

**Factors Affecting the Performance of Small Holder Credit Schemes offered by
Commercial Banks to Small Scale Farmers in Chipata District**

**A Research Report Presented to the Department of Agricultural Economics and
Extension Education of the University of Zambia**

BY

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LIST OF ACRONYMS

ACF	Agriculture Consultative Forum
COZ	Credit Organisation of Zambia
FAO	Food and Agricultural Organisation
GDP	Gross National Product
MACO	Ministry of Agriculture and Cooperatives
NATSAVE	National Savings and Credit Bank
NABARD	National Bank for Agriculture and Rural Development
SPSS	Statistical Package for Social Scientists
USDA	United States Department of Agriculture
ZNBC	Zambia National Commercial Bank

ABSTRACT

Factors Affecting the Performance of Small Holder Credit Schemes offered by Commercial Banks to Small Scale Farmers in Chipata District

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This study was carried out in Chipata District in Zambia's Eastern Province. The overall focus of this study was to analyse the factors which affect the performance of small holder credit schemes offered by commercial banks to small scale farmers. The Zambia National Commercial Bank and National Savings and Credit Bank offers credit to small scale farmers.

The objectives were to determine the productivity levels of small scale farmers who have received credit from commercial banks, to determine the performance of small scale farmers in terms of loan repayment, to assess the appropriateness of lending policies of the bank and to find out the extent to which commercial banks supervise the way small scale farmers use their loans for.

The findings were that in general productivity levels of small scale farmers increase after accessing credit, this can be attributed to availability of farming inputs to farmers when they access credit, on the other hand it was found that these commercial banks do not monitor the loans use by farmers. Research also reviewed that small scale farmers who were accessing these loans were benefiting because their income levels increase though not upon selling their produce because of the long period it takes for them to be paid, the farmers use this income to send their children to school, access health services and generally improve their conditions of living.

The key recommendations of this study were that the Zambia National Savings and Credit Bank and Zambia National Commercial Bank must involve farmers in the formulation of these Credit Packages and to embark on extensive Monitoring programs.

CHAPTER 1

INTRODUCTION

1.1 Background Information

Agriculture contributes about 22 percent to the Gross Domestic Product, provide livelihood for more than 50% of the population and employs about 67% of the labour force in Zambia (ACF, 1998). security at national level and increase the sector's contribution to Gross Domestic Product (GDP) from current 20% to 30%.However, to realise the targeted GDP and contribute to poverty reduction as well as sustainable development, credit has been identified to be one of the major contributing factors. As early as 1964, only commercial loans were available and these were sanctioned by foreign commercial banks, these banks considered small scale farmers as having a high risk and that credit with them carries high administrative costs (MACO, 2006)

By 1966, the Zambian government intervened through the formation of The Credit Organisation of Zambia (COZ), this organisation did not perform well as it suffered a high rate of default and debts (Quick, 1978). In 1970, The Agriculture Finance Company was formed, it also suffered for default problems which by 1981 had gone up to 50%, causes of failure were lack of criteria for loan appraisal, monitoring and loan recovery system(MACO, 1983), when these institutions went under ,a vacuum was created, it was only in the ninety's that commercial banks designed small holder credit schemes to offer to small scale farmers(ACF, 1998),however very little has been done concerning the analysis of factors which affect the performance of small holder credit schemes offered by commercial banks to small scale farmers, this research analysed the credit packages offered to small scale farmers by The Zambia National Commercial Bank and The National Savings and Credit Bank

1.2 Statement of a Problem

Credit supply has been in existence in Zambia since the independence, however little success has been achieved in terms results, this was worsened by the closure of lending institutions established earlier on, among them The Credit Organisation of Zambia, LIMA Bank and The Agriculture Finance Company(Mulenga, 2002),following this a vacuum was created. Commercial banks namely The Zambia National Commercial Bank ant The National Savings and credit Bank Have come on board to offer small holder credit schemes to small scale farmers, this research attempts to gain a deeper understanding on the performance of these smallholder credit schemes, the main task therefore is to find out the performance of these small holder credit schemes

1.3 Rationale

While there is substantial literature on credit, no studies have been done on the factors which affect the performance of this credit, equally rare studies have been done on the sustainability of credit schemes, the propose study investigated this aspect of smallholder credit schemes with reference to factors affecting performance. To date there is no record to show that smallholder credit was formulated on the basis of accurate reliable information on the local conditions in Zambia, furthermore no matter how old smallholder credit is in Zambia, it is not clear as to what impact the scheme has had on the farmer's economic welfare in the country in general and small scale farmers in particular, this study is significant as it provides valuable data on the performance of smallholder credit scheme offered to small scale farmers by commercial banks in Chipata district ,specifically the study will analyse the factors which affect the performance of smallholder credit schemes offered by commercial banks to small scale farmers

1.4 Research Objectives

1.4.1 General Objective

The general objective of the study is to analyse the factors which affect the performance of smallholder credit schemes to small scale farmers

1.4.2 Specific Objectives

1. To determine the productivity levels of small scale farmers who have received credit from commercial banks.
2. To determine the performance of small scale farmers in terms of loan repayment.
3. To assess appropriateness of lending policies of the banks.
4. To find out the extent to which commercial banks supervise the way farmers use their loans.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the significance and relevance of work done by various scholars who have studied credit, whereas previous studies have examined the supply side of agricultural credit, this study analyses the factors which affect the performance of smallholder credit schemes offered by commercial banks to small scale farmers.

