total value of the loans taken out by each group reflects the share price and the length of the cycle. The 2018 cycle included 16 meetings for the Women's A group and 17 meetings for the Men's A group, the 2019 cycles had 20 meetings. So, in 2019 there was more opportunity for members to take out loans, and the higher share price for the Women's A and Women's B group enabled larger borrowings. Looking at only the Men A and Women's A groups, both increased the average number of loans per member, but the average loan size also increased substantially (Table 7.15). In the case of Women A group average loans increased from K94 to K174; the corresponding figures for the Men A group were K116 and K196. The different share prices used, and the different lengths of the 2018 and 2019 cycles makes comparison between groups and between years challenging.

Table 7.15: Number and value of loans, Bena VSLA groups 2018-2019

	No. of loans		Total value (Kina)		Mean loan size (Kina)	
	2018	2019	2018	2019	2018	2019
Men A	39	52	4524	10,192	116	196
Women A	37	52	3478	9048	94	174
Women B	-	68	-	8092		119

All members have taken out loans from the VSLA. In both the 2018 and 2019 cycles, most members took out two or more loans. In their first cycle the Men's A and, particularly, Women's A groups had been cautious. By their second cycle both groups were more familiar with VSLA and confident to take on greater risk.

In the first cycle, in which the K2 share price was adopted, borrowing at times exhausted or near exhausted the pool of loan funds. However, this was not cited by members as a major concern, and members were generally able to take out loans as desired. In the 2019 cycle (see Figure 7.7), when the higher K5 share price was used, deposits of money outpaced demand for loans, and so borrowing was not restricted by the available funds. Thus, it was by choice that members did not take out more loans, or larger loans, rather than due to the lack of available funds.

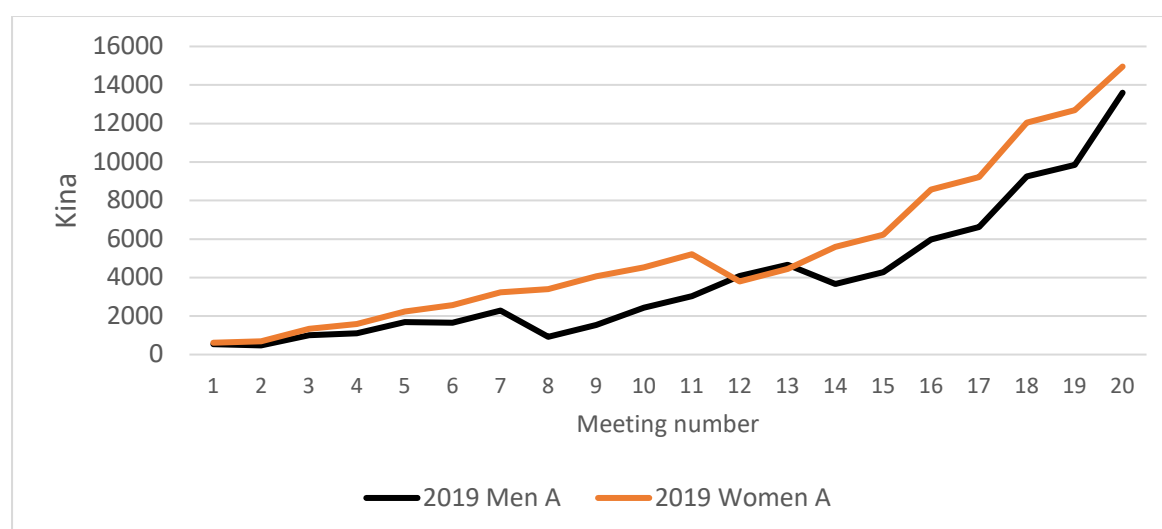


Figure 7.7: Funds remaining in the savings box at the end of each meeting. Men's A and Women's A groups, Bena, 2019.

The Men A and Women A groups took out loans at a very similar rate in both 2018 and 2019 cycles (Figure 7.8). In both cycles, on average the men's group took out slightly larger loans than the women's group. The Women's B group was less conservative in their first cycle. For all groups in both 2018 and 2019 cycles loan size was most frequently less than K100. Generally, the greater the loan value the lower the frequency at which they were taken out. In the 2019 cycle, the Men A and Women's A group each had a few members who took out substantially larger loans than other members.

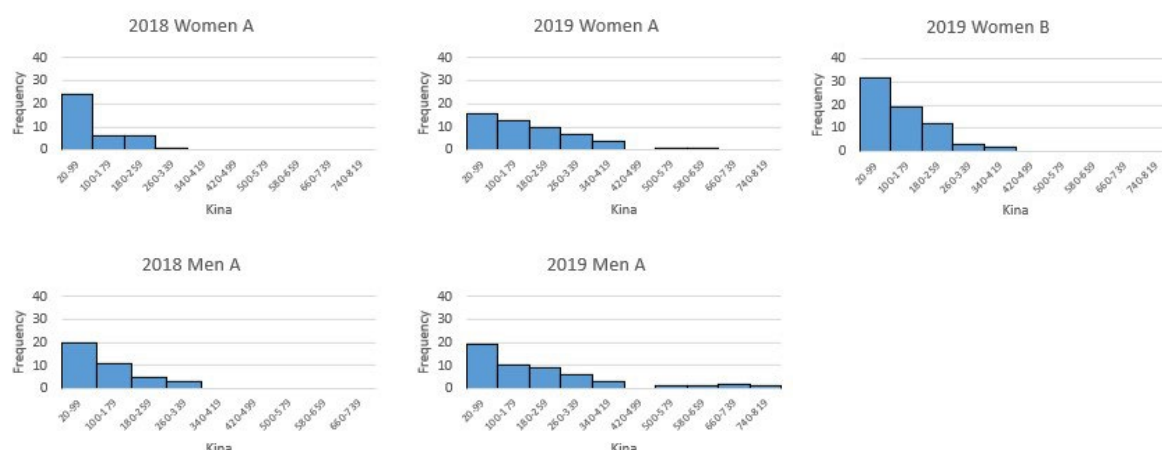


Figure 7.8: Distribution of loans of different amounts, Bena 2018-2019

Most other savings group models that operate or have operated in Melanesia only allow members to take out loans up to the value of their savings. These loans are effectively only the member accessing their savings rather than having access to credit. The VSLA model, however, allows members to borrow up to three times the value of their shares. It is, then, important to understand the extent to which members took advantage of the credit offered.

Across the three groups and two cycles, 70% of loans have been for an amount greater than the members savings, and so credit was extended. In each of the groups' first cycles, when the share price was K2, the great majority of loans exceeded the member's savings at the time the loan was taken out and therefore the member benefitted from access to credit. In the second cycle (2019) for the Men A and Women A groups, when the share price was increased to K5, and therefore members had accumulated greater savings, a much smaller proportion of loans exceeded member savings. The proportion of loans that accessed credit was around half that of the previous K2 cycle, though a substantial proportion of loans still made use of access to credit – 46% of loans by members of the Men A group, and 38% of loans by members of the Women A group, exceeded the member's savings (see Figure 7.9).

Most loans have, however, been well under the maximum permitted borrowing of three times the member's savings. Members borrowed proportionately more relative to their savings when using the K2 share price, because the slower accumulation of savings meant that they needed larger loans relative to savings to borrow an amount sufficient to be useful for their micro-enterprises. In 2019, in the two groups using the K5 share price, only 11% of the loans were for an amount greater than twice the member's savings. In the K5 cycles, members have had access to credit if they wanted it, but members have not fully used the credit available to them. Most members have been conservative in their borrowing, and this reflects their cautious experimentation with credit, the high interest rates, as well as the limited cash earning opportunities in rural communities in PNG.

Loans of less than a member's savings, however, still benefits those members. By taking out loans, rather than drawing down their savings, it compels those members to find ways to earn money to repay the loan and so, as long as they did not default, to maintain their savings. As noted, interest on loans also contributes to group profits that are ultimately re-distributed to the members.

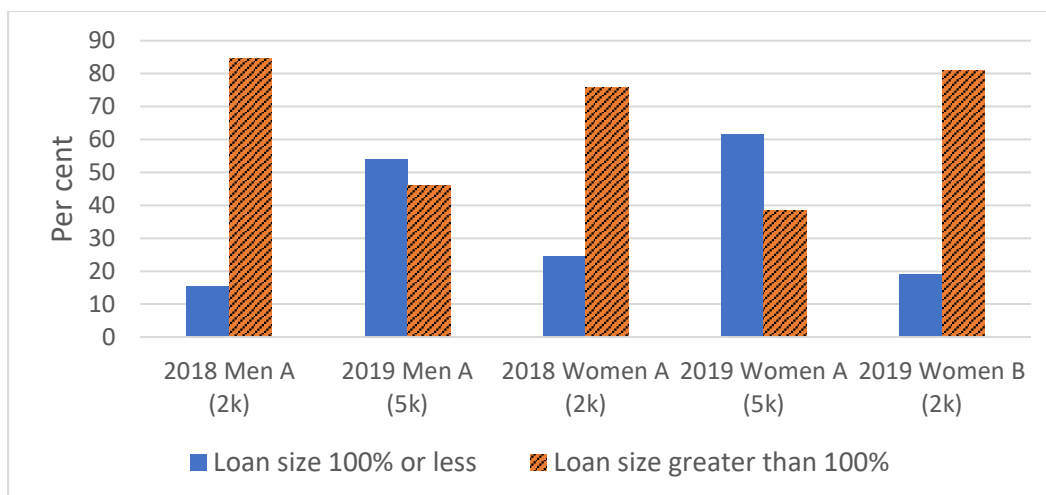


Figure 7.9: Proportion of loans in each group that were greater than or less than the member's savings when the loan was taken out, Bena, 2018-2019.

### Loan repayments: were loans repaid?

In the first two cycles, across all groups, 77% of loans were repaid on time (see Figure 7.10). In 2018, both the Women A and Men A groups were conservative in their borrowing, and almost all loans (92%) were repaid on time. In the 2019 cycle, the higher share prices and longer cycles enabled members to take out larger loans that they subsequently struggled to repay. Members of the Women's B group, although in their first cycle and using the lower K2 share price, did not take the same conservative approach adopted by the other two groups during their first cycles and so encountered the same repayment challenges in the 2019 cycle. In 2019, 30% of loans were not repaid on time. This also reflected the more relaxed enforcement of charges for late repayment. In general, women were more likely to pay on time.

In most cases, late loans were eventually repaid by the member without shares being struck out of the member's passbook. However, for 15% of loans in the Men's A group, 8% in the Women's A group, and 13% in the Women's B group, shares were forfeited by the member to repay the loan. When members forfeit shares, they are paid out at the original purchase price, and so members do not receive a share of their group's profits on those shares.

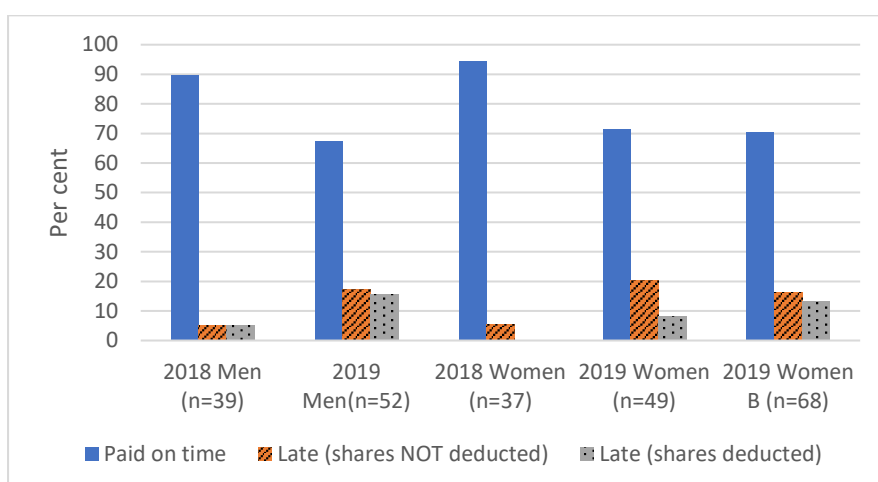


Figure 7.10: Proportion of loans paid on time and late. Bena groups, 2018-2019.

