EVALUATION OF DEMAND-LED MICROFINANCE AS A STRATEGY FOR SUSTAINABLE RURAL POVERTY ALLEVIATION IN NIGERIA: A CASE STUDY OF SELECTED LOCAL GOVERNMENT AREAS IN KADUNA STATE

BY

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CERTIFICATION

This Dissertation entitled **AN EVALUATION OF DEMAND-LED MICROFINANCE AS A STRATEGY FOR SUSTAINABLE RURAL POVERTY ALLEVIATION IN NIGERIA: A CASE STUDY OF SELECTED LOCAL GOVERNMENT AREAS IN KADUNA STATE** meets the regulations governing the award of the degree of Doctor of Philosophy (PhD) in Economics of Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DECLARATION

I hereby declare that this dissertation is written by me and that it is a product of my own research work. It has not been presented before in any previous application for a higher degree elsewhere. All ideas that did not originate from me have been duly acknowledged by way of references and quotation marks.

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DEDICATION

This work is dedicated to my beloved wife

PHARM. (Mrs) Mohammed, Boma Blessing

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"All to Jesus I surrender, All to Him I freely give, I will ever love and trust Him; In His presence daily live" All glory and honor be unto God who granted me favour and grace to complete this work.

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ABBREVIATIONS

ADP	Agricultural Development Programme
ACGS	Agricultural Credit Guarantee Scheme
AEP	Agricultural Employment Programme
BL	Back to Land
CBN	Central Bank of Nigeria
CCPI	Composite Consumer Price Index
CPI	Consumer Price Index
CAC	Corporate Affairs Commission
CAMA	Companies and Allied Matters Acts
CHELTECH	College of Chemical and Leather Technology
DFRRI	Directorate for Roads and Rural Infrastructure
FEAP	Family Economic Advancement Programme
FSP	Family Support Programme
FCPE	Free Compulsory Primary Education
GDP	Gross Domestic Product
GSM	Global System Mobile-satellite
GR	Green Revolution
GWA	Giwa
HDI	Human Development Index
ISA	Integrated Services Approach
KUD	Kudan
LCHS	Low Cost Housing Scheme
LA	Latin America
LPO	Local Purchase Order
LFTM	Linking Food and Training with Microfinance
MFBs	Microfinance Banks
MFI	Microfinance Institution
MRE	Micro Retail Enterprise
MPI	Multidimensional Poverty Index
MDGs	Millennium Development Goals
MKR	Makarfi
NAPEP	National Poverty Eradication Programme
NAPEC	National Poverty Eradication Council
NDE	National Directorate for Employment
NEEDS	National Economic Empowerment and Development Strategy
NACRDB	Nigeria Agricultural Co-operative and Rural Development Bank
NACB	Nigerian Agricultural and Co-operative Bank
NMCC	National Microfinance Consultative Committee
NGO	Non Governmental Organization
NDIC	Nigeria Deposit Insurance Corporation
NCAT	Nigerian College of Aviation Technology
NITT	Nigerian Institute of Transport Technology
NARICT	National Research Institute for Chemical Technology

OFN	Operation Feed the Nation
ODA	Overseas Development Administration
PBN	Peoples' Bank of Nigeria
PAP	Poverty Alleviation Programme
RBDA	River Basin Development Authority
REB	Rural Electrification Board
RRF	Rediscounting and Refinancing Facility
ROSCAs	Rotating Savings and Credit Associations
SAP	Structural Adjustment Programme
SPW	Special Public Work
SSE	Small Scale Enterprises
SSA	Sub-Saharan Africa
SDI	Subsidy Dependence Index
SAB	Sabon Gari
SPRMM	Segmented Rural Poor Microfinance Model
UNDP	United Nations Development Programme
UNCDF	United Nations Capital Development Fund
VSD	Vocational Skills Development
ZAR	Zaria

ABSTRACT

The government have sponsored and supported supply-led microfinance schemes and institutions both to improve rural growth and equity and to neutralize urban-biased macroeconomics policies. Because of high risks, heavy transaction costs and loan losses, many of the rural microcredit schemes have drained state resources, reaching only a small part of the rural poor and making little or no progress towards poverty alleviation and financial self-sustainability. Following these, the 2005 microfinance policy jettisoned supply-led microfinance for demand-led microfinance anchored on old and new institutions. The change in policy was intended to provide sustained access to micro credit and to achieve financial self-sustainability for microfinance institutions as a strategy for sustained rural poverty alleviation. The 2005 microfinance policy emphasis is on the replacement of public funds with market funds in microfinance institutions in order to encourage the pursuit of financial self-sustainability within the context of private profitability. This raises the question of the cost implications of full market supply of micro credit to the rural poor as a strategy for rural poverty alleviation. Furthermore, how would market determined cost impact on affordability and sustained access to micro credit by the rural poor? Again, how would the pursuit of financial self-sustainability impact on sustainable rural poverty alleviation? This study used field survey, Outreach and Repeated Use Approach, and the Subsidy Dependence Index to evaluate the operations and services of microfinance banks and the implications for sustainable rural poverty alleviation. It also assessed the performance of microfinance banks in rural poverty alleviation and investigated the impact of the drive towards financial self-sustainability by microfinance banks on sustainable rural poverty alleviation in Nigeria. The findings of this study show that information asymmetry characterized the operations and services of microfinance institutions. This led to adverse selection of credit products by rural poor borrowers. Furthermore, the findings indicated that outreach of microfinance banks was not significant in terms of target clients/population, women participation and number of active borrowers. Repeated use of loans by borrowers from the selected five microfinance banks in the study area were not significant for good performance in terms of generating gains to the borrower over time requisite for sustainable rural poverty alleviation. The demand-led microfinance as presently constituted and practiced in Nigeria is not financially self-sustainable and is incapable of achieving sustainable rural poverty alleviation. Along with other instruments of economic policy, this study recommends an alternative microfinance model called SEGMENTED RURAL POOR MICROFINANCE MODEL that would ensure private profitability, sustainability and keep balance with the desired social impact of rural poverty alleviation.

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND TO THE STUDY

Finance is an indispensable management tool for all forms of formal and informal economic activities, e.g. agriculture, manufacturing, public and private sector activities. Finance is concerned with the acquisitions, management and control of money. It is needed for the purchase of capital goods such as machinery and chemical inputs, man power development (education) and for the maintenance of liquidity within the production system. A poorly developed, disoriented and off-target financial/credit system only serves as an obstacle to the enhancement of socio-economic welfare and promotion of human dignity (Ukpak, 1996).

Micro finance plays pivotal roles in the implementations of rural poverty alleviation programmes and policies (Jacob, 1994). This is because one strategy that has assumed universal acceptance and adoption in rural poverty reduction models is the provision of micro-finance to the economically active poor (Attah, 2005). The basis for this belief is the assumption that such category of the rural population only needs financial empowerment to realize their dreams and unleash their potentials. Access to micro-finance has assume a considerable level of importance in view of the fact that it enables the poor to create, own and accumulate assets and ensures smooth consumption pattern (Olaitan 2005). When access to micro-finance is sustained it helps to alleviate poverty by generating income, creating employment, fund children education, enable families to obtain health care and empowering the rural poor to make choices that best serves their interest or needs (Annan, 2005).

Micro finance involves the provision of credit, savings, repositories and other financial services to poor house-holds and low income earners to create or take advantage of income yielding investment opportunities and other financial opportunities or expand existing economic activities in order to improve their standard of living (See Olaitan, 2001). The Canadian international Development Agency (2005) has included in micro finance the provisions of small loans to micro enterprises, agriculture, educational and consumption purposes savings facilities and other financial products such as insurance, housing, and pension funds. Micro finance has been proved to be successful (see Olaitan 2005) in opening economic opportunities for the poor, increase their access to resources, build their confidence and well being.

The provision of micro finance helps to facilitate the procurement of capital inputs needed for production. Micro finance has become essential in Nigeria because financial resources at the rural level are so limited that they can hardly support a moderate infusion of capital into productive activities to enhance the efficiency of other inputs. In view of this; providing affordable credit to the rural populace has long been a prime component of Nigeria's rural poverty alleviation strategy.

The government and donors have sponsored and supported supply-led (the provision of microfinance institutions and financial products and services with the demand following) micro finance institutions both to improve rural growth and equity and to neutralize or mitigate urban- biased microeconomic policies. According to Jacob (1994), because of high risk, heavy transaction costs, and monitoring loan losses, many of the rural micro credit

schemes have drained state resources, reaching only a small part of the rural population and making little progress toward poverty alleviation and self-sustainability.

However, the 2005 microfinance policy of the Obasanjo administration jettisoned supply-led micro finance for demand-led (the demand for the financial products and services of microfinance institutions leading to the creation of microfinance institutions) micro finance policy anchored on existing and new financial institutions (especially commercial banks and Community banks, and microfinance banks). The change in policy is intended to achieve self sustainability for micro finance institutions and provide sustained access to micro credit. The question is: Will the demand led microfinance policy sufficiently address the problem of financial self-sustainability? Is this policy capable of ensuring sustained access to micro credit for the rural poor? This study finds it's relevance in investigating and providing answers to these and other questions.

The world bank (1996a) has indicated that more than 1.3 billion people in the world live in poverty and more than two-third of these people live in rural areas. Consequently, rural development and poverty alleviation have been the concern of most developing nations, international development agencies and a vast majority of non government organizations in recent years.

The strategies for achieving the goal of rural poverty alleviation has tended to depend on the perceived extent of poverty, the set of values inherent in the vision for its reduction and available human and material resources. The international community's commitment to the reduction of poverty led to the declaration of Millennium Development Goals (MDGs), in year 2000 which is focused on cutting by half the proportion of people living on less than one

US Dollar a day and those who suffer from hunger by 2015(Olaitan,2005). Following this, development strategies in recent times are basically driven by the desire to achieve the MDGs of nutrition, education, health, gender equity, productive employment etc.

Despite the fact that most people are familiar with the term poverty, and its numerous definitions, the understanding of the concept is multi dimensional and complicated. According to Iniodu (1997) poverty is often described as the state or condition of living in which people have little or no money, assets, or means of adequate life support. Some development economist (eg Burkey, 1993) defined poverty with reference to basic human needs which the individual must have in order to survive. A family may be said to live in poverty when it is unable to satisfy its basic needs. The concept of basic needs from a restricted perspective has to do with food, clothing and shelter (Iniodu, 1997). In the view of Burkey (1993:3) basic needs include clean water, air, an adequate and balanced diet, emotional and physical security etc. Attah and Joe (2005), see poverty as a state of deprivation which encompasses issues such as lack of access to economic, social, political and religious opportunities. In specific terms, poverty involves sub-optimal access to good food, education, health care and employment resulting from defined inhibitive economic and social factors.

It has become extremely essential to note that in the real sense of the concept of a rural setting, the issue of poverty goes beyond the limitations of income and food. As much as income is an element for great consideration in the definition of poverty, social relations will necessarily constrain a social analyst to consider as equally important total resources needed for appreciable level of existence. The Overseas Development Administration (ODA 1995:37) remarked that to use aggregate income data as the sole measure of poverty may obscure the

misery of peoples' lives, since income alone does not adequately capture the reality of poverty in any rural community. Therefore, this study views rural poverty as constituting poor access to income yielding opportunities, food, education, health care, portable waste, shelter and electricity. It is the prevalence of these issues that prompted the Federal Government of Nigeria to consider rural poverty alleviation and economic transformation as the focus of government policy and consequently makes provision for poverty alleviation in its previous and current annual budgets and in the on-going National Rolling Plan.

1.1 STATEMENT OF RESEARCH PROBLEM

Rural poverty accounts for about 63% of poverty world-wide, reaching 90% in some countries (e.g. Bangladesh) and between 65 and 90% in sub Sahara Africa (Khan, 2001). In almost all countries the conditions in terms of personal consumption and access to education, health care, portable water, sanitation, housing, transport and communication faced by the rural poor are far worse than those faced by the urban poor in Nigeria (Igue, 2005).

Persistently, high levels of rural poverty, with or without overall economic growth, have contributed to rapid population growth and migration to urban areas. In fact much urban poverty is a creation of rural Poor's efforts to get out of poverty by moving to the cities.

Distorted government policies which have manifested in the neglect of the agricultural sector and rural infrastructure have contributed immensely to rural poverty in Nigeria. Identifiable fundamental causes of rural poverty in Nigeria includes among others, inadequate production and income; shrinking employment opportunities, poor quality of the labor force, low level of technology, inefficient use of resources and lack of access to credit facilities (see Igue, 2005).

For a proper understanding of the nature of rural poverty in Nigeria, it is important to situate it within the context of the indicators for measuring the targets in goal one of the Millennium Development Goals. Goal one is to eradicate extreme poverty, malnutrition and hunger. The target is to halve between 1990 and 2015 the proportion of people whose income is less than $1 a day. Available evidence from Millennium Development Goals report (2004) for Nigeria shows that the incidence of poverty increased during the period 1980 – 1996. The proportion of people living in poverty in 1980 was 28.1% but rose to 65.6% in 1996. It declined to 54.4% in 2004. This translated to 17.7, 67.1 and 68.7 million people in 1980, 1996 and 2004 respectively.

Poverty is more pronounced in rural areas when compared with urban areas in Nigeria. Poverty statistics (F.O.S, 2005) in rural areas showed that the proportion of people living below the national poverty line was 28.3% in 1980; it rose to 51.4% in 1985. It dropped to 46.0% in 1992 and rose again to 63.3% in 2004 (M.D.Gs report 2004).

On the basis of sex of house head, there is a rising trend of poverty in both male-headed and female-headed households in Nigeria, but the male headed households are more impoverished than the female–headed house–holds. The proportion of poor female-headed house-holds which stood at 26.9% in 1980 rose to 43.3% in 2004.While the proportion of poor male-headed house-holds which was 29.2% in 1980 stood at 58.2% in 2004 (see Igue, 2005).

Poverty in Nigeria is denoted to be deep and severe (see World Development Indicators, 1997). Depth of poverty could be interpreted to mean the number of people below the poverty line. Severity could be viewed from the point of the spread of the poor around that

level of the average poor defined by the minimum level of income required to support life (as in Igue, 2005). Poverty gap measures the depth of poverty as well as its incidence. The poverty gap for Nigeria as shown in World Development Indicators (1997) was 35.0% in 1997. Another dimension of the poverty situation in Nigeria is the worsening income inequality. World Development Indicators (2004) revealed that the Gini Coefficient Index for the periods 1992 – 1993, 1996 – 1997 and 2004 was 45%, 50% and 48.8% respectively.

The poverty situation is precarious not only with regard to food and nutrition poverty. The proportion of underweight children (i.e. under five years of age) was 35.7% in 1990; it declined to 28.3% in 1993 and rose to 30.7% in 1999 (Igue, 2005). The situation appears to be more pronounced in the rural areas of Nigeria. The proportion of underweighted children in the rural areas was 38.5% in 1990 and 1993; it declined to 34.1% in 1999. For the urban areas, it was 26.3% for 1990 and 1993 before it declined to 21.7% in 1999. Note that the figures for the National, as well as the urban and rural areas are quite far from the 2015 (see MDGS; 1. 2000) target figures which are estimated at 17.8%, 13.2% and 19.3% respectively.

Following from the issues above, it becomes very clear why poverty alleviation/reduction takes centre stage in development policy debates both at the domestic and international level. Over the years successive governments in Nigeria have made several attempts [e.g. Agricultural Development Programmes ADP, Operation Feed the Nation (1978), Green Revolution (1980), Back to Land (1984), Better Life for Rural Women (1986), National Directorate for Employment (1987), Directorate for Food, Roads and Rural Infrastructure (1987), Family Support Programme (1995), Family Economic Advancement Programme (1995), National Poverty Eradication Programme (2000), NEEDS (2004)] to

address the issues of poverty alleviation especially in the rural areas. However, Igue (2005) remarked that most of these past programs were inadequate and failed to achieve the stated objectives due to poor policy framework and implementation arrangements, inadequate participation by stakeholders and poor co-ordination.

The wrong conceptualization of rural areas and poverty alleviation is an observed platform for failure of the various government micro-credit scheme efforts (see, Igue 2005). Otherwise, how do we explain the rationale for locating about 95 percent of People's Banks and Community Banks in Semi-urban areas? What informs tricycle scooters, minibuses through micro-credit scheme in the name of rural poverty alleviation, all servicing semi-urban cities and towns? What are the likely consequences of such mis-conceptualization on core rural transformation and poverty alleviation?

One of the means for poverty alleviation that has obviously assumed universal acceptance and adoption is the provision of access to micro finance for micro and small scale economic activities by the economically active rural poor. In these regards, various micro credit schemes have been initiated by the Nigerian government. Efforts have included among others, Nigerian Agricultural Co-operative and Rural Development Bank (formerly NACB, but reformed and merged with Peoples' Bank in 2005 to become NACRDB); Agricultural Credit Guarantee Scheme (ACGS, 1987), National Directorate for Employment (NDE, 1987), Family Economic Advancement Programme (FEAP, 1997).

The search for viable rural financial markets also led to such initiatives as Rural Banking Scheme (1989), Peoples' Bank (1990) and Community Banks (1990). These were intended to provide easy access to micro-finance for the rural poor. Most of these credit

programmes depended solely on grants from government. According to Iniodu (1996), the performance of state or donor sponsored rural micro finance operations fell substantially short of expectations and thus became a costly drain on government budgets. The credit reached only a minority, often the wrong minority of the rural population, generating an unintended "grant" in the form of negative-on-lending interest rates captured by wealthy and influential farmers (see Ukpak, 1996). The obvious consequence of this is that the rural economy remains untransformed and the poverty gap widens in an ever increasing dimension. It is of critical importance to evaluate the present emphasis of the 2005 microfinance policy on greater market efficiency in terms of its outreach to the rural poor. Can the rural poor afford market determined cost of microfinance credit? What are the implications of market determined cost emphasis on the access to microfinance credit for the rural poor? How do the answers to these questions affect rural poverty alleviation on a sustainable basis? The need for this study arises from here.

Iniodu (1996) and Ukpak (1997) both noted that there exists a form of discrimination in access to institutional credit in most innovative credit schemes in Nigeria that has further accentuated rural poverty. Sustainable rural poverty alleviation cannot be achieved with skewed outreach that is sex discriminatory. How does greater market orientation in microfinance address such a problem? This study helps to provide answer to this and other questions.

The failure of most of the past micro-finance programmes strongly suggests the need for alternative strategies that would ensure the survival, sustained creation of access to micro-credit by micro finance institutions for growth and rural poverty alleviation in Nigeria. This

provided the platform for the 2005 microfinance policy that emphasizes the replacement of public funds with market funds in microfinance institutions. The replacement of public funds with market funds in the microfinance market was envisaged to put pressure on those institutions involved in microfinance to pursue financial self-sustainability within the context of private profitability. This raises the question of the cost implications of full market supply of micro credit to the rural poor as a strategy for rural poverty alleviation. How would market determined cost impact on affordability and sustained access to micro credit by the rural poor? This study finds its relevance in investigating how the pursuit of financial self-sustainability for micro-finance institutions will impact sustainable rural poverty alleviation in Nigeria.

Rural development has always been basically conceived to provide raw materials for industrial development in the urban centers without a conscious effort to transform the rural dwellers themselves. Consequently there are more "outflows" from the rural areas than there are "inflows". For instance produce from rural agriculture which is the main economic activity, are purchased during harvesting peak at a depressed price by multinational agents. This leaves the peasants at a negative net worth level and therefore, they may not be able to sufficiently accumulate savings that could accommodate loan repayment as scheduled.

