

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

In South Africa, the small-scale farming sector continues to battle with the daunting task of moving from a "subsistence syndrome" to the "plane of entrepreneurship". Smallholdings play a very important role in African agriculture, both in terms of their number and the numbers of people involved (1989)

The "poor but efficient" hypothesis of Theodore W. Schultz has attracted much attention since the 1960's. Schultz made the statement that it was neither the perverse economic behaviour of farmers (including small-scale farmers), nor the fecundity of man that was to blame for agricultural woes. "In my judgment, the real culprit causing the poor performance of agriculture in the less developed countries is the lack of economic opportunities in agriculture, opportunities that are rewarding to farmers. It is the lack of viable opportunities that is the crux of the matter" (Schultz, 1964). Schultz (1964) contended that farmers in "traditional" agriculture, using "age-old techniques", are generally efficient in their resource use, although they are poor.

Although they note methodological reservations in this regard, Eicher & Baker (1982) quote a large number of studies in which marginal value product and marginal factor costs of inputs in African agriculture were found not to differ significantly from each other. This lends support to Schultz's "poor but efficient" hypothesis. Van Rooyen *et al.*, (1987) conclude that small farmers in traditional agriculture will generally be capable of making rational economic decisions if the technical and economic constraints they face are removed. In Southern Africa, the Farmer Support Programmes, financed by the Development Bank of Southern Africa, are largely based on this premise (Coetzee, 1997:35). Economists like Falcon, Mellor, Ruttan and Timmer have made it clear that agricultural development is important and that new technologies, price incentives and supporting infrastructure are its primary determinants. The work of these economists convinced most policy makers that farmers respond to production incentives (cf. Coetzee, 1997:35). However, these constraints continue to be treated in an

uncoordinated way, encouraging their recurrence over time. One of these constraints is the access to financial services. This element forms the basis of this thesis.

Apart from the efforts of the government to ensure that small-scale farmers have access to financial services, the provision of financial services to the small-scale farming sector has generally been static and has even declined in some parts of the developing countries because of the risks involved in dealing with farmers and the incompetence of some service providers in dealing with smallholders (Kuhn *et al.*, 2000:68). Access to financial services has been limited by the following factors:

1. A lack of repayment discipline; and the resultant extensive losses have weakened many institutions (Kuhn & Darroch, 1999). Loan delinquency and default have plagued agricultural credit programmes in low income countries, especially with respect to loans provided by agricultural development banks (Spio, 1995; Braverman & Gausch, 1986).
2. Low interest rates for credit normally lead to low interest rates on deposits, thereby hampering the growth of savings and preventing financial institutions from becoming financially independent (Mohane *et al.*, 2000:731; Spio & Groenewald, 1998:165).
3. High loan transaction costs have discouraged lenders from serving certain groups of farmers (Fenwick & Lyne, 1998).
4. Credit is conditioned chiefly by providing securities in the form of land or other assets. Most small-scale farmers are not able to satisfy this requirement because of poverty and the tenure arrangements associated with their land assets.
5. The cost of borrowing, including the risk of failing to obtain credit or obtaining it too late (for example after planting) was high. Studies have shown that borrowers' cost of acquiring formal loans can be substantially larger than the normal interest payment (Gonzalez-Vega *et al.*, 1997).
6. Bureaucratic red tape: The complicated, cumbersome and time consuming operating procedures of, particularly, state or parastatal institutions result in delays in approval, and loans are not made available when required.

As the drive to boost agricultural production becomes desperate in the face of rising population, the small-scale farming sector continues to live in a "dilemma of financial problems"; it continues to be excluded from enjoying the benefits of using financial services. These problems contribute to low per capita food supplies, hence most of the small-scale farmers survive on family remittances or move out of agriculture. However, the "poor but efficient" hypothesis of Theodore W. Schultz should convince policy-makers of the need to design and implement policies and programmes directly aimed at improving access to financial services and the other above-mentioned primary determinants in the small-scale farming sector.

