FINANCING AGRICULTURAL MARKETING IN TANZANIA: A CASE OF RICE AND MAIZE TRADERS IN KYELA, MBOZI AND DAR ES SALAAM

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURAL ECONOMICS OF SOKOINE UNIVERSITY OF AGRICULTURE. MOROGORO, TANZANIA.

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ABSTRACT

This study analyzed the financing of agricultural marketing for rice and maize. Data for the study were collected by administering a questionnaire to retailers, wholesalers and village assemblers and supplemented by interviews with actors in credit markets. Both descriptive and econometric procedures were used for data analysis. The results show that most traders' source of capital was own saving, very few used grants/gifts and credits. Credit for business start-up was mainly from informal sources as many formal sources don't lend to start-up businesses. It was found that grain marketing in Tanzania is fragmented and unreliable due to poor information, mainly on prices. During the survey, this was evident with maize trade in Mbozi district. Various credit sources exist ranging from informal to formal financial institutions (FFI). Access to these credit facilities is limited by lack of collateral and bureaucratic/lengthy procedures for loan application. Further, loan demand by traders is hampered by demographic and socio-economic factors in varying ways. Regression results on formal loan demand showed that interest rate, trader location, marital status and stock holding duration were inversely related to loan demand, while traders' experience in business, gender, education and age were positively related. For informal sources, results show that majority borrowed from friends and relatives, few from moneylenders, millers and small unregistered groups. Informal lenders charge higher interest rates than formal institutions due to lack of regulation from government and due to risk factors associated with their lending. However, informal lenders are few, unreliable and offer small amounts for very short durations due to lack of capital. To improve credit accessibility, it is suggested that:- formal-informal linkage be initiated and strengthened, engagement in group lending, avoidance of

subsidized interest rates, improvement of market information flow, improvement of legal environment, promotion and backstopping credit facilities and warehouse receipt system .

DECLARATION

I, ANGANILE VENANCE MWAMNYANGE, do hereby declare to the Senate of Sokoine University of Agriculture that this dissertation is my own original work and has never been submitted or being concurrently submitted for a degree award in any other university.

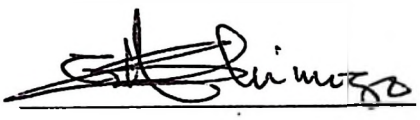


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DEDICATION

This work is dedicated to my late sister Deokallah Mwamnyange who passed away during the initial stages of this work. May our almighty God rest her in peace, Amen.

TABLE OF CONTENTS

ABSTRACT ..... **ii**

DECLARATION ..... **iv**

COPYRIGHT ..... **v**

ACKNOWLEDGEMENTS ..... **vi**

DEDICATION ..... **vii**

TABLE OF CONTENTS ..... **viii**

LIST OF TABLES ..... **xii**

LIST OF FIGURES ..... **xiv**

LIST OF APPENDICES ..... **xv**

LIST OF ABBREVIATIONS AND ACRONYMS ..... **xvi**

CHAPTER ONE **1**

INTRODUCTION **1**

1.1 Background information 1

1.2 Problem statement and justification of the study 2

1.3 Objectives of the study 4

1.3.1 General objective 4

1.3.2 Specific objectives 4

1.4 Research questions 4

1.5 Organization of the thesis 4

CHAPTER TWO **6**

LITERATURE REVIEW **6**

2.1 Theoretical background 6

2.2 The policy context 9

2.3 Development of credit markets in Tanzania 10
2.4 Formal and informal financial systems and agriculture 12
2.5 Credit and SME regulation in Tanzania 16
CHAPTER THREE 19
METHODOLOGY 19
3.1 Conceptual framework of the study 19
3.2 The study area 21
3.3 Geographic location, climate and sizes 21
3.3.1 Mbozi district 21
3.3.2 Kyela district 22
3.3.3 Kinondoni municipality 22
3.4 Methodology 23
3.4.1 Data collection 23
3.4.1.1 Data type 24
3.4.1.2 Selection of crops and sample markets 23
3.4.1.3 Sampling technique and sample size 23
3.4.2 Data analysis 24
3.4.2.1 Loan demand 25
3.4.2.2 Limitation of OLS 26
3.4.2.3 Participation and non-participation in credit markets 28
CHAPTER FOUR 30
RESULT AND DISCUSSION 30
4.1 Respondents' general characteristics 30
4.1.1 Marital status 30

4.1.2 Education level 31
4.1.3 Age of respondents 32
4.1.4 Gender 33
4.1.5 Other main activities 33
4.2 The grain marketing 34
4.2.1 Trader category 34
4.2.2 Business record keeping 34
4.2.3 Grain market availability 36
4.2.4 Average grain handled, prices and costs incurred 37
4.2.5 Grain marketing channels 37
4.3 Credit markets 41
4.3.1 Terms and conditions-Formal loans 42
4.3.1.1 NMB 45
4.3.1.1.1 Type of financial support 45
4.3.1.1.2 Decision making process 45
4.3.1.1.3 Conditions, terms and eligibility 46
4.3.1.2 Small Enterprises Development Agency (SEDA) 47
4.3.1.3 SACCOS (Savings and Credit Cooperative Societies) 48
4.3.2 Difficulties in loan acquisition-formal loans 49
4.3.3 Terms and conditions-informal sources 51
4.3.4 Loan acquisition difficulties-informal loans 52
4.3.5 Credit application failures 53
4.3.6 Credit linkage and relations 53
4.3.7 Traders opinion on credits 53

4.3.8 Source of capital 54
4.3.9 Linkages between informal credits and the marketing system 55
4.3.10 Preferred credit sources 56
4.3.11 Loan structure from formal and informal sources by location 58
4.3.12 Credit information 61
4.3.13 Opinion on fund adequacy 62
4.3.14 Other factors affecting traders' participation in credit markets 63
4.3.15 Credit accessibility by male and female traders 64
4.3.16 Loan Demand 64
4.3.17 Participation in credit market 67
5.2 Recommendations 73
CHAPTER FIVE 67
CONCLUSION AND RECOMMENDATIONS 67
5.1 Conclusion 69
5.2 Recommendations 73
REFERENCES 78
APPENDIX 87

LIST OF TABLES

Table 1: Summary for independent variables on loan demand equation 26

Table 2: Summary for independent variables on participation equation..... 28

Table 3: Marital status distribution of respondents by district..... 31

Table 4: Education level distribution by district 32

Table 5: Respondents distribution by age 33

Table 6: Respondents distribution by gender..... 33

Table 7: Respondents distribution by other major activities..... 33

Table 8: Trader category by crop type 34

Table 9: Record and non-record keepers..... 35

Table 10: Reasons for not keeping records 36

Table 11: Availability of grain markets by crop type 37

Table 12: Average grain handled per month (Kg), prices (Tsh/kg) and costs incurred (Tsh/kg)..... 37

Table 13: Formal Credit sources by trader category 42

Table 14: Most important condition for formal loan..... 42

Table 15: Most difficult condition for formal loan 43

Table 16: Form of collateral..... 43

Table 17: Difficulties in loan acquisition..... 50

Table 18: Source of informal loan..... 51

Table 19: Most important condition for informal loan 51

Table 20: Type of witness required for informal loan 52

Table 21: General perception on credit..... 54

Table 22: Source of capital by location..... 55

Table 23: Credit linkage 56
Table 24: Preferred credit source 57
Table 25: Reasons for preference 58
Table 26: Summary on loan structure received by respondents from formal sources by location. 59
Table 27: Summary on loan structure received by respondents from informal sources by location. 60
Table 28: Awareness on credit sources 62
Table 29: Credit information 62
Table 30: Opinion on funds adequacy 63
Table 31: Distribution of respondents on formal and informal credit by location crosstab 63
Table 32: Formal and informal credit access by gender 64
Table 33: Regression results: Loan demand 66
Table 34: Regression results: Participation in credit market 68

LIST OF FIGURES

Figure 1: Factors affecting credit demand and supply 18

Figure. 2: Maize marketing channel 39

Figure 3: Rice/ Paddy marketing channel 40

LIST OF APPENDICES

Appendix 1: Traders questionnaire; Financing agricultural marketing in Tanzania; a case of rice and maize traders in Kyela, Mbozi and Dar es salaam 87

LIST OF ABBREVIATIONS AND ACRONYMS

BOT	Bank of Tanzania
BTC	Belgian Technical Cooperative
^0C	Degrees Centigrade
CRDB	Cooperatives and Rural Development Bank
DALDO	District Agricultural and Livestock Development Officer
DCB	Dar es salaam Community Bank
FAO	Food and Agricultural Organization
FFI	Formal Financial Institutions
FINCA	Foundation for International Community Assistance
GDP	Gross Domestic Product
Ha	Hectare
IMF	International Monetary Fund
Kg	Kilogram
Kg/ha	Kilogram per hectare
Km^2	Square kilometer
LIC	Low Income Countries
M	Meter
MAFC	Ministry of Agriculture, Food Security and Cooperatives
ME	Medium Entreprises
MEDA	Mennonite Economic Development Associates
MFI	Microfinance Institutions
MKURABITA	Mpango wa Kurasimisha Rasilimali na Biashara Tanzania (Bussiness and property formalization programme)

MLE	Maximum Likelihood Estimate
Mm	Millimeter
MT	Metric ton
NGO	Non Governmental Organizations
NMB	National Microfinance Bank
%	Percentage
OLS	Ordinary Least Square
SACCOS	Savings and Credit Cooperative Society
SAP	Structural Adjustment Programme
SEDA	Small Enterprises Development Agency
SHZ	Southern Highlands Zone
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
Tsh	Tanzanian shillings
URT	United Republic of Tanzania
WB	World Bank
WRS	Warehouse Receipt System

CHAPTER ONE

INTRODUCTION

1.1 Background information

Tanzanian economy is characterized by a large traditional rural sector and a small modern urban sector and depends heavily on agriculture, which accounts for about half of GDP, provides 85% of exports, and employs 80% of the work force (Satta, 2002). The manufacturing sector is still small, contributing less than 10 percent of GDP.

Paddy/rice and maize are grown virtually in all parts of Tanzania although Shinyanga, Mwanza, Morogoro, Mbeya, Tabora, Mtwara, Rukwa and Ruvuma produce the largest share of them. Both crop production systems in Tanzania are characterized by smallholders using low technologies and a large scale mechanized production usually undertaken by parastatal and government institutions. Area under paddy for the 2002/2003 statistics was estimated to be 688,500ha in total from 439,300ha in the 1996/97 season. This is an increase in total area by 36.19%. The overall trend is on the increase side (MAFC, 2003). Paddy production totaled 1,293,800tons for 2002/03 season compared with 549,700 tons in 1996/97 season which is a 57.5% increase. Paddy yield averages at 1,562.96kg/ha across the country since 1996/97 to 2002/03 seasons.

Maize on the other hand is one of the major staple foods in Tanzania. The national consumption level of maize for the 2002/03-crop season is estimated by the Government to be approximately 3,089,000 metric tones. During the same season,

maize availability was projected at 2,927,000 MT, yielding a deficit of 312,000 MT (Rates Center, 2003). This implies that maize is among the highly tradable staples in Tanzania. In marketing, it is noted that maize in Tanzania is characterized by a large number of small traders, operating from main producing areas and urban centers. Maize is produced in almost all parts of the country for home consumption while the surplus is marketed to meet the household cash needs. According to the National Food Balance Sheet, maize consumption in the country is currently estimated at around three million metric tones per year (Rates Center, 2003).

Traders be it grain traders or any other type of trader are inclined to apply for a loan at some juncture in business. Traders may need credit to secure an ongoing supply of goods, to bridge gaps in income and to finance expansion as well as to meet the consumption needs of their own households (Southwold-Llewellyn, 1992). The loans with varying terms and conditions can be obtained from formal and informal financial sources available in their area of operation.

1.2 Problem statement and justification of the study

In Tanzania commodity marketing in general is very inefficient due to lags and leads in information dissemination, credit availability and accessibility. The level of unfavorable economic conditions in Tanzania, where the majority of the population is still rural, raw materials and markets are small and dispersed. Transport is costly and difficult. However, small businesses are increasingly becoming more important in terms of income generation and provision of goods and services. Despite all their importance, they face a daunting obstacle since far too few have access to regulated

banks, savings and loan associations, investment funds, and other formal financial institutions. In most cases financial intermediaries see small businesses simply as high risk and low return operations not worth their resources (Satta, 2002).

Therefore, the aim of this study was to identify the finance available to grain traders. The study looked at the adequacy of available finance and problems associated with lending and the nature of financial linkages in the rice and maize marketing systems. It dwelt into the sources of finance to maize and rice traders, the role of financial institutions, evolution of trader finance and cross-cutting issues as they are equally important in trying to solve the lack of capital to invest in agricultural marketing.

The study is important in that it will help to authenticate available information on credit accessibility and availability for agricultural traders in particular for proper policy formulations. For instance, currently the government has released Tsh 1 billion for Small and Medium Enterprises (SME) credits for each region and it encourages Savings and Credit Cooperative Societies (SACCOS) formation across the country. Therefore, the study will come up with current and up-to-date insights into constraints and opportunities facing agricultural traders in accessing the funds. The output of this study will be beneficial to policy makers, farmers, traders, financial institutions, researchers and academicians and the whole public at large.

1.3 Objectives of the study

1.3.1 General objective

To analyze the financing of agricultural traders in Tanzania.

1.3.2 Specific objectives

i. To identify sources of finances available to maize and rice/paddy traders.

ii. To assess formal and informal credit acquisition practices for grain traders and the associated constraints and opportunities in the study areas.

iii. To analyze the nature of financial linkages between traders, farmers and financial institutions.

iv. To provide policy implications and recommendation measures.

1.4 Research questions

i. What are the sources of working capital for rice and maize traders in the selected areas?

ii. Why did traders opt for these sources?

iii. If credit is available, what are the amounts and what are the limiting factors?

vii. For both formal and informal credits, what are the acquisition practices, the constraints and opportunities available?

viii. Are the funds adequate? If not, what should be done?

1.5 Organization of the thesis

This thesis is comprised of five chapters. Chapter one has an introductory part covering the background information, problem statement and justification, objectives of the study and research questions. Chapter two presents literature review which

covers economic theories behind the study, the policy context and formal and informal financial systems and agriculture. Chapter three presents materials and methods covering the conceptual framework and the methodology used. Chapter four covers results and discussion. Chapter five provides conclusions and recommendations from the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical background

Diagne (2000) studied credit availability and accessibility using the credit demand and supply functions. He urges that credit market can be analyzed like any other commodity markets using the concept of demand and supply, with the interest rate being the price for credit. The supply and demand curves, respectively, represent the amount the lender is willing to lend and the amount the borrower is willing to borrow and the exogenously given interest rate. From any possible credit source, the supply for credit is limited. The limited supply is perceived as not the maximum the lender is able to lend but willing to lend. This gives rise to the concept of maximum limit or credit limit. The credit limit was the focus of the methodology used in this study to analyze traders' access to credit facilities. Diagne (1998) argue that the credit limit, the maximum amount that may be borrowed as self-reported by survey participants, is a better measure of credit access.