Although a substantial number of loans were repaid late or by forfeiting shares, the level of default was exceptionally low. In 2019, across the three groups, 172 loans totalling K27,332 were issued. Only two of the loans were not recouped in full, both within the Women's B group. One member still owed K175, the other K20. This is an impressive achievement by

a group amongst whom very few members had any banking experience prior to joining the group.

The following quotes reflect how group members strongly value how VSLA enabled them to borrow money. These quotes speak of the difficulties of borrowing money, both from community members and from formal financial institutions, and of how the ability to take out loans has assisted members in their agricultural work.

*[Previously], we had wanted to borrow money from others, but it's hard, they said 'no'... people would talk behind my back. Now I have joined [the VSLA] and I see... we borrow but there is no [negative] talk. We save our money with wanbel (support/agreement), and we get loans with wanbel. (female)*

*I went three times to the [named] bank to get a loan. The first time they talked to me in difficult English. I am a villager and it was hard for me. After some years I went back and asked again. They talked to me in the same way. They are the same colour [as me], but they spoke in English. (male)*

*When we get money from coffee, we put money aside for Round-up (herbicide). [But, then] troubles (hevi) come, and we use it, then grass grows in our coffee garden and we struggle to find new money. (female)*

### **Micro-enterprises: has VSLA enabled women and men to start new enterprises or expand existing enterprises?**

Loans have supported a range of agricultural and non-agricultural enterprises. Members were able to start new enterprises and expand the scale or scope of existing enterprises. Data collection on member enterprises is currently incomplete due to Covid-19 travel restrictions, however, there are strong indications that the loans have facilitated growth in small-scale enterprises in the community.

In line with the group constitutions, loans were granted for three main purposes, classified here as: agricultural work and enterprises; non-agricultural enterprises; and for non-agricultural, non-business purposes, primarily education.<sup>6</sup> What members did with their loans was strongly gendered (see Figure 7.11). Most men (87%) took out loans for agricultural purposes, compared with just over half of women members.<sup>7</sup> Agricultural loans were fairly evenly split between coffee and fresh food. A high proportion of members used their loans to purchase herbicides to use on their coffee gardens to clear understorey weeds and in food gardens to clear weeds following fallowing and prior to planting. Herbicides are a labour-saving technology, in a context where labour shortages are a significant constraint on production. In 2010, 49% of households surveyed in the community cited labour availability as a constraint on coffee production (Curry et al. 2017:47). The proportion of members taking out loans for livestock increased between 2018 and 2019, reflecting the establishment of numerous small chicken rearing enterprises

A much greater proportion of women took out loans for non-agricultural businesses (78%), whereas only 28% of men did so. The most common forms of non-agricultural businesses were the resale of 'store' goods (primarily from the vendor's house or a small roadside table, and less commonly through a trade store/canteen), the resale of betel nut and cigarettes, and the sale of cooked food (primarily flour balls, scones, rice balls, and cups of coffee – all produced with store bought goods). Similar proportions of men and women took out loans for purposes other than business or agriculture, mostly for education.

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<sup>6</sup> In the group constitutions, the third permitted loan use was for education, however a small number of loans were for other purposes.

<sup>7</sup> Members frequently took out loans for multiple purposes that fell into more than one category.

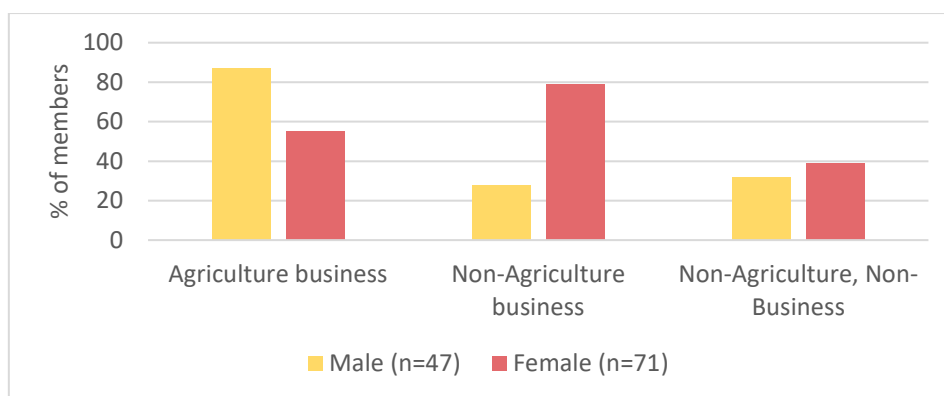


Figure 7.11: Proportion of VSLA members by gender taking out loans for different purposes, Bena, 2018-2019. Note: individuals who were members in both 2018 and 2019 are analysed as two members.

In the focus groups, members spoke about how VSLA had enabled them to set up enterprises, which they had previously not been able to establish. Loans through the VSLA also enabled members to upscale activities they were already engaged in and supported the longer-term sustainability of some enterprises by providing access to funds when needed.

Members also spoke about an increase in the prevalence of different enterprises in their community. The enterprises established through the VSLA are enterprises common in rural PNG. Though certain enterprises including small roadside vending and chicken rearing were previously present in the community, they have become more common because of the VSLA. Loans enabled members to access more distant markets to sell fresh food (such as at Lae) where previously they had mostly sold locally. Several individuals have also experimented with long-distance wholesaling of betel nut and coconuts from the coast to the highlands. The following quotes reflect some of the discussions around setting up small-enterprises with the help of the VSLA.

*I am happy that I can get a loan to do my small projects - raising chickens, pigs, restarting my canteen that broke down. When VSLA came, I saw it would help me. When I have money I go save it, and VSLA will give me small amounts of money to grow my small business. (female)*

*I got a loan. VSLA has helped me and my family. Before the first share out I sat down with my husband, and we came to an agreement that with the first share-out money we would set up a small trade store. We now have the trade store. For the second share-out, we sat down again. My husband and I have agreed that when I get the share-out money, we would go to Madang and buy coconuts to sell. (female)*

*Before, there weren't many people thinking of earning money through small market vending in the village. Since they have joined the [VSLA] group, and they have taken loans from the group, now there are lots of people doing small-scale marketing [in the village]. (male)*

### Has VSLA contributed to improvements in people's lives?

Members of the VSLA have been overwhelmingly positive about the VSLA and in focus groups reported on the improvements which it had brought to their lives. A substantial number of members invested part of their share-out funds to improving their housing and have invested in education (see Table 7.16).<sup>8</sup> Members have reported improvements in household consumption and in diets.

<sup>8</sup> The differences in investment in education between 2018 and 2019 is in part the result of the 2019 surveys being conducted prior to school fees being due.

Table 7.16: Proportion of members by group using share-out funds for house building and education

	2018 Men A (n=19) (%)	2019 Men A (n=25) (%)	2018 Women A (n=19) (%)	2019 Women A (n=26) (%)	2019 Women B (n=24) (%)
House building	16	20	21	12	8
Education	37	20	42	19	21

The following is one woman's story of what she has been able to achieve through her and her husband's involvement in VSLA:

*Big changes have occurred in our lives. I have built a house... My husband is also in the group [Men's group]. My husband and I both took loans, and we put it aside and bought corrugated iron... when I got money I saved it, when I got money at the share-out it helped us, and now we completed the house.*

In addition to more material benefits, in focus groups, members frequently cited how they had developed new financial management and livelihood skills and reported on the changes they had observed in their relationships at home and within the community. VSLA has also contributed to some reimagining of what women are capable of. These changes have brought a sense of personal transformation, growing confidence, and greater self-esteem. There is not the space in the present report to document in detail the improvements people have seen in their lives, however the following quotes document a range of people's comments.

Many members commented on how their involvement in the VSLA had helped them develop various financial management and livelihood skills. Those members involved as record keepers and money counters in the groups reported how their numeracy and accounting skills improved. The record keepers were already among the most literate and numerate of the group, yet they reported their skills improving and in particular growing in self-confidence. Members in the money counter roles also reported their numeracy improving. The emphasis on transparency within the VSLA model, with all transactions verbalised, and group funds visibly counted multiple times during meetings, also means that other members through repeated observation were also able to learn. The following quotes reflect this:

*I got money from the market ... [but] when I counted it I would make mistakes... [Now] I come [to the VSLA meetings], I look, and learn. It is a kind of schoolhouse of ours. (female)*

*Now I have learned to write numbers. It is a big change in my life. I could count [before], but when writing numbers I would make errors. Since I have come here [to VSLA] I have learned.*

*Record keeper (female)*

*I am a money counter in the VSLA... Before I would just count small amounts of money, my own money. Now I count large sums of money. I feel like I am working inside a bank.*

*Money counter (male)*

Involvement in VSLA has also contributed to members, both male and female, reimagining what is possible, and as a result many members have now set their sights higher than they previously thought possible. This has been particularly important for women, who were 75% of VSLA members in 2020, with women themselves and men reimagining what women can do. VSLA has opened their eyes to what they can achieve and what new roles they can pursue. In many conversations with women there was a clear "before and after" narrative of how life fundamentally changed for them and their families. There has been a shift in women's consciousness as they learn new skills, start small enterprises and do things that previously they would never have imagined. Women in focus groups emphasised that they can envisage a different life, have developed greater confidence in themselves, and are able to 'think big'. Part of this confidence in reimagining what they can do and how life can change partly results from being in the supportive environment of the savings groups where women can come together and freely share their experiences and dreams as they rethink who they are and what they can do.



The following quotes reflect these changes in women's horizons.

*I raise chickens. Now my plans have got larger. I want to look after more than five boxes [of chicks]. I started with one box. (female)*

*Our behaviour is changing, our thinking is changing. Our 'walk', our 'talk', our 'work', how we use money, it is changing now. (male)*

*It is just women [in the group], so we are free [to be ourselves], to express ourselves, our worries ... If there was a man in the group with us, I think we would be embarrassed to have some of our conversations. (female)*

VSLA members have also reported changes in household relations and the status of women within the community from their involvement within the VSLA and the expansion of the savings groups in the community. Women have been prominent within the growth of VSLA, and now the savings groups have become very positively viewed by other community members: this has driven positive changes in the status of women. Many members also report that their involvement has brought improved marital and family relationships. It is important not to overstate this change, as instances of poor marital relations were also documented in the research, nevertheless, there are some positive indications of women's empowerment.

*Before, there was lots of criticism of us [coming to VSLA]. They said all sorts of things. But we came. When they saw the changes [in our lives], they regretted [their criticisms]. (female)*

*One small change I have seen, is some families of VSLA members, I have seen how their children dress has changed. Before they wore tattered trousers about, they didn't mind too much... [but] when they joined the VSLA, I don't know what caused it, but I saw some small changes in how their children dressed, how the adults dressed... It opened the eyes of those not in the group, and it has stimulated their interest in joining. (male)*

*[People who previously just hung about the village, now] I see them holding spades, they are working. Now their habits are changing... Men and women are working together, in agreement. Men are helping their wives carry their string bags [of produce] to the market. (female)*

## **Beyond the pilot: Sustainability and lessons learned**

The pilot at Bena has been very successful, however, there have been several challenges. One challenge has been low levels of literacy and numeracy. The VSLA methodology is designed for low literacy and numeracy context – members save by purchasing fixed-price shares, and each share is recorded as a stamp in the member's passbook. Loans withdrawal and repayments are less standardised, and require members to sign off on the figures recorded in their passbooks. The basic numeracy tests we conducted among several group members suggest around a third of women would be unable to consistently recognise basic numbers recorded in their passbooks. Record keeping has been generally accurate, though minor errors have been observed. Low literacy and numeracy levels also means the pool of potential record-keepers is limited, and this may impact on the sustainability of the groups. Low numeracy levels also impact on members' capacity to keep records related to their enterprises.