Provision of financial services helps farmers and microenterprises to avoid being caught in a traditional Schultzian low-return-to-investment trap (Batterham & Majid, 1987). It helps smallholder farmers to offset the risk of adopting new technologies and to buy improved input; thereby increasing their productivity and generating their own capital for investment. Other advantages of providing efficient financial services are:

- It increases the productivity of available resources, that is, it improves efficiency in resource allocation;
- It increases the flow of savings and investment, thus contributing to faster economic growth;
- It favours stability, through greater market integration and opportunities for risk management;
- It improves income distribution by making available to those with few resources of their own, purchasing power with which to take advantage of their productive opportunities, which otherwise would have to be forgone; and
- It ameliorates life cycle problems, in which the young need to acquire farm and household assets, often by borrowing from established persons in the community who have accumulated savings. Normally loans enable borrowers to use somebody else's savings (Sharma & Zeller, 2000:2; Levine, 1997:698; Montiel, 1996; Coetzee, 1993:1; Gonzalez-Vega, 1989).

The supply of and the demand for financial services to farmers and microenterprises hold the potential of substantially increasing the overall pace of investment and development. Cross-country and firm-level data continue to tell a compelling story:

finance matters (World Bank, 1992:1). However, a key requirement for this to occur is to reduce or remove if possible, most of the constraints encountered by the major role players in the financial markets.

1.2 MOTIVATION

One of the major factors hampering the development of rural areas is the limited access to appropriate financial services. The development of the rural economy in developing countries depends on growth in agriculture and other small and medium enterprises. These enterprises constitute the engine of growth, employment and income for the rural community. In an effort to make the landscape of rural finance more attractive and to fulfill the national objectives of increased production, policymakers and donors adopted the conventional approach of advancing credit, where all practices and operational procedures were geared towards the interests of the borrower.

Credit programmes were seen as the solution for a quick impact on agricultural production problems, as well as for low productivity and poverty in rural areas. They were also seen as the tool for an effective compensation for the urban bias, as well as for encouraging rural people to ignore the “exploitative” informal sources by taking part in the formal targeted cheap credit programmes. In addition, they were seen to encourage small farmers to take up new technology. Thus, these programmes were seen as the ideal measure to advance credit to the small-scale farmer and the rural poor (Coetzee, 1993:2). The unfortunate thing about this approach was that the viability of financial institutions and the interests of depositors were not regarded as prime objectives.

In the early 1970s, warning signals started to emanate from these programmes. Problems were encountered with loan recovery, and default rates ranging from 40-90 per cent were recorded in some programmes. High operating costs were common among most established institutions, and it was quite clear that these institutions could only continue operations with massive capital injections from governments and donors. The policies applied in these programmes made it possible for the funds to land in the pockets of

larger farmers rather than the small farmers and the poor (Proenza, 1997:1; Coetzee, 1993:3).

Strategies used by the credit programmes were flawed in the following respects (Von Pischke, 1991:93-115):

- Overemphasis on credit - The programmes ignored saving mobilisation, disregarded alternative means of stimulating investments and were characterised by the absence of a clear concept of risk in their operations. These missing elements produced bad loans which made most of the credit programmes unsustainable.
- Use of target and credit quotas or ceilings - Governments used these devices to push lenders through the frontier at a faster pace than they would otherwise have undertaken. These resulted in bad loans because the approach did not address the problems that made lenders reluctant to advance loans voluntarily.
- Neglected transaction costs - The credit programme policies paradoxically increased loan applicants' and depositors' transaction costs. These increases made borrowers' and depositors' cost of funds roughly equal to the cost of the alternative funds/savings that they could obtain/deposit elsewhere. In addition, the credit programmes were designed without reference to the cost of implementation. The overall effect of some of the devices increased the spread between gross costs of borrowing and net returns to lenders.
- Overlooked incentives - Most of the credit programmes initiated to serve the financial frontier disregarded the incentives that motivate individuals and institutions. Incentives were not properly examined. Most of the established institutions did not command confidence; they were perceived as a lien and transitory by the local community, and as a result, the ideal of linking savings and credit in retail financial institutions did not materialise.
- Emphasis on institutions rather than instruments - Governments and donors were more interested in establishing specialised institutions than in finance itself. They became involved with the establishment of agricultural credit institutions, co-operative credit societies, small enterprises, development banks and special credit programmes, among others, at the expense of financial products and

services which are the financial vehicles needed to ensure sound transactions. Emphasis on institutions was logical in every sense; however, the neglect of instruments and innovations inhibited good lending and effective financial management.

- Provision of cheap credit - The attitude regarding the appropriate interest rate for agricultural loans has been that they should be kept low to promote agricultural development and to assist the rural poor. Rates of interest on some agricultural loans were zero in nominal terms, whilst others often did not exceed 12 per cent per annum in most low-income countries. Interest rates assigned to savings were simultaneously less than the concessionary rate charged on loans (Spio, 1995:16).

