VIEWPOINT: FINANCING SMALL FARMERS - QUO VADIS?

Gerhard Coetzee
Rural and Agricultural Development Group, Development Bank of SA, Midrand

Nick Vink
Centre for Policy Analysis, Development Bank of SA, Midrand

"Why do you not seek the ..... (financier) funding? We are afraid of the catch....."

"I thought they would take crop failure into consideration when repayments are expected...."

"I think the loan was no good because there was not enough money from ploughing fields to help pay off the loan..."

"What is bad is that this money has a lot of interest. Many people have had very bad experiences with the 'children' (interest). Some of us are very scared because of others' bad experiences.....they harvested nothing and the umlungu wanted his money. People are still paying up to now. Some are just paying for the 'children' and they have not even started on the 'parents' (capital). The ..... (financier) is quite happy to get the 'children' - as long as you keep paying."

(Quotes from DBSA, 1991)

1. Introduction

The agricultural sector in Southern Africa is in the process of change. These changes will hopefully at some future date culminate in the integration of all farmers into a comprehensive farm production and support system. In order to achieve this, all farmer support elements as embodied in different support institutions, have to be redefined in terms of target population. This is especially true with respect to the services provided by the agricultural finance sector. This sector can roughly be defined as that part of the broader financial sector that provides finance to the agricultural sector. This includes commercial banks, public sector parastatal institutions in the form of agricultural banks, certain government departments, co-operatives, traders, money lenders and other informal sources of finance such as family and friends.

If all farmers are to be served in an equitable manner, the participants in the agricultural sector and thus the target population of the agricultural financing sector will have to be broadly defined. These participants can range from full-time owner-operator farmers to part time farmers and farmers who rent the land they farm on. Within such a comprehensive support system it will however be necessary in the short and medium term to make special provision for small farmers if they are to emerge into fully fledged commercial activities. Although the targeting of specific groups of farmers is difficult it is known in broad terms that small farmers are those who receive only a portion of gross income from farming, who usually have production rights rather than ownership of the land, who mostly make use of family and casual labour and whose production objective can range from subsistence needs to infrequent or consistent surplus production for marketing purposes.

The financial needs of farmers, including small farmers, can be met in three ways. First, by using own funds (savings), second, by borrowing funds and third, by grants from governments and other bodies. The borrowing of funds can be from two sources, namely informal and formal. Most farmers in less developed areas make use of informal credit. This source meets the need for small scale agricultural operations where production for the market is not developed to its full potential. Where the aim is to expand farming operations to a scale to produce for the market, a formal, more stable and comprehensive source of credit is needed. This implies a source that will provide short, medium and long term credit.

As groups of farmers differ according to the above broad criteria, different financial needs will be expressed by these farmers. This paper will address the needs of the broadly defined complement small farmers. The first part of the paper will look at the characteristics of small farmers in terms of financial needs based on elements of the financing process of these farmers and the type of institutions involved. Second, the role of an agricultural bank as financier of these farmers will be discussed. Lastly, conclusions and proposals will be put forward.

2. Financing small farmers

Small farmers have been the target population of numerous credit and financing programmes the world over for the last fifty years. An indication of the scope of these programmes is that between 1964 and 1985 the portion of World Bank agricultural loans that went to credit programmes amounted to 15 per cent (Yudelman, 1985). Most of these credit programmes were based on two assumptions. First, the assumption that small farmers need cheap credit to motivate agricultural activity and second that small farmers, or in broader terms the rural population are too poor to save. Past experience in other Third world countries have however proved that policies based on these assumptions invariably result in credit programmes that all but helped the target population. Credit mostly landed in the hands of the larger farmers as depicted by the 'Iron law' of interest rate restrictions.