Security of funds is also becoming an issue, one which has emerged as a result of the success of the groups. As noted, the savings groups have large memberships, the rate of saving is high, and outpaces the demand for loans. The result is that money accumulates in the locked box (see Figure 7.7), particularly in the latter half of the cycle. The security of such funds was flagged as a key risk at the outset of the project. Efforts are currently being made to link the Bena groups up with a supportive finance institution to ensure security of funds does not ultimately undermine the viability of the groups.

As reported earlier, late repayment of loans also became an issue in the 2019 cycle (Figure 7.9). This has not, however, undermined trust within the group. In focus groups following the end of the 2019 cycle, members identified that late repayment had become an issue



because as a group they had not strictly enforced their group constitutions. They reflected that VSLA was still very new for them, and that they had learned from their mistakes and that they were confident these issues could be resolved in the next cycle. Their ability to manage this has further strengthened trust, and governance of the group.

A last challenge, discussed here, is not directly associated with VSLA itself, but with the limited economic opportunities available in rural PNG. Members have access to credit, nevertheless they have found the capacity for them to enter new areas or expand production remains a constraint. The supply of particular fresh foods in the Goroka market is often saturated and prices are low. Many women have also experimented with various forms of reselling and sale of cooked food within the community, but have found that other women are doing the same thing – there are only so many ‘scone’ sellers a small rural community can support. The skill sets that the women and men in the groups possess are very similar to those held by many other rural people in PNG. People are trying to find niches, and areas of the market not yet fully subscribed, and, although they may not have found these, the VSLA has nevertheless provided them with the opportunity to experiment.

Despite these and other challenges, the Bena groups have been very successful. It does, however, need to be kept in mind that the pilot reported here was only within one community. A significant factor in the group’s success has been their proximity to markets and so their capacity to diversify their economic activities, and the strong leadership, cooperation and trust within the group. The regular participation of CIC and Curtin researchers has no doubt also contributed positively. Other communities where CARE PNG has established VSLA groups have not all experienced the same level of success, including in the second pilot site where data collection was abandoned due to Covid-19 restrictions. Challenges encountered by other groups including access to markets and group governance have tempered the success of VSLA within those communities, and more work is needed to draw together the broader learnings from all the VSLA sites.

With the success of the pilot, how sustainable is the VSLA concept in PNG beyond the end of the pilot? An important feature of the VSLA model is that it is intended to be rolled out into other communities through village agents. Village agents are members of existing VSLA who receive training from CARE to enable them to teach the methodology to, and mentor, new groups. This has only happened to a limited extent to date, and only to closely linked groups within the same communities. For VSLA to scale-out in PNG, it needs to be able to successfully self-propagate new independent groups, and beyond the pilot sites. Strong institutional commitment, informed by research, will be needed for this to occur.

The analysis of the VSLA data is ongoing. A separate report on the VSLA, with a more detailed analysis and discussion is currently being drafted.

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## 8. Impacts

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### 8.1 Scientific impacts – now and in 5 years

Our study has advanced knowledge and understanding in four key areas. These include:

**Gender and small-scale enterprise development in PNG.** Information derived from Objectives 1 and 2 activities has contributed new knowledge on women operating micro and small enterprises in PNG. Despite the existing literature on SMEs in PNG, there has been scant attention to understanding the socio-economic and cultural constraints on SME development among rural women. In part this is because most studies are based on rapid assessments and largely confined to men and women operating small enterprises in the formal sector, in urban/peri-urban areas. They do not adequately deal with the larger group of rural women who operate predominantly in the informal sector. Nor do such studies consider the village socio-cultural context in which many small rural enterprises operated by women are situated. This project has helped fill this gap by gaining knowledge from a large number of interviews with rural women on some of the key factors, contexts, opportunities and individual characteristics that contributed to their business success. Moreover we examined women's own perspectives on running a small enterprise and how the complexities of their everyday lives, social relationships and community and cultural factors both constrain and support their move into establishing a small local enterprise. From this research we have identified some of the key pathways and enabling factors as well as constraining factors affecting enterprise development for rural women in PNG. This is the first major study of its kind across rural communities in six provinces of PNG. This information will provide guidance for donors, NGOs and national/provincial planners in developing suitable interventions that will build on the opportunities operating at the community or local level for female-led enterprises and help address the challenges many face.

**Gender and agricultural extension in the export commodity crop sectors in PNG.**

Under Objective 2, the assessments of: i) female agricultural extension officers; ii) the *Mama Lus Frut Scheme* in oil palm; and iii) new extension models in the cocoa industry, together bring new insights into ways to foster and strengthen women's involvement in commodity crop production and agribusiness. Despite women's significant contributions to household export crop production, most agricultural extension organisations have very few female extension officers and their programs typically remain gender-blind and offer women few opportunities to improve their access and control over household income to strengthen household livelihoods. The evaluation of the *Mama Lus Frut Scheme* provides a detailed study of a gender-inclusive extension scheme operating for over 20 years in WNB. The evaluation shows how policy interventions can both increase smallholder productivity and advance gender equity in commodity production.

The findings on the impact of the scheme on household production and the social and economic outcomes for women and smallholder families, provide lessons on what works, why it works, and in what contexts. This is valuable information for extension providers in other commodity crop sectors planning to improve the participation of women and establish more equitable and inclusive extension services. Furthermore, where agricultural projects or interventions have attempted to improve the participation of women, few have been evaluated to better understand how they benefit women, the intra-household impacts of the interventions, and the factors that explain their success or failure (for exceptions, see Doss et al. 2012, Johnson et al. 2016; Amber et al. 2018;). Less common are studies of the long-term impacts on women's economic position and changes in household relations. Thus, this evaluation makes an important contribution to the literature on gender and extension.

Similarly, the assessment of female agricultural extension officers in PNG provides essential information that is presently lacking in much of the literature on extension. While there is a long tradition of agricultural extension in PNG, with several reviews of the effectiveness of extension in the country, few studies have considered female agricultural extension officers or examined ways to improve the participation of female farmers in extension. This study fills this gap and is likely to be of particular interest to donors, NGOs and INGOs interested in improving women's engagement in commodity crop production and agribusiness.

**Women and informal community-based savings clubs.** The monitoring and evaluation of the VSLA provides new knowledge and understanding of the role of savings groups in advancing women's economic empowerment in PNG. Many donor agencies and INGOs have supported establishing women-only savings groups as a means of advancing women's economic empowerment. Globally, the oldest and most prominent formalised savings group model is CARE's VSLA, which, until this project, had not been trialled in PNG. There are other savings group models in the region, but there are few publicly available and independent evaluations of these, and the quantitative and qualitative data available on these groups are limited. The findings from the pilot site provide a detailed quantitative and qualitative evaluation of the model and its suitability for scaling-up to other parts of PNG and Melanesia, more generally.

**Marketplaces.** This project has generated new and improved understanding of contemporary marketplaces in PNG. Fresh food marketplaces are of great significance for livelihoods and food security in PNG. Since the early 2000s the organisation and dynamics of fresh food marketplaces have been transformed. Wholesaling and reselling have proliferated, commercially oriented production has increased, there is greater dependency on marketplace earnings for people's livelihoods, roadside selling has expanded, more store goods are being sold, and more men are becoming involved. The present project has drawn together recent research on marketplaces in PNG, and interviews with producers, small-scale resellers and wholesale traders, to firstly document the continued importance of marketplaces for women in PNG, particularly for rural women. Secondly, the project has documented the changes occurring in PNG's marketplaces and the opportunities, challenges and risks this presents for rural women's engagement in marketplaces. There has been renewed development interest in marketplaces in PNG, and the wider Pacific, in recent years. Marketplaces have been redeveloped, and further redevelopments are planned, and they have also provided a vehicle for development interventions around women's security. However, the research base for planning has been limited. The improved understanding of PNG's marketplaces, generated by the present research, will provide a foundation for future development engagements in marketplaces and in relation to food security and urban and rural livelihoods.

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## 8.2 Capacity impacts – now and in 5 years

Capacity building of Papua New Guinean and Australian early career researchers (ECR) was an important project goal. While previous projects with PNGOPRA, CCI and CIC led to the employment of trained socio-economists in these organisations, where none were employed previously, the current project consolidated this training. The three institutions now have strong socio-economic sections that have continued through this project to make significant contributions to research on smallholders.

### Training during fieldwork and formal workshops

Most training occurred during fieldwork, but formal research training workshops were also organised for our partner institutions. For many of the research staff involved in the project,

examining factors around women's involvement in agribusiness was a new area of research. This project has built knowledge among the research staff on these issues. Whilst the project further developed the researchers understanding of constraints on smallholder production in cocoa, oil palm and coffee, many had not explored the institutional and other external factors constraining income generation among women and their ability to transition to managing their own small enterprises. Thus, research staff involved in the project have vastly improved their knowledge in areas related to financial inclusion, constraints on women's involvement in small enterprise management and women's empowerment

In the past we have conducted research workshops with the PNG partners in this project. The workshops have focussed on quantitative and qualitative research methods covering survey design, interviews and focus groups, data base management and statistics, writing research reports and journal articles, research ethics and video production. In this project a two-day training workshop on writing journal articles was held at CIC in March 2019. Another workshop was planned for 2020 but was postponed because of COVID-19. The next research training workshop will be held under ASEM/2016/100 in 2022 or 2023 when COVID-19 travel restrictions are lifted.

## Conferences

Early career and senior project staff had opportunities to present their research at national and international conferences as well as at other fora such as ACIAR workshops. These included:

- The mid-term review at Kimbe, WNB (March 2019) and final review (online March 2021). Presentations by: Jelmah Wesley (CIC); Reuben Sengere (CIC); Matilda Hamago (CIC); Durida Sisire (CARE); Emmanuel Germis (OPRA); Steven Nake (OPRA); Esley Peter (CCI); Kathleen Natera (CCI); Robert Nailina (CCI) Leonnie Sontag (CCI); Raylin Gena (Unitech).
- Seeds of Change Conference, Uni of Canberra, 2-4 April 2019. Joint presentation titled "Twenty years of economic empowerment for smallholder women in Papua New Guinea: a case study from West New Britain" by: Merolyn Koia (OPRA), Elizabeth Rawa (OPIC), Jacqueline Kalama (OPIC) and Gina Koczberski (Curtin).
- 4th World Congress on Agroforestry, Montpellier, France, 20-25 May, 2019. Joint presentation titled "Breaking open the black box: the socioeconomic factors explaining adoption or rejection of innovations in agroforestry" by Curry, G.N. (Curtin), Nake, S. (OPRA), Koczberski, G. (Curtin), Rafflegeau, S., Lummani, J. (CCI), Germis, E. (OPRA), Nailina, R. (CCI) and Peter, E. (CCI).

## Thesis completions

The HDR students have cross-project involvement with supervision from senior staff involved in this and other projects. Some former students such as Drs Veronica Bue (Unitech, Lae) and Reuben Sengere (CIC) have had in-country supervisory roles with some of the students. Recent students include:

- Stephanie Harris (2017). *Moralising Money. The dilemmas of savings in Papua New Guinea*. Honours thesis, First Class, Curtin. Funded by the New Colombo Plan Mobility Project. Stephanie was supervised and given informal research training in qualitative techniques in the field by CCIL, OPRA and Curtin project staff. She was awarded an Australian Government New Colombo Plan Mobility Project grant to conduct 6 weeks fieldwork in ENB and WNB in 2017.
- Matilda Hamago, CIC. (2019). *The role and impact of female extension officers on the participation of women in export cash crop production in Papua New Guinea*. MPhil thesis, Curtin. ACIAR John Allwright funded student.

- Madeleine Stephens (2019). The rise of rice: How changing livelihoods influence the diets of oil palm smallholders in Hoskins, West New Britain Province, Papua New Guinea. First class Honours' thesis. Curtin University. Madeleine was supervised and given informal research training in qualitative techniques by OPRA and Curtin project staff. Fieldwork supported by an Australian Government New Colombo Plan Mobility Project grant.
- Esley Peter, CCI. (2021-under examination). The assessment of the effectiveness of a private sector extension model for smallholder men and women in Papua New Guinea. MPhil thesis, Curtin. ACIAR John Allwright funded student.
- Raylin Gena, Unitech. (2021 ongoing). Examining the Success and Constraints of women fresh produce resellers at the Lae Urban Market in Morobe Province, PNG. Master of Agric, Unitech, Lae. Tuition fees funded through the project. Co-supervised by Dr Vero Bue (Unitech) and G. Koczberski.