1.2 RESEARCH OBJECTIVES

The main focus of this study is to examine the implications of the pursuit of financial self-sustainability by microfinance banks for sustainable rural poverty alleviation in Nigeria. The specific objectives are to:

1. Evaluate the operations and services of microfinance banks and the implications for sustainable rural poverty alleviation in Nigeria.

2. Assess the performance of microfinance banks in rural poverty alleviation in Nigeria using Outreach and Repeated Use Approach.
3. Evaluate the impact of the drive towards financial self-sustainability by Microfinance Banks on sustainable rural poverty alleviation in Nigeria.

1.3 SIGNIFICANCE OF THE STUDY

The international community's commitment to the reduction of poverty led to the declaration of Millennium Development Goals (MDGs) in year 2000 in order to cut poverty to half by 2015. Nigeria's commitment to achieving the MDGs was further boosted when in 2005 a new policy framework and guidelines for micro finance was launched. This shows the importance the Nigerian government attaches to improving access to micro finance as an integral part of its effort to promote rapid economic growth, creation of jobs and especially reduction of rural poverty.

The growing awareness of the potential influence of micro finance in poverty reduction has effectively placed the issue of micro finance on the political agenda of the Nigerian nation. Accordingly, the Central Bank of Nigeria (CBN) which serves as the regulatory body for micro finance has effectively licensed existing community banks and new institutions to provide micro finance related services with specific focus on the rural poor.

It is significant to note that the characteristics of micro finance clients are distinct, their credit methodology is different and in many cases, the ownership structure of the institutions may not be the same as found in conventional institutions. These and other factors may give rise to a unique risk profile that could threaten their financial sustainability (CBN, 2005). The significance of this study is founded on the need to address the unique risk profile of the rural

poor clients with respect to financial sustainability of the micro finance institutions within the context of the 2005 micro finance policy.

According to Igue (2005) administrative interventions (i.e. government intervention) is one of the major factors which has retarded the efficient functioning of rural financial institutions and have thereby impeded the development of the rural economy, mainly by depriving rural financial institutions of loan able funds and increasing their borrowing costs. Many of the formal rural financial institutions, both government financed (NACRDB) and privately owned (Community Banks) have been associated with heavy losses generated either by inadequate indexation in a highly inflationary environment or by poor loan collection (Olaitan, 2005). The theoretical frame work for this assessment is the belief that rural finance institutions can only achieve financial sustainability when the return on equity, net of any subsidy received, equals or exceeds the opportunity, costs of funds (Yaron, 1994).

Efforts to make financial services accessible to poor rural households are faced with several key constraints. First, rural incomes are highly susceptible to systemic risks, such as bad weather and disease, and cyclical and seasonal fluctuations in prices of agricultural commodities (see Miller, 2005). Any loss of expected income has significant impact, and reduces savings and borrowing capacity. For providers of micro financial services, the rural sector is particularly risky. Returns on investment capital are low and profit margins are often very low. Operating costs are high in isolated areas and, since collateral is often unavailable, lenders face greater risks from loan defaults. The low level of skills reduces capacity for adopting new technologies, affecting both productivity and competitiveness in the market place (Miller, 2005).

If these issues are credible, achieving financial sustainability by micro finance institutions might be difficult with zero subsidies. Rural poverty reduction may be jeopardized. The relevance of this study is found in its attempt to investigate the implications of the pursuit of financial self-sustainability by micro finance institutions for sustainable rural poverty alleviation in Nigeria.

Recent studies (e.g. Iniodu, 1996; Ukpak and Iniodu 1996; Ojo 1997; Umoh, 1998; Olaitan, 2005, Igue 2005 etc) have shown that specialized rural agricultural credit institutions established to implement targeted and often subsidized loans have suffered from inadequate planning and inefficient operation, and hamstrung by economic, political, social and institutional environment inimical to their effectiveness. Among their (rural financial institutions) most important deficiencies has been the problem of imbalance between rural finance institutions sizeable, supply-led portfolios and mobilization of savings.

Savings represent that part of income not spent on current consumption. In economic theory, societies have to refrain from current consumption in order to release resources from the production of consumer goods so that investment spending can occur to absorb these resources for the production of capital goods. Nigerian core rural dwellers rarely live above the subsistence level, such that the rate of savings is abysmally low (Iniodu, 1996). The mobilization of savings under such condition will be difficult if not impossible. In Keynesian theory of consumption, as income rises, the average propensity to consume tends to decline while the average propensity to save tends to rise. The implication of this is that at income levels lower or equal to subsistence; consumption spending is prominent. Such that any income left unspent does not necessarily form part of capital formation but serve as immediate

future consumption social security. Since mobilization of rural savings for financial self-sustainability poses a serious problem, as in Iniodu (1996), this study is relevant and quite significant as it seeks to study those opportunities for rural capital inflows that could be directed towards off-farm, income-generating activities as well as non financial services such as health, education etc that could stimulate productivity, raise farm incomes, create self-employment opportunities for the rural populace. This has the potentials to raise total income and consequently raise average propensity to save and make for sustainable rural poverty alleviation.

Studies on rural finance and poverty alleviation in Nigeria (e.g. Babalola. 1991; Ojo, 1992, 1996, 1997; Iniodu and Ukpak, 1996, Olaitan, 2001, 2005, Igue, 2005 etc) have left out financial self-sustainability of micro finance institutions, but have concentrated mainly on the functional relationship between rural finance and changes in rural incomes. They failed to study the working definitions and characterization of targeted beneficiaries within the context of the objectives of rural poverty alleviation and micro finance schemes. These are clear omissions or gaps this study is focused to fill. To this end some questions become germane. i) Have these schemes targeted the very low-income rural households? ii) Are they gender discriminatory? iii) Do these schemes arise from an appropriate conceptualization of rural clients and rural poverty alleviation? The significance of this study lies in its pursuit of the answers to these and other questions.

1.4 SCOPE AND LIMITATIONS OF THE STUDY

The main focus of this study is to evaluate the potentials for achieving financial self-sustainability for those institutions involved in micro finance services and the implications for sustainable rural poverty alleviation in Nigeria. While the study provides a general overview on poverty reduction strategies in Nigeria, it however focuses on the role of microfinance banks in sustainable rural poverty alleviation. The 2005 Microfinance Policy provided the framework for the analysis of the study with specific focus on the activities of microfinance banks in rural areas between 2006 and 2009.

This study inferred from available data and information in existing studies on the incidence, depth, level and severity of poverty in Nigeria in making certain assumptions but did not in any way attempt the measurement of these variables. The study covered selected five Local Government Areas in Kaduna state. These local governments were purposively selected on the basis of similar characterization in terms of poverty experiences and incidences.

The basic limitation of this study is centered on the question of the reliability of the data and information provided by microfinance banks. As usual with financial institutions, official restrictions for the reason of confidentiality makes it quite difficult to trust entirely, data and information provided from internal sources that are not supervised by a researcher. Many data banks were classified as 'strictly confidential' such as the asset portfolio file and repayment profile on borrowers, outstanding loans, etc. This study had to rely on whatever data and information the microfinance banks choose to make available. In essence, the quality

and reliability of data may be poor. About two-third of the borrowers do not keep business records, and where such records exist they are either discontinuous or highly inaccurate. In view of this, the interpretation of the results will have to be done with some level of caution.

This study notes that the mathematical framework and approach to the modeling of the measure of financial self-sustainability may generally appeal only to those with basic banking industry knowledge, however, the interpretations of the model is simplified for ease of understanding and made amenable for economic predictions. Thus, to guide against exclusivity, the study used structured questionnaires administered to microfinance banks and borrowers through field survey to elicit data and relevant information that is fundamental to understanding the basis for the measurement of financial self-sustainability as far as a microfinance bank is concerned.

The problem of low financial resources imposed tremendous limitations on the sample size for each of the selected microfinance banks located in the various rural communities that made up the study area.

1.5 ORGANIZATION OF CHAPTERS OF THE STUDY

This study is divided into six chapters as follows:

Chapter one presents the introduction, statement of research problem, and covers the objectives of the study, the justification, scope and limitations of the study; and organization of the study.

Chapter two is focused on Overview of Nigeria Macroeconomic Environment. This is intended to provide a platform for the evaluation of the chosen strategy for rural poverty alleviation.

Chapter three provides review of related literature on the theoretical framework of the study. This chapter includes overview of the concept of microfinance and rural poverty, review of theoretical literature, institutional development in microfinance, assessment of the performance of microfinance institutions and review of empirical literature.

Chapter four contains the methodology of the study, hypothesis, study area, sample design and data collection, theoretical framework, model specification, method of estimation and sources of data.

Chapter five provides analysis of the data obtained from the field survey, interpretation and discussion of the results of the mathematical estimates of the various components of the models. The chapter presents the results and discussion in the order of the stated objectives of the study.

Chapter six gives the summary of the study's findings, the conclusion, policy implications of the study findings and the study's recommendation for relevant policies.

The bibliography is presented at the end of chapter six, followed by the Appendices.

CHAPTER TWO

OVERVIEW OF NIGERIA MACROECONOMIC ENVIRONMENT

The intent of this section within the framework of this study is to take a critical overview of the Nigeria macroeconomic environment that informed the 2005 Microfinance Policy as a strategy for rural poverty alleviation. An overview of the macroeconomic environment would help us to evaluate institutional microfinance as the choice strategy for rural poverty alleviation in Nigeria. The specific macroeconomic issues that are of interest in this study are the financial system, the real sector, macroeconomic policy and anti-poverty strategies; state of poverty and inequalities in Nigeria. For the purpose of this study only, we shall limit our analysis to the period 2000- 2008.

2.1 The Financial System

The financial system of any economy holds a lot of implication for the growth potentials as well as the sustainability of any choice strategy and the sustainability of poverty alleviation. Finance is a pre-requisite factor input for production and investment that could generate income and employment. The sustainability of this process is a function of sustained access at a cost level that is not prohibitive to prospective users of financial resources.

I. Formal Financial System

The formal financial system as conceived in this study comprises of institutional credit agencies that includes the Central bank, commercial banks, development banks, microfinance banks as well as other financial intermediaries such as insurance companies and credit societies. The financial system of most developing countries like Nigeria is characterized by highly diversified interest rates, narrow capital marketing, savings insensitivity to changes in

interest rates, limited financial assets and the dominance of the transaction motive of the demand for money over the speculative motive. The formal financial system falls directly under the direct control of monetary authorities. The relative importance of the formal financial system is definitive for economic growth as it helps to identify profitable and growth enhancing investments, exert corporate control, and mobilize savings for promising investment. Also, differences in economic growth are easily explained by differences in financial structures that has implication for income redistribution and poverty reduction. An institutional based formal financial system is assumed to have close ties with the real growth drivers of the economy, which helps to reduce the cost of information about real investment opportunities that generates sustainable income flows that could sustain long term growth with consequences for sustained poverty alleviation

II. Informal Financial System

The informal financial system is a highly heterogeneous grouping, especially in the Nigeria case. It is a residual incorporating all financial transactions that take place beyond the functional scope of banking and financial regulations. The informal financial system revolves around traditional rural groups that work together for the mutual benefits of participants. The operators transact business under different names in different parts of Nigeria. These includes "Esusu" among the Yorubas, "Etoto" among the Igbos; "Adashi" for the Hausas of western, Eastern and Northern Nigeria respectively. The essential characteristic of informal financial system is that it is far more loosely monitored and regulated than the formal financial system. In Nigeria, there exist a well developed system of intermediaries, lenders and borrowers that includes indigenous bankers who take deposits and make loans; commercial financiers who

mediate between customers and commercial financiers; and the rotating savings and credit association (ROSCAS, Ojo, 1996). The informal financial system is estimated in Ojo (1996) to cover a larger portion of the capital needs of both urban and rural small producers. Interest rates are usually higher than the bank lending rates. Whenever informal financial system's facilities are available, very small urban and rural enterprises may pay as much as 40% higher than formal bank rates. Thus, availability rather than cost of credit determines demand and supply of funds. The transaction costs and default rates of informal financial system can, by and large, be much higher than for commercial banks in Nigeria.

Informal financial intermediaries and credit markets in Nigeria, function both in rural urban areas (Anyanwu, 2005). Transactions in rural areas are not always distinct from those of the formal urban commercial and individual financial system. This in Ojo's view is because informal financial intermediaries and markets serve operators and business enterprises (in trade, services and industry) in rural and urban areas as well as in both the informal and formal sector institutions and enterprises. Thus, the Central bank of Nigeria credit guidelines for 1989 (confirm, Ojo, 1994); had to prescribe provisions to arrest an undesirable rural-urban credit drift situation by prescribing minimum percentage of banks total deposit liabilities inn their rural branches should be advanced as credit to customers in the rural area.

The implication of this is that a dual financial system exists in Nigeria, with only the formal financial system being within the purview of the monetary authority for the purpose of regulation and control. The consequence of this scenario is the continual distortion of macroeconomic policy whose targets can never be met. Also, with the dual financial system, there is a disconnect between institutional development and growth targets that could help to

achieve sustainable rural poverty alleviation. Such a disconnection creates the problem of information asymmetry that leads to adverse selection of credit products on the part of rural poor borrowers. This has serious consequences for sustainable rural poverty alleviation.

The disconnection is exacerbated by the fact of the inability of the regulatory authority to control the distortionary activities of the informal financial system operators. The demand-led microfinance policy of 2005 was in part intended to address this problem. The target is that with the licensing of many formal microfinance institutions both in the rural and urban areas, the informal financial would be easily become integrated into the formal financial system for the purpose of regulation and control by the monetary authority. This raises the question of compliance and sustainability of pay-offs from formal microfinance institutions as compared to the pay-offs from informal operations. If institutional microfinance is geared towards higher pay-offs in order to achieve self-sustainability; the cost implication then becomes problematic for the rural poor borrower and hence poses a danger to the sustainability of rural poverty alleviation.

2.2 Institutional Environment and Development

The present aim is to analyze institutional environment and developments in the financial sector in Nigeria in order to evaluate the extent to which existing institutions have assisted in the task of financial intermediation. For the purpose of this study, the focus is on commercial banks and microfinance banks.

i) Commercial Banks and Microfinance Banks

The available number of operating banks helps to provide a fair idea of the spread, speed and depth of financial intermediation process in the economy. In terms of number, commercial

banks operating in Nigeria as at 2000 were 54, this number steadily grew to 90 in 2001 and remained so until 2003 (as indicated in table 2.1 in page 23). However, owing to distress that manifested in various forms (insolvency, bank-run, under capitalization, poor management practices, etc; see CBN, 2000) one of the banks was liquidated in 2003, and the numbers marginally declined to 89 in 2004. The branch network of commercial banks which stood at 2,193 in 2001 grew sharply to 3,492 in 2004. This sharp increase in the branch network of commercial banks was in response to the sharp growth in federal government recurrent expenditure and poor fiscal restraint exhibited by both the states and local government.

The 2004 financial sector reforms anchored on consolidated recapitalization through mergers and acquisitions resulted in the reduction of operating banks in Nigeria to 25 (see table 2.1 in page 23). The 2004 reforms essentially embraced universal banking policy focus, thus the distinction between commercial banks and merchant banks became inconsequential. The branch network of the operating banks declined to 3,004 in 2006 as some branches of the acquired banks were closed. Again, one of the consolidated banks was later acquired by another bank; this reduced the number of banks to 24 in 2007. Following the aggressive pursuit for savings mobilization and in response to CBN directives for branch network, branches of operating banks grew fast to 3,897 in 2007 as shown in table 2.1.

Before 2005, the official concept adopted for microfinance services delivery in the Nigeria financial sector was Community Banking system. As at 2000, there were 881 community banks operating in Nigeria; about 101 of them experienced full operational failure during the same year (2000) and were consequently shut down. This brought the number down to 747 in 2001 (see table 2.1 in page 23). The number gradually increased to 774 in 2003 and

declined again to 753 in 2004 following another round of failure resulting mainly from non performing loans and unprecedented level of repayment default. The spate of failure of community banks had risen to a worrisome level such that CBN had to undertake an assessment survey that revealed failure rate to be around 50% between 1996 and 2004; when from 1,368 community banks collapsed to 753 (see Soliu, 2009).

Table 2.1: No. of Commercial Banks, Branches and No. of Microfinance Banks (2000-2008)

Year	Commercial Banks	Branches	Microfinance Banks	Branches
2000	54	2,193	881	n.a
2001	90	2,193	747	n.a
2002	90	3,010	769	n.a
2003	90	3,247	774	n.a
2004	89	3,492	753	n.a
2005	25	n.a	757	n.a
2006	25	3,004	750	n.a
2007	24	3897	709	n.a
2008	24	n.a	695	n.a

Source: CBN Statistical Bulletin (2009)

Again, Soliu (2009) showed that based on a CBN survey; out of nearly 100 million poor Nigerians that are potential customers of microfinance institutions only about 600,000 and about 1.3 million were served in 2001 and 2003 respectively. Following the 2005 microfinance policy, the concept of microfinance bank was created along side community bank with defined regulatory framework. Consequently, most of the community banks transformed to microfinance banks; bringing their number to 757 from 753 in 2005 and 2004 respectively (see table 2.1 above). Again, poor savings mobilization, repayment defaults etc, began to affect mostly the rural area based microfinance banks early in 2006. This led to the

liquidation of about 7 of them, thus reducing the number of operating microfinance banks to 750 at the end of 2006. This trend of failure continued through 2007 and 2008, as the number declined to 709 and 695 respectively, as indicated in table 2.1 in page 23.

Soliu (2009) showed that as at October 2009, about 33.3% of microfinance banks were established after the 2005 Microfinance Policy and Regulatory Framework was put in place. This points to the fact that 58% (1,368 in 1996 to 577 in 2009; confirm: Soliu, 2009) of community banks have failed within thirteen years. These experiences have negatively impacted on investment decisions of micro entrepreneurs as well as investors in micro credit institutions.

ii) Activities of Community Banks/Microfinance Banks (2000-2008)

The total assets of community banks/Microfinance Banks as at 2000 which stood at ₦12, 014.70million declined to ₦4, 884.40million in 2001, but rose sharply to ₦34, 162.30 in 2004 (see table 2.2 in page 25). From 2005 there was a steady rise until 2008 as follows; ₦82, 866.90million, ₦55, 145.84million, ₦75, 549million and ₦107, 018.60 respectively as shown in table 2.2 below. The sharp rise during the period 2005-2008 is attributable to the injection of fresh capital by new investors following the 2005 Microfinance Policy and Regulatory Framework.

Table 2.2: Summary of Activities: Community Banks/Microfinance Banks (2000-2008)

Year	Number of Reporting Banks	Total Assets (₦= million)	Deposits Liabilities (₦=million)	Liquidity Ratio (%)	Loans-Deposit Ratio (%)
2000	881	12,014.70	7,689.40	61.42	49.85
2001	747	4,884.40	3,294.00	59.29	41.98
2002	769	15,463.50	9,699.20	63.05	46.67
2003	774	28,689.20	18,075.00	54.50	56.99
2004	753	34,162.30	21,407.90	56.41	55.02
2005	757	82,866.90	47,523.70	63.88	62.23
2006	750	55,145.84	34,017.70	75.88	47.96
2007	709	75,549.80	41,217.70	83.34	55.05
2008	695	107,018.60	54,431.00	71.23	65.90

Sources: i) CBN Statistical Bulletin (2008, 2009)
ii) CBN Annual Report and Financial Statements (2008)
iii) Annual Abstract of Statistics (2008)

The loans-deposit ratio that stood at 49.85% in 2000 fluctuated downward to 46.67% in 2002 before growing to 65.90% in 2008 as shown in table 2.2 above. The liquidity ratio grew throughout the period, except for 2003 and 2004 when it fell marginally from 56.99% in 2003 to 55.02% in 2004 (see table 2.2). From table 2.2 above, deposit liabilities which stood at ₦ 47,523.70million in 2005, fell to ₦ 41,217.70million in 2007 following the liquidation of a number of microfinance banks. It rose slightly to ₦ 54,431.00million in 2008 as reflected in table 2.2 above.