Most of these credit programmes did not reach their intended target population and therefore did not show the intended results. The base assumptions have therefore been questioned and new look credit programmes and intervention in rural financial markets have come to the fore in recent years (Meyer and Cuevas, 1990). In South Africa these traditional assumptions are however still subscribed to by most public sector supported financial institutions. The Land and Agricultural Bank of South Africa (Land Bank) followed it until the early 1980s when they brought their interest rates more into line with commercial banks rates for the first time. Low interest rates are however still seen as a necessary condition to enable farmers to produce profitably as is reflected in the various debt relief programmes. The recent announcement of the Land Bank to subsidize mortgage rates down to the level of 12 per cent is also instructive. Subsidized rates for small farmers are also to be found in all the developing areas of South and Southern Africa.

International experience, confirmed in South Africa (Coetzee, 1988), however indicates that factors other than interest rates play the major role in determining the effects of credit in the production process. These factors include the timeliness of the provision of credit, the opportunity cost of time in the credit procurement process, the cost of credit administration, the accessibility of institutions to applicants, the time it takes to make decisions on applications, the procedures and requirements of the credit institutions, the level of information on the applicants and the risk profile of farmers and the lending institutions. Economists lump all these factors together and call them transaction costs. Some of these costs are discussed in the next section.

2.1 Characteristics of small farmers and their financial needs

As already explained no clear definition of small farmers can be put forward. Certain characteristics of the broadly defined small farmer can however be highlighted. Financial institutions should take note of these characteristics as this will indicate the type of service or services that should be provided to meet the needs of small farmers.

Small farmers are mostly women and part time farmers who derive only a portion of their gross income from farming. This portion ranges from five to 30 per cent at the most (Coetzee, 1988; Cobbett, 1986). It also happens that funds obtained for agricultural production purposes are mostly repaid out of other sources of income. This implies that repayment of credit can be linked to income streams other than farming. Production credit may be repaid before the harvest or conversely, production credit may be repaid over a period longer than the production cycle.

In general, small farmers do not have title deeds to the land that they work. This implies no collateral for long term credit. In the absence of other financial information, these farmers can therefore only be considered for short and medium term financing according to the criteria of the commercial banking sector.

In South Africa, contrary to the traditional settlement pattern of smaller more intensive farms near urban areas and larger more extensive farms in outlying and remote areas, the majority of small farmers are situated on the geographic and economic periphery, where most of the necessary support services are lacking. This *inter alia* implies that inputs need to be transported over great distances and these farmers are removed from the markets.

Coetzee (1988) indicated that 55 per cent of small farmers that took part in a survey in KaNgwane had savings, and of these 66 per cent had savings accounts at commercial banks. The commercial banks only supplied loans to 7 per cent of respondents in this survey (Coetzee, 1988). The implication is that the commercial banks do supply a deposit facility but are more reserved in entering into loan agreements with their clients. It also implies that the savings accumulated in a specific rural area via commercial banks are invested in other areas (where people that qualify for loans at these institutions live) with concomitant leakages of economic opportunities. This is an important motivation for a rural savings mobilization drive. The provision of deposit facilities by rural credit institutions could therefore serve as a source of funds for these institutions. However, competitive deposit rates need to be offered to attract deposits.

If small farmers are grouped in two groups, ie. those that produce mostly for own consumption and those that also produce for the market, a marked difference in credit needs for agricultural purposes are indicated (See Table 1). Farmers who concentrate on production for home consumption generally do not take up credit for agricultural purposes.

One of the inferences from Table 1 is that there is a significant correlation between farmers producing for the market and the use of credit in the production process. Table 1 further highlights the major differences between these two groups, eg. in terms of the use of fertilizer which may serve as an indication of the different levels of technology adoption between the two groups.

In the case of small farmers, as in the case of the commercial farmer compliment in South Africa, distribution of production of marketable sales is highly skewed. It has been found that approximately 15 per cent of small farmers produce more than 80 per cent of marketable sales in the case of maize and groundnuts in KwaZulu and KaNgwane (Coetzee and Van Zyl, 1990; Lyne, 1989).