The credit limit concept requires specific questions to be included in survey questionnaires. In particular cases, it may be difficult to make respondents understand what is exactly meant by the question on credit limits, or some respondents may be ignorant about their credit limit. In the survey it involves asking respondents the maximum amount they could borrow during the recall period from both informal and formal sources of credit. Compared to the qualitative indicator, it provides a metric measure of credit rationing, which allows the application of more sophisticated methods of analysis. As is the case with the qualitative indicator, it is

also not necessarily a consistent measure of credit market efficiency, since no comparison with an equilibrium first-best alternative is provided (Petrick, 2004).

Other methods include direct measurement of loan transaction costs and qualitative information collected by interviews. It is urged that the method of transaction costs prescribes to directly collected information about additional, loan specific transaction costs borrowers face apart from nominal interest rates, such as costs of information collection, loan application, insurance of collateral, etc. With this method, which transaction costs are necessary is of course difficult to distinguish. Petrick, (2004) urges that a crucial question in assessing the value of this method for measuring credit rationing is thus to what extent transaction costs are included in the nominal interest rate, and to what extent these costs are inevitable. He further adds that, furthermore, a theoretically consistent, precise measurement of transaction costs is impossible as long as the correct opportunity costs of activities related to loan negotiation are unknown. He concludes that this method uses a different and probably imprecise understanding of credit rationing as compared to the other approaches, requires collection of specific information in field surveys, and that the validity of the share of transaction costs in total lending costs as an indicator of market efficiency highly depends on the pricing policy of the respective bank. Therefore, this method is viewed as inappropriate to analyze the determinants of credits in terms of a cause–effect relationship due to its conceptual difficulties.

The Qualitative information idea is to directly ask borrowers whether they would have liked to borrow more at the prevailing interest rate. In case of a positive answer, respondents are classified as "credit constrained." The same applies to non-borrowers

who respond that they could not get credit although they liked to (Feder *et al.*, 1989). It is urged that Qualitative information on loan rationing in credit markets directly corresponds to the casual observation of credit constrained farmers, that is farmers who complain about lack of access to credit, the categorization of a certain respondent exclusively relies on his own subjective assessment of his situation. The validity of this assessment may be questioned, although there are no plausible arguments why it should be less valid than any other information collected in field surveys. The qualitative information allows the consistent identification of respondents for whom liquidity is exogenous (i.e., not under the control of the respondent). However, it is not necessarily a consistent measure of credit market efficiency, since no disequilibrium in terms of resource allocation is explicitly tracked down. Furthermore, it does not allow a quantification of the severity of credit rationing (Petrick, 2004).

Okurut *et al.* (2004), in Uganda used the concept of demand to identify factors which influence credit demand and rationing by lenders. He investigated credit demand and supply by modeling observed household and individual characteristics.
In their study in Sudan, Elhiraika and Ahmed (1998) urges that loan demand from the individual is often supply constrained, that is,

$$0 < L_d < L_s \quad \text{.....(1)}$$

Where,

L_d is loan demand, and L_s is loan supply.

This implies that observed borrowing is obtained by matching the demand for and the supply of loans and is associated with the determinants of both loan demand and supply (Elhiraika and Ahmed, 1998; Foltz, 2002).

The structural models for loan demand and supply may thus be written as :-

$L_d = \alpha_0 + \alpha_1 Z + \alpha_2 r + \epsilon_1$ .....(2)

$Ls = \beta_0 + \beta_1 M + \beta_2 r + \epsilon_2$,.....(3)

$L_s = L_d$

Where, Z and M are vectors for observed exogenous variables (demographic-age, wealth, subjective poverty; Economic-sales investment level, financing, size of last loan if any; Optimal credit attributes-repayment terms, type of guarantee). These are the variables affecting loan demand and supply. ϵ_1 and ϵ_2 are the white noise error terms, and r is interest rate.

Participation and non-participation in credit markets is affected by various factors. This study further analyzed participation as borrowers and non-borrowers, and those taking formal and informal loans and the factors for each. The loans were analyzed for adequacy.

2.2 The policy context

Tanzania's financial system is composed of a Central Bank of Tanzania (BOT) supported by several banks, cooperative societies and other bank and non-bank organizations. Despite their presence, access to credit by SME is limited. In its SME Development Policy of 2002, the Tanzanian Government admits that the sector has limited access to finance due to various factors, among which include :- its perception to be a risky sector, inability to fulfill collateral requirement, bias by banks by operating in limited geographical areas, inexperience by banks and lack of guarantee schemes to back up banks and associated costs (National website, 2006).

In its Policy statement, the Government urges to enhance financial support to SME. It has put down some strategies to alleviate the problem. Some include, mobilizing resources and promoting development of new financial institutions and simplification of loan procedures. In its 2006/07 fiscal year budget the Government has stipulated several measures like formalization of the informal sector to increase the tax base for the government revenue. Among the steps include increasing SME access to loan through provisions for land ownership which will in turn stand as collateral for loans. If well implemented, the strategies are promising.

2.3 Development of credit markets in Tanzania

Since independence in 1961, Tanzania has adopted a series of development policies aimed at improving the standard of living of the majority of the population. The period between 1961 to 1967 saw a major transformation that was intended to build a country with strong institutions and adequate capacity to promote economic development and wellbeing of its people. Despite the early efforts to build up a strong economy, the expected 'trickle down' effects of economic growth did not materialize (Amani *et al.* 2004).

The government turned its focus to socialism. The Tanzania's Socialism and Self Reliance policy spelled out in Arusha Declaration in 1967 rejected the private capital formation under the famous war against capitalism. Hartman (1988) and Hanak (1985) as cited by Kashuliza (1993) note that capital formation was suppressed throughout the 1970s to mid-1980s. Also Likwelile (1998) as cited by Amani *et al.*

(2004) note that the government exerted comprehensive control over the economy. Private sector was restricted through regulations and licenses.

Under the socialist development approach, credit rationing and interest rate controls where credit were deliberately rationed in favor of the public sector formed policy instrument and control mechanisms among others (Amani *et al.* 2004). The government strived to promote massive extensions of bank and credit institution branches into urban and some rural areas in Tanzania. The Tanzanian Government was therefore interested in establishing a conducive environment for the development of a sustainable rural and microfinance system with wide outreach, thereby contributing to broad-based growth and poverty reduction through expansion of financial intermediation to small-scale rural and urban clients. The microfinance environment was further enhanced with the amendment of the banking law to take into account microfinance companies as well as SACCOS and make them part of the financial landscape in Tanzania and provide for their effective licensing and supervision by the BOT (World Bank, 2005). Several changes in financial services have taken place since independence. For instance, in 1976 the government abolished all cooperatives, including SACCOS. The liberation which set in gradually in the 1980s, led to re-instatement of cooperative unions. Unions through primary marketing cooperative societies started rural savings and credit schemes with loans from CRDB. The legal and policy framework was put in place through the 1991 Cooperative Societies Act and Financial Institutions Act, which provided for the resurrection of Cooperative Societies (World bank, 2005).

The financial sector reforms set in motion a decade ago included liberalizing interest rates, eliminating administrative credit allocation, strengthening BOT's role in regulating and supervising financial institutions, restructuring state-owned financial institutions, and allowing entry of private banks into the market. Despite progress in the financial reforms, access by large segments of the rural and urban population to financial services has remained stunted (Randhawa and Gallardo, 2003).

2.4 Formal and informal financial systems and agriculture

In Tanzania, there are several sources of credit for SME ranging from formal to informal lenders. It is notable that relatives, friends and traders/moneylenders can be grouped as informal sources while banks and other financial institutions are categorized as formal credit sources. In his study, Kashuliza (1993) identified informal credit sources to include relatives, neighbors and friends, medium and large-scale farmers, shop owners, traders and businessmen charging 0-50% interest rates while formal sources were banks and cooperative societies charging 20-30% interest rates per annum. Khandker and Faruqee (2002) also note that the nominal rate of interest is lower for formal loans than for informal loans. However, credit accessibility by SME in particular agricultural enterprises has been problematic for quite long in Tanzania. Informal credit sources are accessible through social networks like knowing each other and trust. Usually no major security items or collateral are put forward as guarantees for such loans. In formal credit sources such as banks, access is restricted mainly by lack of credit worthiness, bureaucratic procedures and high interest rates charged for loan. Kashuliza (1993) notes that only

a small proportion of the Tanzania population had access to credit over years. He further notes that at the same time the major share of credit has gone to few regions and districts in the country as a result of the type of crops grown in these areas e.g. in relation to tobacco growing in Iringa. Carter and Water (2004) further note that the reluctance of many moneylenders to operate in rural areas can be traced to the greater risk, both real and perceived, that they are associated with agriculture. Vagaries of weather and market prices make agriculture inherently more risky than many other economic activities. They urge that lenders are often disinclined to lend in rural areas and to the agricultural sector simply due to a lack of familiarity with the sector or clients within the sector. If agricultural entrepreneurs were able to decrease the risk of default in the face of a catastrophy or price fall, or if lenders could protect themselves in the case of loan loss, this would increase the likelihood of entry by private financial institutions to rural areas and agricultural sector. Furthermore, Amani *et al.* (2004) attribute the lack of access to credit to be associated with the by then policy instruments and control mechanisms under the socialist development approach such as central control of investment planning and restrictive codes on private domestic and foreign investment, credit rationing and interest rate controls where credit was deliberately rationed.

Studies have put forward some factors affecting loan accessibility in Tanzania. Kashuliza (1993) stipulated awareness of the availability of credit facilities in the area, history of having used loans before (experience) and gender of the credit recipient were significantly determining the participation in finance services. Of equally important were education level, value of personal asset and extension

services. It is hypothesized that females have less access to credit than males due to various socio-cultural constraints such as lack of rights to own land (which is needed for collateral). Experienced traders are likely to be granted a loan than new entrants as they are perceived to be young in business and high risk. Education and awareness on the other hand are directly linked to information on credit availability and ability to utilize the loan with efficiency.

For formal credits, studies show that collateral is far the most important limiting factor for credit accessibility. In her study in Sri-Lanka, Southwold-Llewellyn (1992), notes that access to credit was limited to those with financial and social resources to provide them with guarantors. She further adds that by their very structure, institutional loans were not available and useful to most people because of their lack of 'creditworthiness' or through the institutions failure to meet peoples most pressing credit needs. On institutions failure to supply enough credit, Moll (1992) notes that a bank can extend its services to more households and remaining economically viable, but the extension requires careful balancing between costs, returns and the increased scale of operation in order not to endanger the condition of financial viability. In Tanzania, most grain traders operate in penny economies. Bouman (1992) describe a penny economy as an economy in which almost everything is small-scale. Participants in a penny economy produce, exchange, buy and sell, save and borrow and earn money in extremely small quantities. He further says money transactions in this economy, although very frequent, are mini-sized, too; one does not borrow or lend for long, but for extremely short periods. This makes it

difficult for banks and other formal financial institutions to lend to grain traders and likewise for traders to borrow from formal sources.

The establishment of formal credit institutions in the agricultural based developing economies some 40 or more years ago was among other reasons linked to the belief that local or informal lenders such as merchants, landlords and shop owners exploit small farmers by charging them exorbitant interest rates (Kashuliza, 1993). Khandker and Faruqee (2002) urge that informal finance may not be as conducive to development as formal finance because: it is expensive; it is short-term and largely used for consumption; and it is not generally large enough to spur investment and growth. It is further urged that formal credit institutions have not been able to meet the prevailing demand for finances for a number of households, therefore, they continue to seek their finances from informal sources (Kashuliza, 1993). The credit markets continue to be characterized by the co-existence of formal institutions and the informal lenders charging high interest rates. Despite the government interventions and efforts, their positive impact on income distribution has been limited (Swain, 2005). In general, formal lending has an asset bias and is in favor of economically and politically powerful households, with a high correlation between the formal borrowers and the size of landholdings (Braverman and Guasch, 1989). This is believed to have led to a further widening of the income inequalities. However, both formal and informal credit sources are important to entrepreneurs for their businesses to flourish.

The Tanzanian government policies on financial services has been ever-changing, from centrally controlled financial services to free market, from subsidized credit schemes to unsubsidized credits. In the past, the government introduced the Cooperative and Rural Development Bank (CRDB) together with other formal institutions in order to avail credits to SMEs among the objectives. However, the move proved unsuccessful. Recently, the government has released subsidized entrepreneurship loans through the National Microfinance Bank (NMB) and CRDB. Carter and Waters (2004) put forward an argument that such policies do not prove successful. They argue that subsidized credit programs undermine the institutional sustainability of financial institutions, distort financial markets and discourage savings mobilization. It can also result in poor repayment culture to clients and financial instability among lending institutions.

2.5 Credit and SME regulation in Tanzania

Credit regulation is under the government through the BOT. Among other duties the BOT supervises other Banks and Financial Institutions on the way they conduct their businesses, including credit administration. In general, this activity involves ensuring that commercial banks and other financial institutions conduct their business on a sound prudential basis and according to the various laws and regulations in force. It includes the supervision of banking conduct and the licensing of financial institutions. According to the Banking and Financial Institutions Act of 1991, and the new BOT Act, the main responsibilities of the Bank of Tanzania among others, are: implementation of prudential controls concerning capital adequacy, liquidity, concentration of credit and risk diversification, asset classification and provisioning,

and prohibited activities; licensing of banks and financial institutions; etc. The Bank may advise the Government on any matter relating to its functions, powers, and duties. The Bank may also be requested to advise the Government on any matter related to its functions, powers, duties, the credit conditions in Tanzania, or any proposal, measures, and transactions relating thereto (Kirumba, 2002).

The bank also acts as a lender of last resort to other banks. It governs realistic interest rates that must at least be above the level of the rate of inflation; it encourages well-functioning and effective financial markets, including an efficient payments system; it regulates a steady rate of increase in domestic bank credit expansion that will not place undue demand pressures on production resources and that must be consistent with the Money Supply objectives.

Likewise, SME regulation is under the government through various bodies. Kirumba, (2002) reports that apart from the Ministry of Industries, Trade and Marketing there are at least seven ministries which are involved in SME activities, namely the:-

i. Ministry of Community Development, Women and Children Affairs
ii. Planning Commission; Vice President's Office
iii. Ministry of Higher Education, Science and Technology
iv. Ministry of Finance
v. Prime Minister's Office.
vi. Ministry of Industries, Trade and Marketing

The Ministry of Industries, Trade and Marketing has a section for small business development which is responsible for the co-ordination of all the stakeholders in the field of SME promotion in the country. Its main functions include:- policy formulation and planning of SMEs development; monitoring and evaluation of policy implementation; co-ordination of small scale industry and micro project development in Tanzania; liaise with donors and local institutions which are engaged in the SME sector. this acts as a main government control organ. Apart from regulatory role, the government has other roles to play. It creates an enabling environment for the emergence of the private sector and its participation in economic activities. It has committed itself to reduce its direct involvement in productive activities. Instead, the private sector is encouraged to invest into these areas. The main Government role with respect to SME development include:- provisin of necessary infrastructure for SME development; setting up institutions which support SME activities and strengthening the existing ones such as SIDO, TEMDO, through the national budget; ensuring equal access to employment for women, youth, and the disabled (Kirumba, 2002).