The trends in the activities of Community banks/Microfinance banks is well captured by the changing number of reporting banks in table 2.2 above. For instance the failure and consequent liquidation of 134 Community/Microfinance banks between 2000 and 2001 promptly reflected in the changes in total assets, deposit liabilities and liquidity ratio. From 2005, the steady failure of Community/Microfinance banks that continued up to 2008 did not

reflect in the value of total assets (see table 2.2 in page 25). Total assets appeared to have grown steadily from 2005 to 2008. However, it is very obvious that the shrinking number of Community/Microfinance banks due to failure actually affected the deposit liabilities as the pattern of growth was irregular (see table 2.2 in page 25).

Table 2.3: Distribution of Community Banks among Microfinance Banks in Nigeria (2009)

	Period Established	Frequency	Percent
	Established as an MFB after 2004	299	33.3
	Established as a Community Bank before 2004	577	64.3
	Total	876	97.6
	System	22	2.4
Total		**898**	**100.0**

Source: Adapted from Soliu, 2009.

As at 1996 there were about 1,368 operating community banks in Nigeria (figure not reflected in table 2.3 above; see Soliu, 2009); out of which only 577 were still operating up to 2009. The 577 operating community banks as at August 2009 are those that passed through various stages of approval by the Central bank of Nigeria. However, some of them managed to convert to full fledge microfinance banks. As indicated in table 2.3 above; 299 microfinance banks were established after the 2004 financial sector reforms which were followed by the 2005 Microfinance Policy and Regulatory Framework. Thus, as at August 2009, there were 876 registered Community/Microfinance banks in Nigeria. About 22 failed to meet minimum requirements for registration.

iii) Approval Profile for Microfinance Banks in Nigeria (August 2006- August 2009).

Out of the 898 Microfinance Banks in Nigeria as at 2009, about 64% of them transformed from Community Banks (confirm from table 2.3 above). This implies that about 34% of Microfinance Banks in Nigeria were a direct result of the 2005 Microfinance Policy

(see table 2.3 in page26). Generally, Soliu (2009) noted that in less than two years (January 2008-October 2009) about 260 new Microfinance were established in Nigeria which is about 90% of newly established Microfinance. As indicated in table 2.3(a) below only 3 Microfinance banks were approved in 2006, while 89 more were approved between February and December 2007. Between January and March of 2008, about 635 Microfinance Banks were granted various categories of approval. By the end of August 2009, additional approval for 171 Microfinance Banks was granted (confirm from table 2.3(a) below).

Table 2.3 (a): Approval Profile for MFBs

Month/Year	No. of MFBs Approved
AUG-OCT, 2006	3
FEB-APR, 2007	10
MAY-JUN, 2007	8
AUG-OCT, 2007	42
NOV-DEC, 2007	29
JAN-MAR, 2008	635
APR-AUG, 2008	3
SEPT-NOV, 2008	49
JUN-AUG, 2009	119
TOTAL	898

Source: Adapted and organized from Soliu, 2009

Table 2.3 (b) Approval Status of Microfinance Banks in Nigeria.

	TYPE OF APPROVAL/LICENCE				TOTAL
	Approval in Principle	Converted from Comm. Bank	Final License granted	Provisional Approval to Convert to Community Bank	
	130	**5**	**12**	**26**	
% within Microfinance Banks that started as Community Banks	75.1%	2.9%	6.9%	15.0%	
	11	**18**	**4**	**88**	
% within Microfinance Banks that started as Community Banks	9.1%	14.9%	3.3%	72.7%	
TOTAL	**141**	**23**	**16**	**114**	**294**

Source: i) Adjusted from Soliu, 2009
ii) CBN Statistical Bulletin (2009)
iii) Bullion (2009)
Note: Data provided in table 2.3 (b) above is highly aggregative and span 2006-2009.

As could be observed from table 2.3(b) above, about 130 among the Microfinance banks that did not start as Community banks operate with Approval-in-Principle; this represents about 75% of Microfinance Banks that did not start as Community Banks. Also, about 11 others which started as Community Banks have received Approval-in-Principle. Only 12 Microfinance Banks which did not start as Community Banks have been granted Full License to operate which is about 6.9%. On the other hand, 4 Microfinance Banks that started as Community bank were granted Full License to operate. It is interesting to note that about 26 Microfinance institutions that did not start as Community Banks have been granted approval to convert to Community Banks, while about 88 Microfinance Banks which started as

Community Banks have also been granted approval to convert to Community Banks, which is about 72.7% of Microfinance banks operating in Nigeria as indicated in table 2.3(b) in page 28 (confirm, Soliu, 2009).

While few of the institutional Microfinance Banks have performed fairly well, majority of them failed massively. This actually led the Central Bank to begin a review of the operational status of Community Banks/Microfinance Banks operating in Nigeria as early as 2007 when the strong signals of failure started showing. The operational status review provided a basis for new regulatory and supervisory framework that were more stringent. It is important to note that with massive failure in most of the Microfinance Banks in operation especially in the rural areas, the pursuit of sustainable rural poverty alleviation through microfinance would certainly have experienced goals/gain reversals.

2.3 The Real Sector: Structure and Growth

Growth in the real sector is a fundamental indicator of the changes in the economic progress and well being of a country. Also, growth in the real sector helps to measure and identify wealth creating activities as well as improvement in private entrepreneurship within an economy. Where such measurement is progressive in terms of more access to goods and services required by poor households, minimum availability of infrastructure such as communication, transport, health, education, etc impact on welfare and more specifically poverty, will be felt across the economy. When the real sector fails to register any appreciable growth, poor wage incomes and high unemployment rates may result, especially in the absence of social security benefits and other social safety nets. Thus, the capacity of most people to provide the needs of human existence would have been reduced. Similarly, the intensity of poverty within the economy will manifest not only in very low incomes (which may not be sufficient to provide the nutritional requirements for healthy living), but also in poor living conditions with little or no access to potable water, electricity and modern health care facilities (see Benneth, 2007).

Generally, the proxy for growth is the Gross Domestic Product (GDP). The relevant real sector/sub-sectors for this study is Agriculture, Financial institutions, Education, Health, Water, Wholesale and Retail trade. The relevance of the sectors/sub-sectors for analysis in this

study arises from the fact that macroeconomic policies (monetary or fiscal) are often targeted at these sectors to achieve macroeconomic goals such as broadly shared pro-poor growth to achieve poverty reduction, employment generation, balance of payment, etc.

The capacity of the agricultural sector to fulfill its traditional role as the main stay of the Nigerian economy in recent time has been constrained by the dominance of crude oil earnings. Growth in crude oil earnings has to a large extent created disincentives for agriculture in relation to other sectors of the economy. Thus, the performance of the sector in recent time has not been quite impressive irrespective of the fact that government has doubled its efforts at revamping the sector beginning from 2000. Table 2.4 in page 31 indicates that growth in agricultural real GDP reached a peak of 55.2% in 2002 and suffered a very sharp decline to 6.5% in 2008. It is important to note that over 60% of Nigeria's population is engaged in agriculture as a major economic activity. Its performance provides a general overview of changes in income positions of the rural populace which constitute about 70% of the Nigeria population and to a greater extent the poverty level.

Table 2.4: GROWTH RATE IN REAL GDP (in % changes) 2000-2008

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Agriculture	2.9	3.8	55.2	6.9	6.3	7.0	7.4	7.2	6.5
Manufacturing	3.4	6.9	10.0	5.7	11.9	9.6	9.4	9.6	9.3
Financial Institutions	3.9	4.5	29.4	-9.2	2.5	2.6	4.8	4.8	4.6
Education	1.7	1.6	7.8	-7.0	10.8	10.5	10.8	10.8	10.8
Health	1.7	1.6	0.8	2.0	10.8	10.0	10.3	10.4	10.3
Water	3.5	2.4	7.5	8.2	10.8	10.5	10.9	10.9	10.9
Transport	3.5	4.7	17.4	1.2	49.8	6.3	6.9	6.9	7.0
Communication	6.7	595.2	27.0	23.8	55.8	29.6	33.6	33.8	34.0
Electricity	2.0	1,102.0	13.9	17.1	17.0	6.5	4.9	4.9	4.2
Wholesale and Retail Trade	1.6	2.5	6.5	5.8	36.7	13.5	15.3	15.2	14.0
Total Real GDP (in % changes)	5.4	8.4	21.3	10.2	10.5	6.5	6.0	6.3	6.2
Oil GDP	11.1	5.2	-5.7	23.9	3.3	0.5	-4.5	-5.6	-5.8
Non-Oil GDP	5.4	4.6	3.5	6.8	13.2	8.6	9.4	9.6	9.8

Sources: Own computation from CBN Economic and Financial Indicators, 2004; CBN Statistical Bulletin, 2008 and Usman, 2008.

Financial institutions real GDP growth rate which stood at 3.9% in 2000 grew gradually to a peak of 29.4% in 2003. It recorded a negative growth rate of -9.2% in 2004 and it picked up slowly and rose to 4.8% in 2007 before dropping marginally to 4.6% in 2008. The education sector of Nigeria is still dominated by public sector investment. Over 70% of educational institutions in Nigeria are government owned and funded (CBN, 2008). Before 1999, government spending on education had consistently shrunk by 2.5% (Jibril, 2008). This trend continued until 2001, when serious debates on the necessity for government's annual budget spending on education to conform to the World Bank's stipulated 26% of GDP became heightened. By 2002, education sector's real GDP growth rate had risen to 7.8% from 1.7% and 1.6% in 2000 and 2001 respectively (table 2.4 above). The sector recorded a negative growth rate of -7.2% in 2003 mainly due to long term school closures arising from

trade union disputes in the form of strike. The sector picked up again by 2004 recording an average growth rate of 10.8% until 2008. Whole sale and retail trade grew from 1.6% in 2000 and peaked at 36.7% in 2004 and fell sharply to 14.0% in 2008. Note that most micro-enterprises in semi-urban and the rural areas are retail trade based. Thus, the rate of growth in the sector to a very large extent helps to measure the rate of income growth, employment generation and wealth creation which are critical factors for poverty reduction.

2.4 State of Poverty and Inequalities in Nigeria

The problem of poverty and inequality in Nigeria is quite obvious and the rate of growth in the incidence of poverty and inequality enforces on the policy debate as a process in the search for alternatives for poverty reduction a critical evaluation of the state, incidence and causes of poverty in Nigeria.

2.4.1 State of Poverty in Nigeria

According to Igue (2005) poverty means the inability to afford certain pre-determined consumption needs. This is commonly assessed using a comprehensive measure of real consumption or income- including imputed values for consumption or income in kind, including income from own production (Ravallion, 2004). Poverty is not only a state of existence but also a process with many dimensions and complexities. It can be persistent (i.e. chronic) or transient. Transient poverty, if acute, can trap succeeding generations. Attributes of poverty in Nigeria may be classified into structural, economic, social, cultural and political deprivations (Igue, 2005). The structural dimension appears more permanent and manifests a vicious cycle, reflecting limited productive resources, lack of skills for gainful employment, locational disadvantage and inadequate income to obtain the basic necessities of life. The social dimension is largely a gender issue (Igue, 2005) since the greatest weight of poverty is borne by women household heads and children from poor homes.

However, the conventional notion depicts poverty as a condition in which people earn bellow a specific minimum income level and are unable to provide or satisfy the basic necessities of life needed for an acceptable standard of living. CBN (1999), pointed out that in Nigeria there is still poverty situations in which individuals are not able to cater for his/her

basic needs of food, clothing and shelter; unable to meet social and economic obligations, lacks gainful employment, skills, assets and self-esteem; and has limited access to social and economic infrastructure such as education, health, potable water, and sanitation; and consequently has limited chances of advancing his/her welfare to the limit of his/her capabilities.

To understand poverty in Nigeria, it is essential to examine the economic and social context, including institutions of the state, markets, communities and households. This is because poverty differences (resulting from the existence of vertical and horizontal inequalities) in Nigeria cut across gender, ethnicity, age, location (rural and urban), and income sources. In households children and women often suffer more than the men. In the community minority groups suffer more than majority groups and the rural poor more than the urban poor; among the rural poor, landless wage workers suffer more than small landowners or tenants. These differences among the poor reflect highly complex interactions of cultures, markets and public policies (Igue, 2005).

a. Causes and Incidence of Poverty in Nigeria

Poverty is a macro problem with causes as wide as they are deep. Generally, political instability, natural disasters, corruption, socio-economic disparities and prejudice, lack of access to education and lack of infrastructure constitute some of the key reasons for which the most people all over the world are poor (Unitus, 2007). From Iniodu's (1997) point of view, the root causes of poverty may be summarized under four broad headings: environmental, social, economic and political.

In Nigeria the poor are not a homogeneous group. They can be found among several social/occupational groups and can be distinguished by the nature of their poverty. However, Igue (2005) identified the fundamental causes of poverty in Nigeria to include inadequate production and income, difficult access to productive employment opportunities, inequalities, poor quality of labor force, low level of technology and lack of access to credit facilities.

Table 2.5: Classification of the Root Causes of Poverty in Nigeria.

Causes	Features
A. Environmental	Over 60% of Nigeria population is engaged in agriculture. Thus, it is the basic economic activity and consequently source of income. Land is the most basic resource for agricultural activities. Different parts of Nigeria are naturally endowed differently with agricultural land in terms of fertility and suitability. Agricultural Yield differs based on the land condition with implications for levels of income and consequently poverty. Poor soil quality, environmental degradation in terms of soil erosion, desert encroachment, pollution resulting from crude oil extraction activities, etc are threats to land supported economic activities such as farming, animal husbandry, etc that have consequences for income levels and standard of living. Where rainfall is irregular, unreliable and inadequate, water shortages severely limit agricultural activities in Nigeria. Population pressure on land also degrades the environment and threatens its ability to sustain income generating activities and life.
B. Social	Health and education are elements in the set of social causes of poverty. The existence of social inequalities (vertical and horizontal) among regions, zones, rural and urban areas are fundamental to the cause and reinforcement of poverty and the associated problems of lack of access to productive employment, deprivation, poor living conditions as well as living standards in Nigeria. For example, Galadanchi (2007) showed that in the Northwest of Nigeria only 25% of pregnant women use clinics, compared with 85% in the Southeast. Longevity of life is essential to higher levels of productivity and vice versa. Superior skills acquisition through formal education is a prerequisite for gainful employment or productive and appreciable income generating self-employment. But where education receives low priority as is the case in some parts of Nigeria, human resource development and capacity building would be jeopardized. Consequently there would be inadequate superior-skill man power, poor income and low productivity, hence the persisting high level of poverty in some parts of Nigeria.
C. Economic	Unequal access to credit which is a necessary input in the development process, high propensity to consume, income level less than subsistence, etc prohibit capital accumulation for investment in Nigeria. Thus, the poor are perpetually trapped in poverty (Iniodu, 1996). Poverty is twice as high in the Northwest of Nigeria as in the Southeast (Abdul Raufu, 2007). This is essentially due to economic inequalities traceable to discriminatory allocation of government projects and grants, and differential access to key sectors of the economy, such as oil and gas, and telecommunications. Others are the unintended consequences of macroeconomic policies. This is the polarization effect through which dynamic areas accumulate advantages, while deprived areas do the opposite; e.g. Bank loans in Lagos financed by deposits from other parts of the country.
D. Political	Issues of discrimination in terms of ethnic representation and governance; political and economic control dominated by a single tribe has implications for resource allocation as well as access to higher or low wage income employment. These have potentials to generate violet outcomes that engenders political instability which is unattractive for investment and growth, hence poverty.

Source: Modified from Iniodu (1997) and Galadanchi (2007)

Evidence from the World Bank (1996) poverty assessment on Nigeria using 1992/93 household survey data, showed that the nature of those in poverty can be distinguished by the

following characteristics: sector, education, age, gender and employment status of the head of household (FOS, 1995; Benneth, 2007). Other characteristics include household size and the share of food in total expenditure. The percentage of persons and households below the poverty line in 1996/97 using location, household head, age and education is indicated in table 2.6 in page 36. Data from FOS (1999) indicated that 67.1 million Nigerians were in poverty in 1996/97, out of which 23.3 million and 43.8 million were located in urban and rural areas, respectively. Thus about 65% of the poor live in the rural areas, indicating that poverty in Nigeria is largely a rural phenomenon. Based on Ogwumike's (1996) findings, as at 1992, 46.4 million Nigerians were said to be living in absolute poverty, out of which 80.2% or 37.7 million are in the rural areas. However, figures from NAPEP (2010) have indicated that based on the 2006 census about 80 million Nigerians are living below the poverty line. Benneth (2007) had earlier affirmed that it is the marginalization of the rural areas through urban-biased development policies that is mainly responsible for the high poverty incidence in the rural areas.

Table 2.6: Poverty Incidence by Socioeconomic group, 1996/97 (in %)

Socioeconomic groups	Extreme poor	Moderate poor	Non-poor
Urban	25.2	33.0	41.8
Rural	31.6	38.2	30.7
Male-headed	29.8	36.7	33.6
Female-headed	25.0	33.5	41.5
Age of head			
15-24	16.2	21.2	62.6
25-34	20.2	32.5	47.3
35-44	27.9	36.7	35.4
45-54	32.7	38.6	28.7
55-64	32.6	37.3	30.1
65 and above	33.5	34.6	32.0
Education of head			
Non	34.3	38.3	27.4
Primary	24.3	35.1	40.6
Secondary	21.2	30.8	48.0
Post-secondary	15.3	32.9	51.8

Source: Adapted from Benneth, 2007.

The profile of poverty in Nigeria as indicated in table 2.7 (page 29) shows that poverty increased during the period 1980-1996. However, there was a decrease in poverty level during the period 1985-1992. The proportion of people living in poverty in 1980 was 28.1%, it rose to 46.3% in 1985 and declined to 42.7% in 1992 before rising to 65.6% in 1996. By 2004, the percentage of people living in poverty had declined to 54.4%, which translate to 17.7 million and 34.7 million poor people in 1980 and 1985 respectively (see table 2.7 below). The number of poor people in Nigeria also increased from 39.2 million in 1992 to 67.1 million and 68.7 million in 1996 and 2004 respectively. Despite the drop in poverty in 1992 and 2004 as indicated in table 2.7 below, the population in poverty was still

4.5 million higher than the 1985 figure and 1.6 million higher than 1996. Igue (2005) put forward that the reduction in poverty level to 54.4% in 2004 was traceable to reforms that were introduced to alleviate poverty at the inception of democratic system of governance in 1999.

Poverty is arguably more pronounced in rural areas of Nigeria comparatively with the urban areas. This is demonstrated as well in table 2.7 below. The level of poverty in the rural areas exhibits an irregular movement in terms of its incidence. In 1980, the percentage of people living below the national rural poverty line was an estimated 28.3%; this rose to 51.4% in 1985, but fell to 46.0% in 1992 before rising to 69.8% in 1996. However, rural poverty level declined to 63.3% in 2004. A similar trend in the pattern of movement was observed in the poverty level in urban area during the same period. About 17.2% of poor people were living below the national urban poverty line in 1980 as indicated in table 2.7 below. The level increased to 37.8% in 1985 and stood at 37.5% in 1992; it rose to 58.2% in 1996 before falling to 43.2% in 2004. It is obvious that the proportion of poor people in urban areas has grown faster than in the rural areas.