Table 1: Discriminant function for the grouping of farmers in producers for the market and producers only for home consumption in KaNgwane (N = 142)

Variable	Discriminant function: Coefficients	Group averages: Market	Consumers	P > F
Net farm income	0.25	2555.82	-491.49	0.0003
Vehicles, impl.	0.18	7462.56	3108.47	0.0001
Area farmed	0.33	8.11	3.31	0.0001
Total assets	0.15	14293.06	7831.02	0.0005
Fertilizer expenses	0.46	411.74	133.41	0.0001
Seed purchases	0.28	173.60	76.17	0.0001
Use credit	-0.29	1.74	1.88	0.0364
Mahalanobis distance between groups			1.5401	0.0001
Wilk's Lambda			0.6661	0.0001
Number of participants		42	100	

Source: Coetzee, 1988.

In general, small farmers make more use of informal credit sources than of formal sources (Coetzee, 1988). If production patterns and purposes of taking-up loans are investigated one finds that farmers that produce for own consumption make less use of formal sources. For this group the purpose of the loan lies mostly outside the farming activities.

Survey information on small farmers indicates that the average level of education lies between Standard one and Standard three (Coetzee, 1988). This has implications for terms and conditions and language in which the contract is presented.

2.2 Financial institutions and elements of the disbursement process

One way to compare the different approaches regarding these elements will be to contrast the procedures and approaches normally applied by the informal and formal financial sectors. Both formal and informal financiers have advantages and disadvantages as sources of financial services to small farmers. The most important differences are in terms of the nature and extent of transaction costs, and also who carries those costs. Table 2 provides an indication of some of the differences in transaction costs. Table 2 also indicates that farmers make more use of informal than formal credit sources, notwithstanding the higher average interest rate charged by informal sources (see Table 3).

Regarding the method of pay-out, an important observation in recent literature refers to the effect of the fungability of money (Coetzee, 1988). This effectively means that to pay loans out in cash has an advantage over pay-outs in kind. The reason being that the economic effect may be larger as the borrower now has the choice or the controlling power over the allocation of the funds. Formal institutions invariably pay out credit in kind or in the form of a credit note whereas informal institutions pay out the major portion of loans in cash.

Table 2: Differentiation between formal and informal credit sources in KaNgwane

	Formal sources	Informal sources
Average:		
Distance to source (km)	39.7	33.6
Number of visits to source	6.4	3.1
Application time (days)	59.5	8.3
Size of loans (R)	1951.6	446.2
Pay out in:		
Cash (% loans)	19.0	94.7
Kind (% loans)	81.0	5.3
Deposit needed (% loans)	36.0	10.6
% of farmers who took up loans:		
KaNgwane	43.0	57.0
Lebowa*	29.0	71.0

* From a survey in Lebowa (Fenyes, 1982)
Source: Coetzee, 1988

The two most important reasons why formal institutions such as commercial banks are apprehensive of getting involved in the financing of small farmers seem to be the lack of collateral (in terms of the normal requirements set by these institutions) and transaction costs associated with extending loans to these farmers (Table 2 shows the differentiation between formal and informal sources in KaNgwane). Informal institutions have more information on their clients and thus have an idea of the clients' ability to repay loans (an informal form of collateral). Formal institutions' collateral requirements do not apply *in toto* to these informal transactions.

Formal institutions are not as flexible as informal institutions in rescheduling loans or adjusting the payback period to suit the income stream of the client. In a number of cases in rural areas the purpose of the loan and the activities that generate funds for the repayment of loans do not correlate. In the case of the informal institution the lender relies on the rational desicion-making of the client and the clients knowledge of his own cash flow position regarding the source of funds to repay a loan. Formal institutions are more inflexible and prescriptive in this regard. They are usually inflexible on regulations and procedure regarding loan repayment period and method of payment (varying payments etc). Further, decisions do not rest with the small farmer's contact person at the institution. This involves more time and inflexibility in the making of decisions. In turn, this increases the transaction cost for both the borrower and the institution.

A further difference between formal and informal sources exist in terms of level of interest rate charged (see Table 3). A stereotype view exists that the higher interest rates of informal institutions are exploitive and therefore rural people should utilize formal sources. Another interpretation is that these higher interest rates reflect the risk associated with these loans. The argument that interest rates alone do not play the major role in the decision to take up a loan is therefore supported.