Higher degree research students supervised by Curtin University project staff. Back row: Emmanuel Germis, Esley Peter and front row Matilda Hamago all funded through John Allwright and completed their studies during the project.

### Video training

A four-day video training program in May 2017 was organised for OPRA, OPIC, CIC and CCIL. Although this training was initiated under ASEM/2012/072 “Strengthening livelihoods for food security amongst cocoa and oil palm farming communities in Papua New Guinea”, the skills gained were built upon and utilised in this project. In 2017 video-mediated learning had not been widely used in extension training in the main commodity export cash crops in PNG. The training provided the opportunity in the cocoa, oil palm and coffee industries to build skills among staff in media and video production techniques.





Video production by OPRA, recording interviews with smallholders at Bialla, WNB.

Since the initial training, OPRA has made additional investments in video production equipment to establish extension videos production as an integral part of the organisation's efforts to improve the effectiveness of information flows to smallholders (especially youth) and other industry stakeholders.

Extension training using videos is regularly included in OPRA's extension programme for smallholders.

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### 8.3 Community impacts – now and in 5 years

#### VSLA

The establishment of VSLAs in PNG was instigated by the present project, a collaboration between CARE, CIC and Curtin University. The ACIAR-funded pilot included two locations, but in the early phases CARE built on the initial impetus to further expand their VSLA activities under their Coffee Industry Support Program to include a total of six locations by 2019. Since 2019, on the back of the early successes elsewhere, particularly the Bena pilot site where CIC has worked closely, two additional locations were established in a partnership between CIC and CARE (within 2021 a total of 9 groups). This was led by CIC, who has recently incorporated VSLA into their plans for engaging with coffee grower groups as part of a broader recognition of the importance of socio-cultural and socio-economic factors in shaping coffee production, and in line with their shift to a group-based approach to coffee agricultural extension. The intention is for CIC staff to be directly involved in the training of new groups.

To ensure continuity of the VSLA program and assist the transition, CARE has conducted training of CIC staff in the main training modules that will be used by CIC extension officers when setting up VSLA groups. The potential broader community impact beyond the pilot is already evident, and if adequately supported will likely expand over the next five years.

Community impact is already evident beyond the initial pilot groups at Bena. In the first year of the pilot in 2018, there were two groups at Bena with a total of 50 members (25 women and 25 men). Now in 2021, 119 members (90 women and 29 men) commenced the current cycle. Between 2018-2021 a total of 145 individuals (109 women and 36 men) have participated in the groups.

To date, most VSLA groups in PNG have been directly set-up by CARE (as well as by CIC). The international VSLA model is, however, for new groups to self-establish through village

agents (members of existing groups trained to establish and mentor new groups). To date, new groups have only been established in the existing communities, and have not spread to neighbouring communities. In the case of Bena, the four established groups also function more as subgroups of a single VSLA rather than as four autonomous groups. For VSLA to scale out in PNG and have impact beyond the pilot sites (and the other CARE sites), it will be important for the village agent component of the model to be established. CARE has conducted some village agent training with promising members from existing groups, but it is not yet clear if this has led to spread. The complex geographical and socio-cultural context is likely to present some challenges to the village agent approach. To consolidate the current progress and expand further in the future, there is a need for strong support from the institutions involved and for further research on this aspect of VSLA.

CIC has adopted the VSLA in its National Development Coffee Roadmap 2020-2030 and CIC Strategic Business Plan 2020-2024. From next year VSLA will be rolled out to coffee cooperatives and farmer groups throughout PNG. The VSLA will act as a 'glue' in ensuring sustainability of coffee cooperatives and grower groups. We anticipate that potentially many female coffee farmers will experience significant economic benefit from the policy within the next five years.

The following discusses economic and social impacts for the ACIAR-funded pilot groups from Bena. These groups are amongst the best performing of the PNG VSLAs, and so the findings should be seen to reflect the potential impact of a successful VSLA rather than indicative of the experiences and impacts of all groups.

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### 8.3.1 Economic impacts

#### VSLA

The piloting of the VSLA groups has resulted in significant economic benefits at the pilot site. The VSLA groups have increased saving levels in the community, provided access to credit, and enabled people to establish new micro-enterprises, and expand and build the resilience of existing micro-enterprises. The amounts of money involved are relatively small, but for many of the members involved these amounts are very significant, and for some, transformational. Member savings, loans and enterprises are discussed in the findings section, and are briefly summarised here.

Prior to the VSLA being established, households at Bena had limited means to securely save their money or to take out a loan. Only 33% of households at Bena had a household member with a bank account, and only 9% of households reported to have a household member who had taken out a loan from a financial institution in the past.

In the nine-month 2019 cycle, the 80 members of the 3 VSLA groups at Bena saved a total of over K35,000 (\$14,500). At the end of a cycle 'share-out', each member receives their savings in addition to their share of the group's profits. In 2019, the average share-out amount received by members of the Women's A group was K554, with a maximum amount of K621. For rural Papua New Guinean women, these are significant amounts. Generally, this is money that would have passed through these women's hands anyway, but what is important is that the amount is received as a lump sum. As one woman remarked *"This was the first time in our lives we'd taken this amount [of money] to the house"*. This creates opportunities for women to make investments that would previously not have been possible. Members also report the development of a culture of savings both as individuals and collectively.

In 2019, at the pilot site of Bena, all 80 members took out a loan, and most members took out two loans during the 9-month cycle. In total 172 loans were given to members of the 3

groups, ranging from K20-K750 (\$8-\$300). The Women's A group had a mean loan value of K174. Across the three groups and two cycles, 70% of loans have been for an amount greater than the members savings, and so credit was extended. The VSLA model allows members to take out loans for up to three times the amount they hold in savings, yet in 2019, in the two groups in their second cycle, only 11% of the loans were for an amount greater than twice the member's savings. That is, members have access to credit if they want it but other factors are limiting people's desire to take out loans. This is in part a reflection of initial cautious experimentation with credit, but it also reflects the limited economic opportunities for people in rural PNG.

The VSLAs charge a fee/interest to members when they take out loans. The interest charged is very high compared to the formal banks – at Bena 30% on a 12-week loan – but in contrast to a formal sector bank or an informal money lender, the loan charges are ultimately returned to group members at the end of cycle 'share-out'.

Loans were used to start-up and run small enterprises, particularly related to agriculture (coffee and fresh food), resale of store goods, sale of cooked food and for education. Many loans assisted members with already established income-earning activities, and a substantial number of loans were used by members to experiment with new potential income-earning activities (particularly small-scale reselling). There are now many more small enterprises in the community, and also a greater diversity of enterprises. Enterprises have also become larger in scale and more complex (including long distance wholesaling, chicken rearing, bee-keeping and running tradestores). Members also used their share-out funds to expand their small enterprises, to invest in equipment required for new enterprises, for education, and for house improvements. Women and men reported increased levels of asset ownership. Data collected under the project, and ASEM/2016/100, will enable further analysis of these livelihood gains.

In VSLA focus groups, many women and men reported positive changes in intra-household relations, and in the status of women in the community (discussed under social impacts). This is likely to have improved women's economic agency, including their ability to make decisions about the money they earn. And this is critical, as the economic gains for women in terms of savings and loans and running enterprises are eroded where they do not have control over their finances.

The community in Bena is also involved in the ACIAR-funded project *Improving livelihoods of smallholder coffee communities in Papua New Guinea* (ASEM/2016/100), and there are strong synergies between the two projects. Under ASEM/2016/100 a demucilager (a machine used for processing coffee) is being tested with the aim of improving post-harvest processing of coffee and by doing so improve the incomes of coffee farming families. The VSLA provides a good avenue for saving some of the additional income earned through coffee. Furthermore, loans taken out through the VSLA can be used to support improved coffee husbandry (through, for example, tool purchases, labour hire, and purchase of agricultural inputs) that will further improve coffee production, harvesting levels and incomes. The VSLA will consolidate and amplify the economic benefits stemming from reinvigorated engagement in coffee in the community.

## Oil Palm

In 2017, information gained from interviews with female oil palm smallholders at Bialla, WNB, led to a shift in policy in Hargy Oil Palm Ltd regarding the payment of bonuses for oil palm certification. Several years earlier, Hargy Oil Palm gained Roundtable Sustainable Palm Oil (RSPO) certification for meeting environmental and OH&S standards. RSPO certification provides the company with price premiums which are passed directly to smallholder fruit suppliers. Each year smallholder households receive an annual RSPO



bonus, and until 2017 this was paid into the bank account of the male household head (Papa Card holders). Women revealed in interviews that the annual bonus paid by the company was based on the total oil palm fruit sold by a household which included the 'loose fruit' (oil palm fruitlets) sold by female household heads (weighed on their Mama Card). Women felt this was unfair and the bonus on the 'loose fruit' should be paid into their own individual bank accounts rather than their husbands' accounts. In 2017 the project leader referred the grievance to the General Manager of Hargy Oil Palm, and in May 2017 the company accepted the advice and began paying the loose fruit bonus directly to women. This shift in policy has benefited almost 3,000 women who sell RSPO certified loose fruit to the company. From 2017 to 2020, women were paid a total RSPO bonus of K2,657,444 (K886 per Mama Card holder).

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### 8.3.2 Social impacts

#### VSLA

At Bena, where the VSLA has been particularly successful, the social impacts, especially on women, have been significant. Some social impacts stem from the economic benefits from participation in the VSLA. These include improvements to housing, household assets, household consumption and education that have come from money saved in the VSLA or earned by enterprises started from VSLA loans. Other important social impacts stem from participation in the group. Among some of the key social impacts are:

Material impacts. As documented in the findings, a substantial number of members invested their share-out funds in improvements to housing, and to acquire household items, and equipment for their businesses (bee hives, building chicken houses). These investments are also evident in the focus group data. Household surveys to be conducted in 2022 for ASEM/2016/100 will collect further data on changes to household assets and so will enable changes to be traced. The following quote is by a women commenting on the positive changes she observed in her neighbours after they joined the VSLA: *"When she joined this group [VSLA], I saw her dressed up from head to toe. Her children wearing good shoes and socks, wearing good clothes, eating well and the skin/body of her children changed. Her life really changed."*

Training. Formal training by CARE was provided to some of the VSLA group members at Bena who were to become involved in the VSLA programme. This training contributed to the success of the VSLAs and provided members with transferable skills that can be applied in other aspects of their lives to generate further livelihood benefits. For example, the training programmes listed below also benefited the demucilager trial which was part of ASEM/2016/100 and involved some of the same smallholder men and women. The training modules included:

- *Organisational Strengthening Training.* Training on group operation and governance.
- *Family Business Management Trainings (FBMT).* A training module on communication, decision-making, sharing of workloads and budgeting within a family. Husbands and wives attended the training together.
- *Financial Literacy Training (FLT).* Training given on basic money management and entrepreneurial skills.
- *The VSLA Methodology.* Training on the savings and loans meeting procedures, financial services provided by the group and group establishment and forming group constitutions.

Improved numeracy. Poor numeracy is an issue within the groups with a third of women members unable to consistently recognise three-digit numbers. CARE's Financial Literacy training with the group contributed to improved financial skills, but more importantly, members reported that their active participation in the savings and loans meetings – as record-keepers, money counters and as members simply observing – is helping to improve their competency and confidence with numbers, as the quotes in Section 7.4 illustrate.

Education. A considerable proportion of loans, and share-out funds have been invested in education, including to tertiary level. It is likely that this has enabled some children to attend school and university who would not have otherwise.