Kirumba (2002) further notes that, up to this point, SIDO remains a government arm for implementing SME promotion activities in the country. Its main functions are:- the promotion of SME activities in the form of technical advice, training in management, book-keeping and marketing etc.; the provision of credits for working tools and start-up capital; the provision of common facilities through industrial support programmes , i.e. foundry workshops as well as common facility workshops and industrial extension services.

CHAPTER THREE

METHODOLOGY

3.1 Conceptual framework of the study

Participation in credit programme is something an individual chooses to do, while access to credit is a limiting constraint upon an individual e.g. availability and eligibility criteria (Diagne, 2000). An individual has access to credit if s/he is able to borrow from that particular source, although for some reasons s/he may choose not to borrow. In this study, the extent of access to credit was measured as a maximum amount an individual can borrow-Credit limit. Diagne (2000) in his framework urges that the credit limit variable facing a potential borrower and the amount the potential lender wants to be repaid are the variables that lenders can choose. On the other hand, the optimal amount to be borrowed within the range set by the lender remains the sole choice of the borrower, who also chooses ex-post whether and when to pay back the loan. Therefore, loan supply is a function of the maximum s/he is able to lend, lender subjective assessment of the likelihood of default, other borrower's characteristics and price of credit. Also demand for loan is affected by loan size, interest rate, income and other factors. These can be presented diagrammatically as shown in Figure 1.

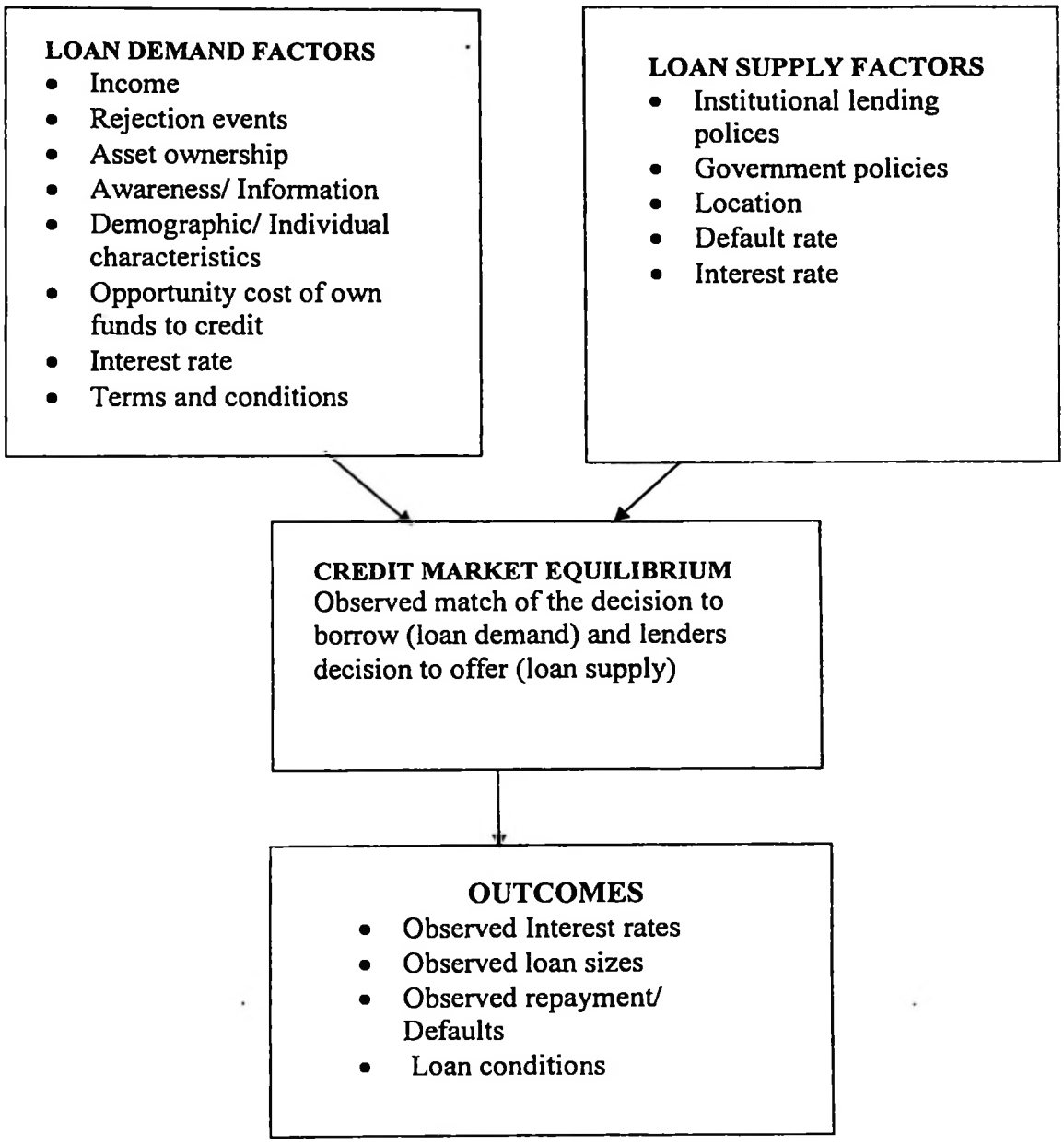


Figure 1: A conceptual framework for the analysis of factors affecting credit demand and supply

3.2 The study area

The Southern Highlands Zone (SHZ) and Dar es salaam are selected for this study and Mbozi and Kyela districts being the representative areas for SHZ and Kinondoni municipality for Dar es salaam. Kyela and Mbozi are among the major rice and maize producing areas in the country respectively. Kinondoni is among the major grain marketing areas in Tanzania and substantial numbers of grain traders can be found in these areas. There is also a lot of interregional trade taking place between Kyela, Mbozi and Dar es salaam.

3.3 Geographic location, climate and sizes

Mbozi and Kyela districts are among the 8 districts of Mbeya region. Others include Ileje, Chunya, Rungwe, Mbeya Rural and Urban and Mbarali. Generally, the two districts are well endowed with land potentials suitable for agricultural development. On the other hand Kinondoni is among the three municipalities of Dar es salaam region, others being Ilala and Temeke. The selected districts have large number of grain trade practitioners.

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3.3.1 Mbozi district

It lies in the South Western part of Mbeya region, between 8^0 and 9^0 12" South of Equator, longitude 32^0 7" 30' and 33^0 2" 0' East of Greenwich meridian. It is bordered by Ileje in South, Mbeya Rural in East, Songwe River at the North, extends to Lake Rukwa where it is bordered by Chunya district in the west. It shares borders with Rukwa region and the republic of Zambia. It has a total land area of 9,679 km^2. It has an estimated population of 330,282 people. It has tropical climate type with

clearly distinguished rainy and dry seasons. Rainfall ranges from 1,350mm to 1,550 mm per annum, with moderate temperatures. Altitude is between 900m to 2,750 m above mean sea level (URT, 1997).

3.3.2 Kyela district

Lies in the Southern part of Mbeya region. It is bordered by Ileje in West, Rungwe in North, Iringa region in North east, Lake Nyasa in South East and Malawi in South. It has a total land area of 1,322 km^2. It has an estimated population of 174,470 people according to the 2,002 National Census. It has tropical climate type with clearly distinguished rainy and dry seasons. Rainfall ranges from 1,350mm to 2,600 mm per annum, with moderate temperatures.

3.3.3 Kinondoni municipality

Kinondoni District is the northernmost of three districts in Dar es salaam, the others being Temeke (to the far Southeast) and Ilala (downtown Dar es Salaam). To the east is the Indian Ocean, to the north and west lies the Coastal region. The 2002 Tanzanian National Census showed that the population of Kinondoni was 1,083,913. The area of Kinondoni is 531 km^2. Kinondoni Municipality lies in the tropical coastal belt of Tanzania and therefore experiences a modified type of equatorial climate. It is generally wet and humid with mean annual temperature of 26^0C. The hottest months are usually from October to March after which temperatures start falling. It is a bit cool between May and August with temperatures around 25^0C. The Municipality has two rainy seasons, the short rainy season, which is from October to December, and

the long rainy season starting from March to June. In both cases, the Municipality receives an average of 1,000 mm of rain per annum (URT, 2004).

3.4 Methodology

3.4.1 Data collection

3.4.1.1 Selection of crops and sample markets

Kyela (Mashineni, Ipinda and Ngonga areas) for rice, Mbozi (Vwawa and Mlowo) for maize and Kinondoni (Tandale market) for both crops were selected. The two crops are the most important tradable staples in Tanzania. Nyange (2005) noted that, it is estimated that approximately 40 percent of maize produced is marketed, though the estimate is much higher (60 percent) in surplus producing regions like Iringa. On the other hand, Southern highlands is chosen as the main surplus area in Tanzania for maize and rice. Kyela and Mbozi have significant contribution to the overall Mbeya regional staples production. Kinondoni (Tandale market) is popular for grain trading.

3.4.1.2 Sampling technique and sample size

Traders (village assemblers, wholesalers and retailers) and financial institutions (both bank and non-bank) were visited. Purposively marketing places were visited basing on buyers and sellers concentration. Due to difficulties encountered in identifying loan beneficiaries, the study employed purposive sampling technique by obtaining the names of loan beneficiaries from formal financial lending institutions and visiting the clients for interview. For Kyela district, 44 respondents were interviewed, 32 for Mbozi and 31 for Kinondoni making a total of 107 respondents dpending on their availability. A checklist was used for discussion with lending institutions. The NMB bank (Mbozi and Kyela branches), Small Enterprises Development Agency (SEDA-

Dar es salaam), four Savings and Credit Cooperative Societies (Motomoto and Pakati in Kyela, Wabimco and WAT in Mbozi) and one Village Community Bank (Mshikamano in Kyela) were visited for discussion during the study.

3.4.1.3 Data type

Both primary and secondary data were collected. Secondary data were collected to complement the information obtained from sample traders from literature, DALDO offices, the Ministry of Agriculture, Food Security and Cooperatives and Financial institutions. The data are on population, crop production and marketing, prices and credit.

Primary data were collected by questionnaire interviews and discussions with different actors and institutions. Traders were those who buy from farmers at farmgate or at assembly markets and sell to millers and/or at wholesale and retail urban markets. A structured questionnaire designed to capture both qualitative and quantitative data was used. It contained both closed and open ended questions. Information gathered were on characteristics of the respondents, volumes of crops handled, main sources and amounts of funds, savings and credit services, rice/maize marketing in general, pricing, adequacy of available funds, constraints and credit opportunities (Appendix 1).

3.4.2 Data analysis

Data was analyzed by Statistical Package for Social Science (SPSS 11.5). Descriptive statistics such as means, percentages, cross-tabs and frequencies were generated. Ordinary Least Square regression was used to assess determinants of loan

demand and Logistic regression for participation and non participation in credit markets.

3.4.2.1 Loan demand

A large number of socio-economic factors determine one's decision to apply for and amount of formal credit granted by lenders to applicant. Determinants of credit demand model –OLS was estimated as :-

$Ld = \beta_0 + \beta_1 D + \beta_2 E + \beta_3 S + \epsilon_i$ .....(4)

Where, Ld is maximum amount they could borrow in Tsh during the recall period 2000 to-date, D are demographic variables (age, asset value/wealth), E are economic (level of sales), S are other variables like interest rate, type of guarantee (Dummy), repayment terms (dummy). It can further be presented as:-

$Ld = \beta_0 + \beta_1 AGE + \beta_2 EDUCATIO + \beta_3 MARITAL + \beta_4 GENDER + \beta_5 TRADERCAT + \beta_6 LOCATIO + \beta_7 STOCK + \beta_8 INTEREST + \beta_9 OTHERACT + \beta_{10} YEARS + \epsilon i$ .....(5)

Where:-

$\beta 0$ =Constant (intercept)

AGE = Age of respondents in years

EDUCATIO = Education level of respondent

MARITAL = Marital status of respondent

GENDER = Gender of respondent (Dummy)

TRADERCAT = Trader category

LOCATIO = Location of respondents

STOCK = Duration of stock holding in days

INTEREST = Interest rate charged on loan in percentage per month

OTHERACT = Other activities carried out by respondent

YEARS = Number of years in business (experience)

ϵ_i = Error term

Table 1: Summary for independent variables on loan demand equation

Variable	Abbreviation	Coefficients	Expected sign	Measurement
Constant	β0	β0	+	-
Age	AGE	β1	+	Years
Education level	EDUCATIO	β2	+	Dummy, 1 = educated, 0 =otherwise
Marital status	MARITAL	β3	-	Dummy, 1 = married, 0 =otherwise
Gender	GENDER	β4	+	Dummy, 1 = male, 0= otherwise
Trader category	TRADERCAT	β5	+	Dummy, 1 = Wholesaler, 0 = otherwise
Location	LOCATIO	β6	+	Dummy, 1 = Kinondoni, 0 = otherwise
Stock holding duration	STOCK	β7	+	Days
Interest rate	INTEREST	β8	-	Percent per month
Other main activities	OTHERACT	β9	-	Dummy, 1 = Farming only, 0 = otherwise
Experience in business	YEARS	β10	+	Number of years in business

3.4.2.2 Limitation of OLS

Hallam (1990) urges that OLS estimator assumes one-way causal relationship between the explanatory and dependent variables. It selects those values for the unknown parameters which minimize the sum of squared sample residuals. The residuals measure the deviations between the actual values of the dependent variable and the values which will be predicted by the estimated equation. The estimation of a general linear model in this context will be a straightforward application of the least squares principles. Upon meeting the underlined assumptions, OLS estimator is unbiased, best and efficient. Furthermore, Mukras (1993) as cited by Mukwenda (2005) urge that OLS requires that the regression line be drawn through the scatter of

sample observation such that the positive and negative deviation of the observations cancel out. OLS assumptions include linearity (Y = f(Xi), homoskedacitcity (constant variance), nonsctochasticity (no multicollinearity effects), normality (mean) of zero and constant variance) and consistency.

Upon violation, OLS method gives inconsistent estimates of the parameter β since the residual is correlated with the independent variables (Xi). It is further noted that OLS estimator of β is downward biased, giving an underestimate of the true effect on violation. This follows from the well-known results about the least squares bias from the omitted variables, which says expected E(OLS estimate) equals true coefficient of the included variables plus true coefficient of omitted variables times the regression coefficient from a regression of excluded variable on the included variable (Maddala, 1991).

However, it is reported that misspecification, multicollinearity and heteroskedaciticty are the most likely encountered problems in survey data. Misspecification can bring about biased estimates. The misspecification problem was curbed by stepwise regression to identify and omit irrelevant variables and include variables that increase R^2. Multicollinearity on the other hand was tested by regressing each independent variable on other independent variables. The R^2 from regression of dependent variable was greater than the R^2 from regressions of all independent variables. Therefore, this implies that multicollinearity might not be a big problem.