Concerning the ability to save it was found in Africa and other less developed countries that rural populations can save. Savings propensities of up to 30 per cent in rural areas have been recorded, also in South Africa (Coetzee, 1988; Nieuwoudt, 1989). Savings mobilization by financial institutions in rural areas has the advantage that it serves as a major source of funds for on-lending and can be utilized for economic activities with the resultant potential economic linkages in these areas.

Policy regarding the provision of credit, and in broader terms financial services to rural dwellers, should incorporate the above, namely the importance of transaction costs and the mobilization of savings. Formal credit institutions and especially those that serve the small farmer as target group usually do not mobilize savings. They have cumbersome and longwinded loan procedures which usually result in high transaction costs to both the farmer and the institution. The advantage is that formal credit institutions have access to larger amounts, although at a higher cost, than informal institutions.

Table 3: Interest rates of formal and informal institutions in KaNgwane

Source	Interest rate/annum* Survey	Institution	Number of loans	Level of signific. (P > F)
Formal:	**12.11**	**	**25**	-
Dev. Corp	11.69	10.00	13	0.0001
Comm. Banks	10.15	14.50	3	0.1262
Dealers	13.36	18.00	9	0.0007
Informal:	**16.30**	**	**14**	-
Family	0.00	**	5	-
Friends	5.00	**	4	0.3910
Money lenders	40.65	**	5	0.3653

* Interest rates have been calculated by dividing the amount repaid by the amount obtained. The precise cessation date of loans could not be ascertained. However, the end of the survey period was used to calculate the loan term which indicates an under estimation of interest rates.
** Not applicable or not available
Source: Coetzee, 1988.

The biggest advantage of informal institutions is that they provide their services at a low transaction cost to the farmer and for themselves as they have far better sources of information to base their decisions on. In addition to the recognition of the importance of transaction cost and savings mobilization, the type of institution that provides the financial services also plays an important role.

3. Specialised farm credit institutions (eg. Agricultural Banks)

Specialised farm credit institutions are defined as a class of financial intermediary primarily engaged in the provision of loans to farmers, ranchers, and others undertaking agricultural production (Von Pischke, 1978). This type of intermediary is characterized by the specialization of its loan portfolio, and also by the the reflection of that loan portfolio in a narrow range of financial services offered. Normally, specialised farm credit institutions do not engage in any significant scale of deposit taking. Specialized farm credit institutions are established by governments in low income countries to provide financial assistance for agricultural production (Von Pischke, 1978). In their role as development finance agencies, specialised farm credit institutions are providers of supply-lending finance, a public sector development tactic which provides funds in advance of effective demand in an effort to stimulate enterprise, ie. risk-taking by borrowers, in a socially useful manner.

Specialised farm credit institutions in low income countries have a patchy record as financial intermediaries (Donald, 1976). The problems encountered by these institutions result in insufficient loan recovery levels to permit them to break financially even before the allocation of administrative expenses. The basic reasons for the failure of these institutions rest on the two traditional assumptions mentioned earlier, the provision of cheap credit and the inability of rural people to save. It was impossible for these institutions to provide a great number of small farmers with cheap credit, while they have to rely on donors for funding and had no other source of funds.

3.1 Demand driven service

The greatest challenge to specialised agricultural credit institutions is to swing their financial services policy away from supply-lending finance to a demand driven service. This can only be accomplished if these institutions can identify the nature of demand, their target clients and the characteristics of rural financial markets. This entails a flexible approach acknowledging the different services required for the broad spectrum of farmers in the agricultural sector. It also entails a deviation from the procedures and practices adhered to by these institutions in the past as well as most of the actors in the formal financial sector.

In terms of the discussion on the financial characteristics of small farmers (see Section 2.1) the specialised agricultural credit institutions have to strive to lower transaction costs for both the financier and the borrower. The specific characteristics of rural financial markets have to be taken into account during policy and procedural arrangements.

