

IMPROVING THE PROVISION OF FINANCIAL SERVICES TO MICRO-ENTREPRENEURS, EMERGING FARMERS AND AGRIBUSINESS: LESSONS FROM KWAZULU-NATAL

M.E. Kuhn¹, M.A.G. Darroch², G.F. Ortmann³ and D.H. Graham⁴

Three development finance institutions (DFIs) which operate in KwaZulu-Natal (KZN) province were assessed in 1996/97 to see how they could improve financial viability and outreach to emerging farmers, agribusiness and micro-entrepreneurs. Improved service quality and emphasis on mobilising savings would help clients and enable the DFIs to diversify their portfolios. Better access to branches and lower loan approval times (improved screening and administrative procedures) could also lower client transaction costs. Charging a suitable interest rate spread is necessary but not sufficient for lenders to achieve subsidy independence. Reducing arrears through stricter loan contract enforcement (borrower accountability for loan repayment, lower collateral specific risks, secure and transferable collateral) will also promote financial viability. Providing both savings and loan services together would reduce borrower access costs, and allow savings to serve as a form of collateral and borrower information for lenders.

1. INTRODUCTION

Past government and donor support programmes in South Africa (SA) that provided subsidized credit to small-scale farmers, emerging agribusinesses and micro-entrepreneurs to try and reduce poverty and stimulate economic growth have had limited success. Similar to international experience, the programmes suffered from limited investment in productive inputs, high default rates (up to 40%), lack of savings mobilisation, and limited client coverage (outreach) (Christodoulou *et al* 1993; Coetzee 1995 and Kuhn & Darroch, 1999). Empirical studies in the developing regions of KwaZulu-Natal, Lebowa, Venda and KaNgwane found that high transaction costs, low wealth and poor debt servicing capacity impeded client use of formal credit (Coetzee, 1995 and Fenwick & Lyne, 1998;). Many development finance institutions (DFIs) also incurred high transaction costs as a result of small loan

¹ Post Graduate Student, Agricultural Economics, School of Agricultural Sciences and Agribusiness, University of Natal.

² Senior Lecturer, Agricultural Economics, School of Agricultural Sciences and Agribusiness, University of Natal.

³ Head of the School of Agricultural Sciences and Agribusiness, University of Natal.

⁴ Professor, Department of Agricultural Economics, Ohio State University, U.S.A.

sizes, poor credit control policies, fixed infrastructure costs, and technical assistance programmes. These costs, together with the charging of subsidised interest rates, meant that the DFIs were reliant on continued government support to remain viable (Coetzee & Vink, 1996 and Strauss Commission Report, 1996a).

Given the poor performance of the development credit programmes, a Commission of Inquiry into the Provision of Rural Financial Services - the Strauss Commission - was appointed in 1995 to make recommendations aimed at improving financial services in developing regions of SA. The Commission recognised that DFIs needed to reduce transaction costs through simpler facilities, broaden the type of financial services offered (to include savings and transmission facilities) and to improve outreach (Strauss Commission Report, 1996b). However, the Commission did not evaluate the effectiveness of current lending technologies serving small-scale farmers, emerging agribusinesses and micro-entrepreneurs in SA.

High levels of outreach and financial viability require innovative and cost-effective financial technologies, implemented by well-designed DFIs, to collect reliable client information and to handle institutional problems (like the lack of formal collateral and secure and transferable property rights) when financing the study clientele (Hoff & Stiglitz, 1993). Given the need to more closely evaluate the effectiveness of financial technologies serving this clientele in SA, this paper aims to assess the financial technologies, outreach and financial viability of three DFIs serving small-scale farmers, emerging agribusinesses and micro-entrepreneurs in KwaZulu-Natal (KZN). Understanding the limitations and advantages of these technologies used by KZN lenders may identify how these technologies and DFI policies could be adapted to improve access to formal financial services.

The performance of the KZN DFIs will be evaluated using Yaron's (1992) framework, as modified by Gonzalez-Vega *et al.* (1997). Performance indicators relate to the breadth (reaching large numbers of individuals), depth (reaching relatively poor individuals) and quality (range of financial services offered and level of client transaction costs) of DFI outreach and self-sustainability. Section two briefly reviews what is needed to successfully deliver financial services to clients like those served by the KZN DFIs. Section three reviews the study methodology and results, while policy implications are discussed in the conclusion.