3.4.2.3 Participation and non-participation in credit markets

Participation and non-participation in formal credit markets is affected by various factors. This study further analyzed participation as borrowers and non-borrowers of loans and the factors for each. A Binary Logistic participation model using Maximum Likelihood Estimation method (MLE) can therefore be presented:-

$$\text{Ln } (P/1\text{-}P) = \beta_0 + \beta_1 \text{INTEREST} + \beta_2 \text{ INFORMATIO} + \beta_3 \text{FUNDAD} + \beta_4 \text{ INCOME} + \beta_5 \text{EDUCATIO} + \mu \quad \ldots\ldots(6)$$

Where, ln(P/1-P) is the dependent variable which is the natural logarithm of the probability of participation (P) to not participating in credit markets. It takes a value of 1 for participating and 0 for nonparticipation. β_0 is intercept (constant), β's are coefficients estimated from the data μ is white noise error term ($\mu \sim N(0, Pi(1-Pi))$.

INTEREST = Interest rate charged on loan in percentage per month

INFORMATIO = Dummy of information on credit availability (awareness), where 1 = aware, 0 = otherwise.

FUNDAD = Opinion on fund adequacy dummy, 1 = if funds are adequate and 0 = if otherwise

INCOME = Income of respondent in Tsh

EDUCATIO = Education level of respondent

Table 2: Summary for independent variables on participation equation

Variable	Abbreviation	Coefficient	Expected sign	Measurement
Constant	β_0	β_0	+	-
Interest rate	INTEREST	β_1	-	Percent per month
Information	INFORMATIO	β_2	+	Awareness dummy, 1 = Aware, 0 = Otherwise
Fund adequacy	FUNDAD	β_3	-	Opinion on adequacy dummy, 1 = Adequate, 0 = Otherwise
Income	INCOME	β_4	+	Income in Tsh
Education	EDUCATIO	β_5	+	Dummy, 1 = educated, 0 = otherwise

Gujarati, (1995) as cited by Chimilila (2006) notes that the commonest problem with logistic regression models is heteroskedasticity. Park's test was carried out to validate this problem, of which it identified to suffer from heteroskedasticity. Gujarati (1995) further suggest solution to heteroskedasticity as to run transformed logistic regression. The model was transformed by natural logarithm followed by re-estimation by MLE method.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Respondents' general characteristics

Respondents' characteristics have important social and economic implications to the accessibility of credit, utilization and repayment. The characteristics have influence on decision making on various issues like production, consumption, decisions regarding loan acquisition, utilization and repayment/defaulting. Therefore, this section describes the characteristics of sampled traders focusing mainly on marital status, education level, age and gender of respondents.

4.1.1 Marital status

In this study, marriage was taken to include both formal and informal unions and was categorized as married, singles, widowed, separated and divorced. Results show that the majority of the respondents were married with Kyela district having the highest rate, followed by Mbozi and Dar es salaam. Other marital statuses (i.e. singles, divorced, widowed and separated) were generally low (Table 3). In this study, marital status of respondents is one of the key factors that may influence individuals' decision making on loan acquisition and utilization. Marriage patterns play an important role in shaping social organizations and relations, as they are associated with many socio-economic, cultural and demographic aspects. Married female traders are unlikely to apply for loan without there husband's consent. This is due to joint or lack of ownership of permanent structures (needed for collateral).

Bell *et al* (1992) as cited by Sumay (1999) notes a number of gender specific factors that exacerbate the problem of women's access to credit, among which education level and marital status fall.

Table 3: Marital status distribution of respondents by district (%)

		Location			Total number (n)
Category		Dar es Salaam	Kyela	Mbozi	
Marital status	Single	21.4	50.0	28.6	14
	Married	20.5	41.1	38.4	73
	Divorced	0.0	33.3	66.7	3
	Widowed	0.0	83.3	16.7	6
	Separated	80.0	20.0	0.0	5
Total					101

4.1.2 Education level

Results show that the level of basic education among traders is relatively high in all locations. For Dar es salaam, majority had secondary education, a few had primary education with a striking person un-educated at all. Kyela and Mbozi, majority had primary education with some secondary school leavers, and no illiterate trader was found (Table 4). This gives an indication that grain traders are fairly educated. This implies that at least the educated majority had bigger chance to apply for a loan as a result of open-mindedness due to education (99% had at least primary education). Furthermore, it implies that credit was given to sufficiently educated borrowers given that the activities they were doing needed little expertise. Kashuliza and Kydd (1996) in their study on rural finance also observed that, individuals with better knowledge on the role of innovations, credit and credit procedures are more likely to be users of savings and credit services than those without education who might be ignorant and skeptical to use financial services.

However, in this study there were no respondents with graduate level qualifications. This can be explained by nature of grain trading in Tanzania vis a vis level of education making graduates shy away from such unreliable petty businesses.

Table 4: Distribution of respondents (%) by education level

Levels of education	Location			Total (n)
	Dar es salaam	Kyela	Mbozi	
None	100.0	0.0	0.0	1
Primary	15.6	44.2	40.3	77
Secondary	39.1	43.5	17.4	23
Total				101

4.1.3 Age of respondents

The interviewed traders fell between the age of 21 and 55, with an average age of 34.8 years (Table 5). The majority being between 25 and 42 years of age, probably a suggestion that they are strong and can actively engage in grain trading in their respective markets. Age influences the income generating capacity of an individual. Rogers *et al.* (1989) as cited by Regnard (2006) urges that in total the accumulation of wealthy is highly dependent on age of an individual, whereby a direct relationship is experienced. Likewise, age determines individual maturity and ability to make rational decisions, among which loan application and utilization fall in. The interviewed grain traders in the study areas fall in economically productive class, below and above which are dependants.

Table 5: Respondents distribution by age

No. of respondents	Mean	Std. Dev.	Minimum (years)	Maximum (years)
98	34.8	6.99	21	55

4.1.4 Gender

Results show that of interviewed traders males were many than females (table 6). There is male domination (in all three districts) as the grain trade in Tanzania is unsophisticated, requires healthy and masculine individuals to undertake the business as it involves sometimes traveling, weight (bags) lifting and other vigilant activities.

Table 6: Respondents distribution (%) by sex

Sex	Location			Total (n)
	Dar es salaam	Kyela	Mbozi	
Male	23.0	37.7	39.3	61
Female	20.0	52.5	27.5	40
Total				101

4.1.5 Other main activities

Grain traders engaged with other activities as source of additional income are likely to apply for and re-pay back loans. Results show that 50.84% of respondents engaged in farming, 42.36% in both farming and livestock keeping and 6.8% did other petty businesses (Table 7).

Table 7: Respondents distribution (%) by other major activities

Category	Frequency	Percent
Farming only	30	50.84
Farming & livestock	25	42.36
Other businesses	4	6.8
Total	59	100.0

4.2 The grain marketing

4.2.1 Trader category

Results show that the interviewed traders comprised of maize traders in Dar es salaam and Mbozi districts categorized as village assemblers, wholesalers and retailers (Table 8). The remaining portion of traders comprised of rice traders from Kyela and Dar es salaam. It was observed during the study that village assemblers found in Kyela and Mbozi were mainly energetic youths as the task is labor demanding, unsophisticated and required lots of movement in search of surplus crops. Retailers were mainly ladies in all locations as their operations involved little or no traveling with little vigilant work. Wholesalers on the other hand were equally distributed between men and women.

Table 8: Distribution of respondents (%) by category of grain traders

	Product.		Total (n)
Trader category (%)	Maize	Rice	
Village assembler	27.3	72.7	22
Wholesaler	33.3	66.7	33
Retailer	43.5	56.5	46
Total	36.6	63.4	101

4.2.2 Business record keeping

Results in Table 9 show that most of the interviewed traders were not keeping business records on various transactions. Of these, a few did not know how to keep records and the majority had a feeling that they do not need records. From the results, it is noted that a large proportion of wholesalers kept business records compared to other two trader categories, followed by village assemblers and retailers. This is probably an indication that wholesalers manage better their businesses as generally

their businesses involve large transactions unlike retailers (wholesalers handle relatively large volumes). In addition, wholesalers and village assemblers travel extensively, therefore recording keeping is vital in order not to lose track of their procurement and sales. Closely related results were obtained by Ashimogo *et al.* (2001) in their study in marketing information that, there is a very low level of record keeping by market participants although the need for information is there. They further noted that for all categories of respondents, the majority of those who did not keep records claimed that the exercise was either not important (70%), they lacked the necessary skills and knowledge (20%) or presumed the exercise to be tedious (10%). These findings are in line with the findings in this study that record keeping is still low among Tanzanian grain traders as they said they don't need them (Table 9).

Table 9: Record and non-record keepers

Trader category	Record keeping		Total (n)
	Kept records	Did not keep records	
Village assembler	45.5	54.5	22
Wholesaler	72.7	27.3	33
Retailer	30.4	69.6	46
Total			101

Furthermore, for those keeping business records, 85.4% kept sales and expenditure records, 8.3% kept sales records only and 4.2% kept expenditure records only. This implies that record keeping education amongst grain traders is very low. For any business, records are vital as they can show the business direction as whether growing or declining over time or making profit or loss over a given period. Also, records can become instrumental in loan eligibility upon one's application as during

business assessment loan officers can use the existing records to assess the business viability.

Table 10: Distribution of respondents (%) by reasons for not keeping records

Response	Frequency	Percent
Don't know how to keep records	11	34.40
No need for records	21	65.60
Total	32	100.0

4.2.3 Grain market availability

Agriculture is vulnerable to many external shocks such as drought, changes in commodity prices/price fluctuations and market availability. Of the interviewed grain traders, rice traders said the market was not a problem during the survey, they had moderate to good market availability for their produce (Table 11). On the other hand maize traders suffered serious lack of assured maize market. This was evident in Mbozi as the prevailed selling prices were on average lower than the buying price. This forced many traders to hold stock of their grains waiting for better prices. However, traders were not certain about the timing of the next price rise. The price uncertainty has a negative implication on loan application and repayment. In such a scenario, a trader who secured a loan for business won't be able to repay the loan as scheduled. That is why agricultural loans are viewed as risky by both, the lending institutions and the borrowers.

Table 11: Availability of grain markets by crop type

Type of product	Grain market availability			Total (n)
	Yes	Little	No	
Rice	52.4	46.0	1.6	63
Maize	13.5	56.8	29.7	37
Total				100

4.2.4 Average grain handled, prices and costs incurred

On average, the visited grain traders were petty traders handling small amounts of grains per month. Table 12 below shows average monthly crops, prices (averages from farmgate to retail) and costs incurred.

Table 12: Average grain handled (Kg) per month, prices (Tshs/kg) and costs incurred (Tsh/kg).

Commodity (Quantity, price & Costs)	Kyela	Mbozi	Dar es salaam	
	Rice	Maize	Rice	Maize
Quantity per month (Kg)-average	2807.56	5991.53	2944	18,000
Buying price (Tsh/kg)	652.47	184	770.5	140
Selling price (Tsh/kg)	825.43	237.58	876.44	206.77
Costs incurred (Tsh/kg)				
Packaging	17.97	6.13	4.48	2.78
Labor	21.15	4.19	4.78	6.12
Transport	23.62	40.69	24.44	37.5
Market fee	16.62	4.84	3.09	4.17
Other costs (security)	31.87	3.99	16.33	13.5

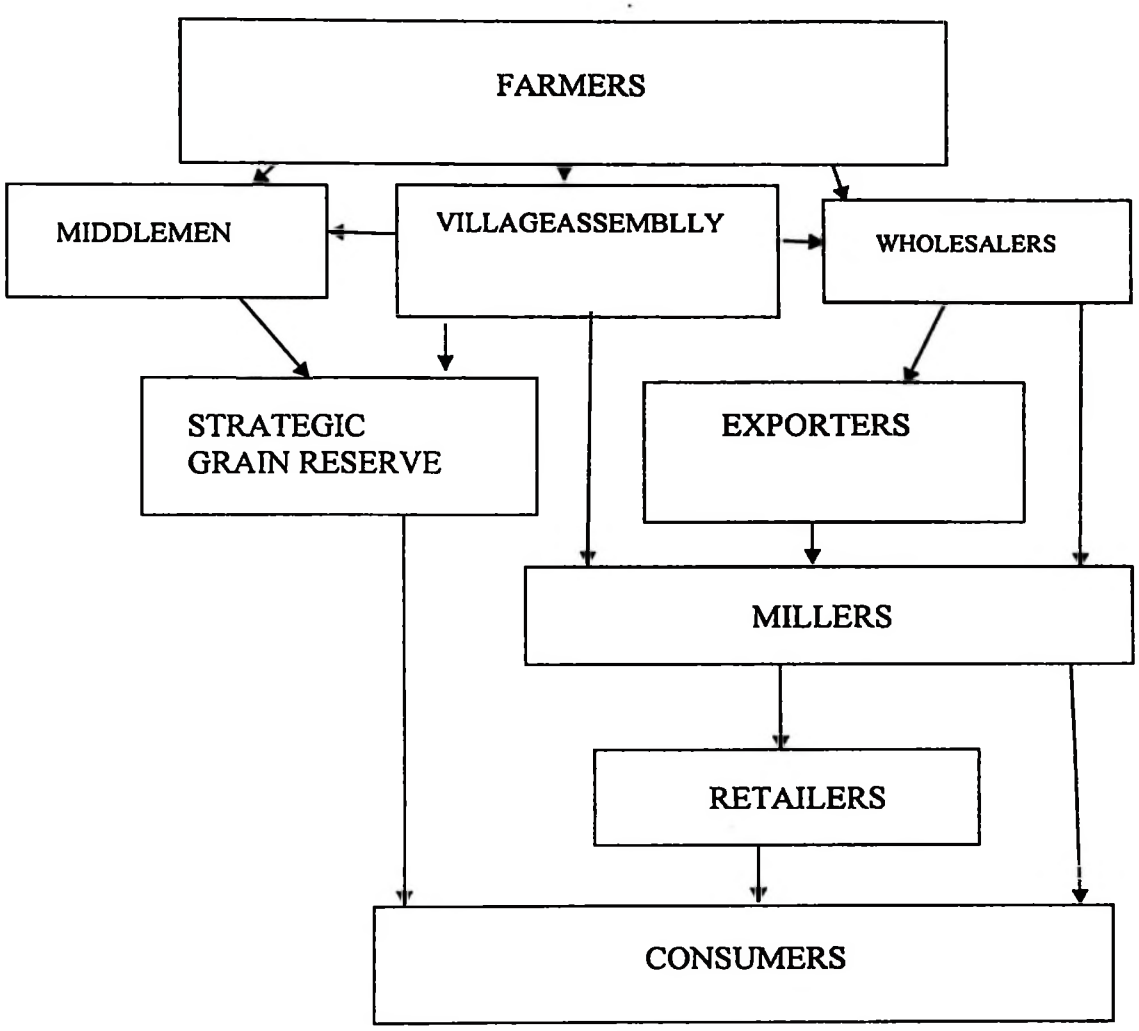
4.2.5 Grain marketing channels

The observed channels for the two crops were relatively simple. They both (rice/paddy and maize) move from producers to final consumers through relatively few intermediaries with relatively little value addition (Figures 2 & 3). Sometimes some actors assume interchangeable roles depending on market condition (e.g. A retailer can assume village assembler's or wholesaler's position). Maize from farmers are sold to village assemblers/middlemen or direct to wholesalers at farmgate

prices. Village assemblers buy maize in small quantities and bulk and bag them to capture economies of scale in transport to local milling points and sales points in town (i.e. Vwawa, in Mbozi). They collect from rural Mbozi and Sumbawanga. In the villages they move from house to house searching for the surplus maize from farmers. Sometimes they hire middlemen /collectors in respective villages.