Improved family relations. Some women reported their improved social status within their families, and increased support from husbands and other family members who were initially dismissive of their enterprises and capabilities. Some members reported more joint decision-making with their spouse, and increased cooperation in economic activities. The VSLA has provided an opportunity for women to demonstrate their capacity to save, and run small enterprises, and as a result they gained the respect and admiration of family members. Although these are very positive indicators, it is important to note that in focus groups some instances were reported of women having their efforts in VSLA undermined by unsupportive husbands. Positive family relations are emphasised in the Family Business Management Training delivered by CARE. This training has helped to open up space for conversations within the community about household gender relations. These messages have been strongly endorsed by the local community leader who coordinated the groups at Bena, and this has been critical in driving the changes as many members did not attend the CARE training. Although the messages by CARE and the community leader have been important, the VSLA itself by providing opportunities for women to exercise their capacity to save and successfully manage their small enterprises, has been equally important in driving these changes.

Women's empowerment. Interview and survey data indicate that the VSLA model is assisting women's empowerment through:

- Providing women with access to loans to start small income-earning activities;
- Women gaining new financial management and livelihood skills;
- Women having more control and access over economic resources; and importantly,
- Building confidence in women that they can make sound economic decisions and move into economic activities that previously were not considered accessible to women.

Several women raised the role of VSLA in building confidence. For many women, the VSLA has opened their eyes to what they can achieve and what new roles they can adopt. There was a shift in women's consciousness as they learnt new skills, started small enterprises and moved into new activities that previously they did not consider possible prior to joining the savings group. This came about in part due to the supportive environment of the savings groups where women came together and freely shared their new experiences. Women are prominent within the savings groups at Bena, making up 75% of current members, and their leading role is symbolically recognised within the group. In the first share-out by the group, all women wore the PNG colours which, according to a community leader, symbolised that the VSLA came to PNG and Bena in women's 'name'. VSLA has become highly valued by the community, and it is likely women's leading role has positive impacts on women's status.

Supported group activities and strengthened group governance. The establishment of the VSLAs in Bena has also supported and spurred other community activities by the wider VSLA group. As noted, the four VSLA groups at Bena are closely interconnected, and their

activities are coordinated by a male community leader. This coordination between the groups, with now up to 120 members, has enabled it to become the basis for establishing and coordinating other activities. VSLA members are, for example, prominent within the community's coffee marketing group, which is trialling a demucilager/eco-pulper (a coffee processing machine) as part of another ACIAR-funded project (ASEM/2016/100).

Preliminary analysis of the records of the machine's use in 2020 show that at least 59% of participants were VSLA members.

The wider VSLA membership was also the basis for a community bulb onion project (established as part of nutrient recycling trials attached to the demucilager under ASEM/2016/100). In late 2020 the wider group were developing plans for coordinated fresh food marketing, and a *bilum* (string bag) marketing group, and had plans about a 'community basic needs store'. While the group was already taking form prior to the establishment of VSLA, VSLA has strengthened the group. VSLA has built trust within the group through the shared successes of the group, successful loan repayments, and transparent fund management. Furthermore, the focus on group governance within the VSLA, the process of forming and revising group constitutions, and the emphasis on transparency, has improved people's knowledge of the importance of governance in the effective functioning of groups. Improved group governance and functioning has enabled the group to coordinate and start to think about other group activities. Moreover, with a greater understanding of the importance of group governance and the need for transparency, the community is now well-placed to use this new knowledge in the establishment and future management of new community groups in the village. Ideas of good group governance were also supported by Organisational Strengthening Training that CARE delivered in the community, under their Coffee Industry Support Program.

These social impacts are especially significant in rural PNG where there are so few opportunities for women to discover and develop their capabilities, bring change to their own and family's livelihoods and well-being, and enhance their numeracy skills.

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### 8.3.3 Environmental impacts

NA

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## 8.4 Communication and dissemination activities

To disseminate the findings of the research group's ACIAR funded projects (including ASEM/2014/054, ASEM/2016/100, ASEM/2008/036 and ASEM/2012/072) the research group established the Pacific Livelihoods website (<http://pacificlivelihoods.com>). The website includes overviews of the different projects, links to publications by the group, and a blog series (see list of blogs below). Since the website was established in 2018, visitor numbers have grown each year, with 2,578 'visitors' recorded in 2020. The website is a valuable resource for researchers, students, NGO workers and professionals employed in the agricultural sector in PNG. In 2020, the website was 'viewed' from PNG 2,274 times (Figure 8.1)

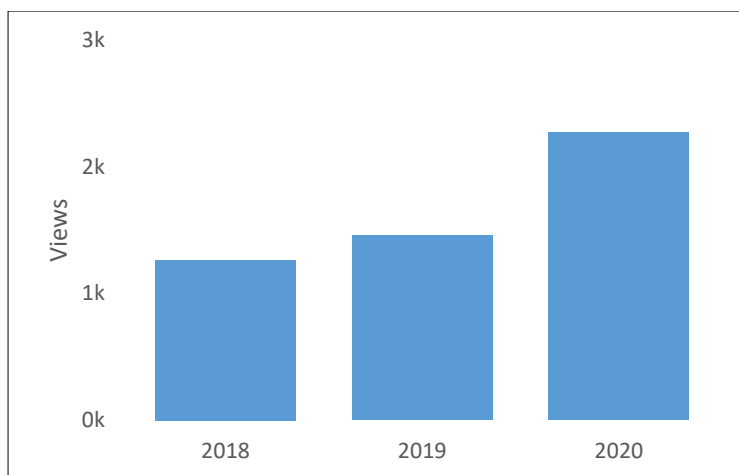


Figure 8.1. Total views of the Pacific Livelihoods website from Papua New Guinea, 2018-2020

### Blogs

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2019. *Seeds of Change': Pacific Livelihoods researchers present 'mama lus frut' 20 years on*. Pacific Livelihoods Research Group.

2019. *Change and continuity in Papua New Guinea's marketplaces*. Development Policy Centre Blog. Pacific Livelihoods Research Group. Sharp, T.

2019. *Improving savings and access to credit among rural women in Eastern Highlands, Papua New Guinea*. Blog. Pacific Livelihoods Research Group.

2019. *Rising rice consumption amongst oil palm smallholders in West New Britain, Papua New Guinea*. Blog. Pacific Livelihoods Research Group. Stephens, M.

2020. *Women's empowerment pathways in PNG*. Pacific Livelihoods Research Group.

2020. *The role and impact of female extension officers on the participation of women in export crop production in Papua New Guinea – Student Series – #5*. Pacific Livelihoods Research Group. Curtin University. Hamago, Matilda.

2020. *The influence of socio-economic factors in farm investment decisions and labour mobilisation in smallholder coffee production in Eastern Highlands Province, Papua New Guinea – Student Series – #4*. Pacific Livelihoods Research Group. Susan May Inu

2021. *The rise of reselling in PNG's marketplaces*. Pacific Livelihoods Research Group. Curtin University. Sharp, T.

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Curry, G. (2016). *Land, labour and women's entrepreneurship*. Project Inception Meeting, CIC, Aiyura.

Curry, G. & Koczberski, G. (2019). *Marketplaces in PNG. What agribusiness opportunities do they provide for rural women?* Curtin University.

Curry, G., Koczberski, G., & Germis, E. (2018). *The changing moral economy of land transactions on customary land for small scale agricultural development: an example from Papua New Guinea*. Paper presented at the Devnet 2018 Conference, University of Canterbury, New Zealand. Presented in the session: The land has eyes and teeth, and also heart and spirit: economic development on customary land in the Pacific.

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Koczberski, G. (2016). *An introduction to Women in Agribusiness in Papua New Guinea*. Project inception meeting, CIC, Aiyura

Koczberski, G., Curry, G., Sengere, R., & Inu, S. M. (2018). *Informal land rentals and women entrepreneurs: a case study from the Eastern Highlands of Papua New Guinea*. Paper presented at the Devnet 2018 Conference, University of Canterbury, New Zealand. Presented in the session: The land has eyes and teeth, and also heart and spirit: economic development on customary land in the Pacific.

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## 9 Conclusions and recommendations

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### 9.1 Conclusions

In PNG, there is a growing number of rural women keen to enter male dominated economic spheres, such as micro-small enterprises. To date an understanding of the experiences of rural women operating their own enterprises and the impediments and factors explaining their success has been limited. This study, through conducting in-depth interviews with over one hundred women, has shown they experience a broad range of overlapping constraining and enabling factors that affect their capacity to establish and manage micro/small enterprises. These include socio-cultural, household, locational, personal and institutional factors. The socio-cultural and institutional structures of constraint on women explain why many struggle to maintain the viability of their businesses or to expand them. These same structures also explain why so few women transition to engage in small-scale enterprises. Given the obstacles women face, a supportive spouse, family and community and being strong and resilient are critically important in explaining their business success. The study provides a better understanding of these enabling and constraining factors. The data demonstrates, through case study analysis, the many pathways rural women move along as they transition to operating small enterprises, and how their success is contingent on certain steps or opportunities being met or in place along the path before they can become successful in their endeavours. Furthermore, such pathways vary in difficulty among women in different socio-cultural and locational settings and due to the specific individual, household, community and institutional constraints they experience.

Despite women's different experiences and personal attributes, the successful transition to managing micro/small enterprises highlighted in this study offer model pathways to facilitate women's stronger engagement in small-scale agricultural enterprises. Currently, there is an interest in PNG by international donors and multilateral organisations to improve women's economic empowerment through greater involvement in small business. By documenting these experiences among women, the research provides valuable information for gender-focused micro-enterprise development programs to improve the capacity of women to engage in micro/small scale enterprises.

Through an examination of both public and private sector agricultural extension, the study shows that when women are included in extension, the benefits at the household and community levels can be substantial. The *Mama Lus Frut* Scheme is one good example. The scheme, which was rapidly adopted by women, is in stark contrast to other smallholder technical interventions and extension advice and training in PNG where adoption has had a very long history of being disappointingly very low (Curry et al. 2007; Sitapai 2012). Given its sustained success over 20 years and the continued benefits women gain from the Mama Card, the MLFS has many lessons that can be shared with other industries, especially export commodity crop sectors. Some of the key principles underpinning the success of the Mama Card include: the introduction of a more gender-equitable payment system to benefit women; the employment of female extension officers; the incorporation of female smallholders/extension officers into institutional decision-making bodies; the support gained from the community (especially from male household heads); and the expansion of services and training to women to meet their needs.

The study has revealed the changing and dynamic nature of marketplaces in PNG, and the potential new entrepreneurial opportunities this presents for women. It has long been known that for most rural women, earning income from small and regular market sales is a major, if not primary source of income, even in regions where a large proportion of households



engage in export crop production. However, in our Highlands study sites, there are some women, and men, increasingly shifting their labour away from coffee production and from small-scale marketing of fresh food crops to the potentially more lucrative large-scale commercial cultivation of fresh foods such as cabbages, carrot, broccoli and pineapples. Some of these women are also renting small parcels of land for vegetable production on a short-term basis. Increased commercial fresh food production is closely connected with the increasing prominence of reselling, both by larger wholesale traders and by small-scale marketplace vendors. The emergence and rise of reselling is a significant transformation of PNG marketplaces, which has received very little research attention.

The study is the first research in PNG to examine the characteristics of marketplace resellers and it offers important insights into a rapidly growing economic sphere that potentially offers women many opportunities. The transformation and growth of the domestic fresh food trade presents opportunities for rural women, but as more urban residents and men enter the trade the place of rural women in the marketplace is changing, and there are risks they may be relegated to more minor roles.

Finally, evidence from the monitoring and evaluation of the pilot of the VSLA model in PNG has shown the model has been very successful. The VSLA has provided a mechanism for people to save, and has contributed to developing a culture of saving. Members have also been able to access credit, and although the groups encountered some problems with delayed repayments, the default rate has been extraordinarily low. Through their savings, and access to loans, members have been able to start new micro enterprises, and to grow and build more resilient enterprises. Members have reported improvements in their lives, both in material assets but more importantly in respect to the development of skills, positive changes in household relations, and in expanding their horizons of what is possible.