Table 2.7: Poverty Profile for Nigeria; 1980-2004 (poverty level in %)

Year	National	Urban	Rural	Male Headed Households	Female Headed Households	Estimated Population (in Millions)	Population in Poverty (in millions)
1980	28.1	17.2	28.3	29.2	26.9	65	17.7
1985	46.3	37.8	51.4	47.3	38.6	75	34.7
1992	42.7	37.5	46	43.1	39.9	91.5	39.2
1996	65.6	58.2	69.8	66.4	58.5	102.3	67.1
2004	54.4	43.2	63.3	58.2	43.5	126.3	68.7

Source: Modified from MDGs report, 2004 and Igue, 2005.

With respect to the sex of household head, table 2.7 above shows a rising trend of poverty in both Male-headed and Female-headed households. However, the Male-headed households were more impoverished than the Female-headed households. The proportion of poor Female Headed households which stood at 26.9% in 1980 rose to a peak of 58.5% in

1996, before falling to 43.5% in 2004. On the other hand the percentage of poor people in Male-headed households rose from 29.2% in 1980 to a maximum of 66.4% in 1996 and then declined to 58.2% in 2004 as indicated in table 2.7 in page 37.

2.4.2 Inequalities in Nigeria

The term inequalities deal with broad categorization of inequality into vertical and horizontal. The conventional definition of inequality in a more general sense refers to the vertical concept of inequality which lines individuals or households up vertically and measures inequality over the range of individuals rather than groups. Vertical inequality measures individuals or households more or less in terms of income categorization, types of employment, range of education, etc. The concept of horizontal inequality differs from vertical inequality because horizontal inequalities measures inequalities between defined groups, such as ethnic, religious, racial or ethnic-base groups. Thus its measurement is multidimensional and encompasses economic, social, cultural status and political dimensions as against individuals or households in the case of vertical inequality (see Langer, 2007).

Concern about inequality arises from the fact that it leads to inefficient allocation of assets. For instance, Isah (2008) illustrates that in Nigeria emphasis is on higher education at the expense of quality universal primary education- this leads to more income inequality. Again, it is believed that extreme income disparities undermine social stability and solidarity. Garba (2006) explains that this is more so because high inequality strengthens the political powers of the rich as well as their economic bargaining powers (use of power to encourage outcome favorable to them). High inequality facilitates rent seeking including actions such as excessive lobbying, large political donations, bribery, and cronyism. When resources are allocated to such rent seeking behavior, they are diverted from productive purposes that could lead to faster growth.

I) Income Inequality.

Issues of the nature, extent and pattern of income inequality in Nigeria are reviewed based on a survey on Kaduna state carried out by Isah (2008). The survey revealed that out of the sampled 600 households in Kaduna state 81.96% and 15.24% were headed by males and

females respectively. According to Isah (2008), the results indicated that in terms of income distribution, males earn higher than the females and the percentages based on various income sources showed male dominance over the female in each category. For instance, in the wage income categories; those earning between ₦3, 600 - ₦10, 000 per annum showed 38 males (6.3%) and 25 females (4.2%). Those earning up to ₦180, 000 per annum indicated 16 males (2.6%) and 7 females (1.2%). The category of those earning ₦240, 000 per annum were 33 (5.5%), out of which 3.3% were males and 2.2% were females as indicated in table 2.8 below.

Table 2.8: Income from Wages per Annum (range) by Gender in Kaduna state

Estimate of Income from wages per annum (range)	Gender			
	No response	Male	Female	Total
No Response	0	38(6.3)	25(4.2)	63(10.5)
₦1, 000 – ₦50, 000	0	11(1.8)	9(1.5)	20(3.3)
₦50, 000 – ₦100, 000	0	31(5.2)	17(2.8)	48(8.0)
₦100, 000 – ₦150, 000	0	48(8.0)	25(4.2)	73(12.2)
₦ 150,000 – ₦200, 000	0	22(3.7)	11(1.8)	33(5.5)
₦200, 000 – ₦250, 000	0	29(4.8)	19(3.2)	48(8.0)
₦250, 000 – ₦300, 000	0	25(4.2)	10(1.7)	35(5.8)
₦300, 000 – ₦350, 000	0	6 (1.0)	4(0.7)	10(1.7)
₦350, 000 – ₦400, 000	0	26(4.3)	10(1.7)	36(6.0)
₦400, 000 – ₦450, 000	0	13(2.2)	7(1.2)	20(3.3)
N450, 001 – N500, 000	0	22(3.7)	13(2.2)	35(5.8)
N500, 001 – N800, 000	0	51(8.5)	26(4.3)	77(12.8)
N800, 001 – N1, 100,000	1(0.2)	32(5.3)	14(2.3)	47(7.8)
N1, 100,000 – N3, 000, 000	0	31(5.2)	7(1.2)	38(6.3)
N3, 000,000 – N300, 000,000	0	9 (1.5)	8(1.3)	17(2.8)
Total	1(0.2)	394(65.7)	205(34.2)	600(100)

Source: Field survey as reported in Isah (2008).

It is interesting to note that gender income inequality although not pronounced in Nigeria is fundamentally a fall out from gender discrimination in employment opportunities which constitute a formidable basis for a quiet but recognizable political agitation among

women pressure groups.

According to Isah (2008), about 73.46% of the sampled income earners (600) in Kaduna state earn their income from wages/salaries, while 16.9% earn income from other sources such as dividend from shares, interest bearing assets, landed property and other forms of rents. The distribution of estimated income earned by income earners from monthly wages/salaries indicated that 7.5% earn ₦1,000 monthly, 26.2% earned between ₦1,000 and ₦ 10,000 monthly, 17.5% earned between ₦ 30,000 and ₦50,000; 6.13% earned exactly ₦50,000, while 6.83% earned from ₦100,000 – ₦200,000. Only 0.167% of the sampled income earners earned between 500,000 and 3,000,000 monthly in Kaduna state.

Isah's (2008) study further indicated that the overall annual wage income exhibited similar behavior as the monthly wage income. 30.2% of the sampled income earners earned ₦120,000 annually, 9.2% earned between ₦400,000 and ₦500,000 annually, while 19.6% earned ₦600,000 per annum. The percentage of those who earned between ₦1,000,000 and ₦2,000,000 was estimated at 13.3%. It is evident that the pattern of income distribution is highly unequal.

II. Inequality in Opportunities

In this study, we allude to inequality in opportunities specifically with respect to issues of horizontal inequalities as they exist in Nigeria. Horizontal inequalities are inequalities between defined groups, such as ethnic, religious, racial or ethnic-base groups. The concept of horizontal inequality differs from the general definition of inequality (vertical inequality) because the latter lines individuals or households up vertically and measures inequality over the range of individuals rather than groups. Horizontal inequalities are multidimensional and encompass economic, social, and political dimensions and best explains inequality on a broad basis as it affects poverty Vis a Vis growth. We define each of the dimensions of horizontal inequalities as follows:

- Political horizontal inequalities consist in inequalities in the group distribution of political opportunities and power, including control over the presidency, the cabinet,

parliamentary assemblies, the army, police and regional and local governments.

- Economic horizontal inequalities include inequalities in ownership of assets – financial, natural resource-based, human and social – and of incomes and employment opportunities that depend on these assets and the general conditions of the economy.
- Social horizontal inequalities cover inequalities in access to a range of services – education, health and housing and inequalities in achievements in health and educational outcomes.

a) Basic Features of Horizontal Inequalities in Nigeria

Horizontal inequalities are a structural feature of the Nigerian society, caused by a variety of factors such as colonial, cultural, demographic, geographic, economic and political which have been at the root of some of the challenges of growth, increasing poverty, governance, etc facing Nigeria. It is important to evaluate the underlying issues that provide the incentive for the existence of differentiated groups that have inadvertently helped to perpetuate poverty.

Table 2.9 (page 42) helps to illustrate the four dimensions of horizontal inequalities listed and some major elements within each one. Each of the dimensions is important in itself, but most are also instrumental for achieving others. For instance, political power is both an end and a means; control over economic assets is primarily a means to secure income but it is also an end. The relevance of any element depends on whether it forms an important source of income or well-being in any given location or group. Again, housing is generally more relevant to industrialized countries, while land is of huge importance where agriculture accounts for most output and employment, but becomes less important as development proceeds.

Unequal access to political, economic, and social resources and inequalities of cultural status can have a serious negative impact on the welfare of members of poorer groups who are conscious of their relative position and that of their group. In Abdul Raufu's (2007) view

high horizontal inequalities makes violent group mobilization and ethnic conflicts more likely.

Table 2.9: Sources of Differentiation among Groups.

Dimensions	Political participation	Economic Assets	Economic Employment & Incomes	Social	Cultural Status
	Government Ministers	Land	Incomes	Education	Recognition of religious practices
	Parliament	Human capital	Government employment	Health services	Designation of state religion
	Civil service- various levels	Communal resources	Private employment	Safe water	Designation of national languages
Elements of categories	**Army**	**Minerals**	**Skilled employment**	**Housing**	**Language of admin. and education**
	Police	Privately owned Capital/credit	Unskilled employment	Unemployment	School curricula
	Local Government	Government infrastructure	Elite employment	Poverty	Recognition of customary law
	Respect for Human Rights	Security of assets against theft/destruction	Informal sector opportunities	Personal and Household security	Recognition and support of ethno-cultural practices

Source: Adapted and organized from Abdul Raufu, 2007.

Group inequality provides powerful grievances which leaders can use to mobilize people, by calling on cultural markers (a common ethnicity or religion) and pointing to group exploitation. All these have aggravated poverty, entrenched economic inefficiency and have made it difficult to reduce or eliminate poverty because it is often difficult to reach members of deprived groups effectively with programmes of assistance. This is especially so because deprived groups face multiple disadvantages and discrimination that needed to be confronted together.

b) Economic Horizontal Inequalities

Economic inequalities in Nigeria are severe (see Abdul Raufu, 2007 and Isah, 2008). For example, core poverty is twice as high in the Northwest of the country as in the Southeast. Some of the economic inequalities can be traced to discriminatory allocation of government projects and grants, and differential access to key sectors of the economy, such as oil and gas, and telecommunications. Others are the unintended consequences of macroeconomic policies. This is the polarization effect through which dynamic areas accumulate advantages, while deprived areas do the opposite. The polarization effect can be seen in Table 2.10 below, which shows that bank loans in Lagos are being financed by deposits from other parts of the country.

Table 2.10: Inequalities in Banking Functions (2006)

Zone/State	% of Deposits	% of Loans
Lagos State	48	69.96
FCT Abuja	16.86	4.6
All 3 Northern Zones	10.75	8.5

Source: Soludo, 2007

Economic horizontal inequalities in Nigeria are as dangerous as political or bureaucratic horizontal inequalities and deserve greater attention than they are currently getting. Adequate access to capital, especially financial capital is critical to entrepreneurship development with particular bias for start-ups. The growth process is fast tracked with graduating development in entrepreneurship with implications for changes in income, employment and wealth creation. Such that any short circuiting of adequate access to credit facilities will have negative impact on business growth and development, employment and income generation as well as poverty reduction. The location and allocation of viable government and private sector projects resulting from economic feasibility studies are predicated on basis of returns to investment. Thus, both public and private financial investments are shifted to locations where returns to investment are highest. This has consequences for economic horizontal inequalities among different zones in Nigeria, thus

creating differences in income levels and living standards.

d) Social Horizontal Inequalities

In this study; health and education are elements in the set of social horizontal inequalities. Social inequalities and the associated problems of poverty and deprivation are a significant aspect of horizontal inequalities in Nigeria. For example, Galadanchi (2007) showed that in the Northwest of Nigeria only 25% of pregnant women use clinics, compared with 85% in the Southeast which is confirmed by the figures in table 2.11 below.

Table 2.11: Maternal Mortality Rates (per 100,000 live births) by Zones in Nigeria.

Zone	Mortality Rate
Southwest	**165**
Southeast	**286**
Northwest	**1025**
Northeast	**1549**
All Nigeria	**800**

Source: Galadanchi, 2007

From table 2.11 above, maternal mortality rates in the Northeast are 939% higher than the level in the Southwest. This could connote either poor health delivery facilities, shortfall in relevant skilled manpower, illiteracy or unavailability of requisite health facilities. All these have implications for human resource development that is fundamental to poverty alleviation.

Social horizontal inequalities exist in education that has complex causes ranging from lack of interest, apathy and the proportion of public and private investment. Also, the responsibilities of different tiers of government, communities, and families have contributed likewise to the existence of inequalities in education in Nigeria, which have resulted in income level imbalance, poor living standards, and low appreciation of best practices in health procurement and preservation, and access to poverty exit opportunities.

2.5 Macroeconomic Policy and Strategies of Poverty Alleviation in Nigeria

The macroeconomic policy issues of interest to be reviewed in the section comprises of monetary policy and fiscal policy. The specific monetary variables covered are money supply, inflation and price stability, interest rate, portfolio behavior and bank credit to the economy.

2.5.1 Monetary Policy and Fiscal Policy

The monetary policy variables of interest in this study are money supply, inflation and price stability, interest rate, bank portfolio behavior and credit to the economy while the fiscal policy variables of interest consist of total revenue, total expenditure, fiscal balance and external debt.

I) Monetary Policy

Monetary policy refers to the combination of measures designed to regulate the value, supply and cost of money in an economy, in consonance with the level of economic activities. It can be described as the art of controlling the direction and movement of monetary and credit facilities in pursuance of stable price and economic growth (CBN, 1992).

a) Money Supply

The most commonly accepted view of what money supply is, is associated with Keynesian thinking. This view holds that money supply is defined by the currency with the public and demand deposits with commercial banks. This is traditionally classified as M1. This definition is focused on the medium of exchange function of money and thus is considered as a narrow definition of money. Friedman (1964) redefined money supply to include the currency held by people, commercial banks demand deposits and time deposits of commercial banks (i.e. M1 + time deposits of commercial banks = M2). This is commonly referred to as the broad definition of money. Later, Gurley and Shaw (1965) included in the

money supply M2 plus deposits of savings banks, building societies, loan associations, and deposits of credit and financial institutions; categorized as M3..

From table 2.12 (page 47); there was a consistent decline in the growth of money supply for M1 and M2 between 2000 and 2002. M1 declined from 62.42% in 2000 to 15.86% in 2002, while M2 declined from 48.7% in 2000 to 21.58% in 2002. M1 grew significantly to 29.52% in 2003; M2 grew marginally to 24.11% during the same year. Both M1 and M2 dropped sharply to 8.6% and 14% in 2003 respectively. During the period 2004-2008 M1 grew steadily from 15.5% to 55.9%, while M2 grew from 16.03% to 57.9%. Even though M1 and M2 both declined in growth during the period 2000 to 2002; their levels consistently overshot Central Bank of Nigeria targets (CBN, 2004). The significant rise in all the monetary variables during the period 2000-2008 as shown in table 2.12(page 47) had negative implications for price stability and balance of payment which in-turn had severe consequences for unemployment and poverty at all levels.

Table 2.12: Money Supply Indicators.

Year	Money Base Mo		Narrow Money M1		Broad Money M2		Quasi Money	
	Mo	Growth Rate (%)	M1	Growth Rate (%)	M2	Growth Rate (%)	Quasi Money	Growth Rate
2000	310,496.3	33.5	637,731.1	62.24	1,036,079.5	48.7	398,348.4	41.2
2001	371,129.6	41.8	816,707.6	28.06	1,423,345.5	26.98	499,161.5	39.9
2002	435,138.6	42.6	946,253.4	15.86	1,918,925.7	21.58	653,241.2	38.2
2003	466,494.4	46.6	1,225,559.3	29.52	2,106,238.6	24.11	637,045.3	51.3
2004	512,839.3	45.5	1,330,657.8	8.6	2,568.065.3	14	760,391.8	41.9
2005	623,104.7	41.2	1,725,395.8	15.5	2,792,433.9	16.03	1,089,450.3	34.9
2006	779,254.2	39.9	2,280,648.9	32.2	4,027,901.7	30.6	1,739,639.9	31.3
2007	960,774.4	40.5	3,116,272.2	36.6	5,809,826.5	44.2	2,249,759.9	38.7
2008	1,155,566.8	41.6	4,857,544.5	55.9	9,167,067.6	57.8	4,304,707.8	26.1

Sources: Own computation from

i. **CBN Statistical Bulletin (2008 & 2009)**
ii. **CBN Annual Report and Financial Statements (2008)**
iii. **Annual Abstract of Statistics (2008)**

b) Inflation and Price Stability

Inflation is generally considered as purely a monetary phenomenon, with significant cost to the economy, thus the primary goal of monetary policy is to ensure that money supply is at a level that is consistent with the growth target of real income, such that non-inflationary growth can be ensured. The pursuit of price stability invariably implies the indirect pursuit of other macroeconomic objectives such as economic growth, which can only take place under conditions of price stability and allocative efficiency of the financial markets as well as clearly defined inflation target.

Table 2.13: Annual Inflation Rates and Composite Consumer Price Index (CCPI)

Year	Annual Inflation Rate (%)	Composite Consumer Price Index (CCPI)
2000	14.5	72.9
2001	16.5	84.9
2002	12.1	95.2
2003	23.8	117.9
2004	10.0	129.7
2005	11.6	144.7
2006	9.0	157.1
2007	7.0	167.4
2008	15.1	192.6

Source: CBN Statistical Bulletin, 2009

Inflation is one of the differentiating characteristics of the Nigeria economy during the period 2000-2008. Except for 2006 and 2007, prices, on average, have risen each year since 2000. From 2000 to 2008, the price level measured by the Composite Consumer Price Index

(CCPI) constantly experienced a sharp upward movement as shown in table 2.13 (page 39). The principal periods of inflation between 2000 and 2008 were associated with expansionary monetary policy regimes and the flow from oil revenue resulting from increases in crude oil prices at the international oil market. For the period (2000-2008) inflation rate was 14.5%, 16.5%, 12.1%, 23.8%, 10.0%, 11.6%, 9.0%, 7.0% and 15.1% respectively, as shown in table 2.13(page 48).

Price instability generates uncertainties that will materially affect consumption and investment decisions. With this scenario, economic agents will take long-term decisions with much reservation about price change at the macroeconomic level. In addition, the conditions in the financial markets and institutions would create a high degree of loss of confidence, such that the financial infrastructure of the economy may be undermined by the market participants. Indeed, an unstable price level, high inflation rate and unbridled money supply will render the transmission mechanism of monetary policy less effective, making the achievement and maintenance of strong macroeconomic fundamentals difficult.

c) Interest Rate Policy

Interest rate plays a pivotal role in consumption, investment, savings and borrowing decisions of all economic agents in an economy. Recall that in conventional Keynesian economic propositions, investment is a function of the rate of interest; savings also respond to changes in the rate of interest. Interest rate as return on financial assets serves as an incentive in the choice between present consumption and the deferment of consumption to a future period for present investment. Output changes in response to savings and investment. It then follows that interest rate policy is critical to the achievement of growth in real income (real GDP). Nigeria adopted the policy of regulation of interest rate during the 1970s up to 1986. In 1987, all controls on interest rates were removed, while the CBN adopted the policy of fixing only its minimum rediscount rate (MRR) to indicate the direction of interest rate changes (see Jibril, 2003). By 1994, direct interest rates control was restored; while total deregulation was again adopted in 1996. Between 2000 and 2008 the CBN has consistently maintained greater market approach in the determination of interest rates.