Wholesalers buy maize from village assemblers, but sometimes they buy direct from farmers and bulk the maize in relatively large amounts for long haulage to deficit area, mainly Dar es salaam, Mbeya municipality and other districts. They sell to retailers, millers and sometimes to the Government (Strategic Grain Reserve-SGR, under Ministry of Agriculture, Food Security and Cooperatives). However, traders criticised SGR for delays in payment. Millers are both small scale and large scale with varying technological advancement (from simple hammer mills to capital intensive roller mills; simple storage structures to large silos).

Retailers found upcountry mainly in small towns such as Vwawa and Mlowo, buy whole maize from farmers as well as village assemblers and wholesalers. They handle relatively small quantities of maize. They sell whole maize on per tin basis (about 16 kg) to consumers. They handle other crops in addition to maize such as beans, groundnuts and sorghum. Mainly women were found in retail business. Retailers in Dar es salaam mainly buy maize flour from millers and sell to consumers in small quantities.

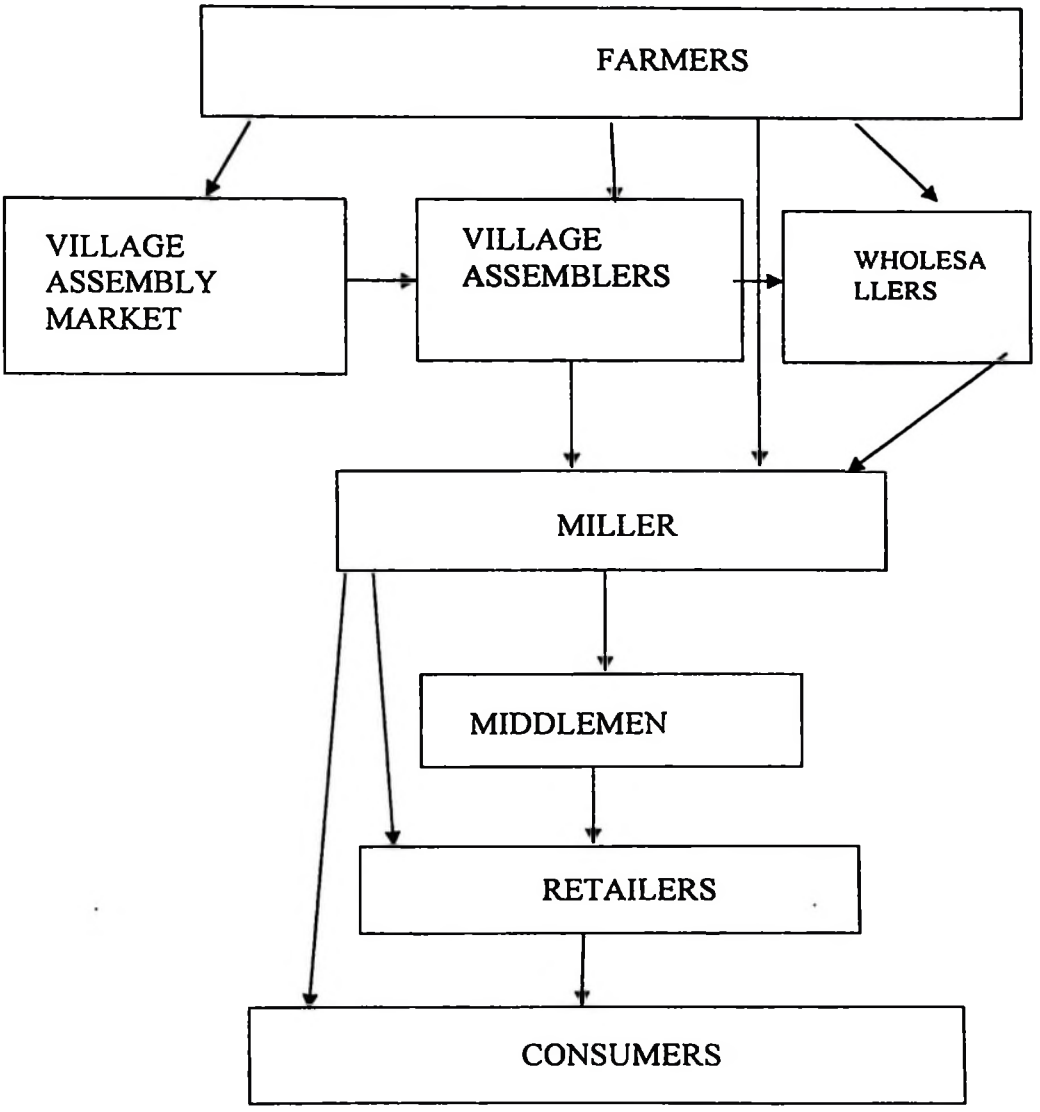


Source: Adopted from Mukwenda, 2005

Figure 2: Maize marketing channel

A more or less similar situation exists in rice marketing channel with few exceptions. Paddy from farmers is sold to village assemblers or wholesalers at farmers' premises or local assembly markets operated in specific days of the week. Village assemblers and wholesalers in Kyela use millers' buildings as a collection and storage center under the agreement of milling at that specific machine. Wholesalers transport rice to Dar es Salaam and other consumption points. In Dar es Salaam, middlemen take the

responsibility of selling the rice on behalf of wholesalers to retailers and other consumers.



Source: Adopted from FAO, 2004

Figure 3: Rice/ Paddy marketing channel

4.3 Credit markets

In this study loan types are categorized as formal and informal depending on sources. Maswaga (2001) defines informal finance that it applies to all transactions, loans and deposits occurring outside the regulatory of the central monetary authority. Meyer and Nagarajan (2000) as cited in the FAO (2004) report on Asian experience further define informal finance as credit from traders, input suppliers, moneylenders, friends and relatives and savings clubs and associations, as these financial service providers are not regulated and supervised by national financial authorities. Informal finance is a contract or agreement conducted without reference or recourse to the legal system to exchange cash in the present for promises of cash in the future (Schreiner, 2000).

Formal finance on the other hand, applies to all transactions, loans and deposits occurring within the regulatory of the central monetary authority (Maswaga, 2001). Formal Financial Institutions (FFI) are protected by legislation, controlled by a central bank guarding against breaches of monetary policy and supported by the state and national and international financial communities. These definitions were adopted in this study. For the purpose of this study, however, informal sources were those sources operating without any registration by authorities while formal sources included all registered financial institutions. These definitions give way for the usage of formal and informal terminologies for the rest of the study.

4.3.1 Terms and conditions-Formal loans

As shown in Table 13, most formal credit applicants applied from banks mainly NMB, others from SACCOS and other sources (SEDA, FINCA, MEDA, Pride and Caritas) with the primary purpose of extending their businesses (Table 13).

Table 13: Formal Credit sources (%) by trader category

	Trader category			Total (n)
Formal credit source	Village assembler	Wholesaler	Retailer	
Bank	29.2	20.8	50.0	24
Saccos	28.6	71.4	0.0	7
Other sources	11.5	46.2	42.3	26
Total				57

The most important eligibility criteria for a loan was collateral. Others were business record, business license, membership to group, savings account, registered business/office, training group formation and car registration card (Table 14).

Table 14: Most important condition for formal loan (%)

Category	Frequency	Percent
Business records	1	1.8
Collateral	35	61.4
Other conditions	21	36.8
Total	57	100.0

Again, it was noted that collateral requirement was the most difficult condition to be met by loan applicants (Table 15). This is due to the fact that many traders don't own permanent structures. Even if they own they lack title deeds for ownership. The collateral requirement varied from one institution to the other. Pearce *et al.* (2004) in their study on micro-finance for the poor notes that lack of collateral limits access

to credit and is related to poorly defined property and land-use rights and weak land and property markets in Low Income Countries (LIC).

Table 15: Most difficult condition for formal loan (%)

Category	Frequency	Percent
Business record	1	1.9
Collateral	25	47.2
Referee	7	13.2
Other conditions	20	37.7
Total	53	100.0

However, most respondents said collateral was mainly in form of permanent structures such as house or land. Others said movable assets were accepted such as car and machinery and lastly some institutions accepted valuable home appliances such as Television, sofa sets and refrigerators to serve as collateral for small loans (Table 16).

Table 16: Form of collateral (%)

Category	Frequency	Percent
Permanent structure e.g., house	29	82.9
Movable asset e.g. car, machinery	1	2.9
Land	3	8.6
Anything valuable	2	5.7
Total	35	100.0

Apart from collateral requirement, other conditions mentioned includes referees and business records. In Tanzania, for many years policies over ownership and transfers of ownership of permanent structures have been contradictory and prohibitive. This gives rise to lack of collateral to many traders. In most cases collateral requires surrendering the original title deed to the lending institution, lack of which an

applicant can't secure the loan. However, according to Property and Business Formalization Programme-MKURABITA report (2004), it says Tanzania has designed most of the policies and laws that are required to build a market economy. They are norms that will allow Tanzanian entrepreneurs to register and incorporate a business, establish guarantees (using movable and immovable assets), obtain credit (at microfinance institutions and commercial banks), carry out international trade, participate in public procurement tenders, advertise, take out insurance, resolve disputes and withdraw a business from the market voluntarily or through bankruptcy. The report further shows that 98% of all businesses in Tanzania operate extralegally (a total of 1,482,000). Eighty nine percent of all properties are held extralegally (1,447,000 urban properties such as houses and 60,200,000 rural hectares of land) of which only 10% is clan controlled-mainly Maasai pastoral land. This implies that most of the property can't be used as collateral as they lack title of ownership. In the same report it is further reported that Micro-financing is also prohibitive, requiring a bank account of at least 10,000 Tsh for three months for loan applicants, groups receiving loans are required to attend weekly training sessions for months. Also, in Vision 2025, several impediments are brought about, one being ineffective implementation syndrome. With all the government efforts, with this syndrome carried ahead of strategies the country won't make any changes in credit accessibility. However, if the strategies in MKURABITA are well implemented, a better environment will be created for loan applicants. Interviews with loan officers in respective formal institutions gave a range of eligibility terms and conditions to be met by a loan aspirant as outlined below.

4.3.1.1 NMB

4.3.1.1.1 Type of financial support

The bank provides banking services such as savings/deposits and currents accounts, money transfers and credit administration. For loans, it provides to salaried workers, Micro and Small Enterprises, Personal, Pensioners, Micro Institutions and sugar cane outgrowers loans in Mtibwa and Kilombero. The bank provides credit to ongoing businesses only. The business must be at least one year in operation. The client is assumed to have enough knowledge, experienced with business and knows the difficulties, therefore can handle the loan. It provides credit to all types of businesses, except agriculture production. It is perceived to be risky to lend to agricultural production especially due to drought, pest and disease outbreaks and price fluctuation. However, agricultural production related projects are much more riskier than other value addition projects in real terms. So it is time for financial institution to start supporting agricultural marketing investments.

4.3.1.1.2 Decision making process

The client fills in a short introductory form at bank's customer care which includes age of applicant, business, and number of years in business, etc. If a loan officer is convinced that he/she is a potential customer, he/she fills in an application form. Then, the loan officer visits the business premise in person to evaluate collaterals. The application form is sent to bank branch manager for approval.

4.3.1.1.3 Conditions, terms and eligibility

i. Small and Medium Enterprises loans

For Micro and Small Enterprises (SME) loans, it was noted that an applicant must be Tanzanian, possess an ongoing registered legal business office/shop with a valid business license, must have a movable or non-movable collateral (however, they emphasized more on immovable permanent structures). The business must be within 20km from the branch to minimize transport costs during monitoring and follow up. The amount for SME ranges from 5 million to 30million Tsh for one enterprise and duration of 12 months. The repayment frequency is monthly with an annual interest rate of 18% and the loan must start to be repaid one month after receiving it (i.e. no grace period given). Payment can be done at any branch. Upon delayed payment of two installments or 60 days of non-repayment, the bank sends a demand notice to the borrower commanding him/her to submit the remaining loan plus interest in full at once in 7 days. Failure of which the collateral is sold by bank collectors/agents to compensate for the loan. The loan follow-up costs incurred by the organization were estimated to be about 150,000Tsh per month for visits and 117,000Tsh per month for stationery. Challenges includes default payment, and conflicts with the community when selling collaterals. However, they have no loans specific for agriculture.

ii. Micro-Enterprises loans

The first-time loan to micro-enterprises does not exceed 1 million Tsh. The minimum amount is 50,000Tsh and the maximum is 1 million Tsh. The loan duration is six months for loans below 1 million Tsh. Other conditions are similar to those of SME loans. . The repayment frequency is monthly with an annual interest rate of 24%.

Collaterals differ in line with the amount of loan, from home appliances (like radio, TV set, fridges, cars/motorbikes) to permanent structures (like houses and land). The bank receives original documents (such as car registration card and title deeds) and holds them until when the loan plus interest is repaid in full. During the study, it was noted that NMB was administering entrepreneurship loans initiated by the government at subsidized interest rate of 10% per annum. Other terms and conditions were initially similar to SME loans. However, later some conditions such as collateral requirement changed to collateral free.

4.3.1.2 Small Enterprises Development Agency (SEDA)

With SEDA, it was noted that such loans are provided to both groups (of 10-20 applicants) referred to as Community banks and individual applicants. Members in a Community bank give mutual support to each other to assure repayment. For group loans, each group member stands as a guarantor for every other member. Home assets with values exceeding the requested loan stand as collateral. If there is any default by a group member, the whole group is held responsible. On individual loans, the applicants must have a movable and/or permanent assets/or car registration card, business license, operating capital of not less than 1 million Tsh whereas s/he has to show a bank statement for the previous 6 months). In addition, a recommendation letter from village/ward government, and two referees with permanent structures wealth more than one million Tsh value are also required. Loan durations are 6, 9, 12, 24 and 36 months with 2.5% interest rate per month, repaid on monthly basis. The minimum loan amount is one million Tsh. In case of defaults, Community banks summons the defaulter together with group members and village/ward government

leaders for negotiations and further action including sale of his/her collaterals. For individual loans on the other hand the guarantor takes the responsibility. In addition, for each delayed day, the client is charged 5% of the loan. There are other loan charges incurred by applicants such as 3.5% for individual loans and 2% for Community banks loans deducted as commission charges. The loan costs incurred by the organization were estimated to be about 40,000Tsh for every 1 million Tsh individual loan. SEDA has no agricultural specific loans, however plans are underway to start agricultural schemes.

4.3.1.3 SACCOS (Savings and Credit Cooperative Societies)

SACCOS are financial institutions undertaking financial intermediation function and by their nature (organizationally and functionally) they provide an ideal basis upon which the cooperative movement can foster a mechanism for facilitating financial intermediation not only amongst the cooperators as individuals, but also within the movement's structural build up (Maui, 1996). They are community based financial institutions that are managed and controlled by the members themselves. Generally, SACCOS objectives are to receive savings and make credit available to members, promote saving habit, promote economic planning and assist members to achieve a sound development of their enterprises and economic activities.