2. SUCCESSFUL DEVELOPMENT FINANCE INTERMEDIATION

The ability to produce financial savings and loan products with substantial breadth, depth and quality of outreach in a financially viable way depends on the financial technologies used by DFIs. These technologies include the mechanisms for designing and administering financial products, signalling to market participants and the screening, monitoring and enforcing of loan contracts – all of which impose costs on both clients and financial institutions (Gonzalez-Vega *et al*, 1997). Loan applicants must be screened in order to try and limit adverse selection (borrowers being greater risks than believed when loans were granted) when there is a lack of client information. Loan contracts must also be monitored and enforced to ensure that clients meet their loan obligations, thereby reducing the potential for moral hazard (borrowers incurring greater risks during the term of a loan than anticipated by lenders) (Hoff & Stiglitz, 1993). These problems were faced by many SA DFIs that incurred relatively high transaction costs as outlined above – loans were relatively risky as clients had insecure incomes, secure and transferable collateral was lacking, and lenders specialised, particularly in agricultural finance. Loan applicant screening and loan recovery may have been less rigorous as credit programmes were development orientated. Together with client payment boycotts, this led to poor loan recovery rates (Strauss Commission Report, 1996a).

Client costs of dealing with DFIs include the explicit out-of-pocket costs to travel to lender premises, and administration fees for using financial products, and the implicit costs of providing information to signal credit worthiness, and the time spent in accessing financial products. Fenwick & Lyne (1998) show that rural KZN clients with relatively low literacy levels had difficulty coping with the often complex application and disbursement procedures of DFIs, while centrally located branches were difficult to access. Prohibitive transaction costs, concessional interest rates, and client risks may have reduced the supply of SA DFI financial services to low income individuals, with loans rather going to more wealthy borrowers. High transaction costs, lack of suitable collateral and income risks probably reduced the demand for SA DFI formal financial services, and negatively impacted outreach.

Several successful DFIs in Indonesia, Asia, Latin America and Bolivia have reduced borrower transaction costs by establishing extensive branch networks and mobile banking services. Emphasis has shifted to providing both savings and loan products together, as empirical evidence indicated that individuals in rural areas do have the capacity to save. Short-term loans with flexible loan sizes and repayment terms have allowed a wider variety of activities to be

financed while accounting for seasonality of cash flows. Loans have simple application forms and fast approval times (one to two weeks) facilitated by decentralised decision-making. Lenders have also reduced transaction costs by using effective management information systems (MISs) that can instantly track loan status, reducing paper work, and motivating staff with financial and non-financial incentives linked to quantifiable performance-based indicators such as number of clients, portfolio growth, branch profits *and* loan collections. In addition, branch structures have been kept lean while spreading costs over a large number of clients (Yaron *et al.*, 1997).

Financial technologies have focused on reducing lending risks by providing repeat loans to small borrower groups. Initial small loans with frequent repayments instil financial discipline and facilitate monitoring. Joint liability amongst borrowers provides a collateral substitute, with lenders requiring compulsory savings as a contingency fund to finance group members in arrears (Yaron, 1992). Lenders with more flexible loan terms have used character references to screen and monitor borrowers, as well as interest rate rebates, reputational capital, loan guarantees and warehouse receipts to encourage repayment and enforce contracts (Coulter & Shepherd, 1995 and Chaves & Gonzalez-Vega, 1996). Borrowers have been held strictly accountable with no new loans being granted if existing loans are not repaid. Charging positive real interest rates that provide a suitable spread to cover operational costs and the cost of funds, and protect the DFI equity base, has also promoted financial viability. Best practice institutions with innovative financial technologies and motivated management have achieved breadth, depth and quality of outreach with high levels of financial self-sustainability (Yaron, 1992) in a variety of institutional environments. However, outreach and financial viability goals are more likely achieved when there is a low inflation rate, suitable economic growth, a stable political environment, a credible legal system, secure and enforceable property rights, and well-established infrastructure (Christen *et al.*, 1994).