Table 2.14: Trend in Money Market Interest Rates (2000-2008)

Deposit Rates					Lending Rates		
Year	3 Months	6 Months	12 Months	Over 12 Months	Savings Rates	Prime	Max.
2000	10.6	10.27	10.67	10.44	5.29	17.98	21.55
2001	10.7	10.5	9.98	10.09	5.49	18.29	21.34
2002	16.31	16.99	16.5	15.57	4.15	24.85	30.19
2003	14.31	13.07	13.04	11.88	4.11	20.71	22.88
2004	13.69	12.47	13.32	12.21	4.19	19.18	20.82
2005	10.53	10.38	10.82	8.68	3.83	17.95	19.49
2006	10.25	10.07	7.89	8.73	3.14	17.26	18.7
2007	10.05	9.49	7.75	13.15	3.24	16.49	18.24
2008	12.91	12.86	12.71	12.7	3.52	16.08	21.18

Source: CBN Statistical Bulletin, 2009.

The period 2000-2008 falls within total deregulation of interest rate policy framework in Nigeria. However, there were intervals of policy modifications to accommodate other macroeconomic objectives of the Central Bank of Nigeria. For instance in order to influence the direction of interest rate, in line with the prevailing monetary conditions the Monetary Policy Rate (MPR) was reviewed upward by 50 and 25 basis point in April and June 2008, respectively. The rate was, however, reviewed downward by 50 basis point in September 2008 to minimize the contagion effects of the global financial crisis (see CBN, 2008). During this period (2000-2008) the average rate on time deposit of various maturity was between 7.75% and 16.99% while savings deposit average rate for the same period is 4.1% (see table 2.14 above).

It is appreciable that money market rates were relatively high in 2008 when compared with 2007 as liquidity conditions were quit tight in the money market in response to the global financial crisis. With inflation rate of about 15.1% (and its continued rise) CBN had to review the MPR in April, 2008. The weighted average maximum lending rate rose from 18.24% in 2007 to 21.18% in 2008 representing about 3% rise. While average savings rate fell by 0.4% points to 3.6% in 2008 (see table 2.14 above and CBN, 2008). With the annual year-on-year inflation rate at 15.1% in 2008, deposit rates were all negative, while lending rates were positive, in real terms.

II) Fiscal Policy and Macroeconomic Stability

Fiscal policy is the use of government revenue and expenditure policy to influence investment, employment, output and income. If the policy focus is fiscal expansion, government would increase its expenditure and/or reduce taxes. If on the other hand the policy focus is that of fiscal contraction government expenditure would then be reduced and/or increase in taxes (Olofin, 2001; Jhingan, 2004). Fiscal policy can either promote or retard economic growth through its impact on decisions regarding investment in physical and human capital. In particular, increased spending on education, health, infrastructure, and research and development can boost long-term growth (Bloom, et al; 2001). Higher growth, in turn, generates greater fiscal resources to finance spending on human capital, further bolstering the dynamism of the economy. Effectively and efficiently implemented government spending on infrastructure increases private sector productivity by providing complementary public inputs (for example, through spending on roads and bridges that facilitate trade in rural areas). This has the impact of increasing the factor productivity index, leading to increased economic performance (Besley and Burgess, 2003).

Ineffective fiscal policy, on the other hand can harm the growth process of an economy. Dead-weight loss from taxes that finance public spending and the associated adverse factor-supply effects are good examples that readily come to mind (Milesi-Ferretti and Roubini, 1998). In this case government intervention can generate lower index of total factor productivity and availability of factors of production as well as higher externalities imposed on the private sector by the government (Barro, 1990 and 1991), thereby producing a reduced real growth of the economy. Unproductive public spending can take various forms, including expenditure on wages and salaries of unproductive employees. Such resources can be deployed to more productive initiatives that would enhance productivity in the economy. Rent-seeking incentives reduce growth by diverting higher human capital away from productive activities with adverse impact on the index of productivity and as a result lower economic performance compared to what would have been obtained if the resources had been effectively deployed (Usman, 2008).

Macroeconomic instability is particularly damaging to the poor, as their earnings are not indexed to inflation and they have limited opportunities to invest in assets that provide a hedge against inflation. The macroeconomic stability associated with prudent fiscal policy yields greater benefits, including higher rates of investment and educational attainment, as expected rates of return can better be achieved in an environment of low inflation. Prudent fiscal policy, as reflected in appropriate fiscal deficit and debt tend to reduce the risk of economic crises, arising from concerns relating to the government's ability to meet its obligations. Such a fiscal policy stance prevents interest expenditure from rising to levels that squeeze out critical social spending and ensures that the stock of debt remains at levels consistent with a country's capacity to service this debt. Furthermore, the macroeconomic stability associated with the absence of such crises yields numerous benefits, including higher rates of investment, economic growth, and human capital development (see Gavin and Haussmann, 1988).

Table 2.15: Selected Economic Indicators (2004-2007)

	2004	2005	2006	2007
National Income and Prices (in % changes)				
Total GDP	10.5	6.5	6.0	6.3
Oil GDP	3.3	0.5	-4.5	-5.6
Non-oil GDP	13.2	8.6	9.4	9.6
CPI Inflation	15.0	17.8	8.3	7.0
Consolidated government operations (in % of GDP)				
Total Revenue	35.4	38.1	34.1	28.2
Total Expenditure	29.1	30.0	26.4	27.3
Fiscal Balance	6.3	8.1	7.7	0.9
External debt	35.9	20.5	3.5	3.3

Sources: Ministry of Finance, IMF report (2008) and Usman (2008)

The formulation and proper implementation of appropriate macroeconomic policies and programmes more often than not, enhance economic growth. Such macroeconomic policies expectedly involve the deliberate manipulation of policy instruments like public expenditure to achieve basic macroeconomic objectives such as poverty reduction. Table 2.15 in page 52 indicate that growth in total GDP which stood at 10.5% in 2004 fell to 6.5% in 2005; while total expenditure which was 29.1% of GDP in 2004 increased to 30.0% in 2005. Within this period (2004-2005), while total expenditure as a Percentage of GDP rose, total GDP fell. Total expenditure as a percentage of GDP which fell from 30.0% in 2005 to 26.4% in 2006 rose marginally to 27.3% in 2007. Percentage changes in total GDP for the same period (2006-2007) were 6.0% and 6.3% respectively. The CPI inflation for the period (2004-2007) was 15.0%, 17.8%, 8.3% and 7.0% respectively. On the whole, total revenue shrank throughout the period 2004-2007; recording 35.4%, 38.1%, 34.1% and 28.2% respectively (as indicated in table 2.15, page 52).

Fiscal balance figures for 2004, 2005 and 2006 depicts considerable fiscal imbalance, except in 2007; recording 6.3%, 8.1%, 7.7% and 0.9% respectively (see table 2.15 in page 52). Fiscal imbalance presupposes discrepancies between expenditure and revenue. Such imbalance in the Nigeria case suggests possible violation of fiscal requirements for expenditure and revenue outlays in budgetary propositions as well as implementation (Usman, 2008). In which case, if the imbalance is skewed in favour of expenditure over revenue, economic growth may be achieved only in the short run which cannot be sustained on a long term basis. Benneth (2007) pointed out that apart from the violation of the requirement for budget to be balanced or have surplus as the key element of a sound fiscal policy to achieve sustainable economic growth or stabilization, the design and execution of other strategies such as public allocation policy, public debt management policy and tariff policy did not help to improve the performance of the economy in terms of income growth and employment generation over the period (2004-2007). Public expenditure outlay for this period were essentially in favour of import–oriented production and consumption patterns, with few incentives for the expansion of non-oil exports. This adversely affected basic production in sectors such as agriculture, in which over 60% of the population are engaged, thereby

depriving such sectors of necessary resources for the needed growth and expansion of activities that would have redistributed income.

2.5.2 Strategies for Poverty Alleviation in Nigeria

Poverty alleviation/reduction is one of the most difficult challenges facing most developing countries where majority of the population is considered to be poor. Successive governments in Nigeria have tried varied efforts to address poverty with a view to reducing, alleviating and/or eradicating it (see Ogwumike, 2001; Buwai, 2004). Poverty alleviation measures implemented so far in Nigeria focus on growth, basic needs and rural development. Such measures could be grouped into the Pre-SAP Era, the SAP Era and the Post-SAP.

I. The Pre-SAP Era

During the pre-SAP era, National Development Planning was the major tool for economic growth and development. Even though, poverty alleviation/reduction was not the direct focus of the development plans, they included development opportunities in health employment and education as well as improvement of access to these opportunities.

Particularly, the fourth National Development Plan which was more precise in the specification of objectives that are associated with poverty alleviation emphasized increase in real income of the average citizens as well as reductions of income in equality (see Ogwumike 1998). However, some of the programmes were not specified to explicitly target poor people or communities. Some of the programmes specified in the National Development Plans are: the River Basin Development Authorities (RBDA); Agricultural Development Programmes (ADP); Agricultural Credit Guarantee Scheme (ACGS); Rural Electrification Scheme (RES) and the Rural Banking Programme. These programmes by design were to address such objectives as employment generation, enhancing agricultural output and income, reduction in rural-urban migration, which no doubt affects issues of poverty alleviation (Ogwumike, 2001).

Other poverty related programmes that were put in place during the pre-SAP era includes: Operation Feed the Nation (OFN) in 1977; Free and Compulsory Primary Education (FCPE) in 1977; Green Revolution (GR) in 1980; Low Cost Housing Scheme (LCHS) 1980; Back to Land (BL) in 1984. The OFN, Green Revolution and Back to Land were aimed at

boosting agricultural production, raise farmers' income and to improve the general performance of the agricultural sector in Nigeria (CBN, 1998).

II. The SAP Era

The Structural Adjustment Programme (SAP) brought with it a conscious policy effort on the part of government towards poverty alleviation. The severe economic crisis in Nigeria in the early 1980s worsened the quality of life for most Nigerians. The government then made a determined effort through the adoption of SAP to address the fundamentals of the economic crises. The government in an attempt to cushion the severe effects of SAP designed and implemented many poverty alleviation programmes between 1986 and 1993. Also, during the period of guided deregulation from 1993-1998 more poverty alleviation programmes were put in place by the government. A summary of the various poverty alleviation programmes put in place by the government between 1986 and 1998 is presented in table 2.16 (page 56).

Many of the programmes in table 2.16 (page 56) targeted poverty alleviation from different economic, social and philosophical point of view. For example, DFRRI as a programme was put in place in recognition of the complementarities of feeder roads, food, shelter, portable water as a foundation for an integrated approach to rural poverty alleviation. Given that poverty manifests itself in the form of unemployment and under employment, the NDE Vocational Skills Development Programme (VSDP), the Special Public Works programme (SPW), the Small Scale Enterprises programme (SSE) and the Agricultural Employment Programme (AEP) were aimed at solving the unemployment problems in Nigeria (See CBN, 2000 and Ogwumike, 1998).

Table 2.16: Summary of Government Poverty Alleviation Programmes 1986-1997

Programme	Year of Establishment	Target Group	Nature of Intervention
Directorate for Food, Roads and Rural Infrastructure (DFRRI)	1986	Rural areas	Feeder roads, rural water supply and rural electrification
National Directorate for Employment (NDE)	1986	Unemployed youths	Training, finance and guidance
Better Life Programme (BLP)	1987	Rural women	Self-help and rural development programmes, skill acquisition and healthcare
People's Bank of Nigeria (PBN)	1989	Underprivileged in rural and urban areas	Encouraging savings and credit facilities
Community Banks (CB)	1990	Rural residents, micro enterprises in urban areas.	Rural-Banking facilities
Family support programme (FSP)	1994	Families in rural areas	Healthcare delivery, child welfare, youth development, etc
Family Economic Advancement Programme (FEAP)	1997	Rural areas	Credit facilities to support the establishment of cottage industries.

Source: Organized and modified from Ogwumike (2001).

Poverty in Nigeria is basically a rural phenomenon and the rural women are said to be worst hit (see Ogwumike, 1998) due to lack of basic skills and education necessary for gainful employment. The Better Life Programme (BLP) was set up to enhance the quality of life of rural women. The People's Bank of Nigeria (PBN) and Community Banks (CB) were established to encourage the formation of productive capital (savings and finance credit) and to provide banking facilities for rural dwellers as well as to support micro-enterprises in rural areas (Olajide and Abiola, 1998). The two banking schemes were established in recognition of the indispensable role of finance in poverty alleviation.

The Family Support Programme (FSP) was geared toward the provision of health care delivery, child welfare, youth development, and improved nutritional status to families in rural areas. On the other hand, the Family Economic Advancement Programme (FEAP) was to provide support credit facilities to co-operative societies for the establishment of cottage industries in both rural and urban areas. The programme was also designed to create employment opportunities at the ward level, encourage the design and manufacture of

appropriate plants, machinery and equipment, and provide opportunities for the training of ward-based business operators (see Olajide and Abiola, 1998; also Ogwumike, 2001).

It is important to note that the frame work for most of the poverty alleviation strategies adopted in Nigeria during the period 1986 -1998 was focused on the rural areas and particularly on the agricultural sector. This is because available evidence (e.g. Buwai, 2008) shows that the poor are located mainly in the rural areas, whose main economic activity is agriculture.

III. The Post SAP Era

For the purpose of this study the post SAP era is defined as the era of democratic governance in Nigeria. At the inception of democratic governance in Nigeria, in 1999; the main agenda has been mainly to address the issue of poverty in a decisive and sustainable manner. Between 1999 and 2006, it was believed that poverty alleviation was the ultimate goal of the government (Ogwumike, 2001).

In 1999, the Federal Government observed that poverty was increasing to a worrisome level in Nigeria irrespective of concerted efforts being made to reduce poverty. Thus the following were identified by the government as some of the reasons for the low impact or total failure of the efforts: poor coordination of activities, lack of well articulated policy for poverty eradication, lack of sustainability of programmes and projects, absence of achievable target settling; absence of monitoring evaluations and impact assessment etc (Kpakol, 2004).

The identification of these problems set the agenda for the Federal Government to take the following decisive steps:

Streamline and rationalize the functions of core poverty alleviation institutions and agencies; reduce overlapping functions; enhance effective performance; improve co ordinations; and improve collaboration with state, local governments and International Donor Agencies.

Following this, the federal government took some definite decisions to restructure some institutions that are related to poverty alleviation in 2000. For example, Nigerian Agricultural Cooperative and Rural Development Bank (NACRDB) was formed from the merger of the Nigeria Agricultural and Cooperative Bank (NACB), People's Bank of Nigeria

(PBN) and the Family Economic Advancement Programme (FEAP); the scope of work of the National Directorate of Employment (NDE), was streamlined to exclude credit delivery and to limit it to training for skills acquisition, vocational training etc. In 2000, the National Poverty Eradication Council (NAPEC) for policy formation, coordination and monitoring was established. As an ad-hoc programme, the Poverty Alleviation Programme (PAP) for identification and formulation of relevant poverty alleviation programmes was also established in 2000 (See Buwai, 2004).

Furthermore, in 2001 the blueprint for the establishment of the National Poverty Eradication Programme (NAPEP) as an apex poverty eradication institution in Nigeria was approved. NAPEP consists of all relevant programmes and projects that are aimed at eradicating absolute poverty among the people of Nigeria.

2.6 Microfinance Policy and Regulatory Framework for Nigeria.

Over the years, awareness of the potentials of microfinance in poverty reduction, economic growth and development has grown. This growth in awareness has firmly placed the issue of microfinance on top of the political agenda of most developing countries. Consequently monetary authorities of various developing countries have taken active measures to address the issue of microfinance by developing appropriate policy and regulatory frame work based on the specific features and risks associated with defined activities of those institutions involved in microfinance. In 2005, the Central Bank of Nigeria (CBN) put in place microfinance policy and regulatory frame work for Nigeria to achieve a robust economic growth and poverty reduction through empowering the people by increasing access to factors of production, especially credit (see CBN, 2005).

I. Microfinance Policy Frame Work

a) Policy objectives

The 2005 microfinance policy for Nigeria has as its specific objectives the following:

i) Accessibility of financial services to a large segment of the potentially productive Nigerian population which otherwise would have little or no access to financial services.

ii) Promote synergy and mainstreaming of the informal sub-sector into the national financial system;

iii) Enhance service delivery by microfinance institutions to micro, small and medium entrepreneurs;

iv) Contribute to rural transformation and;

v) Promote linkage programmes between universal/development banks, specialized institutions and microfinance banks. (CBN,2005)

b) Policy Targets

The policy objectives were expected to target the following:

i) to cover the majority of the poor but economically active population by 2020 thereby creating millions of jobs and reducing poverty.

ii) to increase the share of micro credit as percentage of total credit to the economy from 0.9 percent in 2005 to at least 20 percent in 2020; and share of micro credit as percentage of GDP from 0.2 percent in 2005 to at least 5 percent in 2020.

iii) to promote the participation of at least two-thirds of state and local governments in micro credit financing by 2015.

iv) to eliminate gender disparity by improving women's access to financial services by

5 percent annually; and

v) to increase the number of linkages among universal banks specialized financial

institutions and microfinance banks by 10 percent annually (CBN, 2005).

c) Policy Strategies

From the objectives and targets above defined strategies were derived as follows:

i) License and regulate the establishment of micro finance banks (MFBs).

ii) Promote the establishment of NGO-based microfinance institutions

iii) Promote the participation of government in the microfinance industry by encouraging states and local governments to devote at least one percent of their budgets to micro credit initiatives administered through MFBs.

iv) Promote the establishment of institutions that support the development and growth of microfinance service providers and clients;

v) Strengthen the regulatory and supervisory frame work for MFBs

vi) Mobilize domestic savings and promote the banking culture among low income groups;

Vii) Promote sound microfinance practice by advocating professionalism, transparency and good governance in microfinance institutions, etc. (CBN, 2005).

II The Goals of Microfinance Banks

The intended purposes for the establishment of microfinance banks in Nigeria are to:

i) Provide diversified, affordable and dependable financial services to the active poor, in a timely and competitive manner, that would enable them to undertake and develop long term sustainable entrepreneurial activities;

ii) Mobilize savings for intermediation;

iii) Create employment opportunities and increase the productivity of the active poor in the country, thereby increasing their individual household income and uplifting their standard of living;

iv) Enhance organized, systematic and focused participation of the poor in the socio-economic development and resource allocation process;

v) Provide veritable avenues for the administration of the micro credit programmes of government and high net worth individuals on a non-recourse case basis. In particular, this policy ensures that state governments shall dedicate an amount of not less than 1 percent of their annual budget for the on-lending activities of microfinance banks in favour of their residents; and

vi) Render payment services such as salaries, gratuities, and pensions for various tiers of government.

III. Policy Measures and Instruments in the establishment of the Frame Work for Microfinance Banks

Private sector-driven microfinance banks were to be established. The established microfinance banks were required to be well capitalized, technically sound, and oriented towards lending, based on the cash flow and character of clients. Two categories of microfinance banks were specified, namely:

a) Microfinance Banks (MFBs) licensed to operate as a unit bank (a.k.a. Community Bank). MFBs licensed to operate as unit banks shall be community- based banks. Such banks can operate branches and or cash centers subject to meeting the prescribed prudential requirements and availability of free funds for opening branches/cash centers. The minimum paid-up capital for this category of banks shall be #20million (Twenty million Naira) for each branch. (CBN, 2005)

b) Microfinance Banks (MFBs) licensed to operate in a state

MFBs licensed to operate in a state shall be authorized to operate in all parts of the state (or the Federal Capital Territory) in which they are registered, subject to meeting the prescribed prudential requirements and availability of free funds for opening branches. The minimum paid-up capital for this category of banks shall be #10billion (Ten Billion Naira).

2.6.1 Microfinance Regulatory Framework and Incentives.

I. Regulatory Framework

For the purpose of efficient and effective supervision of microfinance institutions and their various activities to ensure compliance, the following frame work was laid down.