Through these changes members have gained in confidence and in self-esteem. The success of the pilot is also evidenced by the expansion of VSLA within the field site villages, and the strong interest in joining the group amongst other community members and by those in neighbouring communities. The planning of the pilot also provided, at a very early stage, the impetus for CARE to expand the trial of VSLA to four additional locations, and subsequent rollout of VSLA to CIC coffee groups in two new locations. The pilot at Bena has been very successful. However, low numeracy, limited economic opportunities, the potential insecurity of saved funds, and enforcement of on time repayments have presented challenges. Importantly, the challenges has not undermined confidence in the VSLA, but have encouraged members to seek strategies to overcome these challenges.

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## 9.2 Recommendations

1. Further research is needed on understanding the needs and the structures of constraint women who have been unable or unsuccessful in establishing viable small enterprises. The research in this project focused on successful rural women operating micro/small enterprises. It did not investigate the many rural women who have attempted to start or expand their own enterprises but have not succeeded. Thus, data collection for this project focused on a small minority of pioneering women who made great strides in advancing the status of women in PNG as successful entrepreneurs. They are a rarity and while the research provided valuable insights into the factors contributing to their success, for logistical reasons, the much greater number of women who attempted to become entrepreneurs, but failed were not investigated. Examining the structures of constraint these women have faced will provide important additional information that can be used to inform the piloting of initiatives for women to help them develop or diversify their enterprises. These initiatives may include linking women to skills training providers and new markets, trialling village

savings and loans groups, incorporating business development awareness into agricultural field days and exploring downstream processing or other business opportunities with local commodity exporters (e.g. nurseries, spin-off businesses/procurements).

2. CIC to link members of the VSLA women's savings groups at Bena to the Women's Micro Bank and Nambawan Super Choice Scheme. Given that CIC has adopted the VSLA in its National Development Coffee Roadmap 2020-2030 and Strategic Business Plan 2020-2024 (see Section 8.3), it is recommended the well-performing savings groups at Bena that have operated for at least three years, be linked to more formal financial institutions to strengthen future financial and personal security.

3. Expand village savings and loan groups into other coffee, cocoa and oil palm growing areas of PNG. Expanding village savings and loans groups should be tried in communities where well established and functioning farming co-operatives or community/church/women's groups are present. The research identified the power of working collectively and cohesively and the importance of governance in the success of saving and loans groups. The goal would be to improve financial literacy, individual savings, local agribusiness development and the governance and transparency of community-led organisations. Once well-established, groups should be linked to formal financial institutions and the Centre for Excellence in Financial Inclusion (CEFI) in PNG.

4. Examine and support the 'village agent' component of the VSLA model. The VSLA pilot has been successful, however, for the VSLA model to significantly scale-out in PNG and have impact beyond those communities where VSLA has been established, it is necessary that the 'village agent' component be embedded in VSLA training. Village agents are members of existing savings groups who establish, train and mentor new VSLAs. With the establishment of village agents, the role of the institutions (CARE and CIC) shifts towards providing support and mentorship to the village agents rather than to new groups themselves. This will contribute both to the spread and the ongoing sustainability of VSLA, as the body of people with knowledge and experience of VSLA grows. Some initial steps have been taken towards training village agents, however the complex geographical and socio-cultural context is likely to present some challenges to the village agent approach. Further research is needed to understand the potential pathways and constraints to establishing a sustainable village agent model in PNG.

5. Explore the integration of village savings and loans groups and agricultural development activities with adult literacy and numeracy training for women. The project found that despite women's greater access to credit for enterprise development or expansion, several women were unable to take full advantage of improved access to finances as they lacked the numeracy and literacy skills needed to advance or diversify their enterprises.

6. Partner organisations to introduce measures to link female farmers operating or planning to start small-scale enterprises to wider networks that will assist them to further develop their business skills and/or to help advance and expand their business. Such measures could include facilitating collaboration and partnerships with organisations such as CARE, CEFI, and formal financial institutions together with helping women to link up with successful local female entrepreneurs for mentoring.

7. Support collaboration between public/private extension providers and local commodity crop exporters to design and trial initiatives to increase the number of female extension officers employed to work directly with female farmers. The CARE graduate program outlined in Hamago (2021) provides a good basis to inform such initiatives.

8. Examine ways to address the gender-bias in agricultural extension programs and services in the export commodity crop sectors. This project has shown that more gender-inclusive approaches to extension (e.g. the *Mama Lus Frut Scheme*) are very effective in advancing women's role and status in household commodity production and promoting greater gender equity in export commodity crop production.

9. Several research gaps exist in understanding the contemporary and changing context of marketplaces in PNG and require further investigation. Given the rapid changes in the structure of marketplaces such as the increasing complexity of markets and long-distance marketing chains, there is a need for research to inform policy makers and development practitioners engaging with marketplaces and fresh food networks. Some of the key research needs include understanding the decline of the producer-seller traditional model, the emergence of urban-based resellers, who are the new key marketplace actors, and the new types of land tenure that are facilitating the large-upscaling of production of food crops for distant markets. Further research is also required to identify the opportunities and disadvantages for women and communities associated with these marketplace changes and to understand the impacts on women as producers, buyers and resellers and on village agricultural practices and food security.

10. Partner organisations to present research findings and policy recommendations at a full day workshop in Port Moresby to PNG policy makers and national key stakeholders, such as Department of Community Development and Religion, Department of National Planning and Monitoring, the SME Corporation, the National Agricultural Research Institute and the Fresh Produce Development Agency. Inclusion of NGOs, private sector and multilateral agencies based in Port Moresby, such as ADB, World Bank and International Finance Corporation is also recommended.

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## 10.2 List of publications produced by project

### 2017-2018

#### Publications

- Koczberski, G., Numbasa, G., Germis, E., & Curry, G. N. (2017). *Informal land markets in Papua New Guinea*. In: McDonnell, S., Allen, M., and Filer, C. (eds) *Kastom, Property and Ideology: Land Transformations in Melanesia*. Canberra: ANU Press, pp 145–168.
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#### Theses

- Harris, S. (2017). *Moralising Money: The Dilemma of Saving in Papua New Guinea*. (Honours' thesis), Curtin University Perth.

#### Reports

Koczberski, G., Curry, G., Nake, S., Koia, M., Nailina, R., Peter, E. and Natera, K. (2017). *Identifying opportunities and constraints for rural women's engagement in small-scale agricultural enterprises in Papua New Guinea*. Project Annual Report. ASEM/2014/054.

## 2018-2019

### Publications

Koczberski, G., Curry, G.N., Bue, V., Germis, E., Nake, S., & Tilden, G. M. (2018). *Diffusing Risk and Building Resilience through Innovation: Reciprocal Exchange Relationships, Livelihood Vulnerability and Food Security amongst Smallholder Farmers in Papua New Guinea*. Human Ecology, 46, 801-814.

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## 2019-2020

### Publications

Busse, M. & Sharp, T.L.M. (2019). *Marketplaces and Morality in Papua New Guinea: Place, Personhood and Exchange*. Oceania 89(2), 126-153.

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Hamago, M. (2019). *The role and impact of female extension officers on the participation of women in export crop production in Papua New Guinea*. (Masters' thesis). Curtin University

Stephens, M. (2019). *The rise of rice: How changing livelihoods influence the diets of oil palm smallholders in Hoskins, West New Britain Province, Papua New Guinea* [Honours' thesis]. Curtin University.

## Reports

Koczberski, G., Sharp, T., Curry, G., Sengere, R., Nake, S. & Nailina, R. (2019). *Identifying opportunities and constraints for rural women's engagement in small-scale agricultural enterprises in Papua New Guinea*. Project Annual Report. ASEM/2014/054.

Koczberski, G., Sharp, T., Wesley, J. & Ryan, S. (2019). *Village Savings and Loans Association: Eastern Highlands, Papua New Guinea*. Preliminary Report. Curtin University, Perth, Australia.

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## Publications

Sharp, T.L.M. (2021). *Intermediary trading and the transformation of marketplaces in Papua New Guinea*. Journal of Agrarian Change. DOI: 10.1111/joac.12407

Spark, C., Sharp, T.L.M. & Koczberski, G. (2020). *Relationality and economic empowerment: The role of men in supporting and undermining women's pathways*. The Journal of Development Studies. DOI: 10.1080/00220388.2020.1850697.

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Fort, W. & Koczberski, G. (2020). *Women's Savings (and Loans) Groups in Developing Countries. A review of the literature*. Discussion Paper 1. Pacific Livelihoods Research Group, Curtin University, Perth.

Fort, W. & Koczberski, G. (2021). *Women's Involvement in Small Medium Enterprises and Agribusiness in Papua New Guinea. A review of the literature*. Discussion Paper 3. Pacific Livelihoods Research Group, Curtin University, Perth.

Hamago, M. R. (2021). *Experiences of Female Agricultural Extension Officers in Papua New Guinea. A study of the coffee, cocoa and oil palm sectors*. Pacific Livelihoods Research Group, Curtin University, Perth.

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## 10 Appendixes

### 11.1 Appendix 1: Women operating micro-small enterprises Case Studies

Case Study 1. Martha: Coffee Buyer, Eastern Highlands Province	
Personal Information and Family Background	Every day during the peak of the coffee season, Martha, alongside male roadside coffee buyers in the heart of Goroka, is busy weighing coffee parchment, assessing coffee quality and negotiating prices like every other coffee buyer. This 57-year-old woman hails from Unggai in the Eastern Highlands Province. She is married to a man from Bena and has three adult children. Martha retired after 33 years of working as a DPI officer and then started her own coffee buying business.
Business Background	Martha, with help from her husband, started her business to supplement her pension to support her family. Initially, after retirement, they registered a coffee cooperative – Kenilogo Coffee Co-op in the village. The young men in the cooperative bought wet coffee parchment. The cooperative did not make any money (profit), so Martha and her husband then decided to take over the cooperative and run it as their business. They reasoned that it was their capital that started the cooperative. When Martha brought the coffee parchment to town to sell to roadside buyers, she was paid for 200 kg less than the coffee she brought to them to sell (she knew this because she weighed the coffee before taking it to town). She then decided to start buying coffee in town as a roadside buyer. She wanted to do it the honest way and not manipulate the scales or buy low quality wet coffee or as she calls it “buying water”. Because of her experience of the manipulated scale, she buys coffee so people who are selling to her can be confident they are getting the right price and benefit for their hard work.
Business Constraints	When Martha first started buying coffee in town, other roadside buyers were honest with coffee purchases, by calibrating their scales well and only buying good quality dry coffee. Then competition got tough. Buyers began buying wet coffee, bad coffee, and manipulated their scales, so they could buy big volumes of coffee each day and earn an income. Coffee growers also needed money, and they brought in low quality wet coffee and sold it to careless buyers. This practice reduced the average quality of roadside coffee and challenged the market of genuine buyers like herself. Martha wishes that CIC would impose regulations on roadside buyers to ensure only honest people were buying from coffee growers.
Business Success	<p>From her coffee buying business, Martha has ventured into a timber business and has purchased land in town to build a coffee factory and a timber yard. She has a timber mill in place and is slowly procuring the factory equipment for coffee green bean processing. According to Martha, the secret to successfully running her businesses to date is having a supportive husband and family, putting God first and not trusting others to buy coffee for her. In her opinion:</p> <p><i>“When we women start businesses, we depend on capital from our husbands...but there are lot of women now venturing into business... Women at home are managers. They look after the kitchen, food and everything...so women can be successful [business owners] ..if given the opportunity and having a supportive husband or family”</i></p> <p>Martha also emphasized the important of placing God first in everything.</p>

