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## Linking smallholder farmers to microcredit providers in Papua New Guinea: A participatory action research approach\*

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### Abstract

A participatory action research (PAR) approach was used to address the priority issue of lack of access to credit identified by smallholder farmers in Papua New Guinea. Following the cyclic process of research-planning-action-reflection, the research team conducted a thorough mapping of the supply chains in the first stage of the cycle. The results from the research were then presented to key players along the supply chain at a stakeholder workshop, where priority issues were identified and action plans to address them were developed. Action plans were implemented by the research team in collaboration with relevant stakeholders. Outcomes from this stage were then presented and evaluated at a second stakeholder workshop. Necessary remedial actions were developed and implemented to address remaining issues, and from here another round of PAR began. The main lesson learned was that PAR, when applied to international agricultural research projects, has the benefit of stakeholders identifying local problems and locally appropriate solutions, but its drawbacks include the lack of capacity and support services on the ground. To improve outcomes, more resources are required to build extension and development capacities on the ground.

Key words: participatory action research, microfinance, supply chain, sweet potato, Papua New Guinea

### Introduction

Credit helps in reducing poverty for the poor because it provides the seed money that enables them to engage in income generating activities. However, the poor have been kept outside the commercial banking system on the grounds of high costs and high risks. This is especially true for smallholder farmers in the Papua New Guinea highlands who live in remote villages and difficult terrain, compounded by social and cultural attitudes of the locals towards saving and loans.

Lack of access to credit was identified as one of the major issues facing PNG smallholder farmers at a stakeholder workshop conducted for an Australian Centre for International Agricultural Research (ACIAR)-funded research project, entitled "Improving marketing efficiency, postharvest management and value addition of sweet potato in PNG". Several recommendations were made at the workshop

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regarding the means to improve farmers' access to credit. They included providing information on financial products and services to farmers, improving financial literacy for farmers, and linking farmers to credit markets. Following the stakeholder workshop, action plans were developed and various activities were undertaken, including an overview of the financial system and microcredit schemes in PNG; personal interviews of microcredit providers; profiling and needs assessment of farmers' groups; linking farmers' groups to rural microcredit providers; providing financial literacy training to farmers' groups; and finally impact assessment.

In this paper, results from the literature review, personal interviews, group profiling, linking farmers to credit providers and impact assessment are summarised, followed by the lessons learned and concluding remarks.

## The financial sector in PNG

The financial sector in PNG includes 3 sub-sectors: the formal sector, the semi-informal sector, and the informal sector (Biggs, 2007). They are separated by the degree of regulation and oversight exercised by the government and the financial services they are permissible to provide.

**The formal sector.** This sector includes commercial banks, microbanks, credit co-operatives, finance companies, merchant banks, savings and loan societies, life insurance companies, general insurers, superannuation funds, and the stock exchange. These organisations are licensed and regulated by the Bank of Papua New Guinea - the central bank of PNG. There are four commercial banks and two microbanks. The commercial banks are: Bank of South Pacific Limited (BSP) (35 branches), Australia and New Zealand Banking Group (PNG) Ltd (ANZ PNG) (12 branches), Westpac Bank (PNG) Limited (15 branches) and Maybank (PNG) (2 branches) (Aube, 2010). The two licensed deposit-taking microbanks are: the PNG Microfinance Limited, jointly owned by the PNG Sustainable Development (49 per cent), Bank of South Pacific Limited (32 per cent), and International Finance Corporation (19 per cent); and the Nationwide Microbank Limited (previously Wau Microbank), which was funded by the Asian Development Bank and the Government of PNG (Kamit, 2008).

There are 21 savings and loan societies licensed under the Savings and Loan Societies Act. Savings and Loan societies are usually linked to groups of salaried employees and are regionally based. Some also provide microfinance to other individuals and groups.

The National Development Bank (NDB), while not a licensed deposit-taking institution, provides commercial loans and microcredit to the agricultural sector using capital provided by governments or international donor agencies.

Credit co-operatives are registered and regulated under co-operatives law. They are typically financed by members' savings and capital contributions. However, some credit co-operatives may depend primarily on external funds from commercial banks, their apex institutions, or development banks. The record of credit co-operatives as an instrument for financial intermediation has been mixed. One reason for their failure is that because they depend on external funding, they are often obliged to promote social objectives of the government or international donor agencies that are unrelated to their role as financial intermediaries. As a result, they may be lending at artificially low interest rates or fund activities which would otherwise be considered too risky to be economical. In addition, they often suffer from inadequate preparation and participation of their members and lack of adequate management to operate a viable business (Huppi and Feder, 1989).

External (and political) interventions often have a detrimental effect on the co-operatives' long term viability, especially when the external assistance expires. Huppi and Feder (1989) suggested that for a credit co-operative to be successful, it needs the following:

- Adequate planning and education of members;
- Availability of supporting infrastructure, proper management and oversight; and
- Freedom from inappropriate government intervention and political influence.

To assist credit co-operatives to achieve sustainability, government and donor assistance should focus on institution building, training and improvement of management abilities at all levels of the co-operative system, rather than on the supply of cheap credit (Huppi and Feder, 1989).

**The semi-formal sector.** This sector includes: unit banks (savings, rural, village, and community banks), credit unions, and NGOs. The main funding sources for unit banks are savings mobilised locally and to a lesser extent share capital. The scope for long-term lending is usually determined by the amount of capital. Since these banks are locally-based and do not have branches or apex

organisations, the opportunity to diversify their loan portfolio beyond the limits of their communities are rather restricted. Most rural unit banks are marginally involved in agricultural lending. Those operating in rural areas offer credit basically for short-term activities. Though borrowers may be farmers, it is often the case that credit is used for family emergencies, rather than for agricultural purposes. However, unit banks are crucial actors in providing savings facilities and therefore help households in their cash management, which may reduce the credit demand for consumption and contingency needs.

Credit unions are member-owned, focusing on providing savings and loan services to its members. They are often formed by companies for their own employees, by professions (e.g. teachers' credit unions) for their own members or by communities for their own community members. In most developing countries, (community-based) credit unions are not recognised as formal financial institutions and consequently lack access to central banking services.

Most NGOs are not allowed to mobilise savings from the general public and usually do not have access to money or capital markets and are not eligible for concessionary government or central bank credit lines that are often extended to rural branches of commercial banks. Therefore, most NGOs depend heavily on donor funding. Most NGOs, like many agricultural development banks, are incomplete financial intermediaries. They only offer credit, but not other crucial financial services such as savings facilities, insurance, or money transfer. There are several NGO microfinance institutions that provide savings and loans and promote a saving culture and wealth creation to low-income earners, and are registered to PNG Microfinance Competency Centre (MCC).<sup>2</sup> They include:

- PNG Cocoa Growers Savings and Loan Society
- CDA Finance and Investment Limited
- Lutheran Development Service
- Ford Foundation.

**The informal sector.** Self-help (savings) groups such as the rotating savings and credit associations (ROSCAs), moneylenders, loan sharks, trade store owners, input suppliers, friends, and relatives. In most cases, these informal credit sources do not lend for direct productive purposes but for unforeseen emergencies or immediate consumption needs due the absence of appropriate savings facilities. Studies have shown that smallholder farmers in developing countries often rely on the informal sector to satisfy their credit needs as normally they do not have access to credit either from the formal sector or the semi-formal sector. Some lenders can charge exorbitant interest and resort to violence if payments cannot be made or made on time. This persists because there are no alternative sources of credit for the poor. Some microfinance schemes, both formal and informal, are designed to address these problems faced especially by the poorest of the poor. Their services fill the gap that is being left by the commercial banks.