While the above best practice financial technologies may not be directly transferable, DFIs in SA may benefit from adapting some of these methods to reduce both client and lender transaction costs, and to improve loan collections. The next section documents the financial technologies and performance of the selected KZN DFIs, emphasising both positive developments and how their financial technologies could be improved.

3. RESEARCH METHOD AND RESULTS

Personnel at three DFIs (L1 to L3) with financial operations in KZN - who for confidentiality purposes cannot be named - were surveyed at branch, regional and head office level in 1996/97 to assess their financial technologies, outreach and financial self-sustainability. Lenders were selected on the basis of being major providers of financial services, having different financial technologies, and being part of the baseline survey conducted by the Strauss Commission in 1996. The DFI financial technologies, outreach and financial viability reflect the policy environment, the target clientele, and the objectives of each institution. Table 1 shows that lenders L1 and L2 were primarily development-orientated at the time of the survey. Lender L1, a division of a well-established DFI in KZN, provided working capital, medium and long-term loans for agribusiness and farming needs, while L2 only offered medium-term production loans to small sugar-cane farmers. Lender L3 financed micro-entrepreneurs that were in predominantly urban areas. Due to poor programme performance and donor pressure, L3 gave more attention to achieving financial viability from mid-1994 onwards. Both L1 and L2 had operated for over 18 years, a considerable time period to gain experience in their target market and to generate economies of scale in lending.

The DFI financial technologies were assessed as to the quality of financial services (loan and savings terms and conditions, and proximity to clients), client information and contract enforcement mechanisms, and loan interest rates. The number of branches, average number and volumes of loans and savings showed breadth of outreach, while average loan size outstanding and average deposit size gave depth of outreach. Data on DFI productivity and financial viability included the value and number of loan and savings accounts per staff member, the subsidy dependence index (SDI - percentage increase in the on-lending interest rate needed to eliminate all subsidies received), and loan arrears (Gonzalez-Vega *et al*, 1997). The study lenders used both group and individual lending technologies. Flexible and longer-term individual loans enabled L1 to diversify portfolio risk by financing a range of farming and rural agribusiness activities. Flexible repayment terms suited its clients' variable income flows, and L1 had developed an innovative long-term graduated repayment loan product aimed at alleviating the initial cash flow problems facing low-equity borrowers that buy farmland. L1 also extended group loans to small subsistence farmers in an effort to promote income growth in rural KZN. These group loans reduced the costs of dealing with many small farmers, and promoted substantial breadth and depth of outreach (individual loan sizes within groups ranged from R500 to R800).

Table 1: Lending Technologies Used by Study Lenders in KwaZulu-Natal, 1996/97

Indicator	Development Finance Institutions		
	L1	L2	L3
General			
Years of operation	18	23	9
Institution objective	Development	Development	Financial viability
Loan Terms and Conditions			
Financial services	Rural loans and savings	Production loans for small sugar farmers	Microenterprise loans
Lending to groups	Yes	No	Yes
Group size	30 - 60	n/a	4 - 6
Group formation	Borrower & lender	n/a	Borrower & lender
Individual loans	Yes	Yes	No
Loan terms	1 - 20 years	2 & 8 years	4 - 12 months
Loans sizes	Flexible	R4 800 (maximum)	R100 - R5 000
Formal collateral required?	Yes	Yes	No
Place of loan application	Branch	Agencies	Branch
Loan application processing	4 - 24 weeks	6 weeks	4 - 5 weeks
Decentralisation of loan approval	Moderate	Moderate	Good
Repayment frequency	Flexible	Seasonal but fixed	Monthly
Gradual increase in loan size	No	No	Yes
Loan Interest Rates			
Nominal effective interest rate (per annum) ^a	15% - 17%	16,5%	54% - 66%
Savings Terms and Conditions			
Savings	Voluntary	Compulsory	Compulsory
Access to savings for personal use	Good	Poor	Poor
Client Information, Screening and Contract Enforcement Technologies			
Management information system (MIS)	Yes (branch)	Yes (branch)	Only at head office
Use of a formal scoring model	No	No	No
Loan monitoring and tracking	Moderate	Moderate	Good
Client incentives/penalties	No	No	Yes
Future loan if default on current loan	No (not strict)	No (not strict)	No
Foreclosure or repossessions	Difficult	Difficult	Yes
Staff incentives for loan collection	No	No	Yes

^a Effective interest rates were calculated using the framework provided by Rosenberg (1996).