2.2 Literature Review

Ryan and Koenig, (1999) give an analysis of the United States Agricultural Credit Performance, they state that in recent years, low interest rates have provided additional incentives for farmers to purchase land and machinery and to refinance and consolidate debt. Farm business debt varies widely among farms of different typologies, with only a third of small farms, less than half of intermediate-sized farms, and more than three fourths of commercial farms reporting farm debt balances at the end of 2001. While on average only half of all farmers carry debt from year to year. Ryan and Koenig go further to show that some indebted farmers have a particularly high concentration of debt and are in a potentially vulnerable financial position. Despite the significance of farm debt and recent trends toward refinancing and consolidation, little is known about the factors influencing farm credit performance.

Wise and Brannen, (1983) examined the effects of farmers' goals and other characteristics on the amount of credit use. Their results showed that farmers' goals of staying in business and improving their families' standard of living were the most important reasons for using credit. However, their study included only an analysis of the degree of indebtedness and used limited farm-level data from Georgia about two decades ago.

Levonian ,(1996) applied a two-step Heckman model to examine whether or not banks engage in agricultural lending, and their choices regarding the quantity of agricultural loans. They found that the size of the banks' agricultural branches was the single most important factor in determining agricultural loan levels.

Berger and Udell, (2002) pointed out that because of informational problems, the availability of credit to small businesses may be limited, especially during periods of disequilibrium in the financial markets. Small business lending is generally categorized into four main lending technologies: 1) financial statement lending where the evaluation of borrowers is based on balance sheet and income statement data, 2) asset-based lending where credit decisions are made based on the quality of the available collateral, 3) credit scoring lending where credit scoring models and discriminant analysis are used to determine the credit worthiness of borrowers, and 4) relationship lending where lenders make decisions taking into account information gathered through personal interactions or the local community.

All of these technologies are used in agricultural lending. When examining the demand side of agricultural credit, the following caveat Applies credit decisions are inherently joint decisions between a lender and a farmer, and therefore the lender could effectively reject, restrict, or modify the availability of funds to the borrower. The ARMS data do not include information on whether the existing credit lines are based solely on farmers' credit desires or if they were modified by lenders. Therefore, this study examines cross-sectional differences in the current structure of debt regardless of whether or not some farms have been credit-constrained by lenders. To verify that the results here are not driven by such credit constraints, the analysis is repeated only for a subgroup of farmers with favorable income and solvency levels. It is assumed that such farmers would not be credit constrained by lenders.

Long, (1988) gives an idealised for of scenario for small farmer credit, the government and central bank lends money to an agricultural bank which in turn re-lends the funds to

small scale farmers. The farmers use the funds to purchase productive inputs-fertiliser, seeds, pesticides etc, which are combined with family labour to produce more output, the additional output is sold and proceeds are sufficient to repay the loan and yet leave the farmer better off. The repayments received from farmers are suppose to be sufficient to regenerate lending capacity. Millard goes on to suggest that for the success of the programme, more training is needed for the farmers

A paper by FAO, (1983), clearly stated that without extension education, their would be use of credit for unproductive purposes and hence has a retrogressive effect. Farmers are scattered over areas where transport is difficult, a combined effect of credit and supervision definitely gives better performance.

Clarke, (1985) suggest two different types of project evaluation; Input- output model which measures performance of the project against predetermined objectives, mostly looks at whether the project outcomes represent the acceptable rate of return on investment. Process models which are concerned with the project effect, whether intended or unintended, external or internal. Since the process model is concerned with all aspects of the project, such an approach is appropriate where the project is concerned with promoting the social process as is the case with credit scheme which aims at improving the social and economic situation of small scale farmers

Miller, (1977), in his book , Agricultural Credit and Finance in Africa, views lack of capital and savings as the major constraints limiting agricultural production among small scale farmers in developing countries. He argues that few small scale farmers have resources to produce increased output. The author argues that unless a clear policy on smallholder credit is developed, small scale farmers will continue producing low outputs.

Ladman, (1976), uses a theoretical framework to show the important role of transaction cost embodied in credit delivery system and their influence on lender and borrower behaviour. This analysis shows how transaction costs permit money lenders with high interest rates co-exist with agricultural banks with low interest rates. Experiences in the

sub-region of the world have shown variations, for example Malaysian shams appeared to be the most successful, they increased in size and number, Indonesian schemes were also widespread and active But Thailand's experience was quite the opposite, attempts and efforts failed in almost every case.