## Microfinance and microcredit

Microfinance is the provision of a broad range of financial services, including savings and loans as well as insurance, leasing, and money transfer, to low-income micro-enterprises and households (Cornford, 2002). Microcredit, on the other hand, is more narrowly focused on providing credit services to low-income clients, usually for small loans for microenterprises and income generating activities. Microcredit is characterised by short loan duration, small loan sizes, strict supervision, and direct or indirect client screening to reduce default risks. In most cases, the provision of savings services in microcredit schemes only involves the collection of compulsory deposit amounts that are designed to collateralise those loans.

Microfinance institutions (MFIs) are organisations that provide financial services to the poor. They emerged in the 1970 and 1980s when the need to provide small loans to the poor to support their

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<sup>2</sup>The Microfinance Competence Centre (MCC) has been established within the PNG Institute of Banking and Business Management (IBBM) through the PNG-ADB Microfinance Project. It provides extensive training and development services in banking, finance, business and management throughout PNG and the Pacific region. The purposes of MCC include: coordinate the training needs of MFI's, liaise with IBBM to effect training placements, administer microfinance distance learning project, allocate subsidies, liaise with donor agencies and negotiate microfinance aid funds, and manage aid funds and other businesses of the microfinance industry. Wau Microbank, PNG Microfinance, ENB Savings and Loan Society (ENB, WNB), Manus Savings and Loan Society, Niu Ailan Savings and Loan Society and East Sepik Savings and Loan Society (ESP and Mad) are all registered under PNG MCC.

microenterprise development was identified (Cornford, 2002). A number of these institutions have transformed themselves into formal financial institutions in order to on-lend clients' savings, thus enhancing their outreach. There are various microfinance models being used, differing in the products and services provided, as well as the methods which they are provided. They include community-owned village banks, savings and loan associations, credit unions, and self-help groups (Cornford, 2002). Internationally, some of the most well-known microfinance models include the Grameen Bank solidarity group, the Latin American solidarity group, and the rural financial systems approach as facilitated by Bank Rakyat Indonesia's (BRI) *unit desa* system (Cull *et al.*, 2006).

**The Grameen Bank Model.** The Grameen Bank was founded in Bangladesh in 1976 by Muhammad Yunus. It is a microfinance organisation and community development bank that makes small loans to the impoverished without requiring collateral (Yunus and Jolis, 1998). The business philosophy of the Grameen Bank is that charity is not an answer to poverty. Rather, it perpetuates poverty as it creates dependency and takes away individual's initiative to break through the cycle of poverty. Loans, on the other hand, offer people the opportunity to take initiatives in business or agriculture, providing earnings and enabling them to pay off the debt. Grameen philosophy regards all human beings, including the poorest, as endowed with endless potential, which when unleashed, should be the answer to poverty. Grameen has offered credit to many poor, illiterate and unemployed people. It targets the poorest of the poor, especially women who made up 95 per cent of the bank's loans. Women are targeted because they have less access to traditional credit lines and incomes. In addition, women are often credit constrained and have an inequitable share of power in household decision making. Lending to women generates considerable secondary effects, including empowerment of a marginalized segment of society (Yunus and Jolis, 1998). Since 1995, Grameen Bank has funded 90 per cent of its loans with interest income and deposits collected, hence aligning the interests of its new borrowers and depositor-shareholders. Hence, Grameen Bank distinguishes itself from such institutions by converting deposits made in villages into loans for the more needy in the villages.

The Grameen Bank Model is characterised by the following features:

- *Group formation.* Groups of five self-chosen members from similar socio-economic background are formed. Each group elects its own chairperson and secretary, whose responsibilities include ensuring that all members attend the compulsory meeting. Groups are federated into centres. Centre chief and deputy chief are selected from among the group chairpersons. The groups and centres are responsible for the approval, disbursement and recovery of loans under the guidance and supervision of the Trust staff.
- *Joint liability.* Groups are collectively responsible for the repayment of loans. Group liability and peer pressure are used as a substitute for collateral against loans.
- *Comprehensive seven-day training.* Before the group is recognised, members must satisfy Trust staff of their integrity and commitment, and their understanding of the principles of the Grameen Bank Approach and group responsibility by going through the training.
- *Loans are disbursed on a staggered 2-2-1 basis.* Under this approach, the two most disadvantaged group members receive their loans first. To be manageable, loans are repaid in small weekly instalments over a one-year period. The upper limit of the first loan is relatively small (less than US\$50) and the loan size progressively increases with each loan cycle. The loan amount is determined by investment requirements of the borrowers.
- *Savings.* Five per cent of the loan amount is deducted at the beginning and goes into the group's fund. The fund provides access to cash for individual members with the group's approval. In addition, each member makes a personal savings each week.
- *Loan interest rate.* The project charges 20 per cent interest at a flat rate per annum with the objective of attaining financial sustainability.

(Grameen Bank, n.d.)

Studies have shown that the Grameen Bank approach to lending has produced high rates of repayment and viable and sustainable operations (Satgar, 2003). It has been adopted by more than 58 countries, including several microcredit schemes operated in Papua New Guinea. The Grameen Bank approach clearly demonstrates that the poor are "bankable" provided that the right products are delivered by the right methods. However, Cornford (2002) cautioned that the Grameen Bank, and other successful microfinance models, which are developed in Asia or other regions, may not be applicable to the Pacific countries, such as PNG, because of significantly different environmental, economic and socio-cultural contexts.

**Microfinance schemes in PNG.** PNG has a long history of microfinancing, as far back as the 1960s. Past and existing microcredit schemes in PNG include the Rural Development Bank (RDB); Women's Credit Scheme; Small Business Guarantee Facility (SBGF) of the Small Business Development Corporation (SBDC); PNG Credit Guarantee Scheme (CGS) administered by the Department of Finance; Savings and Loan Societies; and NGO-supported credit schemes (such as the Liklik Dinau Abitore Trust (LDAT), Simbu Microcredit scheme, Putin na Kisim (PnK) of the Lutheran Development Services, Bougainville Microfinance Scheme (BMFS), Morata Credit Scheme, and other church credit schemes), and a number of Rotating Savings and Credit Associations (ROSCAs)<sup>3</sup> (e.g., the Wok Meri groups and the Sandes groups) (Kopunye, *et al.*, 1999; Kavanamur and Turare, 1999; Carruthers, 2003; Kavanamur, 2002).

In addition, there are microcredit schemes provided by commodity boards of major cash crops, such as oil palm, coffee, and potato. Under these credit schemes, growers are provided with farm inputs, the costs of which are then deducted from their pay checks when outputs are delivered to the commodity boards at the harvest time. For example, coffee growers through the Coffee Credit Guarantee Scheme (CCGS) are able to acquire loans from the Coffee Industry Corporation (CIC) to meet the cost of coffee production, which are then repaid with interest upon the sale of coffee to CIC (CIC, n.d.).

These microcredit schemes vary significantly in program design and business model employed by financial institutions, formal or otherwise. They differ in group formation (peer selection vs externally formed (e.g., by extension officers, credit officers, village chiefs)); group composition (co-workers vs kinship); lending strategies (individual vs group lending); liability (individual vs joint liability); and target group (women vs general; farm vs non-farm sector).

Many of these PNG microcredit schemes have failed. Key problems include lack of appropriate bookkeeping and management records by both credit providers and users; the continued lurking danger of political meddling; high cost of the service delivery networks; mediocre internal and external monitoring and evaluation mechanism; highly subsidised interest rates; lack of capacity and experience of financial intermediaries in financial intermediation; near absence of provision of non-financial services such as management training; neglect of savings facilities; embedded handout mentality where public funds are involved; and rapid expansion without proper planning (Bablis, 1999; Kavanamur, 1999; Kavanamur and Turare, 2002).

## Economics of microcredit schemes

Lending, like insurance, is a risky business because of information asymmetry where the borrowers have more information about their own ability and intention to repay than the lenders (Varian, 1992). Two problems arise from information asymmetry. One is *adverse selection*, where the loan market tends to attract borrowers with less desirable properties (e.g. inability to repay, lazy, irresponsible people, or risk-takers). The other problem is *moral hazard*, where the borrowers change their behaviour after a loan has been made. This is especially true for individual lending. In this case, how to select individuals to lend the money to and how to ensure the loan is repaid with interest are key issues for the lenders.