In this study, Wat SACCOS of Mbozi district will represent other SACCOS. It is a women only SACCOS established in 2003 (registration number MBR 592) with 156 members. Wat SACCOS' main objective is to empower women through credit and saving schemes. It provides SME loans to women at 3% monthly interest rate. The

loan duration is six months and the loan amount is twice the savings one has. The minimum savings is set at 20,000Tsh, entry fee is 5,000Tsh, annual fees are 1000Tsh and shares are sold at 2000Tsh per share with a minimum requirement of buying 5 shares and above. The maximum amount one can borrow is one million Tsh and not less than 50,000Tsh. The applicant must have two guarantors and collateral (not necessarily permanent structure). The applicant has to buy an application form at 1000Tsh as loan cost. In case of default/delayed payment the SACCOS leadership reminds the clients on his/her obligation to repay the loan three times. Further measures are then taken including seeking police enforcement upon neglect. The SACCOS has no agricultural specific loans, however plans are underway to start supplying input (fertilizer) loans by 2008. Challenges facing Wat SACCOS were delays in loan repayment, little savings and lack of capital.

4.3.2 Difficulties in loan acquisition-formal loans

Lengthy procedures and collateral requirement in formal financial institutions were among the pointed difficulties for both three locations (Table 17). Despite of the free market economy, the banks and other institutions are still bureaucratic in operation. It takes a minimum of 3 days and a maximum of 16 weeks to process a loan. For immediate crop purchase, a loan granted 16 weeks after application is as good as a loan denied. It can be attributed to lack of personnel in respective loan sections. It was evident during the survey that loans departments were understaffed. This implies that, formal financial institutions need to re-work their loan processing time.

Alexandratos (1995) as cited by Maswaga (2001), had similar observation that the formal financial institutions are characterized by centralized operations, demand for collateral when issuing loans and bureaucratic procedures. These observations are in line with the findings in this study as lengthy/bureaucratic procedures was among the difficulties encountered by traders to access credit. Similar findings were reported by Bouman (1992) in which he suggests that for formal loans, procedures should be simplified and speeded up, loan application forms be much simpler and worded in more comprehensible language, criteria for judgment of creditworthiness be less formal. He further urges that land as collateral for loan should be replaced by harvests, individual responsibility for loan repayment by collective responsibility of groups of borrowers, records on loan disbursement and collection should be kept more carefully.

However, Pearce *et al.* (2004) put forward an argument for lengthy procedures instituted by formal financial institutions (FFI) that it is a means to reduce lending risks as the procedures themselves constitute "social" barriers to the borrowers' access to credit.

Table 17: Difficulties in loan acquisition (%)

			Location	Total (n)
Most difficulty issue	**Dar es salaam**	**Kyela**	**Mbozi**	
Lengthy procedures	30.0	30.0	40.0	20
Other difficulties (bribery, initial costs)	0.0	85.7	14.3	7
Total				27

4.3.3 Terms and conditions-informal sources

Results show that most informal borrowers borrowed form friends and relatives, followed by moneylenders and others small informal groups (Table 18). Loans were mainly in cash form and few loans were in consignment forms. Both three trader categories showed more or less similar results for friends and relatives, differing in moneylenders and other informal sources (burial organizations and millers).

Table 18: Source of informal loan (%)

	Trader category			Total (n)
Source of informal loan	Village assembler	Wholesaler	Retailer	
Friends and relatives	30.8	38.5	30.8	13
Moneylenders	28.6	57.1	14.3	7
Other sources	40.0	20.0	40.0	5
Total				25

The most important conditions put forward for informal loans were the witnesses and collateral. Collateral in form of home assets was acceptable. Other conditions were trustship and having wealthy guarantors (Table 19).

Table 19: Most important condition for informal loan (%)

Condition	Frequency	Percent
Collateral	3	12.5
Witness	12	50.0
Other conditions	9	37.5
Total	24	100.0

Accepted witnesses were mainly elderly persons , anyone knowing each other well and village/ward/market leaders (Table 20). The witness requirement and trustship were paramount to informal loan markets to both parties. The witness is important as

s/he will be needed upon default/delayed payments as per agreed schedules. However, informal loans unlike formal ones have greater room for flexibility on repayment and other terms. Sometimes the borrowers surrender their belongings as mortgage/security for the loan to the lender.

Informal lenders lend to someone they know to avoid risk of non-repayment. Results in the study area show that they lend to relatives, friends and well known traders. Kashuliza (1993), also noted that informal loans are largely given on trust between individuals or families who know each other well. Usually no major security items or collateral are put forward as guarantee for such loans.

Table 20: Type of witness required for informal loan (%)

Type of witness	Frequency	Percent
Government/Village leaders	1	7.7
An elderly person	3	23.1
Anyone you know	7	53.8
Others,	2	15.4
Total	13	100.0

4.3.4 Loan acquisition difficulties-informal loans

In most cases informal lenders are few and the few are not well known to traders. Likewise, their operations are unreliable as they can stop and resume lending without notice depending on their financial status at any given time. Selvavinayagam (1995) notes that, the drawback of informal credit, despite its usefulness for some purposes, is its high cost and lack of dependability. This lack of dependability is largely attributed to lack of capital among informal lenders.

4.3.5 Credit application failures

Results show that of the ungranted loan applications, various reasons were given for the failures. Among the reasons given by financial institutions for credit application failures was unviable projects. Many formal institutions do not have agricultural specific credit schemes. When an applicant submits an agricultural specific loan proposal, there is higher failure probability compared to other sectors. Agriculture is viewed as high risk investment. Other failed applicants were told to wait until applications are processed and sometimes this took a long time, if at all the promise is honored. Lack of funds was very common to SACCOS applicants as many such institutions are young and they suffer serious financial problems.

4.3.6 Credit linkage and relations

Traders in the grain marketing channel/system only lend money to those they know or to whom they have had a longstanding relationship who can be easily contacted and supervised. This implies that using the marketing system to channel donor or government funds downwards along the marketing channel may become difficult.

4.3.7 Traders opinion on credits

Credits are viewed as mutually beneficial to both parties. Results show that 55.4% of traders view credit as mutually beneficial (Table 21) On average, all trader categories view credit as mutually beneficial to both parties, i.e. lenders and borrowers. However, some traders view it as exploitative. The former is due to the fact that loans if well utilized can boost one's business, and in the longrun make the beneficiary able to repay the loan back. The later is due to high interest rates charged

by lenders. For instance, a 2%-3% fortnightly interest rate is superficially viewed as low by borrower, while in real terms is bigger than a 24% annual interest rate. Some institutions deceive their clients by subdividing their interest rate on as low as weekly basis so that they look normal while in actual fact are tremendously big when calculated on annual basis.

Table 21: General perception on credit

	Perception on credit		Total
Trader category (%)	Exploitative	Mutual	
Village assembler	47.6	52.4	21
Wholesaler	41.9	58.1	31
Retailer	45.0	55.0	40
Total			92

4.3.8 Source of capital

Enterprise establishment and development among poor are mainly hampered by lack or shortage of capital. One source of capital is remittances from family members, friends or neighbors. Another source is one's savings from wages, salary, farm or non-farm activities. In absence of either of the above sources, credit is an important source of capital (Kayunze and Twamala, 2000).

Results show that sources of initial working capital for grain traders was mainly through own saving, followed by grants/remittances given by relatives and friends and lastly credit (Table 22). This is due to the fact that most financial institutions don't offer credit to new businesses. One of the applicants' loan eligibility criteria is to have an ongoing registered business. For those who took loans for new businesses, majority secured from relatives and friends (informal sources), and a few from

banks, SACCOS and other sources (mainly FINCA). This means that grain businessmen have very low access to formal credits for starting new businesses. It implies that informal sources have their role to play in employment creation. Aliber (2002) in his study on informal credit in informal economy in Kampala found that the most striking observation was the degree to which loans from friends and relatives predominated. These loans constituted 70% of all loans used by respondents to start their new businesses. Results in this study further reveal that Mbozi traders had the highest own saving as source of capital followed by Kyela and Dar es salaam.

Table 22: Source of capital by location (%)

	Source of initial capital			Total (n)
Location	Own saving	Grants	Credit	
Dar es salaam	45.5	36.4	18.2	22
Kyela	61.4	25.0	13.6	44
Mbozi	82.9	14.3	2.9	35
Total				101

4.3.9 Linkages between informal credits and the marketing system

The study revealed that there are interlinkages between credits and grain marketing system. Grain traders give small credits to each other, to consumers and producers in cash and in-kind (Table 23). Results show that wholesalers had high lending rate than other two trader categories. It was observed that most retailers take in-kind (consignment) credit from wholesalers and middlemen and repay after selling the produce.

Table 23: Credit linkage

Trader category	Providing credit to others		Total
	Yes	No	
Village assembler	31.8	68.2	22
Wholesaler	42.4	57.6	33
Retailer	31.1	68.9	45
Total			100

Consignment or in-kind credits provide a secured supply and guaranteed sale of grains to lenders. At the same time it assures borrowers to stay in business even if they don't have cash at hand for crop procurement. For consignment credits, there is no interest charged but borrowers pay a higher price for the produce given in advance. Likewise, there are short and long-term cash loans amongst traders. Short-term credits between traders are common although they can sometimes be interest free. Bouman (1992), notes that informal loans sometimes bear no interest at all. Sometimes the lender has vested interest in extending interest free credit to customers. He further notes that there may be an expected reciprocity between parties; *do ut des*, which means I will help you now and you will help me later.

4.3.10 Preferred credit sources

Borrowing from friends and relatives (informal sources) ranked second in preference to borrowing from banks in all three locations, i.e. Dar es salaam, Kyela and Mbozi (Table 24). Friends and relatives out-beat moneylenders in preference. This is due to the fact that moneylenders charge higher interest rate than friends and relatives. Ledgerwood (2000) has similar argument that usually moneylenders charge relatively high interest rates and may not offer loan products or terms suited to the borrower. Informal sources are easier, quicker to obtain and involve lower or no

transaction costs and offer greater flexibility in repayment terms. For each preferred source, various reasons were put forward for the preference.

For banks, it is perceived that bank loans are reliable in their availability upon meeting set terms and conditions. Banks have lower interest rate than informal sources, offer relatively large size of funds and give longer loan duration. However, with banks there are many 'hidden costs' incurred by borrowers in terms of bribery (Table 17) and sometimes the borrower has to pay some money to his/her guarantors during loan application. Similarly, Bouman (1992) observed corruption to hinder credit accessibility and suggested that corruption by officials and interference by politicians in the targeting of beneficiaries should come to an end. In this study, it was also noted that a fear of losing personal belongings upon defaults was among reasons against seeking bank loans.

Table 24: Preferred credit source

	Credit source					
Location (%)	Bank	SACCOS	Moneylender	Friends and relatives	Other Financial Institutions	Total (n)
Dar es salaam	38.9	11.1	5.6	33.3	11.1	18
Kycla	29.7	40.5	2.7	10.8	16.2	37
Mbozi	43.8	6.3	6.3	28.1	15.6	32
Total						87

In this study, reasons given for favoring informal sources were mainly no collaterals needed, flexibility/negotiability, low transaction costs and other reason such as short procedures, traders experience with informal lenders (longstanding relationships), provision of a grace period before starting repaying, feel of closeness and friendship (Table 25). In his study in Kenya in manufacturing industry, Mayer (2002) observed

that principal reasons for using informal finances includes low interest rates, easier formalities and the fact that no collateral is needed. These findings are in line with the findings in this study. Bard *et al.* (2002) also urge that agricultural borrowers prefer a lender who can provide them with competitive interest rates, quick decisions on loan request and adequate loan amount.

Table 25: Distribution of respondents (%) by reasons for preference

		Preferred credit source					
Reason for preference (%)		Bank	SACCOS	Moneylender	Friends and relatives	Other Financial Institutions	Total (n)
	Low transaction cost	100.0	0.0	0.0	0.0	0.0	6
	No collateral needed	0.0	36.0	12.0	28.0	24.0	25
	Flexibility	0.0	0.0	15.4	69.2	15.4	13
	Other reasons	57.1	23.8	2.4	4.8	11.9	43
Total							87

The main reason for preference of SACCOS by borrowers was easy procedures. However, SACCOS suffer serious lack of capital and hence unreliability. A loan applicant can be told to wait until others pay their loans for him/her to obtain the loan.

4.3.11 Loan structure from formal and informal sources by location

Dar es salaam has many credit sources compared to other two places (Kyela and Mbozi). This is due to the fact that many formal financial institutions tend to concentrate their operations in big towns. This implies that traders in Dar es salaam can access credit with much easy than their counterparts in Kyela and Mbozi.

Aryeetey and Fenny (2006) in their study on access to low cost credit in Ghana found related results. They noted that in general, formal financial institutions are overwhelmingly urban-oriented from the point of view of both the distribution of branch network over the national territory and the concentration of their deposit-lending activities.

Table 26: Summary on loan structure received by respondents from formal sources and their locations

Formal loans Dar es salaam Source	Min (000)	Max. (000)	Number of respondents	Interest rate (%/month)	Loan Duration in months	Repayment
NMB	500	2,000	3	2	12	Monthly
SACCOS	700	1,200	2	2	6-12	Monthly
FINCA	300	1,000	2	3	3-12	Weekly
Karitas	350	350	1	3	6	Weekly
SEDA	1,000	2,000	4	2.5	12	Monthly
PRIDE	2,000	2,000	1	3	6	Weekly
Kyela						
NMB	50	5,000	9	2	12	Monthly
SACCOS	100	500	4	2	4-6	Monthly
FINCA	50	400	9	3	4	Weekly
Mbozi						
NMB	300	2,000	10	2	12	Monthly
SACCOS	500	500	1	1.5	6	Monthly

On loan processing time, the study reveals that it takes one to 45 days to obtain a loan from informal sources, while it takes on average longer time from formal sources. Informal credits are quicker to secure than formal credits. This implies that informal credits can be easily used to procure crops at peak seasons as crops are seasonal.

Table 27: Summary on loan structure received by respondents from informal sources and their locations

Informal loans Dar es salaam	Min(000)	Max(000)	Mean	n	%/week	Duration	Repayment
Friends and relatives	2,000	2,000	2,000	1	1.25-12.5	1-4 weeks	Week (at once)
Moneylenders	3,000	3,000	3,000	1	5-350	24 weeks	Month
Others (e.g. Burial organization, millers)	440	440	440	1	0.625-2.5	1-8 weeks	Month (at once)
Kyela							
Friends and relatives	50	1,800	517	9	1.25-12.5	1-4 weeks	Week/month
Moneylenders	50	500	275	2	5-350	24 weeks	Week/month
Others (e.g. Burial organization, millers)	10	500	302	4	0.625-2.5	1-8 weeks	Week/month
Mbozi							
Friends and relatives	200	2,000	1,100	2	1.25-12.5	1-4 weeks	Week
Moneylenders	200	200	200	1	5-350	24 weeks	
Others (e.g. Burial organization, millers)	-	-	-	-	-	-	-

Results show that informal lenders charge usury interest rates compared to banks. It ranges from 1.25% per week from relatives and friends to 50% per day for moneylenders giving 350% interest rate per week, while formal sources charge 1.5% to 3% interest rate per month. This reveals the disguised exploitative nature of informal credits.