Glover and Glee, (1992), states that in modern farming, credit has become one of the crucial inputs. The co-operative credit society was, in the past and even now, the most important source of credit to the farmers. Since 1969, commercial banks are also financing agriculture because of 'social control'. There has been tremendous increase in the bank branches in the rural areas, the Indian government has adopted the policy of 'multi-agency approach' in agricultural credit. At present, primary agricultural co-operative societies, land development banks, commercial banks and regional rural banks are financing agriculture. National Bank for Agriculture and Rural Development (NABARD) is providing refinance to the commercial banks.

In order to reduce the competition amongst the commercial banks in the rural areas, a policy of "Service Area Approach" has been adopted since 1988. As per this policy, each bank has to adopt few villages and they are required to meet credit. In the past, farming was carried out in a traditional way. It was a subsidence farming and was more or less self sufficient Credit needs of the farmers were limited and were met with mostly by the money lenders, relatives, friends and to some extent by loans from Government. Money lenders used to exploit the farmers in various ways like exorbitant rates of interest, false documents, etc. After independence and particularly after the Green Revolution, agriculture entered the era of modernization and the credit needs of the farming community started increasing. In the present day market oriented farming, the credit has become one of the crucial inputs.

Glover goes further elaborating that Co-operative Credit Societies Acts of 1904 and 1912 was the first important land mark in the agricultural credit policy in India. In the subsequent period, the co-operative credit became more and more significant. It became the most important source of farm credit in the country. It was the result of the policy to

have progressive institutionalization for supply of cheaper and adequate credit to agriculture. Slowly, the importance of money lenders was reduced. The agricultural credit policy took another significant turn in 1969. In this year, the Government of India nationalized 14 major commercial banks and imposed 'Social Control' on them. As per the new policy, they were made to provide finance to agriculture on priority basis. Consequently, many commercial banks opened their branches in the semi-urban and rural areas.

Another important feature of the credit policy since independence is the "multi-agency approach". Farmers are a liberty to avail finance from any of the credit institutions. At present, the major institutional agencies supplying credit to farmers and rural weaker sections are -Commercial Banks, Primary Agricultural Co-operative Credit Societies, Land Development Banks and Regional Rural Banks. In addition, National Bank for Agriculture and Rural Development (NABARD) is refinancing in a big way the banks for different agricultural development projects like lift Irrigation Schemes, etc. The success of agricultural production Programme depends upon the supply of credit. Under the strategy of multi-agency adopted by the Government, the above named credit institutions are providing credit to cultivators in general and weaker sections in particular. Because of this, the activities of the money lenders and their exploitation particularly of the weaker sections in the rural areas has been drastically reduced in the recent years.

According to Glover, agricultural credit in India has been classified into three categories namely, short-term credit (crop loan), medium-term credit and long-term credit. This classification is based on the periods for which the loan is given. This is to meet the varying needs of the farming community. The short term loan which is also known as the crop loan, is provided for 15 month period and is meant for meeting the needs like seed, fertilizer, labor, cattle feed, etc. The farmer can repay the loan after harvest of the crop. The period for medium term loan is from 15 months to five years. These loans are provided for meeting the expenses on land improvements, digging of wells, purchase of implements and machinery, farm animals, etc. These items require relatively more investment and as such the period for repayment is kept up to 5 years. The long term

credit as the name indicates is for longer period than 5 years. This type of credit is given for activities requiring heavy investment. The Land Development Banks provide only the long term finance, while the Regional Rural Banks give loans only to the weaker sections like small and marginal farmers, agricultural laborers, village artisans, etc. Mounting over dues is the serious problem faced by these financing institutions in the rural areas. This is an obstacle in the recycling of funds with the credit institutions.

As indicated earlier, after 1969, there was a rapid spread of branches of commercial banks in the rural areas. As a result, there was duplication of efforts and scattered lending over wider areas. In order to avoid this, a new policy was adopted in 1988 which is known as the "Service Area Approach". Under this policy, each semi-urban and rural branch of commercial bank is assigned a specific area comprising of a cluster of villages within which it will operate. Thus, the compactness in the area of operation will make it easy for the clientele to approach the bank for credit. It will also help the bank in credit planning and monitoring of the Funds. The banks are supposed to prepare annual credit plans for all the adopted villages.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The design and methodology that was used to collect data will be discussed in this chapter, the background of study site and reasons for choosing the site are also discussed here.

3.2 Background of Study Site

Chipata is a town located in Eastern province of Zambia. The main language spoken is Nyanja, In order to study the factors which affect the performance of smallholder credit schemes; Chipata was arrived at after consultations with the lending Commercial banks.

3.3 Research Design

The research design that was used is non experimental, under non experimental research design a case study was used

3.4 Description of the Population

The study population was Chipata district, 104 small scale farmers were sampled, 83 were males representing 79.8% while 21 were females representing 20.2%

3.5 Sample sizes and Sampling Method

The sampling unit was a small scale farmer, simple random technique was used to identify the sample, each farmer who had accessed credit in Chipata district had an equal probability of being selected, a sampling frame was obtained from The Zambia National Commercial Banks and The National Savings and Credit Bank which were the lending banks.