There are several ways to deal with information asymmetry problems, such as conducting background checks on potential borrowers (e.g. credit check, employment history, future income streams, etc); requiring collateral (e.g. land, house, equipment, etc); and requiring a minimum level of net worth so that there are sufficient assets to cover liabilities (Spaulding, n.d.). However, these measures cannot be readily applied to poor and smallholder farmers in the developing countries in part because of their lack of assets or formal employment and in part because high transaction costs in screening and in assuring repayment from large numbers of small loans in often remote areas.

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<sup>3</sup>Rotating Savings and Credit Associations (ROSCAs) has been very effective in providing microcredit to women in the developing world (Besley *et al.*, 1993 and 1994). They come in two forms: random and bidding ROSCAs. In a random ROSCA, members commit to putting a fixed amount of money into a pot for each period of the ROSCA's life. Lots are drawn and the pot of money is allocated randomly to one of the members. In the next period, the process repeats itself, with each previous winner excluded from the draw. The process continues until each of the members receives the pot once. In a bidding ROSCA, the pot is allocated to the member who offers the highest interest payment or pledges the highest future contribution or one-off side payments via a bidding procedure. In a bidding ROSCA, individuals still only receive the pot once as the bidding process merely establishes priority.

“Group lending”, where borrowing is conditional upon group facilitation with some form of liability clauses, appears to be a compromise solution by which small loans can be offered to the poor. However, there is a problem with joint liability lending programs. That is, when the poor are given access to credit without collateral, they cannot, in the event of default, be punished beyond a mere denial of future access to credit. This form of “limited liability” can induce borrowers to take actions that are not optimal, such as excessive borrowing, investment in a risky project, misuse of funds, failure to apply enough effort to manage the investment decisions, or diversion of funds for repayment of the loan to other purposes, and hence, the so-called moral hazard problems remain (Conning, 2000).

To resolve these issues, joint liability group loans rely on self-selection, peer monitoring, peer pressure and social sanctions to ensure repayment from group members (Simtowe *et al.*, n.d.). Typically, microcredit groups are formed by self-selection among participants who are familiar with each other and have some social or economic ties. Familiarity among group members implies better information about the participant’s character, farming skills, and consumption and investment needs while social and economic ties provide group members with possibilities of pressuring their peers to perform (Ghatak, 1999; Ghatak and Guinnane, 1999). Joint liability in group lending, as Conning (2000) put it, has created the “social collateral” to replace the physical collateral that is required to access the more traditional forms of finance. The way joint liability group lending is designed and implemented, e.g. the Grameen Bank and BancoSol, effectively transfers screening costs (through peer-selection of group members) and monitoring and enforcement costs (through peer monitoring and social connections) from the bank to borrowers, providing an effective way for banks to overcome adverse selection, moral hazard, and enforcement problems (Armendariz de Aghion and Morduch, 2000).

Despite the improvements in project design, group lending in practice has a number of shortcomings. One issue is that forming a group, attending group meetings, and monitoring group members can be costly and in some cases can be too costly to implement (Besley and Coate, 1995). The assumption that the poor have low opportunity cost for their time is not always true. Second, there are social costs associated with members who are least able to repay (most likely women), and as a result, they suffer from the repayment pressure put on them (Montgomery, 1996). Third, borrowers assume higher risks because they are not only liable for themselves but also for their group partners (Stiglitz, 1990). Other issues include that members may collude against the lender and undermine the lender’s ability to harness social collateral; that the demand for credit within a group may change over time, forcing members with small loans to be liable for larger loans of their peers; and that the growth of group lending programs may slow down when new borrowers with looser social ties enter and consequently the group lending technology loses some of its power (Giné and Karlan, 2006).

## Linking PNG farmers to microcredit providers

**Interviews of credit providers.** Four microfinance institutions in the PNG Highlands were interviewed. They are Nationwide Microbank in Mt Hagen (formerly Wau Microbank), PNG Microfinance Limited in Mt Hagen, the National Development Bank (NDB) in Mt Hagen, and the Alekano Savings and Loan Society in Goroka. The objectives were to obtain information on their product offerings and to identify issues facing them when dealing with smallholder farmers. The details of these financial services providers, including their backgrounds and products and services, are provided in Appendix 1.

With regard to their experiences and issues in doing business with smallholder farmers, the main issues identified were: financial illiteracy of the majority of farmers who do not know how to manage money and there is no saving culture; irregularity in their income streams as farmers often grow and sell something only when there is a need for cash; and the handout mentality as farmers often see loans as a grant, rather than something they owe and must be repaid.

We focus on NDB’s Microfinance loans in the discussion that follows because it was identified as having the most appropriate products for the smallholder farmers in the PNG Highlands.

**NDB microfinance loans.** NDB’s approach to microfinance is similar to that of the Grameen Bank, especially the principles of group lending, joint liability, and peer monitoring. Loans amounting to K10,000<sup>4</sup> and below are categorised as microfinance loans (NDB, n.d.). These loans target clients

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<sup>4</sup>In December 2010, one PNG kina was worth \$A0.48.

who are engaged in commercial micro-economic activities with short-term and frequent cash turnover. These types of loan products are offered to borrowers who are active members of Community-based Organisations (CBOs) in the communities or villages operating in close proximity to the branch office, and payments are usually made frequently (e.g., fortnightly or monthly) over a one-year repayment period. A CBO can be a self-help informal organisation or registered group or people's association. A CBO for credit purposes should comprise between 20 and 30 members.

This means that communities who want to obtain a loan, must first form into CBOs. Eligibility criteria for becoming a member of a CBO is provided in Appendix 1. The formation and organisation of the CBO is facilitated by NDB's loan officers through a microfinance training workshop and in most cases for the sole purpose of accessing NDB's microfinance loans. Once a CBO is formed, the group is then divided into small units, each with their own unit treasurer. The unit treasurer's role is to represent the unit members, visit their project sites, and report back to the group leader on the progress of the unit.

Once approved, the loan is given to the group (i.e. group lending) and it is up to the group members to decide how the loan is to be divided among themselves. In the case of loan default, all members of the CBO's are liable to repay (i.e. joint liability). For loan security, NDB requires a 30 per cent deposit on the total amount of the group loan, which is used as collateral and can be used to repay any bad debt. This means the savings: debt ratio is 30:100, or 1:3.33.

In order to prevent bad debt, the members of CBOs must have similar socio-economic background when formed and meet regularly (e.g. fortnightly) to keep track of each other's progress (i.e. peer monitoring). In such a setup, members are expected to encourage each other to work diligently towards repaying their loans. During the CBO meetings, sometimes the Bank staff will be present to get a feel for the group's performance and to make sure the group is on track for loan repayment.

**Group Profiling in PNG highlands.** Collective action has always been fundamental for human society and plays an important role in rural development programs. In the 1970s, local groups were organised to address rural development issues in watershed management, integrated pest management, participatory breeding, extension, farmer managed irrigation systems and microfinance. The assumption was that communities would fully engage collectively over a large range of activities. But this is not necessarily true. Seabright (1997) argued that some types of activities were best managed at the community level while others were not and more attention should be given to a better understanding of how collective action arises to deal with different issues and how it is sustained. Without attention to this critical question, the current policies to devolve natural resources to communities, empower women through self-help groups or deliver a range of services through community based organization risk failures (Meinzen-Dick *et al.*, 2004).

Agrawal (2001) identifies a common list of enabling conditions or pre-conditions for successful collective action outcomes, including:

- (1) Interdependence among group members;
- (2) Clearly defined boundaries;
- (3) Shared norms;
- (4) Past successful experiences;
- (5) Appropriate leadership;
- (6) Heterogeneity of endowments, homogeneity of identities and interests;
- (7) Small group size; and
- (8) Low levels of poverty.