As far as credit amounts are concerned, the study revealed that amounts for formal credits, ranged from 50,000 Tsh to 5 million Tsh. For first-time credit, most formal financial institutions have set a maximum amount. For instance, the maximum amount for Small and Microenterprise for NMB is one million Tsh. Ledgerwood (2000) urges that often formal financial institutions set a maximum loan size for first-

time borrowers, which increases with each loan. He further adds that this is designed to reduce the risk to the financial institution and create an incentive for the clients to repay their loans. Such incentive is known as the promise of a future larger loan. This is the case with institutions in this study too. In addition, increasing loan sizes enable the client to develop a credit history and an understanding of the responsibilities associated with borrowing.

Loan amounts from informal, ranged from 10,000 Tsh to 3 million Tsh. Informal sources offer relatively small amounts of credit. This can be attributed to their characteristic lack of capital and non-professionalism in their operations. Maswaga (2001) also notes that loans from informal sources are too small to justify remarkable development activities. Informal financial sources are characterized by short term lending, ranging from one day to few months. (Tables 26 and 27). Related findings by Bouman (1992) support these observations as he noted that informal lenders have financial problems, they can't lend to large projects with long repayment periods.

4.3.12 Credit information

On credit information a lot has been done by financial institutions to sensitize the public about credit availability. Majority of respondents were aware of credit availability (credit sources) in all three locations (Table 28). Dar es salaam had the highest awareness rate followed by Kyela and Mbozi. This is attributed to the availability of means of communication (mass-media) in Dar es salaam than the other two places.

Table 28: Awareness on credit sources (%)

Location	Awareness on sources of credit		Total (n)
	Aware	Not aware	
Dar es salaam	95.0	5.0	20
Kyela	94.1	5.9	34
Mbozi	90.0	10.0	30
Total			84

Mainly, traders got information on credit through media, relatives and friends and the remaining few traders got through outreach (Table 29). However, crosstabulation results show that information alone had no significant role ($p = 0.410$) to play on individuals willingness to apply for formal credits. Therefore, this means that there are other factors affecting credit accessibility. One can be well informed of credit availability in his/her area but can't participate as s/he does not qualify due to lack of collateral for instance.

Table 29: Credit information (%)

Trader category	Credit information source				Total (n)
	Media	Outreach	Friends	Other sources	
Village assembler	55.6	0.0	44.4	0.0	18
Wholesaler	75.0	3.6	21.4	0.0	28
Retailer	51.3	0.0	46.2	2.6	39
Total					85

4.3.13 Opinion on fund adequacy

The results show that majority of respondents had inadequate operating capital for their business to flourish (Table 30). Lack of capital has forced many grain traders in the study areas to handle little volumes of grains. For example, rice traders handled a minimum of 60kg to a maximum of 18,000kg per month, while maize traders on the other hand handled only 200kg to 32,400kg of maize per month. Wholesalers' opinion showed high fund inadequacy than other two trader categories.

Table 30: Opinion on funds adequacy (%)

Trader category	Whether funds adequate or not		Total (n)
	Adequate	Not adequate	
Village assembler	13.6	86.4	22
Wholesaler	12.1	87.9	33
Retailer	26.7	73.3	45
Total			100

4.3.14 Other factors affecting traders' participation in credit markets

Trader location on the other hand showed significant results for both formal and informal loan participation (p= 0.018 and p= 0.038). This implies that traders located in big towns, i.e. Dar es salaam are likely to access credits easily than those in small towns as there are many formal and informal financial sources in urban areas than in rural areas. Temu (1992) notes that many banks are concentrated in big towns and cities than in rural settings (Table 31). Further noted, is that Kyela and Mbozi district had higher number of borrowers from informal sources. This implies that, in absence of formal sources, traders opted for informal sources for loans.

Table 31: Distribution of respondents (%) on formal and informal credit by location

Response for formal credit		Location			Total (n)
		Dar es salaam	Kyela	Mbozi	
Access to formal credit (%)	Yes	17	26	14	57
	No	5	17	21	43
Total					100
Response for informal credit					
Access to informal credits	Yes	2	16	7	25
	No	20	27	26	73
Total					98

4.3.15 Credit accessibility by male and female traders

The results show male traders' dominate in credit accessibility from both sources (i.e. informal and formal sources), table 32. This is due to many cultural limitations on access to credit by females in most LICs. Similar results were obtained in other studies. FitzGibbon (2005) notes that under traditional law in Tanzania, women do not own land. It is noteworthy that this also directly impacts on women's access to financial services and in particular, to credit. Fletschiner (2004) adds that even when they (women) are part of a household that owns enough titled land, women may not be able to use the land as collateral to obtain loans. This can be explained in part by the fact that property rights are biased against women. Also Ledgerwood (2000), citing Islamic culture, adds that there are cultural barriers that restrict women to the home making it difficult for them to access financial services.

Table 32: Formal and informal credit access by gender

Gender (%)	Access to formal credit		Total
	Yes	No	
Male	59.0	41.0	61
Female	53.8	46.2	39
Total			100
	Access to informal credit facilities		
	yes	no	
Male	31.1	68.9	61
Female	16.2	83.8	37
Total			98

4.3.16 Loan demand

The estimated loan demand equation shows that explanatory power of the estimated loan demand factors was unsatisfactory. The R^2 (adjusted) is 29.1% of variation in loan demand in the study areas explained by variables included in the model.

However, Maddala (1991) urges that low R^2 values obtained may not mean that the model is not good. The F-test was statistically significant (Table 33) implying that it is unlikely to find out that the factors included in the model do not explain the variation obtained in loan demand by grain traders.

The coefficient of age of respondents was positive and not statistically significant, indicating a straight relationship between age and loan demand. This implies that as age increases, ownership of permanent assets increases. Permanent assets are prerequisites for loan eligibility as they stand for collateral. Coefficient for education level was positive and significant at 5%. This implies that as level of education increases, an individuals' likelihood to need a loan increases as education is pivotal in loan acquisition and utilization.

Marital status on the other hand showed negative coefficient but significant at 10%. This has an implication in that, married couples jointly decide on loan application in most cases. However, women face disadvantages through inequitable customs and practices in Tanzania. Marriage can become an obstacle for women to access credit on their own. This can have undesirable effects on loan application. Gender showed significant results in a sense that loan requirement may differ between male and female due to the nature of their culturally defined roles and education backgrounds. Kashuliza (1993) notes that females have a restrained access to formal credit than males because of their generally lesser education and socio-cultural constraints. Different trader categories have different loan requirements. In general, large wholesalers' loan requirement differs from petty-retailer selling the same product. In

the study areas, it was noted that retailers secured smaller amounts of credits than wholesalers.

Traders located in rural areas have limited access to formal credit facilities. Traders in rural Kyela and Mbozi are more disadvantaged on credit access as compared to traders in Kinondoni. This has a direct negative implication on loan demand. The coefficient for interest rate, though insignificant, showed a negative sign implying that as interest rate increases, traders won't apply for loan. This has a negative effect on loan demand. Loan demand undoubtly exists amongst Tanzanian grain traders.

Table 33: Regression results: Loan demand

Variable	Coefficients		t	Sig.
	B	Std. Error		
(Constant)	111480345.162	1367308.582	1.083	.286
AGE	11880.888	24738.320	.480	.634
EDUCATIO	699525.810	285483.688	2.450	.019**
MARITAL	-242728.091	121489.090	-1.998	.053***
GENDER	1007365.87	303906.386	-3.315	.002*
TRADERCAT	94432.753	191606.343	.493	.625
LOCATIO	-184187.791	197684.284	-.932	.357
STOCK	-1283.292	1998.671	-.642	.525
INTEREST	-157904.437	141509.458	-1.116	.271
OTHERACT	-79935.119	41945.304	-1.906	.064***
YEARS	37467.359	29660.636	1.263	.214

R^2 , adjusted = 0.291

F value = 3.014***

*= Significant at 1% Confidence level

** = Significant at 5% Confidence level

*** = Significant at 10%Confidence level

4.3.17 Participation in credit market

The estimated participation equation shows that explanatory power of the estimated participation factors is satisfactory (Table 34). The R^2 (adjusted) is 73.5% of variation in loan demand in the study areas explained by variables included in the model. The coefficient for interest rate was negative implying that, as interest rate increases the likelihood of individual traders to participate decreases and vice versa. On information/awareness, results show that traders' general awareness of the formal credit channels available in their area or district has a strong bearing on their participation or non-participation in credit markets. Ignorant traders are likely to miss the opportunity to participate in formal credit markets.

Once funds are inadequate, the likelihood to participate in credit markets increases. This can be noted by negative coefficient (though not significant) for funds adequacy. The coefficient was negative implying inverse relationship between the two. Income reflects the capacity of borrowers to pay back loans. However, in this study income coefficient showed negative sign implying that as income increases, participation decreases. This means that wealthy grain traders don't need credit because they have enough operating capital. On education, the higher the level of education the more the likelihood to participate in credit markets. This is shown by the positive coefficient in the results. The general argument is that grain traders with higher levels of education are expected to have better knowledge on the role of credit and procedures to obtain formal credits than less informed/educated traders.

Table 34: Regression results: Participation in credit market

	B	S.E.	Sig.
INTERES	-2.820	3.543	.426
INFORM	-1.142	1.595	.474
FUNDAD	-5.800	2.002	.004*
INCOME	-.831	.637	.192
EDUC	44.448	25346.421	.999
Constant	45.411	17568.802	.998

R^2 , adjusted = 0.735

*= Significant at 1% Confidence level

** = Significant at 5% Confidence level

*** = Significant at 10%Confidence level

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The study found that both maize and rice traders have general characteristics common to all three study areas. The traders are fairly well educated. The majority were married and generally the grain business is dominated by males. Most traders were in the active/productive age. It was further noted that apart from grain trade, most traders were engaged in other income generating activities to supplement income from trading. The grain marketing channel was basically similar for both crops, comprising of farmers, village assemblers, wholesalers, retailers and consumers with relatively little or no value addition from one actor to the other handling little volumes of the crops. Grain markets were unreliable, prices uncertain with serious poor market information flow.

It was also noted that majority of the grain traders don't keep records although the need is there. Various reasons were given by traders for not keeping records including the lack of knowledge on importance of record keeping and ignorance, some felt they didn't need the records. It was further revealed that own saving was the major source of capital among grain traders with few gifts/granted capital/remittances and credit. This was due to the fact that most formal financial institutions don't offer start-up loans. On information, traders in Dar es salaam got easily informed on credit availability than those in Kyela and Mbozi as the former location has many mass media for communication compared to the latter two locations.

The first objective was to identify sources of finances available to maize and rice/paddy traders in Tanzania. Both formal and informal sources of credit were identified, operating with varying terms and conditions.

Formal sources included commercial banks, formal non-bank financial institutions, microfinance institutions, NGOs, and other registered financial institutions. Their operations are regulated by government bodies such as the central bank (BOT). Included in formal financial institutions were those registered by government authorities but not regulated/supervised directly by central bank, in some literature referred to as semi-formal institutions like SACCOS. It was also noted that formal financial institutions are concentrated in major towns in Tanzania. Informal sources on the other hand comprised of friends and relatives, moneylenders and other lenders such as millers and informal groups such as burial groups. Friends and relatives comprised of the majority of the lenders in this category. Moneylenders, though few were found, but they are worth mentioning due to their characteristic of charging exorbitant high interest rates to their clients.

The second objective was to assess formal and informal credit acquisition practices for grain traders and the associated constraints and opportunities in the study areas. Results revealed that both formal and informal lenders have varying terms and conditions to be met by their clients for loan eligibility with varying difficulties for each source. Credit might be available from a financial institution, but the terms under which it is provided is considered to be difficult for most grain traders/entrepreneurs.

Each formal financial institution has instituted its well outlined procedures for loan acquisition. For each institution, terms and condition for eligibility are laid down in whish most of them emphasize on collateral requirement. Collateral, credit rationing, bureaucratic and lengthy procedures of providing loans in the formal sector keep most of the grain traders outside the boundary of the formal sector financial institutions in Tanzania. Small borrowers like microentrepreneurs lack sufficient fixed assets to satisfy most financial institutions collateral formalities.

Also, most formal financial institutions were found not to fund new businesses (start-up capital). Exceptions were for few microfinance institutions like FINCA. It is urged that credit institutions and intermediaries have to have the courage to trust new borrowers and to venture into new areas of financing when and where prospects for enterprise viability and loan repayment are high.

The above review indicates that access to formal credit for grain traders is very limited. Regression results on participation further support this assertion as it shows that different factors have varying influences on individual willingness to apply for loan. To cite a few, interest rate has an inverse relation to individual's willingness to participate in credit market. As interest rate increases, individual participation decreases. On the other hand literacy showed positive relationship.

Also the demand for loan from formal financial institutions was found to be affected by different factors both positively and negatively, among which interest rate falls again. Others being gender, marital status, age, etc. Meanwhile, the application

process from formal sources imposes high disturbances on credit applicants, i.e. waiting in bank queues, overcoming language obstacles in application forms, producing legal documents and enduring lengthy delays while waiting for a verdict on the applications.

Informal/private lending is an important source of credit in Tanzania. However, it is poorly organized, offers small amounts with relatively high interest charges compared to formal loans. The failure of formal finance to reach small borrowers has meant that the majority of the small borrowers continue to fall back on various non-commercial sources such as friends, relatives and money lenders. Flexibility, speed, trust and personal relationships constitute the main strengths of informal finance. There are, however, many limitations and disadvantages of informal credit, particularly from money-lenders who charge very high interest rates on loans. High interest rates invariably mean that borrowing is often restricted to small amounts obtained for brief periods. In general, loans from informal sources are inadequate for large investment purposes such as start-up capital needs. However, informal sources have potential development role which is minimally utilized. Despite their exploitative nature, the informal lenders have a significant role to bridge the gap that exists as a result of formal sector not being able to cover the entire population due to limited resources. The credits from informal sources assist borrowers to smoothen seasonal cash flow and synchronize income and expenditure, meet immediate crop purchase and payment for other services such as crop transportation charges.

The third objective was analyze the nature of financial linkages between traders, farmers and financial institutions. It was found that grain traders give small credits to each other, to consumers and producers in cash and in-kind (consignment). Cash credits sometimes bear no interest. For consignment credits, there is no interest charged but borrowers pay a higher price for the produce given in advance.