3.6 Data Collection

Data collection was based on primary and secondary sources, under primary sources, structured questionnaires were used .To reinforce information secondary data was collected from the smallholder lending commercial banks

3.7 Data Analysis and Processing

Data analysis started with editing of questionnaires to check for technical fitness, accuracy and uniformity of responses, the responses were then coded by assigning numerical values to the variables. The data was then analysed using Statistical Package for Social Sciences (SPSS) computer software, Frequency tables and cross tabulations were generated to facilitate interpretation of results.

CHAPTER IV
RESULTS AND DISCUSSION

4.1 Introduction

This chapter addresses the results and discussion. The results and discussion have been arranged in order addressing the demographic statistics, analysis of research objectives and various components of credit. Tables and graphs have been used to facilitate a clear flow of discussion. Cross tabulations have also been used to show the relationship between different variables.

4.2 Demographic Statistics

4.2.1 Distribution of Respondents by Sex

The research involved a sample of 104 small scale farmers; the distribution was that male respondents were more than female respondents. The male respondents were 83 representing 79.8% of the total respondents sampled while the female respondents were only 21 representing only 20.2%. The reason why there were more males than females in the study is that most female farmers perceive credit as a service to be accessed by men, most of the women feared the 'unknown' to access credit.

Table 1: Respondent Distribution by Sex

Gender of Respondent	Number	Percent
Males	83	79.8%
Females	21	20.2%
Total	104	100%

Source: Own Survey Data

The men also contributed to fewer numbers of females accessing Credit as they discouraged their wives to access credit, they instead confined them to tedious chores such as doing actual farm work and other household chores.

4.2.2 Distribution of Respondents by Age

The age group of respondents above 50 years represented 33.7% of the total respondents sampled with the age group between 20 and 50 years being the largest at 61.5% while the age group below 20 years was the lowest age group at 4.8%.

Table 2: Respondents distribution by age

Age Group of Respondent	Number	Percent
> 20 years	5	4.8%
20-50 years	64	61.5%
< 50 years	35	33.7%
Total	104	100%

Source: Own Survey Data

The age group of between 20 and 50 years was the most active in accessing credit, this can be attributed to lack of alternative income generating activities by this age group to engage in to earn a living, some of the members of this age group were retirees who had returned from the line of rail 'back to the land', on the other hand, most young men below 20 years were shunning accessing credit for farming in preference to formal jobs in town.

4.2.3 Distribution of Respondents by Size of Households

Most of the households for small scale farmers had a household size of between 6-10 people representing 57.7% of the respondents sampled followed by household size of

below 5 people representing 35.6% as shown by table 4 below, most small scale farmer families have a large number of members, this can be attributed to low literacy levels which leads to uncontrolled higher birth rates and a large number of polygamous marriages. Most small scale farmers in Chipata District regard a higher number of children as a sign of wealth

Table 3: Size of Respondents Households

	Small Scale Farmer Respondents	
Size of Household	Frequency	Percent
Below 5	37	35.6%
6-10	60	57.7%
11-15	3	2.9%
16-20	3	2.9%
Above 20	1	0.96%
Total	104	100%

Source: Own Survey Data

4.2.4 Distribution of Respondents by Level of Education

Most of the small scale farmers who access credit are illiterate; the level of education among farmers is very low; as such most of them depend on extension workers to explain new farming concepts to them. Education level ranged from those who have never been to school up to those who have attended some form of tertiary education. Those farmers who are able to read and write were classified as literate while those farmers who were not able to read and write were classified as illiterate. The illiterate farmers are prone to exploitation, for instance research found out that most farmers did not know the interest rates at which credit was given to them, this disadvantaged most of them as most of them were deprived of the right to make informed decisions regarding the interest

they were expected to pay. The small scale farmers were also not consulted by the government when setting up the floor price for their produce, the government instead consults the Zambia National Farmers Union (ZNFU), an organisation which doesn't have a true representation of farmers in Zambia, it is basically an association for mostly white commercial farmers whose needs are extremely different from the needs of small scale farmers. The table below shows the literacy level of respondents.

Table 4: Distribution of Respondents by Level of Education

Literacy Level	Number	Percent
Literate	41	39.4%
Illiterate	63	60.6%
Total	104	100%

Source: Own Survey Data

60.6% of the total respondents who had accessed credit were illiterate, they could not manage to read and/or write, only 39.4% of the total respondents were literate. The illiterate farmers are prone to exploitation, for instance research found out that most farmers did not know the interest rates at which credit was given to them.. The illiterate farmers also had poor risk management strategies and poor record keeping culture.