Many farmers' groups, community organisations and self-help groups exist in PNG rural communities. However, not all of these groups have been active or successful in achieving their objectives. The purpose of profiling groups in this study is to identify groups that meet these criteria and are deemed sufficiently organised and motivated to be potential recipients of credit and technical training programs of the Fresh Produce Development Agency, a key partner of this ACIAR project. The list provided by Agrawal forms the basis for this study to select the potential recipients for NDB Microfinance Loans.

The profiling covered information about the purpose of forming the group, the success, or otherwise, of the group, its organisational structure and governance; and its current operations, problems encountered, and training needs. The profiling also assessed the groups' need for credit and their

knowledge of products and services provided by various financial institutions in their areas. A total of 30 farmers' groups in Mt. Hagen (20) and Goroka (10) were profiled. Because the similarity of the findings from the Hagen and Goroka cohorts, the results are summarised together below.

*Organisational structure.* Of the 30 groups that were interviewed, 24 groups were registered under Investment Promotion Authority (IPA) as cooperative societies, while the remaining six were self-help groups and are not registered. Generally, all groups have a farming background and are engaging in vegetable production.

*Purposes.* There were various reasons for group formation, including to improve living standards through income generating activities (55 per cent of the 30 groups interviewed); to seek financial assistance from outside to implement their group projects (30 per cent); to mobilise resources and assist each other in production and in accessing markets (10 per cent); and for religious purposes or for addressing social concerns over gender equity and women issues (5 per cent).

*Group activities.* Eighty per cent of the groups interviewed focused mainly on agricultural production of fruit and vegetables, livestock (poultry and pig), fish and flowers. However, most of these activities are done independently, rather than collectively.

*Management and organisational capacities.* Groups' activities and performance depend primarily on the organisational and management capability of the group leaders. About 16 per cent have indicated that their group had very strong leadership and administration, with good working relationships within the group, while 32 per cent indicated good leadership, and 52 per cent were not satisfied with their group administration.

*Problems.* Although half of the groups indicated good leadership and their satisfaction with the performance of the group, there were various problems that prevented them from achieving their objectives. The main problems indicated were (1) lack of financial assistance and access to credit, (2) poor infrastructure and transport system, (3) lack of marketing facilities, (4) lack of cooperation between group leaders and members, and (5) unstable price of fresh produce. These problems have also been identified in other studies (e.g. Chang, 2011; Chang and Be'Soer, 2011; Chang *et al.*, 2012; Chang and Griffith, 2011).

Eighty per cent of the groups stated that they needed financial assistance in implementing their projects. Access to credit was therefore considered as the biggest hindrance to successful implementation of group projects. Out of the 30 groups that were profiled, only two groups had accessed credit from the National Development Bank.

The lack of marketing facilities (especially cool storage and chiller containers) for fresh produce, livestock and fish products means that they are restricted to produce and market within a tight schedule and in the local areas. Likewise, poor road and transport infrastructure, and the resulting high transport costs, have also reduced their incomes and contributed to groups' inability to realise their full potential. Although most groups have wanted to implement projects to improve market access, without credit they have not been able to move forward.

*Training Needs.* To better manage and run the affairs of the groups' activities, 50 per cent of the groups interviewed indicated that they needed training in financial management while 30 per cent needed training in general administration and management. Some 10 per cent needed some leadership training while the remaining 10 per cent needed technical training in cut flowers, citrus production, and vegetable production. From the 30 groups that were interviewed, about 80 per cent indicated having received technical training, especially from FPDA on vegetable production, NARI (livestock), and CIC (coffee management). However, as indicated, there is need for more training in the management and administration of the groups.

From the group profiling, the three groups identified as suitable candidates for financial training were: SWOFFA (South Wahgi Organic Food Farmers Association), Mitnande Mama Farming Group of Kindeng, and RWDI (Rural Women's Development Initiative).

Case studies of selected groups are presented in Appendix 2.

**Partnership with National Development Bank.** After the interviews with the microcredit providers and farmers' groups, arrangements were made for the project team to meet with the Microfinance Loan officer at NDB to learn more about the process involved. The group leaders then met with the Microfinance Loan officer to discuss the training program, how to prepare and select participants, and to set the training dates. The four-day financial training took place between November 2010 and

January 2011. During the first three days, CBOs were formed and members were informed of their responsibility for being a group member and the loan conditions. On the last day, the bank manager met with the CBOs to confirm their eligibility to apply for a NDB Microfinance Loan. Two out of the three groups (SWOFFA and Mitnande Mama Farming Group) subsequently submitted their loan applications and each member of these two groups received his or her first loan of K1,000.

**Financial literacy training.** Soon after the first few financial training courses were given by NDB, we realised that the so-called “financial training” run by NDB was all about group formation and their duty to repay the loans and nothing on financial literacy. Unsatisfied with the situation, FPDA immediately took action to develop a financial literacy training manual and new groups were provided with such training before they were introduced to NDB.

FPDA’s financial literacy training component comprises four modules: budgeting, cash flow management, debt management, and credit management. In future, financial literacy training will not only be included in the FPDA’s farmer training program and but it will be done before any technical training on production or marketing. The rationale for this is that because there is no saving culture in PNG, if farmers do not know how to budget and manage money, the money they make would simply be spent unproductively. In the impact assessment that follows, that was exactly what we found when comparing the groups that had received the financial literacy training with those who had not. In essence, many farmers said that they either would not have participated in the group loan or would not have borrowed as much as K1,000 (or for some, rushed into making the second loan of K3,000) if they had received more information and fully understood the direct and indirect costs of borrowing and the need for budgeting, saving, and cash flow management.

In funding the microfinance pilot and expansion projects in PNG, great emphasis was given to capacity building and financial literacy training of both the clients and MFIs (ADB, 2010). However, this has not happened. Instead, potential borrowers were required to have attended the Personal Viability Program (PVP) of the Entrepreneur Development Training Centre Ltd (EDTC) or an equivalent. Other credit schemes (e.g., the Fisheries Microcredit Scheme) also use PVP as a pre-requisite for qualifying for a loan. Given that PVP is a two-week training course primarily on building entrepreneurial skills and costs K250, it does not suit smallholder farmers’ needs and circumstances. Clearly, this requirement is too stringent and unlikely to be met by the majority of smallholder farmers. On the other hand, it is irresponsible and short-sighted to ignore or play down the importance of financial literacy in ensuring the long-term viability of a microcredit scheme.

In March 2011, we brought the issue of financial literacy training to the attention of NDB. The reply was that NDB simply does not have the capacity or resources to conduct proper training in financial literacy of their potential borrowers. Their job is to make loans. A few months later, both the Goroka and Mt Hagen Branches of NDB ceased to make microfinance loans to new groups because of serious “repayment problems”, with loan officers running around villages chasing up outstanding payments. When a microcredit scheme collapses due to poor management, it means a large number of smallholder farmers will again miss out on the opportunity to access credit.

## Impact assessment

The purpose of the impact assessment was to learn what effect an improved access to credit has on smallholder farmers and what issues had arisen and had to be addressed. To achieve that in August 2011 we went back to those groups that had borrowed from NDB and those groups that had received financial literacy training from FPDA and other agencies.

During the interviews, we were told that until now vegetable farmers in PNG had not had access to credit like other commodity growers (say coffee or oil palm) or agricultural businesses because they are often considered as high risks and not creditworthy. However, through this sub-project (“Improving farmers’ access to credit”), this is no longer the case and the opportunity to access credit has finally opened up for vegetable farmers. We also found that the improved access to credit has had a significant impact on farmers’ income. The first K1,000 loans they borrowed were used mainly for purchasing farm inputs for vegetable production, and day-old-chicks and feed concentrate for poultry raising. They were also used as working capital to buy and sell coffee beans, to increase land holding, to buy equipment (e.g. coffee pulpers and generators), as well as for building permanent houses, buying household goods, and paying for school fees. Those business ventures had generated significant incomes, with nearly a 200 per cent return on investment, and all the participating farmers were able to repay their loans in three to four months.