In-field loan applications and seasonal loan repayments reduced borrower transaction costs, but the group loans tended to be inflexible in terms of the timing and amount of finance granted to individuals. Group formation and monitoring imposed high costs on both L1 and group members, as the groups were relatively large (30-60 members) and members were geographically dispersed. This reduced the quality of financial services and negatively affected L1's financial performance.

Lender L2 specifically targets the establishment of small sugar-cane growers in communal areas of KZN, only providing individual medium-term production loans. Seasonal loan repayments were automatically deducted by sugar mills at crop delivery, thereby lowering administration and loan collection costs for L2, and transaction costs for its clients. Borrowers, however, were able to deliver on non-borrowers' quota (often members of the same household that each had sugarcane quota but did not borrow from L2), thus making the crop cession system less effective. Limited branch networks in major rural towns increased borrower costs to access agribusiness and farm financial services at L1 and L2. Loan approval processing times were lengthy due to moderate decentralisation of loan approval responsibility. Loan disbursements were in-kind, with L1 clients being supplied with the physical inputs, while L2 clients had to collect order slips from the local sugar mill and present them at input suppliers. This gave clients less financial flexibility, since many needed finance for consumption smoothing and not just investment purposes.

Lender L3 lent only to client groups, providing cash loans with distinct loan ceilings to comply with Usury Act exemptions (loans may not exceed R6 000, or run longer than 36 months, and must be disbursed in cash). Short loan terms with strict monthly repayments suited the more regular income flows of its micro-enterprise clients, and promoted frequent borrower-lender contact necessary for group monitoring. The groups tended to be small and homogeneous which encouraged group cohesion but, as with L1, they had set sizes and repayment schedules, and imposed costs on the members who were mainly responsible for forming the group. The frequent borrower-lender interaction required by L3, and its limited branch network, created additional costs for both parties. Loan funds had to be requested from the Pretoria head office which, together with investments in group-formation, lengthened approval times. For security reasons L3 kept no funds at local branches. While this improved security at these branches, clients incurred more transaction costs as loans were issued as cheques that then had to be cashed at a commercial bank.

The relatively high costs of administering group loans, and inflexible loan terms, reduced the quality of L3's financial services, and negatively affected its financial viability. The effective interest rate for L3 was relatively high and consistent with its financial self-sustainability objectives compared to the farm and agribusiness lenders, who charged nominal effective interest rates well below the ruling commercial prime overdraft rates of 18 to 19 per cent per annum. This suggests that L1 and L2 are unlikely to be financially self-sufficient without changing their financial technologies. Higher interest rates are consistent with the costs and risks of serving small borrowers that have variable incomes and limited collateral.

Only the development finance corporation that runs L1 was permitted by special government concession to mobilise client savings. This was done via an extended branch network, thus lowering transaction costs for clients depositing and accessing money. However, not all of the savings branches offered agricultural and agribusiness loan services. Both time and demand deposits could be withdrawn and made at any branch. Savings products are easy to understand as interest rates are quoted in Rand terms to help clients understand the concept of interest, and encourage savings. Cash loans of up to 90 per cent of the value of time deposits were offered to depositors. Lending against deposits could be a viable alternative for rural clients who do not earn fixed incomes but may need cash for emergency purposes. Savings and loans facilities should be offered at the same branch or institution if savings are to be effectively used as collateral. This is contrary to the Strauss Commission recommendations that the savings and loan functions be managed separately by the South African Post Office and the 'reformed' Land Bank (Strauss Commission Report, 1996b: 14-17). A 'one-stop-shop' approach may also lower client transaction costs, and has been successfully used by several best practice DFIs in Bolivia, Indonesia, Benin, Togo and Cameroon (Gonzalez-Vega *et al.*, 1997 & Gurgand *et al.*, 1994). This may be considered by L3 whose clients are required to open a club savings account at a commercial bank that may not necessarily be the bank where they cash loan cheques. Lender L2 also required compulsory savings, but these funds could be used only to purchase crop inputs.