<p>Education background</p>	<p><i>"In a day in everything [we do], we must put God first...My day starts as early as 4:00am ... and I put God first ...everything falls in place. If I forget God... everything has blockages."</i></p> <p>The third reason Martha identifies is not to trust anyone to buy the coffee parchment for her. She fears they could buy low quality coffee [wet beans] and buy at a cheap price cheating the farmers and stealing some of the money. She strongly believes in herself doing the job.</p> <p>Martha has growers as far away as Jiwaka Province who sell to her because of her honesty in buying coffee parchment. They sell to her in bulk. Her business is selling good quality green beans to Niugini Highlands Coffee Exports in consistent quantities, and her work relationship is good and the company considers she is trust worthy.</p> <p>Martha is also privileged enough to have completed an agricultural degree. She graduated from PNG University of Natural Resources (back than called Vudal). Her long work experience also contributed in one way or other towards her business successes.</p> <p>Finally, Martha, believes that women can be successful business owners, just like any male, and in any field she pursues if she is determined. Determination, she says, is the key factor to achieving business goals.</p>
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## Case Study 2. Mary: Floriculture Business, East New Britain

Personal and family background	Mary runs a small floriculture business from her house near Warangoi, ENB. Mary is in her mid-forties and was born in Bougainville and moved to ENB in 1980 to take up employment with the Department of Primary Industry. She is married and has five adult children. Mary cultivates most of the flowers and plants for her business, and she earns supplementary income from other activities such as the sale of fresh fruit, garden food, baked food, and occasionally from tailoring. The family has a tradestore and a guesthouse that she helped establish through savings from her employment. Her husband manages these businesses and the income earned. They have a family cocoa block, but because of its distant location, it is neglected and yields negligible income.
Business background and constraints	Mary is the sole owner of the floriculture business and controls the income. She initially developed an interest in floriculture when she was employed as a DPI officer and attended a summit in 2006 where floriculture was promoted as a suitable income activity for women. Floriculture was later integrated into the DPI programme in ENB and she organised floriculture training and the distribution of planting material for women. Floriculture became popular among rural women, but it was an expensive and laborious activity for many to build up their flora collection and planting stock and to establish a steady income flow due to the limited customer base in ENB. As floriculture increased in popularity, the supply of flowers outstripped demand and as Mary observed, a lot of women lost interest in floriculture as prices declined for their product.
Business operations	In 2011 when she left full-time employment with DPI, Mary began building up her floriculture business and it is now her main income earner. She began by visiting businesses in Kokopo to negotiate deals to supply weekly floral arrangements. At the time of the interview, her business comprised of an agreement with the local Boroko Motors dealership in Kokopo to deliver a floral arrangement twice a week. The 'seven-flower vase deal' is a steady and regular source of income for her business, which she is paid on a monthly basis. On a less regular basis, she provides floral arrangements and decorating for church events, weddings, funerals and other formal events. These events vary greatly in size, and income can vary from K300 to K3,000 for a large event. For large events she will employ casual labour, and if necessary, purchase flowers from other floriculturists to meet the order. The sale of potted plants and cuttings from her house, and flowers at the Kokopo Sunday market, bring in additional income to her business.
Business success	Mary is one of the few women who has successfully maintained a viable floriculture business in her area. To a certain degree, she has many advantages and opportunities that have not been available to many other rural women, including a tertiary based education, a long professional career in agriculture, the necessary knowledge and skills to cultivate a range of flowering and ornamental plants, and savings from employment to establish her business. Her employment not only provided financial and skill advantages, but helped her to establish the very wide community networks that form her customer base.
Constraints on women	During her career, Mary was one of the very few female agricultural officers employed. Given the challenges this can present for working women in PNG (see Hamago 2018), it is possible that such experiences partly explain Mary's confidence to initially visit the business houses in Kokopo to seek potential clients and to trust in herself that she could establish a successful business.



<p>Community links</p>	<p>When discussing why few women move into establishing small enterprises, Mary said that:</p> <p><i>... it's the mentality women have. They don't trust in themselves. They think business is for men ...They always think that if they run something they will fail. But if you are willing and try again, try again, maybe you can do something...Women themselves they don't try... they don't have trust in themselves.</i></p> <p>Mary has other advantages that enable her to run a successful business. With no young or teenage dependent children, Mary is not burdened with the demands young children place on earnings or the heavy daily domestic chores and childcare responsibilities younger mothers face when trying to start a business. From Mary's perspective:</p> <p><i>One thing I observe is because of children [why women find it hard to establish a business]. When they [children] are young, youth come: "mama I want one kina for bus fare?", "I want this", sometimes they all come because you are too soft on them. Even marketing, small marketing, small doughnut marketing: when you come back in the afternoon "mama – one kina, two kina", so this frustration, maybe it makes women become discouraged and give up ('skin i die'). .... I'm ok now, my children are adults.</i></p> <p>Finally, Mary is a respected member of her community. During her long career, she worked with many women's group and represented ENB women at many meetings and workshops. She remains an active member of the community and women often seek out her advice and assistance on floriculture, sewing or family problems. Her generosity, and the respect and trust she has in the community plays an important role in explaining her long-term business success.</p>
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### Case Study 3. Dorothy: Informal Short-Term Money Lending, Morobe Province

Personal and family background	Dorothy is a small-scale money lender in the informal economy. She is married with four children. She lives with her family at Uni Block, an informal settlement in Lae. Her husband was a university graduate while she was a high school dropout. Her husband used to work for FinCorp Limited (a lending institution) where he earned K300 fortnightly. She was a house maker and would sell cooked food and other store goods to supplement her husband's income. Her husband fell ill and resigned taking home his last paycheck of K3000.
Business background and constraints	The money lending business started in 2008. After losing their main stream of income when her husband resigned because of illness, Dorothy and her husband decided to lend the money her husband received for his 'finish' pay. They targeted FinCorp customers. They would stand around on the city streets to offer one-off loans to FinCorp customers. At that time the street was their office. Eventually their customer base increased to around 200 giving them enough income to rent office space. In 2019, they moved into an office with a monthly rental of K900. The maximum amount they lend is K2000, at 30% interest. The main constraint on her business is bad customers who fail to repay their loans thus making it difficult to lend to other customers. They lose potential customers as a result.
Details of business operations	Her husband eventually ventured into hire car and office stationery supplies. Dorothy manages the lending business. She employed someone to help her with business operations. More customers mean more income. Currently, her customer base ranges from 50 to 100 depending on how well customers repay loans and how often they borrow. Customers borrow every day from her, but because of poor loan repayments, the business was forced to scale down lending as there were insufficient funds to lend out. Sometimes they borrow from others to sustain lending so that they can keep their customers.
Reasons for success	Dorothy's husband is very supportive in running the business. The money lending business is successful because there is need for money and customers borrow money every day. Dorothy believes that consistently giving tithe offerings to the church has been the main factor in the success of their business. Also, to run a successful business one must be of sober habits, not a gambler nor an alcoholic.
Why some women find it difficult to run a business	Dorothy believes that women lack the confidence to operate businesses successfully. She believes that everyone has the ability to achieve their dream if they put their mind to it.

#### Case Study 4. Rebecca: Marketplace Reseller East New Britain

Personal background	Rebecca is a marketplace reseller in the Kokopo Market, East New Britain. She lives in one of the informal settlements in Kokopo, but she is originally from a remote area of the Eastern Highlands. Rebecca was 26 years old when interviewed. She is a good market vendor, and clearly intelligent. She received first prize in her school in Grade 1 and 2, but her schooling was ended during Grade 3 when violent fighting broke out in her home area and she and her family were forced to flee.
Education	
Relationships	Rebecca has faced some challenging relationships. Her first husband, with whom she has three children, left her. After then Rebecca had become 'phone friends' with a man, who paid for her ticket to join him in Kokopo. Shortly after falling pregnant with her fourth child, this man ran off to Port Moresby. While he was resident in Kokopo this man who was employed did not allow Rebecca to sell in the marketplace. It was after he left her, and in need of money to care for her children, that she started reselling in the market. She has since married another man. Initially they lived in his brother's house. There was tension over money between Rebecca and her sister-in-law, which led Rebecca to self-mutilate, cutting off her own finger with a bush knife. But now, she said, "I market, I have money, I am very happy."
Starting her enterprise	While pregnant with her fourth child, Rebecca earned a small amount of money being paid a piece rate to sew up screen printed bags. When her baby boy had reached 4 months old, Rebecca used the money she saved to start reselling. Her baby slept in a cloth strung between two of the wire selling beds in the market, and her young daughter 'slept dirty' beside her on the floor. Rebecca faced significant hardship in her life, including when she had first arrived in Kokopo. However, when interviewed she had no thoughts of returning to the highlands. She felt safe in Kokopo and saw that it presented her with opportunities to earn money, improve her standard of living, and to save for her children's school fees.
Enterprise details	Rebecca sells in the Kokopo Market six days a week. Most of the fresh food she sells is purchased from producers at the market, but she also on occasions sells crops her husband grows on land accessed through a local landowner. Rebecca sells mostly introduced vegetables – tomatoes, capsicums, spring onion, onions, garlic, cucumber, eggplant, ginger and leafy greens – rather than indigenous crops. She buys in bulk – small plastic bags and buckets – from producers as they arrive in the market, and actively negotiates the price:
Buying	<p><i>"If the farmers request K25. I check over the produce. I am looking for produce that isn't good, or whether it will have crap in it, or small ones ... we tell the farmers 'the capsicum are not big. They are small and green! Now will you cut K5 and price it at K20?' ... The farmers will remain strong, and say it is a big plastic bag and the price is K25. 'But the capsicums are not ripe, only slightly ripe and green, the customers do not like this' we tell the farmers. And the farmers say it is alright for us to buy for K20."</i></p> <p>Such bargaining was uncommon in PNG's marketplaces in the past, but is now the norm amongst resellers.</p>
Preparing produce	Rebecca then prepares the produce for sale. The produce is washed, the capsicums stalks are cut off, the ginger roots divided, and the produce is graded. The produce is neatly grouped into small piles, and the prices displayed on little wooden squares. Her display is spread across two selling beds, increasing the visibility of her produce.

Selling	As is common amongst resellers, Rebecca prices her produce to double her money. If she pays 50t for something, she resells it for K1. If she pays K1, she resells for K2. She knew how many piles she needed to sell to recoup her 'mother money', and she pointed out the remaining piles as her profit.
Regular customers	<p>Rebecca keenly cultivates relationships to establish a regular customer base:</p> <p><i>"When they come and buy food, and they buy like K10 worth, we give them some extra, two or three extra, and make them happy so ... they will buy again... We speak nicely to them – "Morning Sister, where are you from?" we ask, and speak to them nicely. You make them your friends, wantoks. That is how you attract customers."</i></p> <p>Each day she occupies the same selling position in the market, so her regular customers know where to find her. And like other resellers, Rebecca defends this space.</p>
Credit	Rebecca is acutely aware that offering credit is risky, reduces the enterprise's operating capital, and often leads small businesses in PNG to fail. For this reason, she does not give produce on credit, but for some regular customers she will lend them money that is repaid with interest – a K10 loan is repaid with K15 the next fortnight.
Earnings	Through her reselling, Rebecca can earn a reasonable income. On a normal day she makes over K100, sometimes up to K160. On a very good day she can make up to K300. Previously, Rebecca had employment as a babysitter, but she said the market was better than employment, and that she earned more in a fortnight than most employed people.
Saving	<p>Rebecca has a whole raft of ways that she saves the money she earns. At the market she puts aside any K1 coins she receives, threading these coins through their hole onto a string. Once home, she deposits these coins into three 'tin banks'. Once full they hold K400-500 which she banks into three separate accounts: a Bank South Pacific account, and a passbook account and a school fee account with the East New Britain Savings and Loans Society. She started to do this following training organised by the market authority and delivered by 'Savings and Loans'.</p> <p>Rebecca is also part of two small rotating credit groups. The first is a group of six women. Every market day (6 days each week) each of the women contributes K30, with the sum given to each woman in rotation so that once a week they each receive K150. The second is a much larger group with 21 women each contributing K100 each Saturday, with each woman, when it is her turn, receiving K2000.</p>
Marital relationship	Rebecca has had some challenging relationships with men, but she said she had now married a good man. 'He doesn't hit me, or get angry at me, or ask me for lots of money'. She added that he works in the garden, and at times assists her in the marketplace. The father of her fourth child had not allowed her to market – often men, she explained, do not like their wives marketing and become jealous that their wives may go off with another man – but her current husband was happy for her to market, and supported her to do so. Her reselling has enabled her to save, to look after her family, and to look to her children's future.