4.2.5 Defaults in Loan Repayment and Education Level

The loans are seasonal in nature, this means that the farmers are expected to re-pay the loan at the end of their crop marketing season. The major problem faced by farmers is late payment for crops sold at the local depot, this situation however forces farmers to sell their crops to unscrupulous dealers who pay them on the spot. The loans are seasonal in nature, this means that the farmers are expected to re-pay the loan at the end of their crop marketing season. The major problem faced by farmers is late payment for crops sold at the local depot, this situation however forces farmers to sell their crops to unscrupulous dealers who pay them on the spot. The table below shows that there is a relationship between literacy level and the default rate, 19.5% of the literate farmers had

defaulted in loan repayment, while the illiterate had a higher default record at 39.7% , this is clear that education level has a bearing on the decisions a farmer makes when in problems like droughts, late planting ,floods among other problems which in most cases lead to loan repayment default, research found out that uneducated farmers were prone to exploitation, most of them didn't know the interest rate at which credit was provided to them, another typical case of exploitation was that most commercial banks weren't willing to spread the loan repayment period to ease the pressure on farmers.

Table 5: Cross Tabulation of Default and Level of Education

		Default rate		Total
		defaulted	Not defaulted	
Literacy level	Literate	8 19.5%	33 80.5%	41 100%
	illiterate	25 39.7%	38 60.3%	63 100%

Source: Own Survey Data

4.2.6 Comparison of Gender and Default Rate

From the results obtained, it was reviewed that there is a bearing between default rate and gender, the males had a higher default rate at 33.7% compared to females whose default rate was 23.8%, this can be attributed to the fact that women are more responsible compared to males (Mulenga, 1998),for instance most males spend most of their time drinking beer while females spend most of their time in the fields making sure that the crop is growing well, there is need for commercial banks to step up inspections especially on the males so that they improve on their attitude on farming. The table on the next page shows the results;

Table 6: Comparison of Gender and Default Rate

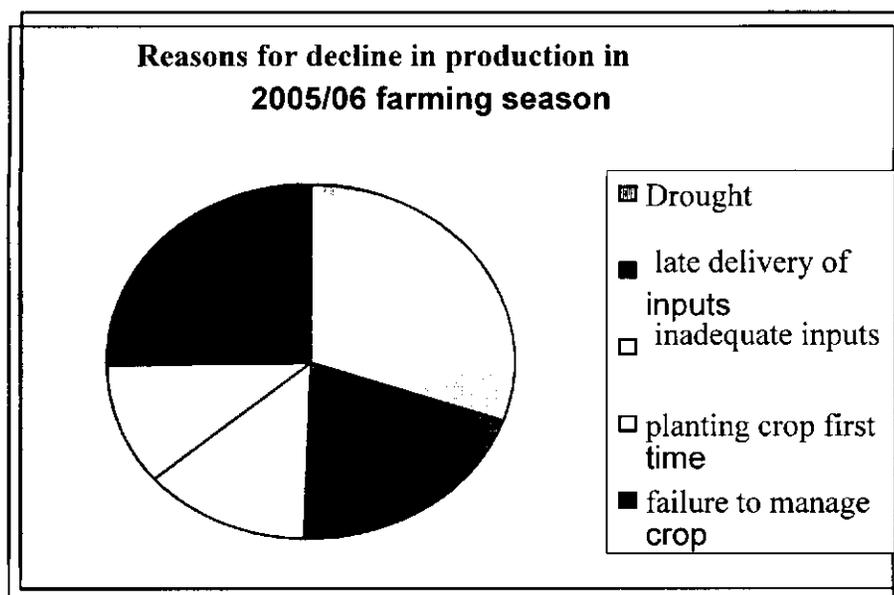
		Default Rate		Total
		Defaulted	Not Defaulted	
Gender of Respondent	Male	28 33.7%	55 45%	83 100%
	Female	5 23.8%	16 76.2%	21 100%

Source: Zambia National Commercial Bank

4.2.7.Reasons for Decline in Maize Production in 2005/6 Season

The number of farmers who recorded good production levels in Maize in the 2003/04 farming season was 63.8%. This number declined to 58.8% in the 2004/05 farming season. This decline in production was attributed to a partial drought by 30% of the farmers who experienced low yields. 20% of the farmers attributed the decline to late delivery of inputs. 11% of the farmers attributed it to inadequate inputs and 25% of the small scale farmers sampled attributed it to failure to manage the crop, these results are illustrated by figure 1 on the next page;

Figure 1: Reasons for Decline in Maize Production in 2005/6 Season



Source: Own Survey Data

From the results obtained, it is clear that drought is a major contributor to lower levels of maize production, however late disbursement of credit in form of inputs also had a bearing on default rate, the table below shows the findings;

Table7: CrossTabulation of Number of Farmers who Failed to Repay Credit and Poor Harvest Due to Late Delivery of Inputs.