Lenders L1 and L2 had well-developed management information systems (MISs) at branch level to handle administrative work and facilitate loan tracking. Loan officers at L3 indicated that the lack of comprehensive branch MISs made credit control less effective. Moderate loan monitoring - in terms of loan officer visits - was carried out by L1 owing to the geographic dispersion of its clients. Lender L3 had frequent monitoring through monthly visits during loan collection. The incentives built into the loan contracts of L1

and L2 to encourage borrowers to repay loans tended to follow commercial debt contracts with formal collateral and equity contributions being required by L1. These financial technologies limited the access by poorer borrowers to finance, but were needed to counter high loan losses and low interest rates.

The joint liability mechanisms used by L1 to reach small farmer and agribusiness clients were not effective in controlling default as the groups were quite large and weakly constituted, and members were geographically disbursed and prone to systematic income shocks. The absence of secure and transferable property rights, high collateral specific risks and a costly legal system made it difficult for L1 to foreclose on defaulting clients with larger individual loans. Loan repayment boycotts were also cited as a problem by L1. Lender L2 required the financed crop as security, but flawed collection mechanisms at the sugar mills reduced the efficacy of this collateral type, resulting in relatively high arrears, which jeopardised L2's financial viability. Following international best-practice, L3 aimed to build client 'reputational capital' by offering larger loans with better terms and conditions upon timely repayment of existing loans. In addition, group members were denied access to future credit if loans from group members were in arrears. This technology reduces formal collateral requirements, but depends critically on the social interaction between group members and the extent to which group members value the lender's services and want to build reputational capital (Gonzalez-Vega *et al.*, 1997). The relatively inflexible group loans, and the transaction costs of cashing loan cheques at commercial banks, may have reduced client incentives to maintain a good borrower-lender relationship with L3. Lenders L1 and L2, although promoting a policy of not granting future loans to defaulting clients, were more lenient, thus limiting the role of reputational capital as a form of collateral.

Table 2 outlines outreach, productivity and financial viability data that the three lenders were prepared to provide. Data concerning client retention (repeat loans) were not available at the time of the study. Lender L2 had the greatest outreach in terms of the average number of loans outstanding - partly due to the active small-scale farmer extension efforts of local sugar mills. Although L1 had 44 branches in total, only 15 branches offered agricultural and agribusiness loans. In contrast, L1 had reached relatively fewer emerging farmers and agribusinesses, but these clients probably had larger asset bases and better liquidity as shown by the larger average loan size outstanding.

For L3, high client transaction costs to apply for loans at the limited branch network, costly group formation, and rigid group loan terms probably constrained outreach. Lender L1 has substantial scale and depth of savings

Table 2 Performance Indicators for Survey Lenders in KwaZulu-Natal, 1996/97

Indicator	Institutions		
	L1	L2	L3
Scale of Outreach			
Number of branches	15	20	12
Average number of loans outstanding	4669	25 500	3342
Average number of savings accounts	495 620	25 500	N/a
Depth of Outreach			
Average loan size outstanding	R10 388	R3 055	R618
Average value of savings account	R467	R403	N/a
Productivity			
Average value of loans per staff member	R673 616	R708 188	R129 117
Average number of loans per staff member	65	231	209
Average value of savings per staff member	R674 198	R93 608	N/a
Average number of savers per staff member	1 444	231	N/a
Financial Self-sustainability			
SDI	54% ^a	112% - 294%	N/a
Arrears	36% ^b	31% ^b	15% ^c

^a Applies to L1 as a whole and not only to the agricultural division

^b Arrears = annual average amount of principal and interest overdue/annual average loan principal outstanding

^c Portfolio at risk = annual average outstanding balance of all loans/annual average total outstanding balance

outreach, indicating that rural clients do have the capacity to save, and that there is considerable scope for savings mobilisation in rural KZN. Lenders L2 and L3 also have considerable depth of outreach as shown by their small average outstanding loan sizes. Staff productivity has been relatively high in loan value terms for L1, in value and loans per staff member for L2, and in loan numbers for L3.