These policies invariably resulted in distortions in the financial markets, and reduced the number of financial products and services that the farmers, micro-entrepreneurs and the poor could obtain in the markets. The deficiencies in and the results of programmes conducted according to the traditional vision led to a change of approach in the analysis and the promotion of rural financial markets (Gonzalez-Vega, 1989). This new approach predicated a system in which numerous and diverse market participants are linked through flows of funds and of information. The problem of limited financial services still exists despite the fact that initiatives such as the emphasis on project appraisal, relaxing collateral requirements and charging of close to market interest rates (Aveyard, 1999; Rhyne & Otero, 1992) have been taken into consideration in most of the new credit programmes.

In South Africa, the past policies of apartheid created structural imbalances in the whole socio-economic fibre of the society, causing different racial groups to have different social contexts and access to wealth. The policies resulted in the disempowerment of rural communities, where about 40% of the population lives - blacks constitute about 91% of the rural communities (Spio, 1995:54). Financial intermediaries directed their attention to commercial farmers at the expense and neglect of the small and emerging farmers, and microenterprises.

Apart from these policies, the financial intermediaries have not been able to serve their rural clientele easily because it is a costly, risky and difficult task. Local lenders were faced with covariant risks and high transaction costs and therefore became reluctant to lend to the poor (Kuhn *et al*, 2000:68). Lack of information prevented large formal lenders who had the capacity to serve the small farmers and the poor from doing so. The lack of information made them prone to problems of adverse selection, moral hazard, and high enforcement costs. In addition, their rural clientele are heterogeneous, geographically dispersed; deal in small transactions; and their activity is highly dependent on exogenous forces (Spio, 1995). The methods and practices of most banks did not meet the needs and characteristics of their clients. Regarding savings, there has been a neglect of rural savings for various reasons. These reasons are well documented in international literature (Spio & Groenewald, 1998; Coetzee, 1997; Fernando, 1991; Meyer, 1989; Vogel, 1984). Informal intermediaries, who are supposed to supplement the financial services provided by the formal sector, also lack in-depth intermediation; and charge high interest rates.

Various studies suggest that who one is and where one lives and works, has an important effect on access to credit. Rural people generally have weaker access and those without a formal sector source of income have the weakest access. In addition, rural people have weaker access to long-term credit in the form of mortgage finance, often due to a lack of security of tenure (Strauss Commission, 1996). The effect of discrimination was apparent as the probability of debt and the average size of debt depends on the variables of race, location and gender. Hence, policy reform is needed to increase the ability of disadvantaged groups, especially rural households, to acquire more loans at a reasonable cost.

The contribution of appropriate rural financial services to economic development, as well as social welfare, peace and stability can be substantial, if the importance of other development determinants of financial markets is recognised and addressed. It is believed that the reduction or avoidance of government interventions and market failures in the rural financial markets is only possible if certain supply and demand constraints, which affect the delivery of financial services, are addressed. The need for this study is therefore to examine the accessibility and effect of financial services on agricultural

production of small scale farmers, and to make suggestions that may reduce, if not avoid, government interventions and market failures in the South African rural financial markets.

1.3 PURPOSE OF THE STUDY

The main objective of this study is to examine the accessibility and effect of financial services, especially credit, on agricultural production of small-scale farmers in the Limpopo Province of South Africa. The specific objectives are to:

1. Determine the impact of credit on small farmer agricultural production and the shadow price of credit
2. Determine the characteristics and factors that influence the accessibility of credit in the small-scale farming sector; and
3. Investigate the efficiency of the rural financial market.

1.4 HYPOTHESES

The preceding discussions have brought forth several issues that need to be examined in terms of the accessibility and impact of credit on small-scale farmers. Firstly, it has been shown that small-scale farmers' access to credit is limited. Financial intermediaries seem reluctant to provide more services to rural areas and to small clients largely because of the risk involved. Even within the small-scale farming sector, different size groups have different access to formal credit.