However, during the impact assessment, a few problems were identified. First, we found that the group who received the first loan in December 2010 was submitting a second loan application for K3,000 per person. This was worrying because from our assessment most of them needed only K500 from the first loan to do what they wanted to do, not K1,000 that they had borrowed. Second, given the high income generated from the first loan, there was no need for a second loan, let alone a greater amount of K3,000. Third, while the loan term was 12 months at an interest rate of 20 per cent per annum, most loans were repaid within three to four months. This means that if they had delayed the repayment, there might not be a need for the second loan or only for a smaller loan. We also found that most of the participating farmers did not understand the interest payments and how costly they were compared to their small earnings. All of these reflect the lack of financial literacy on the part of the borrowers.

At the time of interview, one group leader was pressured by the loan officer to submit the second and bigger group loan application "by tomorrow". It was clear that some group members were reluctant to borrow such a huge amount in such a short time as there was not a real need for it. However, they were pressured to participate because the group loan could not proceed without the participation of all members. We also found that some farmers joined the group simply because they wanted to build their credit worthiness so that they could borrow in future the maximum amount of K10,000 (equivalent to a one-year salary for most low-income earners). Because of different credit needs among the group members, it seems that there would be conflict sooner or later about when and how much to borrow, with the possibility of breaking up an initially cooperative, harmonious group. The other potential issue is that the greater the amount borrowed the higher the probability of default by some members because of potential adverse selection and moral hazard problems discussed earlier.

We also assessed the impact of credit on women, since women farmers often encountered problems unique to them (Chang and Be'Soer, 2011). We found that in most cases, women were satisfied with the outcomes because men and women were working together on the income generating activities afforded by the credit, and the whole family benefits. However, some women had to work extra hard on their own as a result of expanded farming activities and because of the pressure to repay the loan. There were cases where husbands demanded a large share of the profits from the women's hard work while contributing little or nothing to women's income-generating activities. In this case, the additional incomes women made did cause conflict within the household and often subjected the women to potential domestic violence.

The worst case we heard was that the husband had bought a new wife with the coffee money he made and was expecting the woman to support him and his new wife with the extra income she was making. Fortunately, this type of negative outcome was rare and only happened to some communities where traditionally women have been seriously marginalised. Indeed, in most cases, we found that husband and wife were working more closely together to improve their livelihood now that the biggest constraint to generating income (i.e. the lack of credit) has been removed. Another good outcome is that the credit was made available at a time when there was an increasing demand for fresh produce from the PNG LNG project, and hence farmers were able to increase supply without depressing the prices for their vegetables.

## Conclusions

This study is a sub-project of a large ACIAR research project, entitled "Improving marketing efficiency, postharvest management and value addition of sweet potato in PNG". It summarises the various activities which were undertaken to improve smallholder farmers' access to credit. Main activities undertaken included an overview of the financial system and microcredit schemes in PNG; personal interviews of microcredit providers; profiling and needs assessment of farmers' groups; linking farmers' groups to rural microcredit providers; providing financial literacy training to farmers' groups; and finally assessing impact.

Our main conclusion is that improving access to credit has the potential to improve smallholder farmers' income substantially. However, appropriate measures, safeguards and support services must be put in place to ensure that the microcredit schemes are sustainable and the benefits are shared equitably among group members and within households. In particular, there must be honesty, transparency, and good governance when dealing with information-poor, and often illiterate, farmers.

The sustainability of the NDB microfinance loan program was in doubt for two main reasons. First, the NDB's microfinance scheme had some design flaws even though it was based on the Grameen Bank approach: it had not been implemented appropriately on the ground according to prescribed rules or

local culture. In particular, by ignoring financial literacy as one of the key elements for participation more emphasis was placed on granting loans than ensuring loan repayment and hence the long term viability of the scheme. This is because without adequate training on budgeting and cash management, not only were farmers not fully made aware of the social and economic costs associated with making a loan, but also they did not benefit fully from the credit scheme as additional income derived from the credit was neither saved nor invested on productive activities. Second, while most members needed the first loan to kick start their income generating activities, they did not need a second loan, at least not right away. Some farmers, however, had been encouraged or pressured to borrow again soon afterwards and in a substantially larger amount. When this happened, adverse selection and moral hazard problems re-surfaced, the group lending mechanism broke down, and the probability of default increased due in part to the inability to repay by some and in part to the unwillingness to repay by others.

Many microcredit schemes have failed in the past because of inadequate internal and external monitoring and evaluation methods, lack of capacity and experience of financial intermediaries in financial intermediation, near absence of provision of management training, neglect of savings facilities, an embedded handouts mentality, and rapid expansion without proper planning. It seems that few lessons have been learned.

One key recommendation is to provide financial literacy training to all participating farmers and businesses and financial management training to their group leaders so that costs and benefits associated with loans and how best to utilise them are better understood. The other recommendation is to educate loan officers on past successes and failures of various microfinance schemes in PNG so that issues inherent in dealing with smallholder farmers are better understood and potential problems are anticipated and prevented. Loan officers may also benefit from training in financial and project management so they can monitor and evaluate the lending and loan repayment processes properly, as well as providing useful advice to farmers when requested. Finally, given that NDB's microcredit scheme was aimed at helping the poor, both the activities of smallholder farmers and loan officers should be closely monitored, preferably by a third party, to ensure that accurate information and necessary support services are provided to farmers both before and after a loan has been granted.

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## Appendix 1. Products and services of microfinance institutions in PNG

In an attempt to improve farmer's access to credit, personal interviews of financial service providers were conducted to understand issues faced by them when dealing with farmers. Financial institutions interviewed include: Nationwide Microbank, National Development Bank, Alekano Savings and Loan Society, and PNG Microfinance Limited. Their operations and products and services are described below.

**Nationwide Microbank.** Nationwide Microbank (previously Wau Microbank Ltd) was registered under the Company Act in 2005 and licensed by the Bank of Papua New Guinea (BPNG). The Bank was funded jointly by the government of PNG and the Asian Development Bank (ADB). Nationwide focuses on providing financial services to small enterprises throughout the country. It has 20 branches nationwide. The bank's focus is on individual lending, not group lending, due to past experiences of lending to groups. However, group loans are still available provided the groups are registered under IPA or cooperative societies of PNG.

The Bank offers passbook savings accounts to all clients. The five different types of accounts currently offered by the bank are; Micro, Silver, Gold, Small Enterprise and Diamond. The minimum requirements for savings account are described in Table A.1.

**Table A.1. Savings accounts and minimum deposits of Nationwide Microbank**

| Account Type     | Target Group/Client   | Minimum amount to start an account             |
|------------------|---|--|
| Micro Enterprise | Self-help groups  | K20-processing fee, and K20-opening balance    |
| Gold             | Individuals, groups, associations, Trust accounts, joint accounts, etc. | K20-processing fee, and K50-opening balance    |
|                  | Registered businesses   | K20-processing fee, and K500-opening balance   |
| Silver           | Wage or Salary earners  | K20-processing fee, and K20-opening balance    |
| Small Enterprise | Registered companies  | K20-processing fee, and K1,000-opening balance |
| Diamond          | Interest bearing deposit ( <i>IBD</i> )<br>All Clients                  | K20-processing fee, and K1,000-opening balance |

Nationwide also provides loans of various types, including small loans to farmers and operators in the informal sector. Other types of loan offered by Nationwide are described in Table A.2.