The SDI calculations imply that an increase in on-lending interest rates to 25 per cent per annum for L1, and to 34-63 per cent per annum for L2, are required for them to operate without subsidies. Their relatively high rates of arrears, indicating difficulty in controlling default with their current technologies, will also need to be reduced. outreach, indicating that rural clients do have the capacity to save, and that there is considerable scope for savings mobilisation in rural KZN. Lenders L2 and L3 also have considerable depth of outreach as shown by their small average outstanding loan sizes.

Staff productivity has been relatively high in loan value terms for L1, in value and loans per staff member for L2, and in loan numbers for L3.

The SDI calculations imply that an increase in on-lending interest rates to 25 per cent per annum for L1, and to 34-63 per cent per annum for L2, are required for them to operate without subsidies. Their relatively high rates of arrears, indicating difficulty in controlling default with their current technologies, will also need to be reduced.

High administration costs and arrears negatively affect the financial viability of L3 which effectively loses 30 per cent of annual amounts disbursed with an 85 per cent repayment rate, given the short term nature of its loans. Group lending programmes are costly to maintain, while greater economies of scale are needed to reduce administration costs. Both L1 and L2 were making substantial structural and operating changes at the time of the survey. Lender L1 was incorporating a new banking MIS system to improve loan tracking and administration. Access to financial services was being improved by making all products available at all branches. Lender L2 was moving away from sector specific lending to establishing financial service co-operatives which offer a broad range of financial services (loans, savings and transmission accounts) to a broad range of clientele (lower portfolio risk).

4. CONCLUSIONS

The financial technologies of the three lenders varied due to their different target markets and different lending objectives. However, these technologies and the institutional environment in which they operate need some reform to improve access by farmer, agribusiness and micro-enterprise clients to financial services on a sustainable basis. Firstly, expanding branch networks and better rural infrastructure would reduce client transaction costs. This, however, would be costly, and increases the importance of achieving economies of scale, particularly for the micro-enterprise lender in the study. Mobile branches or agencies may be a viable alternative to 'bricks and mortar' branches, and must be located in areas frequently visited by clients, such as grocery stores, village markets or input suppliers. Study lenders could also shorten loan approval times by using computer aided screening procedures, decentralised decision making, a well-motivated staff (through bonus incentive schemes), and appropriate information systems. Their financial services would closer match client needs if savings and loan facilities were offered together ('one-stop-shop' facility), with more flexible loan terms.

Savings (fixed deposits) could provide an alternative form of collateral for emerging farmer, agribusiness and micro-enterprise clients that may not have

reliable incomes against which to borrow consumption credit. This will not be possible where separate savings and credit institutions exist, as lenders then lack information about the savings behaviour of potential borrowers. Lender L1's success in mobilising savings shows that the study clientele in KZN have considerable capacity to save. Savings mobilisation, though, requires considerable institutional capacity and savings products that easily communicate the concept of interest to relatively illiterate clients. Continued outreach over time can be promoted by achieving a suitable interest rate spread while controlling default and administration costs. The implicit interest rate subsidies offered by the farm and agribusiness lenders cast some doubt on whether they can become financially self-sufficient. A change in target market - for example to include viable non-farm rural enterprises - could reduce their loan default rates. More use of formal scoring models and/or local individuals aware of borrowers' credit histories, may improve client selection. Institutional and legal reform to promote secure and tradable property rights and effectively enforce contract penalties for defaulters may enhance loan security in rural areas and improve access of farming and agribusiness clients to formal credit.

Stricter enforcement of the policy of no repeat loans at more favourable terms (larger amounts, longer repayment periods and reduced interest rates) if present loans are not repaid can build client reputational capital and induce voluntary contract enforcement. More effective use of credit bureaus that divulge borrower repayment histories to other financial institutions would also build reputational capital across lenders. Joint liability mechanisms have worked less effectively for large agricultural groups, emphasising the need for properly constituted groups where individuals live in close proximity and have sufficiently diversified income sources to cope with systematic shocks. In addition, joint liability alone may not ensure loan repayment when the client-lender relationship is undermined by low quality financial services and lenders are lenient toward default. Study lenders, particularly the micro-enterprise lender, must focus on offering quality financial services while also meeting the broader needs of the clients through more flexible loan products. The costs of administering financial technologies may be reduced via appropriate management information systems at branch level, giving staff performance incentives and achieving sufficient scale of operations. Staff performance incentives must be based on measurable criteria such as branch profits, client outreach and loan collections.