5.2 Recommendations

The last objective was to provide policy implications and recommendation measures. From the above findings it can be noted that obstacles to financial market development cannot simply be addressed with macro-economic policy reforms. There are many interlinking issues to be tackled. The results presented here pave the way for some policy targeting as outlined below:-

i. Formal-Informal linkages

It is worth noting here that there is no unique financial institution that can provide adequate financial services in Tanzania. An alternative to current problems is to establish linkages. The Government can play effective supporting role to establish and strengthen linkages between the formal and informal financial sectors. One approach is to mobilize the respective comparative advantage of the informal and formal rural financial sectors. The informal sector meanwhile can offer a good relationship with the community and information that can help to identify potential borrowers with good fund management skills, loan repayment history and promote timely repayment. The formal sector on the other hand, meanwhile, can offer considerably more resources for lending than can the informal lenders. Now the

government is needed to take advantages of the two and facilitate loan accessibility by traders. The government should encourage banks (and perhaps give incentives) to enter into closer relationships with informal lenders and NGOs, as a mechanism to mobilize deposits from and deliver credit to the SME sector. This could retail more credit to the SMEs if well implemented.

ii. Engage in group lending

This methodology is highly practiced by FINCA and few other non-bank organizations. It is hereby recommended to banks to go for group lending option. The principle of group-credit is that the members' joint liability for the loans inspires peer monitoring and effective elimination of the need for conventional collateral. Members of newly formed groups engage in entrepreneurial training with/without regular saving for several weeks before they become eligible for the loan. This in part gives time to the group to build up some collateral for the loan in form of savings and also serves to inculcate to the group solidarity, cooperation and inter-dependence which are critical for future success of the group. On group lending, Selvavinayagam (1995) adds that it can reduce administrative costs of lending to small borrowers. It provides economies of scale in lending to homogenous groups rather than geographically dispersed households. Borrower access is enhanced and transaction costs for the borrower are likewise reduced. Collateral requirements can be eliminated or reduced by group liability.

iii. Subsidized interest rate

The government should refrain from giving loans on subsidized interest rates as is the case with entrepreneurs' loans now being administered by NMB and CRDB banks in Tanzania. In longrun, this can create a non-repayment culture among Tanzanians. In Sub-Saharan Africa, programs that target specific populations with subsidized interest rates have generally suffered low repayment rates, institutional dependency, and limited growth unless they continue to receive new subsidies from donors or governments. There is a very long history of subsidized interest rate programs that have failed, decapitalized, and died after the donor project ends. Also on interest rates, it is urged that lending rates should reflect the costs of providing financial services, which would include the cost of funds (opportunity cost of capital), a premium to cover default risk, administrative costs, plus a profit to ensure institutional sustainability. Therefore, basing on the study results, I urge that the interest charges should reflect the real costs plus some profit, neither understated nor exaggerated. Development assistance focusing on subsidized credit as a means to expand credit flow to small borrowers does not reduce transaction costs or minimize risk in lending. The challenge for the government, lenders and small borrowers is to design financial services that would build sustainable financial intermediation as reflected by high loan repayment and low administrative costs.

iv. Market information

Due to frequent information breakages on market condition especially prices, the government need to establish effective extension service activities and improve transportation, distribution and communications infrastructures from urban to rural

areas. These will in longrun increase productivity and the return on investment. These interventions would reduce borrowers' risk of default.

v. Legal improvement

Legal framework should also be improved to facilitate entrepreneurs' use of formal finance. The government through the ongoing strategies under MKURABITA should fasten the establishment of clear property rights for borrowers. Different properties can serve as collateral for loans. The problem is on right of ownership and issuance of legal documents, especially to land. Though the process is ongoing, the pace at which it is implemented is unsatisfactory.

vi. Warehouse Receipt System

As stipulated by Mukwenda (2005), it is here again recommended that deliberate efforts should be made to emphasize on Warehouse Receipt System (WRS) in order to improve loan accessibility by grain traders in Tanzania. Although the system is in operation in some parts of the country, its potential is minimally utilized in terms of scale of operation, location and product coverage. Onumah and Coulter (2002) define warehouse receipts (WR) as documents issued by warehouse operators as evidence that specified commodities (of stated quantity and quality) have been deposited at particular locations by named depositors. The depositor may be a producer, farmer group, trader, exporter, processor or indeed any individual or corporate body. The commodity remains the property of the depositor until sold at market, while the warehouse operator can extend credit in the form of cash to people who deposit commodities in his warehouse. They further argue on advantages of WRS that the

use of WRS is often associated with structured financing transactions, which ensure that if a transaction proceeds normally then the lender is automatically reimbursed (i.e. the loan is self-liquidating), and if it goes wrong the lender has recourse to collateral that can be liquidated with minimum difficulty. For the WRS to be sustainable, warehousing schemes must appeal to a wide clientele, not just smallholders, and build large volumes, reduce unit costs and improve overall system efficiency.

vii. Promotion and backstopping credit facilities

The government is promoting the formation of primary cooperative societies in Tanzania. However, most of those societies suffer from serious lack of capital for lending to their members. Most of them don't qualify for loans from commercial banks. It is time for the government to let the societies obtain low cost loans from commercial banks so that they can use the money as capital to lend to their members.

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APPENDICES

Appendix : Traders questionnaire financing agricultural marketing in Tanzania; a case of rice and maize traders in Kyela, Mbozi and Dar es salaam

Questions to be addressed to the entrepreneur or business owner

Name of enumerator.....Date of interview.....
Respondent number.....

1.0 BASIC INFORMATION

1.1	Socio-economic and demographic characteristics	
A01	Study title	*1=Miller,2= Grains/Staples trader, 3 = Horticultural trader*
A02	Trader category	*1= Village assembler, 2 = Whole seller(buyer), 3 = Whole sellers (Seller), 4= Retailer, 9= Missing*
A03	Miller category	*1= Small scale,2= Medium scale, 9=Missing*
A04	District	.....
A05	Age	.....*years*
A06	Gender	*1= Male 2= Female*
A07	Marital status	*1=Single, 2=Married, 3= Divorced, 4= Widowed, 5= Separated*
A08	Education level	*1= None 2= Primary 3= Secondary 4= University/College 5= Others, specify*
A09	Major occupation	*1= Farming, 2= livestock keeping, 3= Employed, 4= Trader ,5= Others, (specify*
A10	Apart from trading, what is the other major activity do you have as source of income?	*1= Farming only 2= Farming and livestock 3= other business 4= Employed 5= Others, (specify), 9=Missing*

2.0 TECHNICAL MANAGEMENT AND MARKETING

A11	How many years have you been in business	..... *years*
A12	What products do you deal with	*1= Maize, 2= rice, 3= Vegetables, 4= Fruits, 5= Others*
A13	From whom do you buy the products	*1= Direct from farmers, 2= Assembly markets, 3= Middlemen , 4= Whole seller,5= Others*
A14	To whom do you sell your products	*1= wholesellers,2= retailers,3= direct to consumers*
A15	What is the capacity of your mill	.....*Kg of maize/rice*
A16	On average how much kilograms do you mill per day?	.....*Kg*
A17	What is the reason for this?	*1=No enough grains,2=electricity=others (Specify)*
A18	What is the average duration of stockholding stock?	..... *weeks, 9 =Missing/don't know*
A19	On what basis do you decide to hold the stock	*1=Wait for better prices, 2= perishability, 3=Reduce marketing costs, 4= others (specify)*
A20	What is the average duration of stockholding of finished products?	.....*Months, 9=Missing/don't know*
A21	On what basis do you decide to hold the finished products?	*1=wait better market price, 2= perishability ,3=others (specify), 9= Missing*
A22	Do you have enough market of your products?	*1=yes,2=little,3=no*
A24	What is your source of power?	*1=Diesel, 2= Electricity, 3= Solar, 4 =Others (Specify)*

3. 0 MARKETING COSTS

A25	Do you keep records of your transaction?	*1=yes,2=No*
A26	If yes what record do you keep?	*1=Sales 2= Expenditure, 3=Both, 4=Others (specify)*
A27	If no why?	*1=Don't know to keep record,* *2= No need for record, 9=missing/do not know.*

For the most recent month indicate quantity handled per month

Type of operation	**Type of products** (A28-A76)			
	.....	.....	.....	.....
Quantity Purchased (Kg)				
Buying price (Tsh)				
Packaging				
Labor employed by wholesaler to pack and unload				
Transport				
Market fees				
Market agent fees				
Total costs				
Quantity sold				
Selling price				
Revenue				

4.0 SOURCE OF FINANCE

4.1	Source of investment capital	
A77	How did you get the initial capital to enter into business	*1= Own saving,2= Grants,3=Credit* *If not credit go to A70*
A78	If credit mention the most important source	*1= Bank, 2= SACCOS,* *3= Friends and relatives , 4=Money lender, 5=Others, (specify)*
A79	How did you get the information of the credit source	*1=media, 2=outreach, 3=friends, 4= Other (specify)*
A80	Do you know any other financing sources other than the one you used?	*1=Yes, 2=No*
A81	If yes, mention the sources.	*1=Microfinance institutions, 2=NGO,3=Trust fund*
A82	What is the source of finance do you have for day-to-day purchases?	*1= Own saving, 2= Credit* *3= Differed payments*
A83	Are the funds adequate?	*1 = Yes 2 = No*

5.0 CREDIT UTILIZATION

5.1	Credit Terms and conditions	
84	Have you applied for any credit from any source	1=Yes, 2=No
85	If credit mention the most recent source .	*1= Bank, 2= SACCOS, 3= Friends and relatives , 4=Money lender, 5=Others, (specify)*
A86	What was the primary purpose for that credit?	*1=Operational, 2= Expand business, 3=Others (specify)*
A87	What is the most important condition you were required to meet for obtaining the loan?	*1=Business record, 2=Collateral, 3=Referee, 4=other (specify)*
A88	What most important condition did you consider too difficult to meet?	*1=Business record, 2=Collateral, 3=Referee, 4=other (specify)*
A89	If collateral, in what form	*1= Permanent structure e.g. house 2 = Movable assets e.g. car, machinery 3 = Land 4 Animals 5 Anything valuable, 6 = Others, specify*
A90	How long did it take to process the loan?	*……months*
A91	Were there any difficulties in loan acquisition?	*1=yes, 2=no*
A92	If yes, what was the most difficulty issue?	*1=Lengthy procedure, 2=High transaction cost, 3=Others (Specify)*
A93	Did the loan meet your requirements?	*1= Yes, 2= No*
A94	Did you apply for a loan from any other institution	*1=Yes,2=No*
A95	If yes what institutions	*1=NGO, 2= Microfinance institution (name the institution and the NGO)*

Indicate terms of the loan, sources and number of times you borrowed

5.2	terms of the loan	*Units*
A96	Amount of loan	*.....Tsh*
A97	Loan duration	*.....Months*
A98	Interest rate	*.....Tsh*
A99	Repayment frequency	*.....Weeks/Months*
A100	Amount per installment	*.....Tsh*

	Informal credit	
A101	Do you have access to any of those informal credit facilities?	*1 = Yes 2 = No*
A102	If yes, which ones have you ever borrowed from?	*1= Friends and relatives, 2= Money lenders, 3= Others (specify)*
A103	In what form?	*1 = Consignment, 2 = Cash form 3 = Transport, 4= Others (specify)*
A104	What was the amount?	*……Tsh*
A105	What was the interest rate?	*……Tsh*
A106	Loan Duration	*……Weeks*
A107	Repayment frequency	*……Weeks*
A108	Mode of paying	*1= By cash 2 = Reduce from crop 3 = Other (specify)*
A109	If cash, what is the amount per installment	*……Tsh*
A110	What is the most important condition you were required to meet for obtaining the loan?	*1=Business record, 2=Collateral, 3=witness, 4=other (specify)*

A111	If witness who?	*1 = Government/ village leaders 2 = Political leader 3 = An elderly person 4 = Formal lawyer 5 = Anyone you know 6 = Others, specify*
A112	If collateral, in what form	*1= Permanent structure e.g. house 2 = Movable assets e.g. car, machinery 3 = Land 4 Animals 5 Anything valuable, 6 = Others, specify*
A113	How long did it take to process your loan	.....Days
A114	Relation ship with the informal lender	*1 = Relative 2 = Well known and friends 3 = They lend to anyone with collateral 4 = Other (specify)*
A115	For the credit application failures (both from formal and informal sources). What is the most important reasons given by institutions/lender for unsuccessful applications	*1 = unviable project 2 = Pending (told to wait) 3 = Lack of funds, 4 = No reason 9= Do not know/missing.....*
A116	Which is you most preferred credit source	*1=bank,2=SACCOs, 3=Money lender, 4=Friends and relative 5=NGO, 6=MFI*
A117	Why do you prefer it?	*1=Low transaction cost, 2=No collateral needed, 3=Flexibility, 4=No interest charged, 5=Other (specify)*

6.0 CREDIT LINKAGE

A118	Do you provide any credit to other people?	*1=Yes, 2=No*
A119	If yes, to whom?	*1=Producer, 2=Other traders*
A120	In what form?	*1= Cash, 2= Input, 3=Consignment*
A121	What is your most preferred credit form	*1=Cash, 2=Crop, 3=input*
A122	Why do you prefer it?	*1=Timely, 2=Secured supply 3=Simplify crop procurement 4=To avoid risk of non payment 5= Guaranteed sales 6=Other (specify)*
A123	What is the repayment form?	*1=Cash, 2=Produce.*
A124	How do you perceive the nature of the credit?	*1= Exploitative, 2=Mutual*
5.1	**Transaction cost**	
A125	What are the estimated costs of loan processing?	..... *Tsh per loan*

7.0 MILLING PERFORMANCES

	Type of cost	*Quantity*	*Amount (Tsh)*
A126	Rent		
A127	Maintenance /repair		
A128	Labor		
A129	Electricity		
A130	VAT		
A131	Buying maize		
A132	Buying paddy		
A133	Transporting raw materials		
A134	Transporting finished products		
A135	Electricity		
A136	Packaging		
A137	Water		
A138	Fuel		
A139	Advertising		
A140	Others (specify)		
A141	Total cost		

For the most recent months indicate costs incurred
For the most recent months indicate income you generate per month

Sell of milled products

	Source of income	*Quantity sold Kg*	*Selling price Tsh*	*Total revenue Tsh*
142	Rice			
143	Maize flour			
144	Maize grits			
145	Bran			
146	Others			

Milling others grains

	Source of income	*Quantity milled Kg*	*Price per kg Tsh*	*Total revenue Tsh*
147	Milling maize in to flour			
148	Milling maize into grits			
149	Milling paddy			

THANK YOU FOR YOUR COOPERATION

CHECKLIST FOR FINANCIAL INSTITUTIONS

BASIC INFORMATION
Name of Institution.....
District..... Division.....
Nature/Type of organization E.g. Bank/SACCOS/Primary Cooperative Society.....
Date of establishment
Documented or officially stated objectives
Formal registration

LOAN CONDITIONS/ORGANISATION
Type of financial support provided
Decision making process for loans applied
Conditions and eligibility for loans
Policies and lending procedures
Terms of the loan (interest rate, loan duration, repayment schedules, collateral requirement, others)
For SACCOS, information on membership (eligibility, contributions, others)
What are the loan processing costs incurred by the institution?

LOAN REPAYMENT/FINANCIAL ASPECTS
Loan repayment rate
Delayed and default payments and their remedies
Levels and trends of loans, purposes, beneficiaries, conditions, collateral, and repayment schedule
Any other relevant information

EXPERIENCES IN LENDING AGRICULTURAL ENTERPRISES
Whether they have agricultural specific loans
What are the opportunities available in agricultural lending?
What are the problems/challenges encountered?