3.2 Reducing transaction costs of financial intermediation[3]

Transaction costs have been identified as the major influence on the viability of financial institutions as well as the decision and situation of the borrower. The reduction of transaction costs of financial intermediation in developing countries requires improving information systems, reducing financial regulations, and implementing risk reducing mechanisms so that procedures and practices in financial transactions can be streamlined and simplified (Meyer and Cuevas, 1990). Several types of improvements both external and internal to financial intermediaries are suggested by Meyer and Cuevas (1990) along with some examples of how they are being implemented in selected countries.

Improving the economic environment

In order to ensure that small farmers are in a position to take up the challenges of commercial agriculture several improvements in the economic environment in which they operate is needed. Improved transportation and communication systems can help increase the efficiency of financial institutions. Market information will help both borrowers and bankers to better project the returns and risks associated with different types of investment projects.

Overall measures may include the provision of elements that will influence the access of small farmers to the market (Van Rooyen *et al*, 1987). Resultant improvements in farmer income will make farmer borrowers more attractive, less risky customers for loan and deposit services.

Improving banking regulations

Cheap credit policies do not benefit the farmers, nor does it benefit the credit institutions. Interest rates at very low levels force financial institutions to ration credit to their target client group and contribute towards the inability of the institutions to recoup lending costs at these low rates. This rationing is often accomplished by creating additional procedures and delays in loan processing which raise transaction costs. Borrower transaction costs are also increased. Cuevas (1984 in Meyer and Cuevas, 1990) found that borrowing costs and interest rates were negatively correlated in Honduras suggesting that as interest rates were allowed to rise the lenders found ways to improve lending efficiency for the borrower. Likewise, it was found that for small loans (U.S. $200), a reduction of interest rates of one percentage point was accompanied by an increase in non-interest borrowing costs of 5.5 percentage points.

Subsidized interest rates also have a negative effect on deposit mobilization. Although it is difficult to conclusively prove, there is evidence that suggests depositors are sensitive to interest rate changes. A private bank in Honduras experienced lending costs of 3.13 percent using own funds versus 7.82 percent for similar loans made through a World Bank credit project (Meyer, 1986 in Meyer and Cuevas, 1990).

Reduce risks

Risk profiles of farmers should be scrutinized in a decision to extend a loan. One of the important reasons often given by financial institutions for not making more loans to agriculture, to low income households, and to small businesses is the perception of the high risks associated with these borrowers. Reported default rates suggest that in fact some of the clientele groups that are identified as high priority for financial assistance in developing countries contribute to high default rates.

One way to reduce this risk is to accumulate information of prospective clients. This is possible if a specific institution provides deposit facilities and uses the financial profile of a clients deposit track record. Group schemes can also be utilized. The groups accumulate savings that are deposited in the financial institutions that make loans to group members. The joint liability of the group members covers the balance of the loan risk for loans made to members without collateral. This type of group scheme is also expected to reduce borrowing costs for its members, besides giving them access to loans otherwise denied to them. Organizing and participating in these groups, however, can represent fairly high transaction costs in itself.

Diversify financial institutions

A characteristic of the many specialized farm credit institutions that were created during the 1960s and 1970s is that it rarely engages in significant deposit mobilization. More frequently, they relied on subsidized external funds. This also occurred with many credit unions in Latin America that originally relied upon their own funds but gradually increased their dependency on external funds.

The institutions that begin to mobilize deposits may find that they reap several benefits (Meyer and Cuevas, 1990). First, the present external funds that appear to be cheap may actually be quite expensive when transaction costs are defined to include the reporting and administrative costs the donors and central banks usually require for utilizing their funds. Furthermore, external funds are not completely risk free for a lender interested in establishing itself as a dependable long term financial institution for its customers. However, with the ebbs and flows in interest and funds of donors and the government, an institution may at one time find itself awash in funds, but starved at another time.

Second, a financial institution that has an active deposit relationship with a customer can accumulate information about that customers' reliability, cash flows, and savings potential. This information may be useful when the institution appraises the customer's future loan application.

Third, deposit mobilization may contribute to superior loan recovery. By lending funds that have been mobilized from depositors, the financial institutions know they must be more careful when granting loans as they are more likely to be able to avoid political pressure with regard to loan allocations. At the same time borrowers may be more inclined to repay loans that they know represent their neighbours' deposits.