ACKNOWLEDGEMENTS

The financial assistance of the Centre for Science Development (South Africa), and the University of Natal Research Fund, towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the authors and are not necessarily to be attributed to the Centre for Science Development or the University of Natal Research Fund.

REFERENCES

CHAVES, R.A., & GONZALEZ-VEGA, C. (1996). The design of successful Rural Financial Intermediaries: Evidence from Indonesia. *World Development*, Vol 24(1): 65-78.

CHRISTEN, R.P., RHYNE, E. & VOGEL, R.C. (1994). *Maximising the outreach of microenterprise finance: The emerging lessons of successful programs*. Washington, IMCC Paper No. 6860.

CHRISTODOULOU, N.T., KIRSTEN, M. & BARDENHORST, J. (1993). Financing South African micro-entrepreneurs. *Paper presented at the International Council for Small Business Conference*, Las Vegas, June.

COETZEE, G. (1995). Credit. In R. Singini and J van Rooyen (Eds). *Serving small-scale farmers: An evaluation of the DBSA's farmer support programmes*. Midrand, Development Bank of Southern Africa: 227 - 250.

COETZEE, G. & VINK, N. (1996). The Efficiency and Outreach of Rural Financial Institutions in South Africa. *Agrekon*, 35(4):256-260.

COULTER, J. & SHEPHERD, A.W. (1995). *Inventory credit: an approach to developing agricultural markets*. Rome, Food and Agriculture Organisation of the United Nations, FAO Agricultural Services Bulletin 120.

FENWICK, L.J. & LYNE, M.C. (1998). Factors influencing internal and external credit rationing among small-scale farm households in KwaZulu-Natal. *Agrekon*, 37(4):495-504.

GONZALEZ-VEGA, C., SCHREINER, M., NAVAJAS, S., RODRIGUEZ-MEZA, J., & MEYER, R.L. (1997). A primer on Bolivian experiences in microfinance: An Ohio State perspective. Report prepared by Department of Agricultural Economics and Rural Sociology, The Ohio State University, Columbus, United States of America.

GURGAND, M., PEDERSON, G. & YARON, J. (1994). *Outreach and sustainability of six rural finance institutions in Sub-Saharan Africa*. Washington, World Bank Discussion Paper No. 248.

HOFF, K. & STIGLITZ, J.E. (1993). Imperfect information and rural credit markets: Puzzles and policy perspectives. In Hoff, K., Braverman, A. and Stiglitz, J.E. (eds). *The Economics of Rural Organisation: Theory, Practice and Policy*. New York: Oxford University Press Inc.: 33 - 52.

KUHN, M.E. & DARROCH, M.A.G. (1999). Factors affecting rural medium-term loan repayment: Evidence from a South African development finance institution. In Peters, G. and von Braun, J. (eds). *Food Security, Diversification and Resource Management: Refocusing the Role of Agriculture?* International Association of Agricultural Economists (IAAE) Occasional Paper No. 8, Ashgate Publishing Co. Ltd., Aldershot, UK, 1998: 322 - 328.

ROSENBERG, R. (1996). *Microcredit interest rates*. Washington, World Bank, The Consultative Group to Assist the Poorest, Working Paper No 1.

STRAUSS COMMISSION REPORT. (1996a). *Interim report of the Commission of Inquiry into the provision of rural financial services*. Pretoria, Government Printers.

STRAUSS COMMISSION REPORT. (1996b). *Final report of the Commission of Inquiry into the provision of rural financial services*. Pretoria, Government Printers.

YARON, J. (1992). *Successful rural finance institutions*. Washington, World Bank Discussion Paper No.150.

YARON, J., McDONALD, P.B. & PIPREK, G.L. (1997). *Rural finance: issues, design and best practices*. Washington: The World Bank, Environmentally and Socially Sustainable Development Studies and Monographs Series No. 14.