		Poor harvest due to late delivery of inputs			Total
		Yes	No	N/A	
Did you default to repay the loan due to poor harvest?	Yes	33 71.7%	13 28.3%		46 100.0%
	No			34 100.0%	34 100.0%
Total		33 41.3%	13 16.3%	34 42.5%	80 100.0%

Chi-square test

	Number	Df	Asymp. Sig. (2-Sided)
Pearson Chi-square	80	1	0.000

Source: Own Survey Data

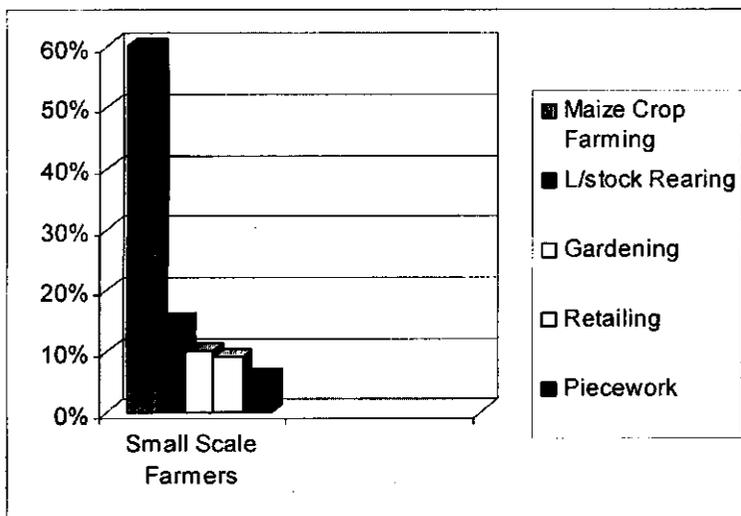
NOTE: If there is a significant relationship in the hypothesis being tested, the Pearson chi-square value should be between the range of 0.00 – 0.05.

A Pearson chi-square value of 0.000 was found indicating that there was a significant relationship between one defaulting in loan repayment and poor harvest due to late delivery of inputs. It was found that 71.7% of the farmers who had defaulted in loan repayment attributed this to poor harvest due to late delivery of inputs.

4.2.8. Respondents Major Source of Income

The Respondents major source of income was through Maize Crop farming which comprised 60%, however a few of Small Scale farmers (6 %) have as their major source

Figure 2: Respondents Major Source of Income



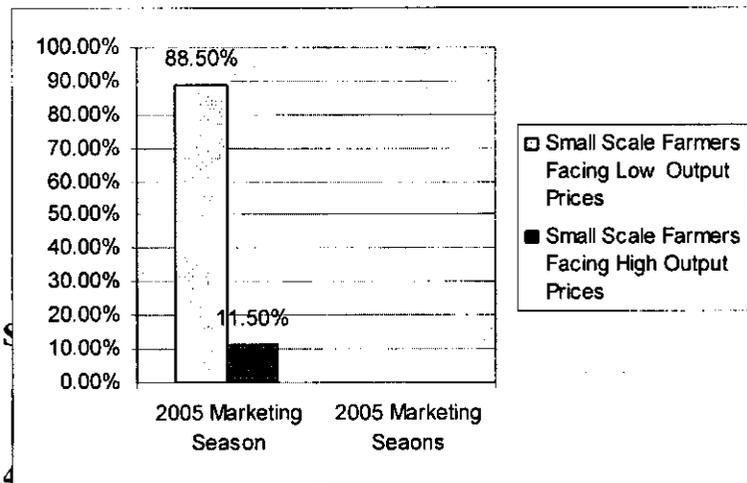
Source: Own Survey Data

of income through piece work, the figure above shows these results. These findings show that most of the farmers who obtain credit have their major source of income as maize crop farming

4.2.9 Respondents Produce Prices

Despite the farmers abilities to produce increased output after accessing credit, it was necessary for the study to assess whether the farmers were selling their produce at high prices or not. The small scale farmers interviewed were generally selling their produce at low prices, most of the farmers complained that the produce price is low and that it does not match with the costs they incur to produce output .

Figure 3: Respondents Produce Prices



4.3.1 Effect of Credit on Yield

The research findings reviewed that most of the small scale farmers who had accessed credit experienced increased yield, out of the 104 farmers who had obtained credit, 74% experienced significant increases in yield after accessing the loans, this can be attributed to availability of farming inputs due to credit which allows the farmers to produce on large scale and as such enjoy economies of scale, while this is so, 26% of the farmers did not experience increased yield despite accessing credit, this is so because of drought and poor agricultural practices like failure to rotate crops

Table 8: Credit Effect on Yield

Effect of Credit on Yield	Number	Percent
Significant increase in yield	77	74%
No Significant increase in yield	27	26%
Total	104	100%

Source: Own Survey Data

Poor agricultural soils also contributed to lower produce yield, other factors like laziness on the part of a farmer to efficiently produce also contributed.