**Table A.2. Loans and account types of Nationwide Microbank**

| Account Type      | Purpose/Target Client  | Loan Amount     |
|-------------------|--|-----------------|
| All purpose       | Any purpose/all clients<br>At 3%/month   | K200 and up     |
| Salary loan       | Any purpose/only for wage/salary earners<br>At 3%/month                                      | K200 to K5,000  |
| Microfinance loan | To purchase electrical items, machinery, or other household items/all clients<br>At 3%/month | K200 to K15,000 |
| Business loan     | For any type of business/all clients<br>At 2%/month  | K15,000 and up  |

There are two loan options for clients. Option 1 is the fully secured loans where the savings: loan ratio is 1:1 and the loan amount is up to the same amount of savings. For example, if a farmer has K500 savings in his passbook, he/she is eligible to get a loan with maximum limit of K500 at an interest rate of 3 per cent per month (for All Purpose, Salary, and Microfinance Loans) or at 2 per cent per month for a Business Loan.

In Option 2, potential borrowers are required to meet the following requirements:

- The farmer or the client must have savings with the bank for at least 3 months;
- 30 per cent of the loan amount is required as security (put away in an IBD account);
- Other forms of security or collateral, which may be basic household items, electrical goods, and other household valuables; and
- Guarantors: two persons are required to act as witnesses and guarantors for the loan. The guarantors are expected to put pressure on the client to repay his/her loan, and are liable to repay the loan should the client default or be unable to fully meet the repayments.

If a repayment is late, the management writes a default notice letter to the client and the loan officer make follow up calls/visits to the client. Grace period can be given up to 3 months. If the client does not repay within that period then other measures are taken to recoup the money, including confiscating the client's assets which were nominated as collateral, or/and guarantors are asked to meet the liability. Main causes for defaults by farmers are:

- Intentional: some people purposely avoid repaying their loan.
- Seasonal: some crops experience seasonality in production. During the peak season, there is more income and repayment is not a problem. However, during the off season, there is less or no income, causing delay in repayment. A good example is coffee. During the coffee season, more money is circulated while during the off season, little is circulated.
- Natural disasters: natural disasters also contribute to delays in loan repayment where crops are destroyed or access to markets is sometimes prevented by poor road conditions or landslides.

**National Development Bank.** The National Development Bank (NDB) is the development finance institution of Papua New Guinea and is wholly owned by the Independent Public Business Corporation (NDB, n.d.). It is the successor to the former Rural Development Bank Limited (RDB), which was founded in 1967, with the primary function of providing accessible development credit to citizens to engage in income generating activities to improve their livelihood, especially for the 80 per cent who live in the rural areas of Papua New Guinea. The head office is in Port Moresby, with 18 branch offices nationwide.

The National Development Bank has been very active in providing credit to the agricultural sector since its establishment in 1967, with up to 50 per cent of loans going to the agricultural sector. NDB's products include long-term agricultural and commercial loans, credit scheme loans including the Fisheries Credit Facility and the SBDC Credit Guarantee Scheme. RDB was designed to promote PNG government's programmes which were favourable to small enterprise sector development. These include hire and purchase equipment finance schemes, small rural loans, mini loan schemes for women and youths, smallholder coffee rehabilitation loan schemes and commercial industrial loans. It also helped implement some government programmes such as cash crop price support schemes, government grants and interest subsidy schemes to enterprises in disadvantaged areas.

Although NDB was created to provide small agricultural loans, it has had a long history of serving larger farm units and non-farm operations oriented towards the urban sector (Kavanamur and Turare, 1999). In addition, loans are provided mostly to clients who are easily accessible by roads for easy administrative and monitoring purposes. This is due to bad experiences when lending to clients in remote villages, which was proven risky because of non-availability of security/collateral, lack of access to market, commodity price fluctuations, non-existent extension service, and deteriorating road conditions.

The Bank piloted its microfinance scheme in Kimbe in 2005, which was then rolled out to seven other locations in 2007. The main aim of NDB microfinance scheme is to provide small loans to the people in the rural areas to improve their livelihood. Loans amounting to K10,000 and below are categorized as microfinance loans.

The scheme has three mandates:

- *Outreach*: this is all about reaching people in very remote areas who are hard to reach, especially the rural communities which are shut out by other financial service providers, such as commercial banks.
- *Sustainability*: this aims to provide demand-driven services that can be sustainable over a period of time so that clients will continue to have access to the credit and savings services provided.
- *Impact*: the micro credit scheme aims to have impact on the lives of the people who seek their services, such as generating income and improved living standards

Microfinance loans are offered only to borrowers who are active members of Community-based Organizations (CBO) in the communities or villages operating in close proximity to the branch offices. Most microfinance loans are given a 1 year repayment period and are usually repaid frequently (e.g. every fortnight or monthly). These loans are to be invested by clients who are engaged in commercial micro-economic activities with regular income.

A CBO can be a self-help informal organization or registered groups or people's associations. The CBO assists the Bank's field staff in selecting and training of borrowers and collecting repayments. A CBO comprises a maximum of 30 members, which is sub-divided into smaller groups of 5-7 members. Each of the sub-groups elects a Secretary who does the collection of repayments from its members. The CBO is headed by Executive members who lead and facilitate the fortnightly members' meetings. The Executive members are given the authority to recommend and approve the loan amount that is acceptable to each member on the condition that each member is accountable for his/her own conduct and the conduct of the CBO. The fortnightly members' meetings serve as a monitoring device to follow-up repayment status of the members and to discuss issues affecting the CBO. Microfinance loan offers attend each CBO meeting in their designated geographical areas of jurisdiction and provide guidance to the Executives members in running the affairs of the group. Under a CBO arrangement, if a CBO member defaults, all the other members are liable to pay for the outstanding amount. Except for fully secured loans, all loans from NDB Microfinance are offered only to members of recognized CBOs only.

The eligibility test for becoming a recipient of the microfinance loan includes the following:

- Member of a recognized CBO
- Must be engaging in an ongoing income generating activity or have current source of regular income
- Must have attended the Personal Viability Course<sup>5</sup> or other courses conducted by SBDC or other financial institutions that are contracted to provide business skills and financial literacy training
- Be a permanent resident in the area for at least 5 years and has no intention of moving
- Must be willing to consistently attend the CBO meetings
- Must not be previously delinquent borrower with NDB or other lenders.

The Bank's microfinance officer initially conducts a demographic survey of the area and if proven satisfactory, then the group is taken through a series of steps in the formation of the group leading up to the members receiving training on financial management and loan procedures. The training workshop covers the following topics:

- Detailed explanation of a CBO
- CBO formation and organisation process
- Duties and responsibilities of CBO members and executives
- Duties and responsibilities of a Loan Screening Committee
- Duties and responsibilities of a Discipline Master
- Group operating account, security deposit, loan processing fee
- Type of loans
- Incentives and penalties
- Withdrawal and expulsion from the group

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<sup>5</sup>The Personal Viability course was devised in the late 1990s by Sam Tam. The program has been in operation in PNG under the Entrepreneurial Development Training Centre (EDTC) since 1997. A basic 2-week PV course currently costs K250 per person and is open to anyone. The course basically teaches participants how to manage their finances effectively and how to balance the demands of social obligations such as the traditional custom activities. They are encouraged to discipline themselves when it comes to these demands. Participants are also told that time is of the essence and the course teaches it is the most valuable asset. Hence, it should not be wasted doing anything other than productive work, such as working in the growing/marketing of garden produce. Participants are also taught not to entertain people who want to borrow money from them for various reasons, as these are the type of people who will run their businesses down, and facilitating such borrowing encourages the borrower to be lazy and fall into debt (Entrepreneurial Development Training Centre, n.d.)

- Lending Process
- Recording of payments and reconciliation
- Repeated loan (next loan after the first one has been completed)
- CBO meetings
- Means and priority of collection in case of a loan default.

Once the CBO meets all the requirements, then it is eligible for a loan application.

The loan products of NDB are summarised in Table A.3.