Expand the banking network or bringing the service to the borrower

Greater accessibility of institutions to prospective borrowers is one of the prerequisites to decrease borrower transaction costs. The use of mobile banking units, to increase accessibility of the financial institutions, were tested in several less developed areas with mixed success (Coetzee, 1988).

Group lending

Group lending is often recommended as a way to reduce transaction costs. The following advantages are claimed for group lending (Adams and Ladman, 1979 in Meyer and Cuevas, 1990). For the lender, 1) default risks are reduced because of joint liability, 2) loan transaction costs are reduced per unit of money lent by making one large loan to the group rather than several small ones to individuals, 3) scarce manpower can reach a larger number of clients through groups, and 4) technical services can be provided more cheaply to a few groups than to many individuals. For the borrowers, the transaction costs per unit borrowed may be reduced compared to individual loans. Mixed results have however been experienced with group lending (Bratton, 1986; Desai, 1983).

Improve internal operations

Time to take decisions is one of the limiting factors of formal financial institutions. Operating costs are reduced through decentralized decision making. Loans to farmers and small enterprises are sanctioned by the branch managers with the advice of technical staff (Meyer and Cuevas, 1990). Reporting procedures are confined to collecting and documenting information relevant for decision making either at the branch or the head office. In addition micro-computers could be utilized to administer the deposit accounts, develop lists of past due loans, print demand letters, prepare *ad hoc* reports, and generally rationalise the Bank's daily office routine.

Link informal finance with formal finance

In many parts of the developing world, informal financial services provided by money lenders, commodity traders and landlords have been perceived at best as inefficient and unproductive, and at worst as usurious, monopolistic, and prejudicial to rapid, broad based development. Savings groups and ROSCAs[4] have been seen as mere precursors to more formal credit unions. Pawnshops have been viewed simply as sources of high priced consumer credit for the urban poor. This negative view of informal finance is being replaced by a more positive interpretation, especially in the light of the major problems experienced by formal financial institutions in developing countries (Adams, 1989 in Meyer and Cuevas, 1990). There is recognition of the fact that the practices and technologies that contribute to strengths and advantages of informal finance, often in spite of many efforts to replace it, may provide suggestions on how to improve formal finance. There is also greater recognition for the need to tap the strengths of informal finance by linking it with formal finance.

By linking informal with formal finance, all the participants in financial transactions may experience a reduction in transaction costs, and/or they may be a transfer in transaction costs from the participant less able to absorb them (usually the financial institution) to the one more able to do so (usually the borrower or saver). Linking savings clubs with financial institutions, such as is being done in Zimbabwe with great success (Chimedza, 1984 in Meyer and Cuevas, 1990), represents an example largely oriented towards savings. These clubs are formed mostly by small groups of peasant farmers from the same village or cluster of villages. Similar arrangements are popular in South Africa, and are usually called stokvels. It is estimated that these stokvels mobilize about R50 million per month in the urban areas alone (Lukhele, 1990). Many of these stokvels keep their deposits in specially structured deposit accounts for stokvels at a major local building society and a commercial bank.

4. Conclusions

The rural environment and characteristics of participants in rural financial markets necessitate a re-look at agricultural banks. The success rate of these institutions could be improved if the institutions acknowledge the fact that the clients will determine the type of services that should be provided, ie. it must be a reaction on expressed demand. In order to be successful, the promotion of rural financial services would require critical success factors such as changes in the environment, changes in policies, changes in institutions and improvements in financial technology (Gonzalez-Vega, 1989; Meyer and Cuevas, 1990).

The milieu or environment within which farmers find themselves influences the profitability and risk of agricultural endeavours, and as a result the profitability and risk of loans to farmers. Farmers with low and unstable incomes cannot become good bank clients. Low incomes limit their savings capacity, their ability to transform some assets into financial deposits, their desire to borrow, limit their opportunity to profitably use loan funds, and diminish their ability and willingness to repay loans.