4.3 2 Process of Obtaining Loan

The process of obtaining loans is cumbersome, 76% of those sampled attested to this, they sighted issues like the long distances they walk to the banks, the long time the banks take to process these loans as well as late delivery of these

Table 9: Process of obtaining loan

Process of Obtaining Loan	Number	Percent
Cumbersome	79	76%
Not Cumbersome	22	24%
Total	104	100%

Source: Own Survey Data

while this may be so, low literacy levels and poor communication between the commercial banks which offer credit and the small scale farmers contributes massively to the process of loan acquisition being cumbersome, the farmers weren't happy with this situation, most of them also called on the banks to interpret the loan agreements into their local languages so that they understand fully the entire process and conditions

4.4 Components of Credit

4.4.1 Credit Lending Policy

Small Holder Credit Scheme operates a stringent policy, the objective of the credit scheme is to increase agricultural production of small scale farmers. The scheme offers short term loans to the farmers, the duration of this loan is twelve months, the loan has to be repaid in less than two years. The interest charged on the loan offered by the National Savings and Credit Bank is 34 percent while The Zambia National Commercial Bank charges 40 percent on its loans. The small scale farmers are not allowed to re-negotiate the terms on which credit is offered, the scheme has standard terms with respect to credit duration, interest rate, credit form and security.

The form of credit offered is called package loans, inputs necessary for farming are included in the loan, the main inputs in one pack include 20 kilograms Hybrid seed 4 bags of top dressing fertiliser and 4 bags compound 'D' fertiliser. The package does not any credit for settling debts. Further, the bank does not allow any shifts in credit use. For example maize production to sorghum production. The banks disburse the loan from its district branches, there are no agents involved.

4.4.2 Credit Approval Process

The most frequent problem met in credit programme is that of identifying the areas and persons most appropriate for financing. The bank needs to have indicators for locating potential areas and potential farmers. The credit scheme has set specific guidelines or criteria for approving credit, the most important guidelines are;

- Evidence of land availability and existence of a family
- Past cropping history;
- Climate situation, that is soil, rainfall distribution among other things;
- Level of Technology;
- Declaration of honest from sureties like chiefs, ward chairmen, cooperative chairpersons and so on;
- Security if any, though not a necessity.

Application forms are obtained from district branches, bank officers render assistance in filling in the forms, the assistance is in form of language interpretation (as the forms are only in English) and general application requirements., there is normally a dateline for receiving application forms which varies depending on the year, the banks then sends it's field staff in the field (for on spot inspection) who give initial approval. The goes further to assess to assess the applicants repayment capacity by assessing the following factors;

- Compares forecasted yield with previous yield.
- Past farmer repayment record.

Those applying for the first time are exempted from assessing their past repayment performance, the bank manager makes the final decision on credit approval, usually he does this by comparing the applicant with reference farms (Farms which have performed well after accessing credit)

4.2.3 Credit Monitoring

From the results obtained, it is clear that despite commercial banks which offer these loans having clear policies on paper, they do not actually follow up these farmers they provide loans to with monitoring and extension services, the farmers weren't happy with this development, most of them felt that as stakeholders, the commercial had a duty to provide extension services to them instead of just appearing at a time when repayment

Table 10: Credit Monitoring

Credit Monitoring	Number	Percent
Monitored	15	14.4%
Not monitored	89	85.6%
Total	104	100%

Source: Own Survey Data

time of the loan approaches, while the banks have good monitoring policies on paper, they actually do not enforce these policies, there is an urgent need for these banks which offer small holder credit to provide farmers with extensive extension services in order to build capacity in farmers who access credit so that they are able to efficiently produce and re-pay the loans without problems.

However, monitoring staff according to commercial banks do three things;

1. Visit clients to provide them with technical advice and encouragement
2. Assist clients in developing good record keeping systems
3. Help clients in analysing outcomes of farm operations, they suggest measures for improvement.

Indirectly the monitoring staff checks on credit misuse. Monitoring is done at bank branch level, the banks employ two field staff per district, the distribution of the field staff is according to the number of clients, the field staff aim at visiting each small scale farmer who access credit at least twice a month. The timing of the visits is that it coincides with agronomic operations such as land preparation, planting, harvesting

among other operations. The farmer is made aware of the visiting timetable of bank field officers. The bank field officers basically look at the timeliness of farming activities and the total yield per hectare. The bank management routinely analyse the reports from field officers, this process is centralised and is done at the head office in Lusaka. The credit scheme has encountered default problems, the default rate for Zambia National Commercial Bank stood at 29.6% while the default rate for The Zambia National Savings and Credit Bank stood at 36%. Reasons for non-payment are misuse of credit and drought occurrence. For defaulting farmers, the scheme immediately stops any further assistance and may even proceed to engage bailiffs to recover the loan. The scheme offered by Zambia National Commercial Bank considers 5% default rate as normal while the National Savings and credit Bank considers 10% as normal default rate.

4.2.4 Productivity Levels of Farmers who Access Credit

Research reviewed that productivity levels of farmers who access credit goes up when they obtain credit, while this may be so, it was not obvious that even the income level of such farmers increases, sometimes the increase in income level was knocked out by higher taxes and lower market prices of output.

Quite often, the government failed to provide ready market for the output and some farmers ended up selling their produce at lower prices to unscrupulous traders who offered payment on the spot

CHAPTER V

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter comprises of the conclusion which basically wraps up the research findings and the recommendations which are the proposed remedies to the shortcomings detected by the research in the credit scheme.