Secondly, rural financial institutions are inefficient as most small-scale farmers are credit constrained. The issue is whether relaxing the credit constraint will result in farmers taking advantage of the opportunity to increase the net economic benefits envisaged by access to credit. Thirdly, arguments for subsidised credit in rural financial markets have been numerous and convictions about it are deeply held. As a result, one of the key elements of agricultural credit policy in the past in many parts of the world was a low interest rate policy, which was based on the assumption that the poor cannot

pay market rates of interest. The question is: is this assumption right? If yes, then the shadow price of credit should not exceed the social opportunity cost of capital.

Finally, understanding the impact of credit on the production behaviour of small-scale farmers is essential in terms of directing policy regarding the rural financial markets in the country. However, the impact of improved credit access on small farm production is only weakly understood because of identification problems, which hamper the measurement and estimation of credit's effects. Given the issues discussed, the hypotheses that will be tested in this study are:

- Hypothesis 1:** Access to credit to small farmers is limited, and within the small farmers' group, the farmers closer to the upper limit in terms of farm size are relatively well off in terms of access to credit, resulting in differential access to formal credit institutions among small farmers.
- Hypothesis 2:** Rural agricultural financial markets are inefficient in that borrowers are credit constrained.
- Hypothesis 3:** Interest rates in the markets are very high, meaning that the shadow price is in excess of the social opportunity cost of capital; hence, credit must be subsidised.
- Hypothesis 4:** Credit has direct productivity effects.

1.5 RESEARCH METHODOLOGY

To achieve those objectives and to test those hypotheses, an examination of both international and South African rural financial markets was firstly carried out. Issues considered were the structure of rural financial markets (RFMs), major policies that influence rural financial market activities, rural financial market public sector objectives and performances, and institutional and economic environments within which most credit programmes operate, especially within the South African context.

Secondly, cross-section data were obtained through a farm household survey, covering 153 small-scale farmers in the Lowveld and Northern regions of the Limpopo Province. Thirdly, two econometric models were developed: an endogenous switching regression model which was applied to determine the impact of credit and its shadow price, while a logistic regression model was used to assess the accessibility of credit to small-scale farmers in the two regions under investigation. Tabular analysis was also used to determine the differential access to credit within the small-scale farming sector.

1.6 LIMITATIONS

It is worth noting that one of the limitations of empirical analysis is that the behaviour of only 153 households in a random sample is under consideration and generalised to the rest of the small scale farmers in Limpopo Province, and that due to the different contexts of the provinces the findings of this study cannot be readily generalised to the rest of South Africa.

The accuracy of the data depends on the information given by the respondents. Any bias on their part would affect the results. In general, one should note the difficulty of obtaining accurate financial data from respondents. However, all the appropriate scientific approaches to ensure that the confidence levels are high enough were implemented.

1.7 DELINEATION OF RESEARCH

The study limits itself to rural financial markets. It also concentrates more on the micro aspects of rural finance. In terms of the financial services, only credit components are analysed. Other services were not considered.

1.8 ORGANISATION OF THE STUDY

In Chapter 2, the relationship between financial services and development is discussed. The relationship between real growth and financial development is examined. Three

patterns are identified between these two sectors, namely: demand-following, supply-leading and the hybrid approach. An analysis of the role of finance is also given, in addition to the effect of financial services, especially credit, on small-scale farmer development. Approaches that have been used by governments and other development institutions are discussed. The chapter concludes with a discussion of hindrances to the development of financial systems in developing countries. Among issues highlighted as hindrances are: a lack of rural infrastructure, the political environment, institutional environment and the policy environment.

In Chapter 3, consideration is given to the features of rural credit markets and their relationship to credit accessibility. It also discusses four principal features which distinguish credit markets from other credit markets: segmented/fragmented markets, problem with collateral security, underdeveloped complementary institutions, and the presence of inter-linkages between markets. Some of the major constraints to credit accessibility in the formal financial markets are also covered. Among these constraints are: Risk and credit rationing, transaction costs, delinquency and default, interest rates and collaterals

Chapter 4 briefly presents an overview of the small-scale farming sector in South Africa, with specific reference to previous policies, productivity and efficiency. Perspectives from both the province and the study area are discussed. The chapter ends with brief discussion on two of the major lending institutions in the study area.

In Chapter 5, empirical tests of the various hypotheses are conducted and the results discussed. It covers two major analyses, namely, differential accessibility of loans to small-scale farmers, and the evaluation of the impact of credit on small-scale farmers' productivity.

Chapter 6 presents the summary and conclusions of the major empirical findings, and recommendations for future research