**Table A.3. Loan products of National Development Bank**

| Type of loan              | Purpose and target client   | Loan amount   |
|---------------------------|---|---|
| Agriculture               | Small Rural Loans: Generally these loans are to assist in establishing village based farming with a view to diversifying rural based industries.<br>Large Agricultural Loans: These loans are for redevelopment or rehabilitation of plantations, or for an extension as part of an overall agricultural development programme.   | Less than K10,000<br>Greater than K10,000                           |
| Commercial                | A Commercial Loan is any loan for the following non-agricultural purposes: large equipment finance, purchase of commercial property, hotels and guesthouses, hire car services, or working capital  | K2-4 million  |
| Corporate                 | Similar to the Commercial Loans   | K4 million and more   |
| NDB Microfinance          | Microfinance loans are delivered using the community-based organisation (CBO) model. Borrowers must be a member of a CBO recognised by NDB. Loans are secured with CBO group guarantee and a 30per cent of the loan amount must be deposited in cash upfront. There are two types of microfinance loans:<br>Kisim-na-Bekim Bisnis Loan: Individual members can get a loan from K300 to K5,000 with a loan term of 3, 6, or 12 months, which is to be repaid fortnightly or monthly.<br>Tutu Bisnis Loan: Individual members can get a loan from K300 to K2,500 with a loan term of 4, 8, or 12 months, which is to be repaid bi-monthly   | K300-K5,000<br>K300-K2,500  |
| Credit Schemes            | National Development Bank manages a number of credit schemes. These credit schemes include the Village Oil Palm Credit Scheme, Fisheries Credit Facility (see details below), District Credit Schemes funded by the Joint District Planning & Budget Priorities Committees, and Agriculture Credit Schemes sponsored by the NDAL under the National Agricultural Development Plan. Under these schemes, NDB and the project sponsors enter into a Memorandum of Agreement that stipulates the parties' responsibilities as well as the operational aspects of the scheme.   |   |
| Fisheries Credit Facility | Micro-credit line: It offers small lines of credit to individual village-based fishermen or enterprises that may not necessarily have access to credit from mainstream financial institutions.<br><br>Small Enterprise Credit-line: it targets small fishing enterprises that wish to strengthen and commercialise their operations. Under this credit line, some form of tangible collateral may be required to secure a loan.<br><br>Business Credit line: It targets established private fishing companies and individual members of fisheries cooperatives or associations that have been successful and are expanding their operations or seeking to improve internal management.  | K1,000-K5,000<br><br>K20,000-K100,000<br><br>K10,000-<br>K1,000,000 |
| Women in Business Loan    | The National Development Bank has launched two new Women In Business Loan Products called Start Up Package and the Grower Package in March 2012. These two new products have been specifically designed to meet the needs of PNG women only-owned and managed businesses and SMEs. They are available to women aged between 18 to 55 years old.<br>Start up loan package: It offers loans ranging from K5,000 to K100,000 at a 10 per cent/year interest rate, which is to be repaid between 2 to 15 years. There is an equity requirement of 20 per cent with security or 30 per cent without security.<br>Grower loan package: It offers loans ranging from K100,000 and more at market rates, which is to be repaid between 2 to 20 years. There is an equity requirement of 40 per cent (including cash). | K5,000-K100,000<br><br>K100,000+                                    |

**Alekano Savings and Loan Society.** Alekano Savings and Loan Society is a society that has most of its members from the informal sector, those that are outside the employment zone, unlike other savings and loan societies which are available only to employed or salaried individuals. The Alekano Savings and Loan Society was originally formed as a grassroots-based Cooperative Association by the Gehamo–Gahuku tribes to offer credit to its members. It later grew and expanded into a Savings and Loan Society under the Savings and Loans Act. Currently, it has a branch in Lufa and an agent in Port Moresby. With rapid growth, it plans to establish branches in all districts of the Easter Highlands Province.

The Society offers savings accounts for day-to-day transactions as well as savings for future use. There are four types of savings accounts: Savings, Transaction Savings, Special Purpose Savings, and Term Deposit (see details in Table A.4).

**Table A.4. The Alekano Savings and Loan Society account type, minimum balance and purpose**

| Account Type            | Minimum opening balance   | Purpose  |
|-------------------------|---------------------------|--|
| Savings                 | K120 (plus K7 membership) | All-purpose account and can be used as security for loan |
| Transaction Savings     | K120                      | Day to day transaction                                   |
| Special Purpose Savings | K120                      | Special purposes (e.g. Christmas, school fee, etc)       |
| Term Deposits           | Min K300 and max K10,000  | Long term savings  |

With Alekano, clients are eligible for a loan if they;

- contributed continuously to their savings account for six months
- have a minimum of K120 or more in their savings account
- are considered trustworthy
- are industrious
- have a good credit rating with repayment of their previous loans with the society
- have the capacity to repay the loan.

The Loan amount clients qualify for is determined by:

- their saving balance and pattern
- depending on the loan purpose and the savings: debt ratio is 1:1 or 1:2
- their ability to repay
- Additional securities they pledge over their personal and business assets.

Clients are allowed up to eight loans a year and the loan interest rate is a flat rate of 12 per cent per annum. The 12 per cent flat rate is the maximum interest rate that can be charged by all savings and loan society to their members. There are no account keeping fees and no loan establishment fees. With the 1:1 ratio loans, clients can borrow up to the value of their savings while for the 1:2 ratio loans, clients can borrow twice the amount of their savings. The loans range from K100 to K80,000.

Loan repayment is flexible according to the types of projects clients are engaged in. Clients who are involved in freighting and marketing can obtain short-term loans and loans for the purchase of assets and trucks can be repaid within 24 to 36 months.

Like any other financial institutions, clients who default on loans are penalized with K20 fee together with interest. To date, there has been no loan default, which is a result of effective dissemination of information especially at the counter. Since most of the clients are illiterate, Alekano is planning to provide financial Literacy training to help its members understand how the microcredit system works and their responsibility towards repaying their loans.

**PNG Microfinance Limited.** PNG Microfinance was established in 2004 by PNG Sustainable Development Program Limited to provide financial services to the unbanked people of PNG. The Bank was licenced by the Bank of PNG in December 2004. It is owned by the PNG Sustainable Development Ltd (49 per cent), Bank of South Pacific Limited (32 per cent) and International Finance Corporation (19 per cent) (Kamit, 2008).

Its main funding sources come from the shareholder capital as well as savings from the depositors. The Bank lends to both groups and individuals. Table A.5 provides a list of account types with the minimum account opening balance.

**Table A.5. PNG Microfinance loan type and the minimum account opening balance**

| Account Type       | Minimum Deposit | Purpose & Target Group/Client  |
|--------------------|-----------------|--|
| Personal Savings   | K20             | General public for normal current savings purposes.  |
| School Savings     | K20             | Children between the ages 8-18 years, aimed at developing the habit of savings.  |
| School Fee Savings | K20             | General public/For school fee only. Withdrawals allowed only in January and February.  |
| Equity Savings     | K20             | Loan clients only/Used as savings for loan customers for future business needs and security for loan                           |
| X-Mas Club Savings | K20             | General public/Withdrawal only in December.  |
| Term Deposits      | K300            | General public/Savings invested for a certain period with its corresponding interest rate. Cannot be withdrawn until maturity. |

Infrastructure is limited and mainstream financial services are mainly restricted to larger urban centres.

Even though PNG Microfinance falls under the category of Microfinance institutions and its great importance in providing microcredit, its geographical coverage (mainly in Port Moresby) hampers their services to the target farmers of this project.

## Appendix 2. Case studies of selected credit groups

**Tomba CBO Farming Group.** The Tomba CBO farming group was formed in 2008 after receiving the Personnel Viability Training from NDB in 2006. The members are from Tomba and Tambul area of Tambul/Neibilyer district in WHP. In 2008, 40 group members (12 females & 28 males) received one week's training on financial management from NDB under its Microfinance Scheme. After the successful completion of the financial literacy training, the group was granted their first group loan from the NDB with a loan amount of K27,000, with 20 per cent interest rate per annum. This group loan was divided between 27 members (12 females and 15 males), each receiving K1,000 with repayment of K1,200. The loan was fully repaid after 4 months following the crop cycle.