### Case Study 5. May: Seamstress/Cocoa Buyer, East New Britain

<p><b>Personal &amp; Family Background</b></p>	<p>May, from Vunamurmur is a licensed cocoa wet-bean buyer and runs her own small tailoring business. Her mother was co-owner of Haus Laplap Tailoring in Rabaul in the 1970s. May was taken out of school after Grade 10 to help with the company's book-keeping and business operations for almost 10 years before May married and moved to Goroka. After living away for 17 years until the husband resigned from work, they returned to East New Britain in 1999 with their four daughters. They now live at Vunapalading on a 2ha cocoa block that the husband inherited from his parents. At the time of the interview May's husband was employed at Lihir Gold Mine, New Ireland, and May was operating her tailoring business from home and managing the family cocoa business and buying cocoa wet bean. Two of May's children are in formal employment and two are undertaking tertiary level studies (in the Philippines &amp; Kokopo). An adopted son is currently in Grade 9.</p> <p><i>"Education blong ol pikinini em i very important because nowadays graun emi sot... mipela invest long ol pikinini, ba ol pikinini imas kisim save na bai ol i ken kaikai na kisim mani long save blong ol yet".</i></p> <p>In short, land pressures have driven the couple to prioritize their children's education so that they may be better able to fend for themselves in future.</p>
<p><b>Business background</b></p>	<p>While living in Goroka, May gained a lot of work experience and began small enterprises. She worked with Collins &amp; Leahy, and after hours sewed suits and meri-blouses for Asian business houses in Goroka to help support her family's needs. In addition, May ran a poultry business to help cover the costs associated with the house rental, electricity, garbage disposal, and water bills, and also employed people to sell ice-blocks and market her tailoring products at the local market place.</p>
<p><b>Contributing factors to her success and challenges</b></p>	<p>May started her wet-bean buying business when she realized that one of the main reasons farmers were neglecting their cocoa blocks was because of poor access to market. She used savings from the cocoa business to purchase a second-hand vehicle to support her cocoa buying business and for local farmers. The vehicle provided farmers with the transport services needed for them to access local markets in her area. May then realized that the vehicle could also be operated as a PMV business, which was another good business opportunity as there were few PMVs operating in her area. However, bad road conditions and unexpected breakdowns plagued the business, as did the employment of untrustworthy drivers and crew. May closed her PMV business. With an IPA registration and separate bank accounts for each business enterprise, at the time of fieldwork she was planning to take a bank loan to purchase a second vehicle but was advised by her husband to await his financial support.</p>
<p><b>Community links</b></p>	<p>Presently, May continues her role in cocoa. She pays hired labourers at K100-K200/youth group to work on the cocoa block and she is a lead farmer of a women's cooperative group affiliated with Women &amp; Youth in Agriculture (WYiA) Cooperative Society. She formed the women's cooperative group in a bid to boost women's involvement in managing money made from cocoa, and as a lead farmer she does door-to-door visits to ensure all her farmer members receive and implement the training they have undertaken. She encourages farmers to take better care of their blocks to minimize CPB infestation levels and improve production and quality. May is well respected in her community.</p> <p>May's access to government-funded training has made her more aware of the plight of the majority of other women in cocoa-farming families. This has prompted her to reach out to encourage other women to take a 'mindset-change approach'</p>

<p>Aspirations</p>	<p>towards themselves, their children and men-folk in relation to running cocoa as a business and as a means to transform their lives and gain more sustainable livelihoods. Despite the good efforts of the government and donor projects, she believes the government could do more in terms of helping people interested in SMEs establish themselves.</p> <p>Today, with the children now less dependent on her, May has less to worry about in terms of providing for her family. She continues to run the cocoa business and sells her tailored meri-blouses at her roadside market store. Because her tailoring products sell very quickly, her husband plans to help her set up a shop in Kokopo to enable her to compete with foreign-owned businesses in Kokopo. May's early participation in business activities has been to her advantage, and with a supportive husband who guides and allows her much independence in business decision-making, she has been able to successfully manoeuvre her way through her business endeavours.</p>
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### Case Study 6. Lisa: Wholesale Potato Reseller, Western Highlands Province

Personal background	Lisa is a wholesale potato trader in Mt. Hagen's Main Market. She is married to a man from Western Highlands. When he took a second wife Lisa moved back to her natal village near Mt. Hagen. Her husband respects her, and recognises her hard work, and so does not request money from her. He does not assist her with her trading, and she is primarily responsible for looking after her children, whom she says she has raised using market income.
Source of income	Lisa earns most of her money from the wholesale resale of potato, though she also earns some income by growing crops to sell in Hagen, and also transporting her produce to sell in the coastal city of Lae. She also periodically earns money from selling pigs. Previously she reared chickens for sale, but she stopped this because too many of the chickens were sold on credit and never paid for.
Starting enterprise	Lisa initially started reselling potatoes after observing others doing this. She had sold some potatoes she had grown to someone in the market who she then observed on-selling her potatoes at a higher price. She saw that with growing potatoes, she did not always have produce ready to sell, and so she started reselling so that she had a more frequent source of income.
Enterprise details – buying	Lisa buys potatoes from growers in the marketplace, but she also buys from people in her natal village. People know that she does this work, and will approach her when their produce is ready. When she cannot obtain sufficient supply locally or in the market, she buys in other communities although she has safety concerns, and the produce isn't as high quality as that she receives from her own community.
Enterprise details – selling	Lisa mostly on-sells to other traders who have formal contracts with companies in the resource sector, and to <i>kaibar</i> operators in Mt. Hagen. These buyers have specific quality requirements, so she grades the produce she purchases which frequently includes poor quality potatoes. Large, good quality potatoes are repacked and used to supply the contract buyers. Any insect damaged potatoes are removed, and sold loose in the Hagen market. She takes home small potatoes to use as seed potatoes for her own gardens. She also occasionally sells produce in Lae, when her son who lives in Lae informs her that the market there is undersupplied. At one point Lisa and her husband had secured a contract to supply a company in Wau, however they abandoned this due to security concerns there.
Education	Having completed Grade 6, Lisa has a reasonable level of education for a woman of her age and although she can read and write, she keeps no written records with all transactions held in her head.
Enterprise details – labour	Lisa often trades at a large scale, buying and reselling 20-30 bags (60 kg bags) a day – in the past she had traded in much larger quantities. There are young men in the marketplace, known as "taxis", who shoulder the large bags through the market and do other labouring tasks such as grading and repacking. She has her own trusted "private taxi", a young man from the Southern Highlands, who works for her fulltime. Additional labour is recruited when needed. They are paid for tasks completed, rather than receiving a wage – K2 per bag for carrying, and K2 per bag for sorting and repacking.
Fluxes in operating capital	There is a seasonal cycle to the scale of Lisa's potato trading. Over the year the scale at which she trades builds to around 20-30 bags a day, however, the education expenses of her four children significantly deplete her



	<p>operating capital. Her eldest son is at Unitech in Lae, another son is in teachers college, a daughter in secondary school and a younger daughter in primary school. When the education fees and other expenses are paid in January and February, she is only left with enough operating capital to trade 5-10 bags a day.</p>
Enterprise details – selling and challenges	<p>The amount Lisa earns for each bag is relatively small. She might earn K10-20 a bag selling to <i>kaibar</i>, and only around K10 for supplying contract buyers. So, her earnings rely on the scale of turnover. Contract buyers often require she supply them on credit, with the promise of payment when they are themselves paid by the purchasing company. This can tie up significant amounts of her operating capital at times, and it also comes with risks.</p>
Challenges	<p>In 2014, Lisa had supplied one trader from Tambul a few times and had developed a level of trust in him. She supplied him with 100 bags of potatoes which he traded to Port Moresby. The man told her he was not able to pay her until the cheque he had received had cleared, but requested she supply a further 100 bags, which she did. This man never returned with the money, and Lisa found herself K20,000 out of pocket. Following this, her business was vastly reduced in scale, and the increasing education costs of her growing children have prevented her from returning to a similar scale. She said, however, that she never invested all her money and always kept K400-500 aside, and it was with this money that she restarted her trading. She has faced similar issues with smaller amounts of money on other occasions, and by retaining some <i>bun moni</i> (operating capital) she has always been able to start again and keep her enterprise going.</p>
Protecting operating capital	
Challenges	<p>Lisa said that if she were a man, she would have found the man who tricked her and fought with him, but she couldn't as a woman. She had considered asking her brothers to help her but did not want to create trouble. Her community lies alongside the Highlands Highway, and it would be possible for men within her clan to block the highway and seize a vehicle belonging to someone from Tambul as a means to regain her lost money, but she didn't want to bring trouble back to the community. Lisa is a regular church goer, and is a hymn leader in the church she attends. She hopes one day God will bring the man and her money back to her.</p>
Community support	
Aspirations, constraints and achievements	<p>She has goals of moving into a larger business. She would like to buy a minivan to run as a local PMV. She would also like to build a house to rent out. These are things, she said, would have been possible a few years ago, but were at the time of the interview beyond her reach. At the encouragement of her eldest son, she had built the family a good house. She had lost the K20,000 while the veranda was still under construction, and 4 years later with all her earning ploughed into her children's education, it remains unfinished. She is committed to her reselling work, but she also says that she has few other options.</p>

Case Study 7. Julie: Food Catering Business, Autonomous Region of Bougainville	
Background	<p>Julie is a widow in her fifties with six children. Her parents were missionaries and she was raised on missions where her father did pastoral work. Julie attended a mission primary school in Bougainville and a mission high school in East New Britain. Julie also attended Arawa Technical college for secretarial training and graduated with a secretarial qualification. She was employed until she married. According to Julie because her husband was in full-time employment, she did not need to work because her husband was very supportive in providing for family needs.</p> <p>“Masta save sapotim mi gut tru, mi nomo nid lo wok gen. Tasol taim masta blo mi dai, mi painim olsem laif em had tumas long mi lo sapotim mi wantaim sixpla pikinini. Wanpla pikinini stap yet long hai skul”.</p> <p>As an urban resident the main livelihood option for Julie was some type of retail business. Julie started her business when her husband was still alive. An opportunity for baking and selling buns arose during a Mutrus sponsored sporting tournament in Arawa after the 1997 ceasefire of the civil war.</p> <p>“Mi wanpla meri we mi save sem lo sidaun lo maket, so mi askim masta blo mi, “inap yu wokim wanpla stall blo mi?”</p> <p>Her husband built a stall and Julie started baking and selling buns during the tournament. It was then she realized the opportunity to earn money through establishing her own enterprise. She continued baking and selling buns after the games finished. She baked at night and sold the buns from her stall in the morning and returned home in the afternoon. Julie’s stall operated from Sunday to Friday. Eventually, she replaced the makeshift stall with a permanent building, which she calls “haus bun stoa”. The store is rented for K800 per month. Julie ceased baking buns and moved on to establishing a fast food business selling meals for breakfast, lunch and dinner (kai bar).</p> <p>Following the death of her husband in 2009, Julie received support from her friends. Her friend Elizabeth came to her assistance. Julie was cooking and serving meals from standard kitchen cooking pots before Elizabeth gave her a food warmer on the understanding that Julie would pay for the food warmer when she was able to do so. When the business first started, Julie employed female workers but stopped employing them when she realized she could do most of the cooking herself. She currently employs one male and female full-time to help with the business. Julie concluded that running a business is not easy but “I did not give up because this is my bread and butter for me and my children’s survival”</p> <p>As a widow, Julie faces a very difficult and challenging life situation in which she must create a livelihood to live and support her six children. One of her daughters is now a primary school teacher while two others have married. Bougainville is a matrilineal society; however, men are obligated to take care of their wives and children and her daughters’ have moved on with their husbands. Julie anticipates all her daughters will get married and eventually move elsewhere. She would like to build the family business for her son to take over, so when her son marries, he will be able to look after his own family.</p>
Relationships	
Business opportunity	
Challenges	
Widowhood	