If the low incomes and performance of farmers are caused by the milieu in which the farmers operate, this should be changed. The development of a country's infrastructure, greater security in land tenure arrangements, and a legal framework that protects rights and the enforcement of contracts increase resource productivity and reduce transaction costs and, in this way, promote rural financial markets. In addition to the price policies, taxes and subsidies that critically influence farmers' income, appropriate macro-economic management and financial policies are crucial for the promotion of rural financial markets. Rigid financial policies have repressed growth in many developing countries. In addition to non-repressive policies and a more adequate regulatory environment, promotion of rural finance require viable, independent, permanent, and efficient institutions. Inconsistent objectives reduce intermediary viability. Excessive specialization increases risks. Lack of deposit mobilization weakens institutions.

Note

1. Paper presented at an Agribank Seminar on Agricultural Financing: Small farmers and interest rates, 17 July 1991, Mmabatho.

2. That is, the more restrictions on the provision of credit and more specific the level of interest rates, the more funds do not land in the hands of the target group.

3. This section is taken from the work of Meyer and Cuevas (1990) who provide a comprehensive summary of endeavours to reduce transaction costs of both borrowers and lenders.

4. Rotating savings and credit schemes. In South Africa *inter alia* known as "stokvels".

References

BRATTON, M. (1986). Financing smallholder production: A comparison of individual and group credit schemes in Zimbabwe. Public administration and Development, Vol 6:115-132.

COBBETT, M. (1986). The land question in South Africa: A preliminary assessment. Paper delivered at the conference on the South African Economy after Apartheid, Centre for African Studies, University of York.

COETZEE, GK. (1988). Die finansiering van landbou-produksie in die kleinboersektor van Suid-Afrika. Unpublished Msc Agric thesis, University of Stellenbosch, Stellenbosch.

COETZEE, GK and J VAN ZYL. (1990). An assessment of food security in South Africa. Contributed paper delivered at the 1990 Interconference symposium of the International Association of Economists, Swakopmund, Namibia.

DBSA. (1991). Unpublished DBSA mimeo on the Farmer Support Evaluation Assignment. Development Bank of Southern Africa, Midrand, Johannesburg.

DESAI, BM. (1983). Group lending in rural areas. In Von Pischke, JD, Adams, DW and Donald, G (editors). Rural financial markets in economic development. Economic Development Institute series, Baltimore, John Hopkins Press.

DONALD, G. (1976). Credit for small farmers in developing countries. Boulder, Colorado: Westview Press.

FENYES, TI. (1982). A socio-economic analysis of smallholder agriculture in Lebowa. Unpublished DSc Agric dissertation, University of Pretoria, Pretoria.

GONZALEZ-VEGA, C. (1989). Rural financial services as a development factor. Economics and Sociology: Occasional paper No 1636, The Ohio State University, Columbus, Ohio.

LUKHELE, AK. (1990). Stokvels in South Africa: Informal savings schemes by blacks for the black community. Amagi Books, Johannesburg.

LYNE, M. (1989). Unpublished survey results, 1985. University of Natal, Pietermaritzburg.

NIEUWOUDT, WL. (1989). Research report to DBSA. Midrand, Johannesburg.

MEYER, RL and CE CUEVAS. (1990). Reducing the transaction costs of financial intermediation: Theory and innovations. Economics and Sociology: Occasional Paper No 1710, Ohio State University, Columbus, Ohio.

VAN ROOYEN, CJ, VINK, N and NT CHRISTODOULOU. (1987). Access to the agricultural market for small farmers in Southern Africa: The farmer support programme. Development Southern Africa, Vol 4, No 2:207-223.

VON PISCHKE, JD. (1978). Specialised farm credit institutions: A model of supply-leading finance for farmers in low income countries. Working paper No. 341, Institute for development studies, University of Nairobi, Nairobi, Kenya.

YUDELMAN, M. (1985). The World Bank and agricultural development: An insiders view. World Resources Institute, WRI Paper No 1, Washington.

YUNUS, M. (1982). Grameen Bank Prapalka in Bangladesh. Report of the workshop on poverty focused rural development and small farmer credit, Comilla, Volume 1, Commonwealth Secretariat.