5.2 Conclusion

This study analysed the factors affecting the performance of small Holder Credit Schemes offered by Commercial Banks to Small Scale Farmers in Chipata District, the results show that Risk Management Strategies, Natural Calamities like Droughts, Late Delivery of Inputs, Gender of the Farmer, Education Level and Gross Income had significant influence on the performance of the credit scheme. It is evident from the findings that farmers access credit which leads to availability of farming inputs, this allows the farmers to experience increases in yield and acquire extra income due to economies of scale, the farmers use the extra income they obtain to send their children to school, access health services, venture into other businesses and generally to improve their living conditions.

The farmers are also encouraged to produce efficiently after accessing credit as they know that they have to pay back the loan and interest at the end of the day, the farmers also have a chance through credit provision to enter competitive farming. From this study a great deal was learnt about the banks credit policies towards small scale farmers, the banks even in the face of numerous problems had done a lot to help these small scale farmers increase crop production, some of the policies these banks had set for small scale farmers were beneficial, for instance they charged lower interest rates on loans in the agriculture sector compared to other sectors in the economy, in cases where the banks

provided seed and fertiliser as loans, these inputs were provided right to the local depot in the farmers area, this greatly reduced transport costs the farmers would otherwise have had to incur if they had to go to town to buy these inputs. It is however clear that credit access is a profitable farming arrangement which contributes significantly to increased household food security when utilised wisely.

On the overall it can be safely concluded that smallholder credit helps small scale farmers to overcome barriers to entry into competitive farming and as such improve their standard of living.

5.3 Recommendations

1. The commercial banks which offer credit must come up with mechanisms to help farmers pay back the loans in cases where production levels are low due to natural causes like droughts.
2. Farmers must have input at the design stage of these small holder credit packages.
3. Commercial Banks must effectively monitor progress of farmers who access loans and back them up with extension services.
4. Loan agreements must be interpreted into local languages and conditions explained fully to small scale farmers so that the farmers make informed decisions
5. The repayment period of these loans must be spread to reduce the pressure on farmers.
6. The banks must consider establishing mobile loan offices in rural areas in order to reach more farmers.
7. Linkage of credit with extension and marketing must be made stronger in order to reduce farmer problems.

Areas for Further Research

1. There is need to carry out further research in assessing the factors which affect small scale farmers productivity levels, this will help in gaining a deeper understanding on why some small scale farmers fail to repay the loans .

REFERENCES

- Agriculture Consultative Forum, (1998-2001), *The Concepts, Process and Impact*, Printech Limited, Lusaka.
- Berger, A and G.Udell, (2002), *Small Business Credit Availability and Relationship Lending*, Washington. D.C.
- Glover .D and Glee (1992),*Contract Farming and Smallholder Credit Schemes in Less Developed Countries*. World Development vol 13 pp 1125-1157 Pergamon Press.
- Harvey .C, (1977) *Financial Constraints in Zambia's Development*
- Katchova, A and J. Miranda. (1998) *Two-Step Econometric Estimation of Farm Characteristics*. American Journal of Agricultural Economics
- Levonian, M (1996).*Explaining Differences in Farm Lending among Banks*, Federal Bank of San Francisco
- Miller.L.F (1977) *Agricultural Credit and Finance in Africa*. The Rockefeller Foundation.
- Mulenga (2002) *Sustainable Agriculture printed by Times of Zambia*.
- Millard .F Long (1988) *Conditions of Success of Public Credit Programmes for Small Scale Farmers*.
- New Approach to Agricultural Credit (1964), *FAO Agricultural Development Paper* Number 77.
- Ryan, T., and .R. Koenig (1999). *Who Holds Farm Operator Debt?* Economic Research Service
- Roy Clark (1985) *Guidelines in Project Evaluation in Zambia*, UNZA Workshop on Project Evaluation.
- Wise. and L. Brannen (1983). *The Relationship of Farmer Goals and Of Other Factors to Credit*, Southern Journal of Agriculture

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APPENDICES

Appendix 1:
Survey Questionnaire

SECTION A

BACKGROUND INFORMATION

1. Age.....
2. Sex
 - a. Male ()
 - b. female ()
3. Level of Education
 - a. None ()
 - b. Primary ()
 - c. secondary ()
 - d. Tertiary ()
4. How long have you been farming?.....

SECTION B

5. How many hectares is your farm?.....
6. How did you hear of the loan?.....
7. Which commercial bank provided you with the loan?.....
8. Why did you choose this particular bank to obtain the loan from?.....
9. Distance of the farm to the bank?
 - a. under 5km
 - b. 5-10 km
 - c. over 10 km
10. In what language was the application form?.....
11. Did you understand everything about the lending policies of the bank before the loan was offered to you?
 - a. yes ()
 - b. No ()
12. Which items does the loan cover?
 - (i) Fertilisers only ()
 - (ii) Seed only ()
 - (iii) Chemicals ()