Licensing of microfinance banks shall be the responsibility of the Central Bank of Nigeria. A licensed institution is required to add "Microfinance Bank", after its name. All such names shall be registered with the Corporate Affairs Commission (CAC), in compliance with the Companies and Allied Matters Act (CAMA) 1990.

A National Microfinance Consultative Committee (NMCC) was constituted by the Central Bank of Nigeria (CBN) to give direction for the implementation and monitoring of this policy. Membership of the committee is to be determined from time to time by the CBN. The microfinance support unit of the CBN is to serve as the secretariat to the committee.

Due to the peculiar characteristics of microfinance practice, a credit reference bureau, which is responsible for providing information on microfinance clients and aid decision making was created. In this regard, the present Credit Risk Management System in the CBN shall be expanded to serve the needs of the microfinance sector.

The CBN shall encourage the establishment of private rating agencies for the sub-sector to rate microfinance institutions, especially those NGO-MFIs which intend to transform to microfinance banks.

Since MFBs are deposited-taking institutions and in order to reinforce public confidence in them, MFBs shall qualify for the deposit insurance scheme of the Nigerian Deposit Insurance Corporation (NDIC).

In order to bridge the technical skill gap, especially among operators of microfinance banks, the policy recognizes the need to set up an appropriate capacity building programmes for MFBs.

To this end, the CBN was mandated to put in place a microfinance bank management certification process to enhance the acquisition of appropriate microfinance operational skills of the management team of MFBs. A transition period of twenty-four (24) months was allowed for the take-off of the programme, with effect from the date of launching the policy.

The establishment of an apex association of microfinance institutions to promote uniform standards, transparency, good corporate practices and full disclosures in the conduct of MFI businesses was encouraged.

The policy recognized the importance of the provision of wholesale funds for microfinance banks to expand their outreach. Pursuant to this, the CBN worked out the modalities for fostering linkages between universal/development banks, specialized financial institutions and the microfinance banks to enable the latter source for wholesale funds and refinancing facilities for on-lending to their clients.

In order to promote the development of the sub-sector and provide for the wholesale funding requirements of microfinance banks, a Microfinance Sector Development Fund shall be set up. The fund shall provide necessary support for the development of the sub-sector in terms of refinancing facility, capacity building and other promotional activities. The fund would be sourced from government and through soft facilities from the international development financing institutions, as well as multilateral and bilateral development institutions.

The CBN recognizes the peculiarities of microfinance practice and shall accordingly put in place appropriate regulatory and prudential requirements to guide the operations and activities of the microfinance banks.

Licensed MFBs shall be required to disclose their sources of funds, in compliance with the money laundering prohibition act 2004. The board of directors of MFBs shall be responsible for establishing strategic objectives, policies and procedures that would guide and direct the activities of the banks and the means to attain same, as well as the mechanism for monitoring management's performance.

II. Regulatory Incentives:

The new window of opportunity for the emerging microfinance banks in bringing financial services to people, who never had such access to such services before, would necessitate the support of government and regulatory authorities. The CBN shall corroborate with the appropriate fiscal authorities in providing a favorable tax treatment of MFBs'

financial transactions, such as exemptions from value added tax (VAT) on lending, or tax on interest income or revenue.

The principle of exemption from profit tax shall be applied to any MFB that does not distribute its net surplus but ploughs it back and reinvests the surplus to finance more economically beneficial micro, small and medium entrepreneurship.

Further, a Rediscounting and Refinancing Facility (RRF) shall be made available to MFBs for purposes of providing liquidity assistance to support and promote microfinance programmes. This would enable MFBs that have met the CBN prudential requirements to, on a sustainable basis, provide and render micro credits and other services to their clients.

CHAPTER THREE

REVIEW OF LITERATURE

3.1 OVERVIEW OF THE CONCEPT OF MICROFINANCE AND POVERTY ALLEVIATION

The term microfinance is used in different contexts. Because of the diversities in its usage, it can sometimes be oversimplified and viewed in a skewed or narrow perspective. At its core, microfinance can be viewed as an innovative segment of the banking sector to provide financial products and services, primarily credit, to the poor thus bridging the gap that commercial banking has not been able to fulfill, and where philanthropy has not been able to go beyond pilot approaches to reach meaningful scale (see Marge, 2007). The building blocks of the concept of microfinance were conceived on the platform of the agenda to provide small loans for the specific purpose of creating self employment for the poor, thereby enabling the poor to build their own micro enterprises and move themselves out of poverty. In essence, microfinance is an income producing tool rather than consumption and thus goes beyond just providing the poor with access to financial capital.

Three basic features have been identified which helps to draw a line of distinction between microfinance and other formal financial institutions' services and products. These are: a) smallness of loans advanced and or savings collected b) absence of asset based collateral and c) simplification of operations (see CBN, 2005)

Microfinance has grown exponentially in the last decade as investors, donors and commercial banks realize the potential for capital that can be pooled together by banking to the rural poor. In the past it was assumed that the rural poor were un-bankable since they were only capable of taking small loans, and had no collateral (Swope, 2005). However, the Grameen Bank experience in Bangladesh has proved that not only are the poor bankable, but microfinance in the informal sector can be quite profitable (See Brandsma and Chaouli 1998:1). Since then microfinance institutions have sprung up all over the world and reached millions of poor people (Simanowitz and Walter 2002:5).

Swope (2005) holds the view that a microfinance institution is usually a non-governmental organization (NGO) or governmental program aimed at poverty alleviation. It serves as a bank for the rural poor which provide access for financial loans for the purpose of starting a small business. Again, Swope (2005) strongly emphasized the fact that because microfinance banks operate primarily (though not exclusively) in the Third world, they are often faced with unique difficulties such as lack of collateral and lack of infrastructure or mobility. Consequently, microfinance institutions have adopted several innovative practices to accommodate for these difficulties. These practices as indicated in Swope (2005) include the use of village banks, trust and group lending programmes focused on women, and high interest rates.

This study non- the- less agrees with Swope (2005) that these innovative practices are co-terminus with microfinance in general. However, these practices represents an informal microfinance that does not come under the purview of institutionalized regulatory frame work that have been emphasized in recent discus on the nexus of microfinance and poverty alleviation (see CBN,2005, Marge 2007 etc). The regulatory and policy frame work for formal microfinance institutions that resulted from the 2004/2005 Nigeria financial sector reforms presents an opportunity for a possible debate about the likely difficulties that could confront emerging microfinance institutions in attempting to integrate Swope's (2005) innovative practices into their operations mainly due to high take-off capital and operating cost implications

Recent developments in most developing economies, especially in sub-Saharan Africa, (SSA), Latin America (LA), Asia, etc have succinctly reinforced the contention that microfinance structures are imperatives for the economic and social development of rural areas and consequently reduce poverty. This is in consideration of the fact that socio-economic developments in these countries have been pro-urban centers (Iheduru, 2002). From the United Capital Development Fund's (UNCDF) point of view, the development of microfinance institutions over the last two decades or so is a clear major stimulus for development in the countries of the south, and it is a powerful tool for combating rural poverty (see, Iheduru, 2002).

It is however interesting to note that Olomola (2005) has argued that multiplicity of microfinance institutions over the years in Nigeria through government interventions has not resulted in significant improvement in rural financial intermediaries. Following this, others (e.g. Iheduru 2002, Alegieuno, 2005, Olaitan, 2005, etc) have put forward that the rate of socio-economic transformations of the rural areas particularly in Nigeria has been dismally low, irrespective of the multiplicity of microfinance institutions via government interventions. What is missing? What is responsible for the weak link between the growing number of microfinance institutions in Nigeria and rural socio- economic transformation that could sufficiently reduce rural poverty in Nigeria? This study is relevant as it seeks to find out why the multiplicity of microfinance institutions resulting from government intervention has failed to bring out socio-economic transformation in rural areas in Nigeria. How far will private sector driven microfinance structure go in correcting the failure of government led microfinance intervention in the pursuit of rural poverty reduction in Nigeria?

Understanding poverty as a concept is fraught with certain complexities. The conceptual complexity of poverty is a result of its multi-dimensional nature. Therefore, a single conceptual definition is obviously difficult. Poverty encompasses issues of sub-optional utilization of economic, social, political and religious opportunities that prohibit access to basic needs such as good food, sustainable income; education, healthcare, etc (see Alegieuno and Attah, 2005). A conceptual definition is critical since it forms the basic tenets of the frame work for poverty alleviation, reduction or eradication.

Absolute poverty may be defined as an individual's inability to satisfy basic needs in food, clothing, shelter, and health (Answer.com, 2008). In more economically developed countries (e.g. United Kingdom) relative poverty is more often discussed. Thus in United Kingdom, relative poverty applies to those households whose annual income (including all benefits) is below 50% of the median in terms of the entire households. (CACI Ltd U.K 2006). The immediate problem that then confronts us is the problem of where to draw the poverty line.

Yapa (2006) argued that poverty is socially constructed. For Yapa (2006), poverty is embedded in a nexus of productions relations diffused throughout society. To illustrate this,

Yapa (2006) stated that 20% of the Sri Lankan population exist on less than their minimum daily food supply not because they are poor but because of Sri Lankan agricultural policy. Poverty is also disempowerment (Williams, 1996). This is illustrated in William's (1996) reference to the scheduled castes (untouchables) and widows in West Bengal; while Drēze (1998) describes poverty as a lack of entitlements.

Again, Ravallion and Bidani (1994) referred to poverty as a lack of command over basic consumption needs that is, a situation of inadequate level of consumption; giving rise to insufficient food, clothing and shelter. World development report (1990) defined poverty as the inability to attain a minimum standard of living. The report constructed two indices based on a minimum level on consumption in order to show the practical aspect of the concept of poverty. While the first index was a country–specific poverty line, the second was global, allowing cross-country comparisons (Walton, 1990). Other indices invoked by United Nations include life expectancy, infant mortality rate; primary school ratios and number of persons per physician (see Elumilade, Asaolu and Adereti, 2006). However, Sen (1992) is of the opinion that gender and place sensitive definitions of poverty would help to identify target groups and place for poverty alleviation programmes since such definitions would more efficiently focus on people and place functioning and capabilities as income or consumption based definitions would not.

Measurements of the extent of poverty generally depend on how it is defined. Poverty as a relative term is understood differently for an affluent post industrial culture than for a developing country. As stated by John Kenneth (2008), people are poverty-stricken when their income, even if adequate for survival falls markedly behind that of the community. Earlier on Michael (1962) had established that poverty is obviously defined when 20 to 25 percent of any given population at a time live without adequate nutrition, housing, medical care, and education. This implies that such a group of people are deprived of the standard of living shared by the rest of the society.

From the World Bank's (1992) point of view a poor person is considered as one without a job, who cannot help himself or cater for his family, who has no money, farm or business. Adolescent males and females are poor if they have no parents, education, no good

food, clothes and health. A poor person is described as one who is under nourished and ageing fast, one without self-confidence, looks dirty and lives in a filthy environment, one who cannot cater for his family, train his children in the school and unable to pay medical bills.

From the absolutists literature (e.g. Johnson, 1974, Aluko, 1975, etc), poverty is conceived to be a situation in which a population or section of the population is able to meet only its subsistence essentials of food, clothing and shelter in order to maintain minimum standard of living. Johnson (1974), Aluko (1975) and Isah (2007) believe that poverty is made manifest in lack of basic necessities of life including material wealth, flow of income and inability to sustain oneself. With these conditions prevalent, income becomes insufficient to support basic needs. Again the contention for appropriate definition rages on with Ajakaiye and Olomola (1999), Oladuni (1999), Engllawa et al (1997) arguing that poverty goes beyond mere measurement of incomes and consumption. That for any definition of poverty to be relevant, it must take into cognizance a measure of purchasing power, physical health and education, which absence would clearly indicate retrogression in human life. Consequent upon these assertions, Oladuni (1999) and Engllawa, et al (1997) defined poverty as a living condition that confronts an individual with economic, social, political, cultural and environmental deprivations. Such deprivations carry with it the consequences of not having enough to eat, a high rate of infant mortality, low life expectancy, low educational opportunities, lack of portable water, inadequate health care, unfit housing and lack of active participation in the decision making process.

In view of the multidimensional definitions of poverty given above, this study is of the opinion that poverty is characterized by the inability of individuals, households, or communities to command sufficient resources to satisfy a socially acceptable minimum standard of living.

Traditionally, microfinance implies providing very poor families with very small loans (micro credit) to help them engage in production and to grow their tiny businesses. In recent times, microfinance has witnessed the inclusion of a broader range of services (credit, savings opportunities, insurance, etc) as it becomes clear that the poor and the very poor that lack access to traditional formal financial institutions require a variety of financial products (See

Microfinance gateway 2008). It is noteworthy that place matters in issues of providing broad range sophisticated financial products especially as it affects the very poor. The very poor are basically found in the rural areas where the cost of providing the aforementioned financial products is quite prohibitive as supporting infrastructure are unavailable. The obvious implication is that the on-cost of these services could be a disincentive for the very poor, who constitute the target group of microfinance.

In Kimotha's (2005) view, modern microfinance is focused on providing standardized credit products. These include mainly loans, savings opportunities, insurance, money transfers and other financial products, through regulated formal financial institutions with bias to the low income and poor clients. Micro credit refers specifically to small loans which may not necessarily be institutionalized. The average loan size varies from country to country, but in most cases, the average loan is the equivalent of $120 to $150 in the respective country currency. Where institutional micro credit is available, it is often made without collateral by a bank or other institutions (e.g. an NGO) directly to the very poor through group lending.

The growing concern that the poor just like anyone else, need a diverse range of financial instruments to be able to build assets, stabilize consumption and protect themselves against risks, provided the frame work for the broadening of the concept of microfinance to include a range of financial services other than small credit. Essentially the challenge is, to find out the implication of "place" for the realization of poverty alleviation based on the frame work for broadening the concept of microfinance. This is because such broadening of concept will clearly shift emphasis to sustainability in the face of zero subsidies. The characterization of the Nigeria rural areas brings to the fore the cost implications on the rural poor in the delivery of microfinance services as distinct from micro credit which focuses mainly on small loans.

The typical target clients of microfinance are low income persons that do not have access to formal financial institutions. In rural areas, they are usually small farmers and others who are engaged in small income-generating activities such as food processing and petty trade. In urban areas, microfinance activities are more diverse and include shopkeepers, service providers, artisans, street vendors etc. by inference, microfinance clients are poor and

vulnerable non-poor who have a relatively stable source of income (Microfinance Gateway, 2008).

Access to conventional formal financial institutions is directly related to income: the poorer you are the less likely that you have access. On the other hand, the poorer you are, the more expensive or onerous informal financial arrangements. In view of this, Kimotha (2005) stressed that informal financial arrangements may not suitably meet certain financial service needs or may exclude the very poor. Individuals in this excluded and under-serviced market segment are apparently the clients of microfinance.

As the notion of the type of services of microfinance broadens, the potential market of clients of microfinance also expands. Micro credit might have a far more limited market scope than a more diversified range of financial services which includes various types of savings products, payment and remittance services and insurance products; it is more target focused especially on the rural very poor (Godwin, 2005). For instance, a very poor rural farmer may not require the services of apartment and remittance but access to small loans to support production in order to earn income for daily living requirements.

While the broad range of services offered by today's microfinance institutions may serve the needs of low income and vulnerable non-poor with relatively stable sources of income in urban and semi-urban areas, these range of services may not serve the needs of the very poor in rural areas where support infrastructures that ensures the provision of such services are non-existent. Thus rural poverty alleviation in Nigeria may be hampered in view of the 2005 microfinance policy frame work. (See Ngozi 2005; CBN 2005; Kimotha, 2005).

3.2 The Theoretical Literature

The theoretical literature review is focused on the relevance of the linkage between poverty, inequalities and growth in the determination of the choice strategy for poverty alleviation. The review also, highlights the theoretical issues of anti-poverty programme designs and the approaches to measuring and evaluating the impact of microfinance on poverty alleviation.

3.2.1 Poverty, Inequalities and Growth

Poverty, inequality and growth interact with one another in a three-way link. First, inequality and poverty are assumed to affect each other directly or indirectly through their link with growth. Second, poverty can be influenced through redistribution of income (Felix, 2002). Third, growth directly affects poverty; while growth also affects inequality.

Why is inequality of any concern in the analysis of poverty reduction? In most analysis of socio-economic indicators (e.g. Francois, 2004; Todaro et al, 2006; etc) of a number of countries; increased social welfare is assumed to depend positively on the level of income per capita and negatively on poverty and negatively on the level of inequality. It is on the basis of this concern for relative inequality that the universal support for the alleviation of absolute poverty arises (see Isah, 2008). Fundamentally, concern for inequality arises on account of the fact that extreme income inequality leads to economic inefficiency (Toney, 2002). The argument is that at any given average income, the higher the inequality, the smaller the fraction of the population that qualifies for a loan or other forms of credit. When low income individuals cannot adequately borrow money, they generally cannot adequately educate their children or start and expand business. And with high inequality, the overall saving rate tends to be lower, because higher rate of marginal saving is usually found among the middle income classes because the rich spend much of their income on imported luxury goods, gold, expensive cars, their marginal propensity to save is very low (confirm, Isah, 2008).

Bhorat (2008) further argued that there is very little debate amongst economists around the notion that a high level of economic growth is essential for poverty reduction. In Bhorat's (2008) view, increased growth rates, measured by rising *per capita* mean incomes, makes the linkage between poverty, inequality and growth clear and simple: Rising growth rates, yields lower poverty levels in the society. Cross-country results from Ravallion and Chen, (1997) have indicated that the absolute value of the elasticity of poverty with respect to economic growth (as measured by the survey mean income or consumption) ranges from 1 to 5, with an average of 3. Hence, there is strong evidence that economic growth is a necessary condition for poverty reduction. The range of values however suggests that some economies are more

able to achieve pro -poor growth than others, indicating that economic growth is a necessary but not sufficient condition for poverty reduction.

One over-riding factor in understanding the growth-poverty linkage is of course how it is intermediated through distribution of income. Once inequality is allowed to change in the modelling of the welfare consequences of economic growth, the impact on poverty is unclear (Kanbur, 2004; Kanbur & Squire, 1999). Again, Bhorat (2008) pointed out that the most important welfare consequence from growth, in terms of its impact on poverty, is how the growth process impacts on the distribution of income. The consequent literature, driven by the work for example of

Attempts by Ravallion and Datt (2002); and Kanbur (2005) to provide more accurate and careful representation of the interaction between economic growth, poverty and inequality have indicated: First, that growth which is accompanied by a rise in income inequality will dissipate the impact of the former on poverty reduction. This was earlier proved by Ravallion (2001) by showing that the impact of economic growth on poverty depends on the extent to which inequality has increased. Ravallion (2001) further indicated that, spells of growth during the 1980s in a sample of economies including Bangladesh, China, Colombia, India, Philippines and Vietnam, witnessed the dilution of the impact on household poverty through rising income inequality. The often apparently minor changes in the relevant inequality measure – usually the Gini coefficient – belie the dramatic impact these shifts can have on poverty reduction outcomes from growth.

Secondly evidence seems to suggest that the initial level of income inequality within an economy is important in predicting the magnitude of the impact of growth on poverty (Ravallion, 1997; Clarke, 1999; Ravallion, 2001). Specifically, higher levels of initial income inequality are likely to be associated with a lower impact on poverty from growth, *ceteris parabus*. Bhorat (2008) put forward that this expectation is based on the fact that an initial mal-distribution of physical, human and financial resources makes it much difficult for the poor to participate in, and therefore gain from, the process of economic growth. Ravallion (2004) illustrated through cross-country evidence how, at very high levels of initial income

inequality within the choice sample, growth-poverty elasticities are not significantly different from zero. In many cases then, societies on a path of successive years of growth should expect more inelastic growth inequality outcomes than possibly that of growth and poverty. This relationship has implication for this study as it is obvious that any choice strategy for poverty alleviation that will be incapable of fundamentally addressing issues of growth, inequalities in income and opportunities is not likely to be sustainable and this has consequences for the sustainability of the desired outcome of poverty alleviation.