Upon successful repayment of the first loan, the group was then granted the second loan of K60,000 in 2009, in which 30 members (12 females & 18 males) received K2,000 each. Due to extremely wet weather, the repayment schedule took longer than expected. However, the group was able to repay the loan eventually. The group then lodged in their application in 2010 for their third loan and received K72,000 in total, of which each member received K3,000. The group was expected to repay their loan by February or early March, 2011. The repayment of the loan is paid through the group account.

The group members meet fortnightly to discuss matters of loan repayment and other issues. During each meeting all members contribute K10 into the CBO account to meet the expenses of running it. Similarly, the group members also contribute regularly to the CBO account.

Most of the members are illiterate but have some basic knowledge on farm management. They plan their farming so that there are separate gardens for loan repayment and for meeting school fees and other household expenses. The main food crops grown for sale are broccoli, potato, cauliflower and carrots. The farmers mostly grow potato for loan repayment and other crops for meeting other expenses.

The Tomba farmer group was awarded the Best CBO in PNG by NDB in 2010. The chair of the group Mrs Elizabeth Andrew was presented with return airline tickets to Australia.

*Interview with Mr & Mrs Manis.* Mr and Mrs Manis are from Tombaarea village in the Tomba area and they have five children with the eldest child in grade 10. Both the husband and wife received their first loan of K300 each. They then pooled their money to purchase farm inputs such as seed potatoes, fertilisers and fungicides. They repaid their first loan successfully and applied for their second loans of K1,000. The couple again pooled their loan money and purchased more farm inputs and repaid their second loan successfully which enabled them to obtain their third loans of K2,000 each.

The benefits this couple experienced through NDB microcredit scheme were quite significant. One obvious benefit of the loan was the couple's social status in the community has been raised because their income has improved tremendously, which enabled them to pay for their children's school fees and purchase household items and clothes which they previously could not afford. Another tangible benefit for this family as a result of having access to loan was the connection of electricity to their home. Thus, the family is happy that their living standard has improved with the loans from NDB.

The only drawback is the inability to make the loan repayment on time due to bad weather and low prices for their vegetables. The couple mentioned that they will be free of loan when they become financially independent.

*Interview with Terema Gali of Tomba.* Terema Gali is a 55 year old male from Tomba with two wives and three grown up children. Mr Gali and his eldest son, Tenn, a bus driver both applied for K1,000 loan each and pooled their cash to jointly fund their potato project. The K2,000 loan was used to purchase 5 seed potato bags, 3 fertiliser bags, and 2 litres of fungicides. From these, they harvested 18 bags of ware potatoes and 11 bags of seed potatoes. The 18 bags of ware potatoes were sold with an income of K3,400, of which K2,400 was used for loan repayment. The other remaining K1,000 was used to purchase store goods for their trade store. The father and son again obtained their second loans of K2,000 each and used the money again to fund their potato project and trade store business.

However, due to extremely wet conditions, the pair had a bad crop and had to battle with diseases, which led to low yield with only 37 bags harvested. From this, 19 bags were sold as ware potato and 18 bags

were saved as seed. The pair then lodged their application for their third loans of K3,000 each and again used the money to meet the cost of potato production and to restock their trade store.

Terema was a carpenter by profession and when comparing his current operations, he has certainly improved his livelihood. His farm is expanding and he also earns income through his trade store operation and is able to sustain his livelihood and he is also able to save the extra income for later use. Terema is happy that through the CBO loan scheme, he is able to live a changed life.

**South Wahgi Organic Food Farmers Association.** The South Wahgi Organic Food Farmers Association (SWOFFA), Minj, Jiwaka is a co-operative headed by Mrs Agnes Jonah. Their main activities are production and marketing of fresh produce. The SWOFFA farmers were the first group that was linked to NDB through this project. The training was provided in November 2010, with 39 participants (25 males & 14 females). Each participant contributed K10 as course fee in meeting the training cost. It was the leadership of Agnes Jonah and the eagerness and enthusiasm of the participants which make it a unique case study. Not long after the training, the group has put together the 30 per cent deposit and K50 application fee needed to secure their first loan of K39,000, with K1,000 each for the participating members. The 30 per cent security is refundable when the loan repayment is completed. In total, K11,700 was deposited as security. The group was presented with a check of K39,000 on the 30<sup>th</sup> of December 2010.

**Mitnande Mama Farming Group – Kindeng/ WHP.** The Mitnande Mama Farming Group was made aware of the NDB's Microfinance Loan program at a ceremony when the cheque was presented to SWOFFA by the bank manager. They subsequently made the request to NDB to conduct a financial literacy training with the group. All the negotiations and arrangements were made between the Bank and the group itself, led by Mrs Ellen Wakai, a former village extension worker of FPDA at Kindeng. The training and logistics costs were all met by the group members.

The training was conducted on 3-6 January, 2011 at Kindeng in which a total of 50 (30 females and 20 males) participants received the training. The Bank manager, like the other two trainings, guaranteed the loan application after the group had successfully passed the eligibility test. Twenty five participants (18 females and 7 males) were able to meet the 30 per cent security and the K50 application fee for their loan to be processed. A total of K7,500 was deposited into NDB on the 20<sup>th</sup> of January, 2011 and a loan of K25,000 was approved and presented to the group.

**Ambo Fresh Produce.** The group was based in Kasena, Asaro-Daulo district and was formed in 2006 by vegetable growers and is registered under IPA and has a total of 170 members with well-established organisational structure and respected office bearers. Their main activities are the production and marketing of fresh produce. The group members produce various vegetables such as English cabbage, carrot and sweet potato as their main crops. The produce is supplied weekly to their two established markets in Port Moresby.

In order to meet the market requirement for consistency in quality and quantity, the Ambo vegetable growers do several things. First, clusters of smaller groups and staggering production is organised so to spread production throughout the year, which enables them to supply to their markets all year round. Secondly, the group helps pay for seeds and other inputs for certain members to encourage them to grow quality produce and to continue production. Upon the sale of the produce to Ambo Fresh Produce, costs of the seeds and other inputs are deducted from the receipts. The same capital is then used to help other farmers. Another step that the group has taken to addressing and meeting their market requirement for consistency is to equip the members with technical knowledge on all aspects of vegetable production. Most of the technical training is provided by FPDA, including the training on basic crop production, gross margin analysis, soil conservation, postharvest management and nursery construction.

The group has experienced success and growth in its vegetable production and marketing operation, but also encountered serious problems in transportation due to its location and poor road conditions. Group members also indicated that they lack business management and financial literacy skills.

The Nationwide Microbank was identified to conduct the financial literacy training in EHP after careful consultation from three microfinance institutions in Goroka, EHP. The Nationwide Microbank was selected to facilitate the Financial Literacy Training because of its flexibilities and products which proved suitable for the rural communities. However, when the project team in Goroka, approached the Nationwide

Microbank in Kainantu, for training arrangements and confirmation, the loans officer they consulted was terminated. Likewise, the branch manager was not in a better position to help the team because he was recently appointed. Thus, the process came to a halt, this did not make the team quit, but to consult the next financial institution. The team then approached the National Development Bank (NDB) which the microfinance loans officer was willing to conduct the financial literacy training for the farming groups.

After the necessary arrangements with the bank, the financial training eventuated on the 14-18 of February. Altogether, 50 people participated in the training. During the training, NDB covered the loan processing and eligibility requirements and the formation of a CBO while the FPDA team covered the basics of Financial Management for another two days. This partnership between NDB and FPDA is essential for ensuring farmers achieve the maximum benefits possible from an improved access to credit and the sustainability of NDB's microfinance scheme.