3.2.2 Models of Poverty Alleviation and Microfinance

Poverty alleviation programs usually develop from one of two approaches viz, the technocratic approach or the institutional. Economists (e.g. Besley, 1996) generally tend to rely on the technocratic approach, which emphasizes designing policies that target the poor as effectively as possible. Non economists (e.g. Amartya, 1995) and nongovernmental organizations favor the institutional approach which emphasizes the development of institutions and the improvement of government performance as means of alleviating poverty. The gap between these two perspectives is that of targeting. Bridging up the gap between the two has always been a problem (see Amartya, 1995). This study finds its relevance in attempting to contribute to the on-going debate about how to bridge the gap between the two perspectives by reviewing a simple theoretical framework that shows how each approach can be modeled and incorporated into policy discussions.

Understanding how to alleviate poverty is a central concern of development economics. There is evidence (e.g. Bruno, Squire, and Ravallion 1995) that policies designed to foster economic growth significantly reduce poverty. However, it is arguably clear also, that policies aimed specially at alleviating poverty are of great importance (Besley, 1996). For instance, programs that provide credit and build human capital try to eliminate the causes of poverty (see Ernest, 1996). Such programs could have a short or a long run perspective. Whichever perspective is aimed at, program design always assumes that income earning activities are fixed.

There are two disparate approaches to poverty alleviation program design. These are; the technocratic approach and the institutional approach. The technocratic approach is usually associated with economist and it focuses on targeting, exploring the theoretical and empirical implications of trying to direct limited resources to people with greatest needs. These efforts emphasizes the difficulties of identifying target groups and use creative approaches to program design that substitute for the detailed information required to achieved first-best results. In the view of Besley (1996), central to such explorations are the incentive effects of program designs, which underscore the need to know key behavioral parameters, such as labor supply responses, in order to formulate policy. It is because of the implicit model of policy making process of this approach that qualifies it to be referred to as technocratic approach. The perspective is that of a "planner" charged with meeting a well-defined objective in the best way possible. As such it parallels a long and distinguished tradition in public sector economics. The institutional approach is more common among non economist (e.g. Edwards, 1995 etc.). For non economist, the question of why programs for the poor do or do not work has much to do with social institutions than with policy designs. In this view, anti poverty policies fail because the poor lack political power or because administrative incompetence or corruption keeps governments from delivering services. Thus improving the lives of the poor requires developing institutions; improving government performances, and changing political structures and attitudes towards the poor.

The gap between the two approaches is easily made obvious in their views of the role of Non Governmental Organizations (NGO) in poverty alleviation programs. The technocratic approach rarely refers to NGOs, while the institutional approach considers them vital to the attack on poverty in developing countries. For Besley (1996), institutionalist see NGOs as policy actors, that are able to substitute for corrupt and inefficient governments in delivering services to the poor, and as an essential part of the political process, fostering empowerment among the poor and lobbing government to change policies.

Hulme et al (1995) submitted that the institutional approach presents interesting challenges to economists. In one sense it suggests that economic analysis is of secondary importance in the design of poverty alleviation programs. However, it is none the less clear

that the increasing concern with better targeting in poverty alleviation programs that stems from governments desire to minimize the cost of achieving poverty alleviation objectives makes economic analysis in the design of programs of paramount importance.

There are two models that help to capture the essence of technocratic and the institutional approaches viz; the cost-minimizing model and non governmental organization (NGO) model. A review of these models would help to show how each approach is modeled and incorporated into policy discussions.

a) The cost-minimizing model.

The need for better targeting in poverty alleviation programs has become a growing concern for government as a result of the necessity of minimizing the cost of achieving poverty goals. Such need carries with it an implication of models in which tax payers, as financiers of transfer programs, seek fiscally efficient methods of helping the poor. The intent is that they expect programs to be designed in such a way that financial burdens would be minimal.

Besley (1996) opined that the minimizing model of program design meets the requirement of targeting and provides a useful first step to developing a positive theory of transfer to the poor. The model also serves as a useful tool for clarifying issues relating to poverty alleviation programmes.

From Besley and Coate (1992, 1995), society is viewed as comprising of two groups: those who make transfers (the rich) and those who receive them (the poor). Thus, there are n_R rich and n_P poor. Each group is assumed to be homogeneous. They are however, differences between the income earning activities of members of the two groups that are reflected in their respective wage rates. It then follows that an individual of type I who supplies l unit of labor will enjoy earnings of $y_i=a_i l$ ($i \in \{P, R\}$).

Consumption is denoted by x_i. Preferences of the poor are given by:

$Up=x_p-h(l_p)$……(1)

Where h (.) is the disutility of labor.

The utility of the rich is given by:

$U_R = x_R - Є(x_p, \lambda R)$…….(2).

Where λ_R is the degree of sympathy the rich feel towards the poor. Besley (1996) noted that for simplicity, the model ignores the labor supply of the rich; it assumes that their supply of labor is inelastic.

Besley (1995), showed that equation (2) above is a reflection of the belief that the rich care about their own consumption but at the same time affected by disutility from poverty. Besley (1995) then assumed that such a functional relationship is decreasing in terms of xp. This implies that the rich prefer the poor to enjoy more consumption, other things being equal. And that the relationship is increasing on λ_R basis, such that a larger value of λ_R represents greater sympathy for the poor. Thus the equation (2) builds in, in a simple and transparent way, the notion that the rich care about the poor. This concern could be interpreted as altruism or as an attempt to avoid the social unrest that could arise if the poor suffered too great a consumption deficit (Boone, 1996). In any event, whatever the reason, there is a motivation to redistribute income. There is however an implied non welfarism in the preferences of the rich; they are presumed to care only about the consumption of the poor, not their utility.

Besley and Coate (1995) assumed that the government is controlled by the rich. Therefore, its objectives are to design a poverty alleviation programme that is financed through taxes paid by the rich. The taxes finance transfers to the poor. Transfer to the poor can depend in principle, on any characteristics observable to the government. But in Besley (1996), the initial critical focus is on the case where transfers depend only on income shown in the function: B(y).

In the cost minimizing model, government's choice of program is constrained in a number of ways (see Besley and Coate 1995). However, all the cases considered in Besley (1996) imposed constraint of voluntary participation of the poor, which implied that the poor must be willing to take any benefit intended for them. This condition rules out a scheme in which the rich could possibly tax the poor. This takes into consideration the ideas that taxes are compulsory in a way that transfers are not. It also reflects a concern that pervades transfer programmes, about the failure of eligible people to take up benefits.

The requirements of voluntary participation assume that people not taking transfers must be at least as well-off as they would be if they were taking transfers. Besley (1996) expressed this as follows:

$$\text{Max}\{a_p l + B(a_p l) - h(l)\} \geq \max\{a_p l - h(l)\} \equiv Up \ldots\ldots\ldots\ldots (3)$$

Before specifying the problem faced by the government, Besley (1995) specified the tax system used to finance the target poverty alleviation programme. For simplicity, Besley (1995) supposed a head tax on the rich. While Besley (1995) accepted that such a tax was unrealistic, the general principles discussed where expected not to be affected by such a simplistic supposition.

In the cost minimizing model, the form of the optional benefit schedule is simple. With an assumption of no imperfect information about the poor's work ability, the rich can effectively choose the consumption- labor supply bundle of the poor, subject to voluntary participation.

The benefit schedule then takes the form:

$$B(y) = \begin{cases} x_p - y_p & \text{if } y = y_p \\ 0 & \text{otherwise} \end{cases} \ldots\ldots\ldots (4)$$

Individuals receive benefits only if they have earnings of less than a certain level. The absence of imperfect information makes this distinction enforceable. It then follows that the problem to be solved by the optional benefit schedule can be stated in the form:

$$\underset{\{X_p,\, y_p\}}{\text{Max}} = Y_R - (n_p/n_R)(x_p - y_p) - \sum (x_p, \lambda_R)$$

Subject to

$$X_p - h(y_p/a_p) \geq U_p \ldots\ldots\ldots\ldots\ldots\ldots (5)$$

According to Besley (1996) this is the canonical form of the optional poverty alleviation program. Besley (1996) pointed out that given the unrealistic nature of the model, the point

then is not to develop the poverty alleviation program that would necessarily solve the problem of low earning capacity of the poor. The model is useful for the identification of the solution since it serves as a benchmark for illustrating the possibility of bridging the gap between the technocratic approach and institutional approach. The only constraint which the government is expected to face is that of voluntary participation. Based on this, the transfer schemes stipulate an earning level y^*_p just high enough that the poor are better-off than they would be without the transfer. This is defined by:

$$Z - h(y^*_p/a_p) = Up \quad \ldots\ldots\ldots\ldots\ldots\ldots (6)$$

The government then set the transfer to fill the gap between this earning level and the poverty line. The underlying assumption is that transfer recipient in such a scheme are "forced" to work harder than they would in the absence of transfers (See Besley, 1996). Since they received a transfer, they receive their pre-program utility level, thus their consumption is Z, which defines the minimum level the rich wants the poor to achieve.

Again Besley (1996) stated that the problem of designing an optimal benefit scheme can be thought of as consisting of two stages. The first stage is the program design stage:

$$\text{Min } (n_p (x_p - y_p)$$

$$Xp$$

Subject to:

$$x_p \geq Z$$

and

$$x_p - h(y_p/a_p) \geq Up \ldots\ldots\ldots\ldots\ldots\ldots (6)$$

Optimal benefit scheme are generally referred to as income maintenance. The term income maintenance comes from the fact that the income level to be attained by the poor (denoted by Z) is specified as a constraint on the problem (See Zeckhauser, 1971). The solution to this is

denoted by C (Z), defined as the minimum cost of fulfilling a poverty alleviation objective of Z. solving this stage does not include the preferences of the rich.

The second stage reflects the choice of a subsistence level. It involves solving:

$$\text{Max } \{Y_R\text{-C (Z)}/n_R - \xi (z, \lambda_R)\} \ldots\ldots\ldots (7)$$

Given the cost of delivering a maintenance level of Z, the rich decide how high they can afford to set Z.

The two stages as discussed above could be viewed from the point of designing a benefit scheme and then deciding how to finance it, while determining its level of generosity. The main point of attraction, at least to the economist, of the cost minimizing model is its ability to view the design of poverty alleviation programs as comprising these two stages.

Poverty alleviation program design assumes heterogeneity among the poor, both in their need for transfers and in terms of their deservingness. These carry with it certain ideas and implications that are deliberately built into the cost minimizing model.

Suppose that the poor fall into two groups:

(1) Those with a wage rate sufficient to avoid poverty under normal labor supply conditions (meaning that, at their utility-maximizing labor supply, they will not be poor).
(2) Those with a wage rate so low that they will be poor even under such conditions. The first group is referred to as undeserving and the second group as deserving. With full information only the deserving will receive transfers under the cost-minimizing model. Thus the optimal cost-minimizing model is targeted toward the deserving group (Besely, 1996).

If information is imperfect and the government cannot tell who falls into such group, even though it can observe private sector earnings. If the government wants to alleviate poverty among the deserving group, it must make a common transfer to all poor individuals. The level of such a transfer would be the same as above. The key difference being that the undeserving may chose to reduce their earnings in order to claim the transfer, thus raising

the cost of the program. From the view of Besely and Coate (1995), the government has two major options for redirecting the program only to the deserving poor: the income test and non income test.

Income testing is an option for the government only if it can observe earnings. A possibility that the undeserving may reduce their earnings in order to qualify for support is to be taken into serious consideration. Dealing with this may require government to offer a benefits system that provide some incentives for the undeserving by specifying a gradual withdrawal rate of benefits. Thus poor individuals may keep some fraction of any extra earnings they may generate without having their benefits reduced accordingly (see Besely and Coate, 1992).

The notion that government must design programs that respect incentive compatibility concerns is familiar with the parlance of public economics. When considered loosely, it states that governments must encourage the undeserving to reveal themselves by offering an option that they prefer to the option offered to the deserving.

Besely (1996) verified this assertion in the following way. Suppose that the government offers a tiered scheme with benefit level.

b_D for the deserving and

b_u for the undeserving.

The undeserving must find it preferable to claim b_u to claiming b_D. That is

$$b_u + Y_u - (Y_u/a_u) \geq b_D + Y_D - h\,(Y_D/a_u) \ldots\ldots\ldots\ldots\ldots\ldots (8)$$

It must be observed that this outcome is possible even if the government pays no transfer to the undeserving. However, it is important to focus on the case in which the undeserving would rather work less and claim a benefit. In this case it is the best if the government offers an optimal level of

$$b^*u \leq b^*_D$$

accompanied with an earnings level at which it can be claimed so that the undeserving prefer the lower benefit level.

Putting these two cases together will yield benefit level for the undeserving as follows:

$$b^*_u = \max \{0, Z - h(y^*_D/a_u) - U_r\} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (9)$$

The government gets an incentive benefit by offering benefits to a group to whom it really does not want to make a transfer, since the transfer the group receives is smaller than it otherwise would be, and so costs are lower.

Two general lessons could be derived from this simple model. First, optimally targeted programs can include transfers to the non poor that are designed to preserve incentives (see Yaron, 1994). The non poor are encouraged not to take the benefit intended for the poor by being offered a transfer instead. By making such transfers, the program prevents the undeserving from trying to participate more fully in the program.

Second, cost-minimizing model generates a Pareto improvement. The surplus accrues to the tax payers rather than to the poor. It therefore shows that the model develops from the perspective of the tax players (who finance the programs). By implication better program design benefits the people who are paying for it (see Besley, 1996).

Non income test option to reducing the cost of poverty alleviation programs comes handy when the government does not have access to income information. The most common test is the work requirements (Nicholas and Zeckhauser, 1982). The idea is that the undeserving in the target group is more likely to be deferred by having to work in exchange for benefits. Among the costs imposed on transfer recipients is the displaced private sector work, either in markets or in home production. This added cost according to Nicholas and Zeckhauser (1982) implies that, if concerns about participation are to be respected, meeting program objectives will necessitate a higher transfer level to compensate for lost private sector earnings.

In their consideration of design of cost-minimizing transfer program Besley and Coate (1992) used the two-type model of the poor earlier discussed above with an incentive

constraint where income cannot be observed. Besley and Coate (1992), posited that if the government designs a scheme that demands that individuals of type I perform C_i hours of work in exchange for transfer of bi; the work require may deter the undeserving from claiming a transfer. The incentive constraint for the undeserving is given by:

$$b_u + Y_u - h\,(y_u/a_u + C_V) \geq b_D + Yu - h\,(Y_D/a_u + C_D) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 10$$

Given the above incentive constraint for the undeserving, the choice for the government is between a universal scheme in which everyone receives a transfer and scheme that imposes a work requirement so that only the deserving participate.

For Besely (1996), either scheme can be cost minimizing, depending on the parameters of the problem. Essentially if the trade off is between the value of displaced earnings and the gain from reducing participation by the undeserving. It is then possible to make a case for universal benefit scheme in one place and a targeted scheme in another even if the objective is the same in both places. In Datt and Ravallon's (1994) view, the case for targeting is contingent on the economic environment being studied. Cost minimizing model underscores the point that better targeting saves tax payers money, unless it results in improved program generosity.

Non income test option illustrates the case in which the utility of the undeserving is reduced by a move to a targeted scheme. This possibly is based on the fact that the use of a work requirement would either lower the utility of the undeserving if they chose to work to claim a benefit or it deters them from claiming any benefit, so they receive no transfer. Hence, targeting is not a Pareto improvement.

b) The Non Governmental Organizations Model

Institutionalist (e.g. Edwards, 1995, etc) believe that the question of why poverty alleviation program for the poor do or do not work has to do with social institutions. Poverty alleviation policies fail due to weak political power on the part of the poor, corruption and administrative in-competences. Improving the lives of the poor requires developing institutions, improving government performance and changing political structures and attitudes toward the poor.

Institutionalist see NGOs as policy actors, that are able to substitute for corrupt and insufficient governments in delivering services to the poor and lobbying governments to change policies (see Besley 1996). Although, NGOs play roles, two are paramount, one policy function and the other an indirect policy function. As direct policy actors, NGOs may provide health related to the poverty alleviation process. As indirect policy actors, or influencers of government policy, NGOs can act as pressure groups, mobilizing citizens to influence the policy process (often referred to as empowerment or encouraging participation) or giving technical expertise. The approach an NGO takes is determined by the government's willingness to cede its monopoly on policy making. (See Hulme, 1995).

The basic idea is that a government considers whether to socialize an activity that has traditionally been undertaken by private charity. The argument is that government financing of the activity may not lead to any increase in provisions, since for every amount spent by the government, private organizations spend less (Bergheim 1986, Roberts 1987, Kingman 1989).

In this model NGO is largely a substitute for, or at least supplement to government activities. However, the situation may be different in developing countries, where indigenous private voluntary activity is presumed to be less important than public provision (Besley, 1996). In this case, the concern would then be how NGOs might crowd out government support.

The model is illustrated as follows: consider a country in which an NGO and the government have the same preferences and technology for delivering support to the poor. The underlying assumption is that NGOs make cash transfers to the poor. The government and the NGOs have similar motivations: finding the cost-minimizing way of helping the poor reach certain level of consumption. Assume that the country contains a well-defined and homogeneous target group of poor and that information is perfect. The shared objective is to raise the poor's consumption to a level Z.

Besley (1996) also assumed the two entities share a common participation constraint. The government's strategy is a transfer function denoted by $B_G(y)$; that of the NGO is denoted

by $B_N(y)$. These show how much these actors are willing to give to a particular poor person as a function of their earnings.

Suppose that these strategies form a Nash equilibrium (the two sides coordinate their strategies since failure to do so would increase their costs). The choice of a benefit scheme in this context is equivalent to having the government and the NGO choose consumption income pairs (x_i , y_i) $i \in \{ G, N \}$ such that the utility of a poor person is given by:

$$X_G + X_N - h (y_G + y_N / a_p)$$

In this case there is family of Nash equilibrium that satisfies the conditions:

$$X_G + X_N = Z \text{ and } Z - h (y_G + y_N/ap) = Up$$

Besley (1996) was quick to note that such a scheme must also satisfy a pair of constraints:

$$X_i - h (y_i/a_p) \leq Up \quad \text{for } i \in \{G, N\}$$

The outcome for the poor is the same as it would have been had the NGO not been involved. The difference is that the cost of poverty alleviation is shared between the government and the NGO, so the tax payers not the poor benefit from the NGO involvement. Such an outcome explains government's preference for NGO activity- a preference that is not based on any notion of altruism. For Besley (1996), it suggests an important lesson for any study attempting to rigorously look at the contribution of NGOs to poverty alleviation; that is, finding that can NGO is helping the poor does not guarantee that the poor are really benefiting in an equilibrium sense.

Besley (1996), then put forward that a model of government behavior is required to generate the appropriate counter factual to access a possible change in outcome for the poor in the absence of NGO activity. This would require modeling government behavior endogenously. To achieve this, Besley (1996) relaxed the special case of a complete crowding out of government support in a situation where the activities of NGOs and governments are imperfectly substitutable. If the NGO takes a more generous view of poverty than the government, Besley (1996), then adjusted the modeling as follows:

Suppose the governments poverty line, Z_G is less than the NGOs poverty line, Z_N. In this case there is Nash equilibrium in which:

$X_N = Z_N$ and $Z - h(y_N/a_p) = \mu$

In the case above, the NGO is the only entity making transfers to the target group, and NGO activities affect both the rich and the poor. The rich benefit because they would have made a transfer to the poor in the absence of the NGO activity (albeit at a lower level). The poor benefit because their consumption is assumed to be higher.

The institutionalists (e.g. Hulme, Edwards, 1995) also argue that NGOs have a comparative advantage in making transfers to the poor; one version of this argument is that NGOs have better information about the poor because of local contacts. Another is that NGOs reduce the leakage in delivering benefits that result from corruption in government bureaucracies. In both cases it is considered more efficient for the NGO, rather than the government, to provide services directly to the poor. This argument pre-supposes that it makes more sense for the government to fund NGOs than to undertake provision itself. Besley (1996) strongly argued that many of the cost savings may accrue back to the government rather than go as transfer to the poor.

An exception is the case where an NGO can reach groups that the government cannot, since the governments transfer is already zero, the possibility of further crowding out government will be of very little concern. The model thus predicts that where NGOs are active it is optimal for the government to reduce its support to zero. However, some observers (such as Besley 1996, Datt and Ravallion 1994) have suggested that there may be a role for government in coordinating the activities of NGOs that are willing to provide support to the poor, particularly if their actions are complementary.

3.2.3 Assessment of the Performance of Microfinance Institutions.

According to Ernest (1996), the achievements of innovative microfinance lending programme needs to be assessed relative both to similar programs across regions and other institutional arrangements within any given country. In effect, what needs to be assessed is the

compatibility of the innovative microfinance scheme with set targets and objectives as reflected in both formal and informal systems.

There are two basic approaches to assessing and evaluating the achievements and compatibility of lending schemes in the literature (e.g. Holt 1991, Yaron 1994, Nzokia 1995, Webster and Fidler 1996 etc). These are the sustainability approach and the outreach approach.

I. Sustainability Approach

Schreiner (1997) explained that performance is meeting goals; sustainability on the other hand is meeting goals now and in the long term basis. Sustainability looks to the future. It matters since there are poor now as well as in the future. A sustainable microfinance institution helps a lot of poor through a long time frame. In contrast, unsustainable microfinance can backfire to harm the poor now and in the future (Krahnen and Schmidt 1994; Adams, Graham and Von Pischke, 1984).

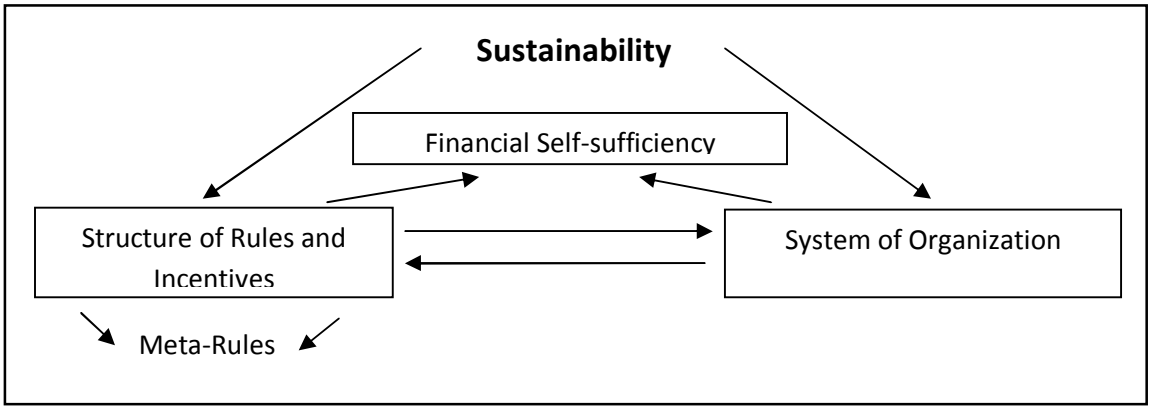
Sustainability requires profit because profits ensure continuity and permanency. A financially self-sufficient microfinance institution could make profit on a sustainable basis such that if it is operating in a subsidy dependent niche, it will not shrink in real terms or reduce the size or scope of its service to the poor (Schreiner, 1997). Continuity matters since access to support from donors and subsidized funds wanes with the whims of fund providers.

Repayment to a large extent also hinges on the sustainability of microfinance institution. Based on Schreiner's (1997) view, poor customers take losses or low profit by microfinance institutions as proof of weakness. Dishonest debtors stop repayment in anticipation of its final collapse. As the expected life of microfinance institution shrinks and as the chances of future loans drops, the net present worth of default will be more likely to exceed the net present worth of repayment from the point of view of a debtor. An increasing rate of default would weaken a microfinance institution to death. This would negatively impact the poor it was intended to help.

Sustainability requires more than just financial self-sufficiency from profit. For instance, one year of high profits and of strong performance does not mean a microfinance

institution is sustainable. Based on this, Schreiner (1995) stated three necessary conditions for sustainability: financial self-sufficiency, structure of rules and incentives and system of organizations. Financial self-sufficiency can last in the long term only if the structure of rules and incentives and the system of organizations prompt stakeholders to adapt the rules to fit changes in the market. This is captured in the figure (1) below;

Figure 1: Three Necessary Conditions for Sustainability.



Source: Schreiner (1995)

Schreiner (1995) showed that such level of sustainability as depicted above requires meta-rules that are rules for making rules. For Schreiner (1995), good meta-rules help microfinance to perform well over time without extraordinary labor, luck or leadership. He (Schreiner, 1995) noted that microfinance institutions operate in a market environment that changes with time, and therefore such institutions must adapt to changes too if they are to do well in the long term.

The implication of the above is that sustainability is difficult to measure. Sustainability is not the same as self-sustainability. Sustainability is meeting goals now and in the long term with subsidized funds. Self-sustainability is meeting goals now and in the long term with subsidized funds replaced with market funds (see Schreiner, 1997). In this case, the Grameen bank of Bangladesh provides a key example. Grameen bank funds are donors sustained. Thus, it is likely that Grameen being sustainable may not necessarily be self-sustainable if subjected to full market conditions, which could jeopardize its goals.

In the framework of Yaron (1992a and 1992b), sustainability does not imply subsidy independence using the Subsidy Independence Index (SDI). For Yaron (1992b) a

microfinance institution with a weak organization and rigid rules could perform well for sometime without necessarily being able to sustain such sterling performance. It then follows that if subsidy independence implies sustainability, no private firm would go bankrupt (see Yaron, 1994). Sustainability requires at least self-sufficiency from the point of view of the workers (Schreiner, 1997). In the circumstance of subsidy dependence, a microfinance institution is expected to maintain the real value of the subsidized funds lodged in its equity while paying market rates for the rest of its funds.

A financially self-sufficient microfinance institution could be sustainable while not being self-sustainable. This is because self-sufficiency does not mean that a micro finance institution could replace all its subsidized funds with market funds (Yaron, 1992a). A financially self-sufficient microfinance institution could be permanent, but it might not attract investors, and so it may not be able to provide adequate help to the poor.

We can safely sum up that microfinance sustainability implies that a microfinance institution is sustainable and keeps its mission of service to the poor. On the other hand, microfinance self-sustainability means microfinance is self-sustainable and unable to keep its mission (check: Schreiner, 1997a, Gonzalez, et al, 1997b). This distinction is imperative because microfinance could gain sustainability at the cost of its mission.

In 1992, Yaron developed the Subsidy Dependence Index (SDI) as a frame work for evaluating the movement of credit schemes towards financial sustainability. For Yaron (1994), financial sustainability is achieved when return on equity, net of any subsidy received, equals or exceeds the opportunity cost of funds. The SDI was intended by Yaron (1992) to answer the question: could a microfinance institution replace all its public funds with market funds and keep the same size and scope of service to its market niche? A microfinance that can do this is said to be privately profitable. The answer to the question above is critical to the Nigeria case in view of the need to evaluate the implications of the 2005 microfinance policy for rural poverty alleviation. The 2005 microfinance policy emphasizes the replacement of public funds with market funds. With market funds financial sustainability on the platform of private profitability becomes the target. Would this target help to achieve sustainable rural poverty alleviation in Nigeria? The answer to this question helps to underscore the need for this study.

II. Outreach Approach

Performance indicator of outreach are considered within the context of the stated objectives of any given microfinance institution. Outreach as a performance indicator focuses on the target clientele of a microfinance scheme or institution. In many instances, there are differences in objectives and in the working definitions of targeted clientele, as there are many microfinance institutions in any one scheme in any given country (Yaron, 1994). Such differences often make comparisons of achievement quite complicated. But it does provide a credible frame work for the assessment of performance of participating microfinance institutions in terms of the stated objectives of policy targets.

Within the framework of market competitiveness of targeted credit delivery through microfinance institutions, perfectly competitive markets hardly exist in rural Africa, neither do full-risk sharing institutions exist (see Udry 1990, Deaton, 1992, etc). In rural areas of several African countries, some individuals, households, and regions remains isolated from markets and from mechanisms for borrowing and lending or insuring against risk (Aryeetey, 1995). In this regard, innovative credit schemes are focused to reach the rural population.

Some innovative schemes target, the multiple objectives of financing off-farm income generating activities, improving general economic conditions through the provision of financial and non-financial services. Each of the participating microfinance institutions forms their specific objectives from the stated scheme objectives. Quite a number of the participating microfinance institutions have their efforts directed to clientele in the low to medium income range, thus confining their credit operations to mainly agricultural producers both in urban and semi-urban areas (Yaron, 1994). Others still, who provide savings and credit facilities, may intend to cover poor rural populations, in which case the target clientele would be the farming population.

Generally, indication of the level of outreach achieved by participating microfinance institutions is measured in terms of structure of clientele, activities of interest, number of borrowers, Number of staff, Town branches, rural (village) branches/post, volume of

outstanding loans and savings, growth rate of assets, level of women beneficiary, etc (see Yaron, 1994; Schreiner 1997).

Outreach measure of performance in this context helps to discover if the innovative scheme is on track to achieving the stated objectives and policy targets. Within the framework of the 2005 microfinance policy in Nigeria, one of the foremost targets is the alleviation of poverty at the rural level on a sustainable basis. Therefore, it is imperative to find out if the framework for the participating microfinance institutions in the drive towards sustainable rural poverty alleviation would meet the outreach measure of performance using the indicators stated above.

3.2.4 Institutional Developments in Microfinance

The current paradigms of financial market liberalization and directed credit have proved inadequate for addressing the structural and institutional constraints on micro financial markets (see Ernest, 1997). These constraints in the opinion of Ernest (1997) arise from the lack of adequate information for lenders, structural and institutional imbalance as well as absence of credible contract enforcement mechanisms. These constraints cannot be removed by macroeconomic policy and financial sector reforms alone. Ernest (1997) further expressed the view that innovative schemes that apply the operating principles of the informal sector within more formal structures cannot sufficiently circumvent these constraints to generate optimal access to credit for the poor.

The extent to which so-called innovative credit retailing schemes have increased access to credit by the rural poor in Africa is unclear. Such schemes (e.g. village bank scheme, community banks, etc) have been implemented at a time when micro economic and financial sector reforms have put both formal and informal institutions under considerable strain in their attempt to deliver credit cost-effectively. The need for intervention has been justified by market failures that have persisted even after reforms (Jackelen and Rhyme 2008). Earlier in 1990, Hoff and Stieglitz had underscored the strong impact of market failures and provided a strong rationale for some level of intervention, even though the nature of intervention was not specified (see also, Besley, 1994).

The World Bank (1989) and many economists (e.g. Caprio, Atiyas and Hanson 1994) have often been unsupportive of intervention in credit markets, believing that liberalization of financial markets is the best way to free up resources for expanding credit markets. The World Bank (1989) supported the market paradigm under which governments that adopt directed credit schemes are urged to attack conditions- market imperfections and extreme income inequality- that made directed credit desirable.

Ernest (1996) has shown that in Africa the issue is not about choosing between a financial market paradigm and a directed credit paradigm. It is about ensuring that the institutions that are in place for delivering credit to the rural poor are able to function effectively and efficiently after financial markets have been liberalized. Because the obstacles to financial markets development are not simply policy induced but have structural and institutional origins that cannot be addressed with macroeconomic policy alone.

To counter the effects of credit market failures that result in fragmentation and the exclusion of many potential borrowers, a variety of credit schemes have been introduced in many African countries. In their study of micro finance institutions in West Africa, Webster and Fidler (1996) found such programs to be common in some countries (Nigeria, Gambia, Burkina Faso etc) and rare in others (Chad, Sierra-Leone etc). A SODECON (1990) study in Kenya where K-REP, probably the best known microfinance scheme in Africa, operates identified as many as forty organizations involved in microfinance projects. Evaluation studies (e.g. Christen, Rhyme and Vogel 1994) of innovative credit retailing and other micro finance projects in Africa suggest that they have been less successful there than in other developing countries.

Innovative credit retailing schemes are usually community-managed credit and savings schemes that are established to improve members' access to financial services, build a community self-help group, and help members accumulate savings (Aryeetey, 1997). Microfinance programs are more likely to emerge from donor projects and are not necessarily community based. For many innovative schemes credit provision is not the only objective- even for programs for which credit provision is the ultimate objective.

According to Ernest (1997), there are schemes that can be characterized as taking a minimalist approach. Such schemes concentrated only on credit, and all of the projects' activities, including training of staff or beneficiaries, are designed to facilitate lending. Other schemes that follow an integrated approach regard training and other forms of technical assistance to borrowers as integrated components of a broader scheme of assistance.

Most of the innovative credit schemes in Nigeria have a mix of these two approaches. (Ogwumike, 2001). Schemes like National Directorate for Employment (NDE) 1986; Better Life Programme (BLP, 1997) focused on training, skill acquisition, and guidance and credit facilities; were clearly patterned after the integrated approach. While schemes such as Peoples Bank of Nigeria (PBN), 1989, Community Banks (CB), 1990 which focused on savings and credit facilities could be said to follow minimalist approach. (Ogwumike, 2001).

Earlier in 1991, Jackelen and Rhyme had observed that some schemes have begun to emphasize market principles. This emphasis has dominated credit schemes from the late 1990s and early 2000s. Webster and fiddler (1996) observed that many African micro finance arrangements have benefited from experiences and best practices in other developing regions. These practices include issuing short term loans to firms with small initial loans, focusing on small working loans to firms with proven track records, offering specialized services but without targeting, simplifying and localizing services, shortening turnaround time for loan applications, relying on group solidarity or joint liability to motivate repayment, mobilizing savings, and charging full-cost interest rates.

Before the emergence of formal micro finance institutions, informal micro finance activities flourished all over rural Africa. Informal micro finance was/is provided by traditional rural groups that work together for the mutual benefits of their members (Anyanwu, 2005). These groups provide savings and credit services to their members. Informal micro finance arrangements operate under different names in different parts of African countries; "ESUSU" among the Yoruba, "ETOTO" for the Igbo's, "ADASHI" for the Hausas of western, Eastern and Northern Nigeria respectively (Ojo, 1996, CBN, 2000); rotating and accumulated savings and credit, village bank in Uganda (Ukeje, 2005). Rotating savings and credit associations are, as discussed by Seibel and Damachi (1982), Ojo (1996) found in

different parts of the world especially in developing countries. In Anyanwu's (2005) view, the key features of these informal schemes are savings and credit components, informality of operations and higher interest rates in relation to formal banking sector. They employ effective simple procedures, are very flexible and adapt well to various local peculiarities and circumstances, and carry out multipurpose functions to deliver effective services (Ojo 1996). In Nigeria, broader perspectives of informal micro finance institutions include traditional mutual aid groups; middle men, land lords and professional money lenders (see Ojo, 1976).

Informal financial intermediaries and credit markets, as found in Nigeria case, functions in both rural and urban areas (see Anyanwu, 2005). Transactions in rural areas are not always distinct from those of the formal urban commercial and individual financial system. This in Ojo's (1996) view is because informal financial intermediaries and markets serve operators and business enterprises (in trade, services and industry) in the rural and urban areas as well as in both the informal and formal sector of the economy. Part of informal financial sectors savings and credit also flow to formal sector institutions and enterprises. Thus the central bank of Nigeria credit guidelines for 1989 (confirm, Ojo, 1994); had to prescribe provisions to arrest an undesirable rural- urban credit situation by prescribing that a minimum percentage of banks total deposit liabilities in their rural branches should be advanced as credit to customers in the rural areas.

The essential characteristic of informal credit markets is that they are far more loosely monitored and regulated than formal financial markets. As in Nigeria, India has a well developed system of intermediaries, lenders and borrowers in informal credit markets. They include indigenous bankers who take deposits and make loans; commercial financiers who mediate between customers and commercial financiers; and the rotating savings and credit association (ROSCAS, Ojo, 1996). The informal markets are estimated in Ojo (1996) to cover a larger portion of the capital needs of rural and small producers. Interest rates may or may not be higher than the bank lending rates, depending on the type used. Whenever informal credit facilities are available, very small and rural enterprises may pay 10% higher than formal bank rates. Thus, availability rather than cost of credit determines demand and supply of funds. The

transaction costs and default rates of informal markets can, by and large, be lower than for commercial banks as in Nigeria.

Personal relationship are the dominant factors in the setting-up and functioning of Rotating Savings and Credit Association (ROSCAs), such as Esusu in Nigeria, mutual aid groups; village bank in Uganda, Haiti and India (See, Sara 2006). They are often based on village or ethnic origin, or consist of workers in the same trade area. Sara (2006) indicates that there is a great deal of trust between lenders and borrowers, and social pressures reduce or eliminate moral hazards. Sara (2006) further reported that ROSCAs display a high degree of flexibility and versatility, while fulfilling the three functions of consumption, insurance and investment; the first two being more important. The main forms of such informal savings and credit arrangements are shown in the table below:

Table 3.1: Informal Savings and Credit Arrangements.

S/N	Main Categories	Types of Links	Lenders	Borrowers
1	Individual Money Lending	Non-Commercial Arrangements	Friends, Neighbors Relatives	Small Farmers Small Businessmen and Households.
		Commercial Credit Arrangements		
		i. Money Based	• Professionals/Money Lenders • Mobile Banks • Private Individuals From Upper Income Groups	• Small Farmers • Small Businessmen and Households
		ii. Land Based	• Land Lords • Farmers-/Money Lenders	• Tenants • Small Farmers
		iii. Community Based	• Traders -/Money Lenders • Agricultural Input Dealers • Equipment Suppliers • Processors (Rice millers) • Produce Traders, Market vendors, Store Owners.	• Small Businesses and Households
2	Associations	i. Savings Arrangement	• Fixed Fund Associations • Mutual Aid Associations • Savings Clubs	• Small Farmers • Small Businessmen and Households
		ii. Combined Savings and Credit Arrangements	• Informal Credit and Savings • Loan Cooperatives • ROSCAs (and Variants)	• Small Farmers • Small Businessmen • Households
3.	Partnership Firms	iii. Financial intermediates	• Indigenous Bankers • Pawn Brokers • Finance companies • Leasing Companies • Hire Purchase Companies	• Small Businessmen • Households

Source: adapted and organized from Germidis (1990), Ojo (1996) and Anyanwu (2005).

According to Ernest (1996), some village banks have over the years become well articulated in their services. For example, they tend to extend credit to finance income generating activities and savings. By establishing joint liability group lending mechanisms, members are expected to overcome collateral requirements. A well developed and organized village bank (see Sara, 2006) lend on an unsecured basis, using five-person group guarantees that make such individuals responsible for the others, with future access to credit dependent on all members repaying their loans-a principle borrowed from the Grameen Bank. Other micro finance projects in Africa provide credit to individuals and projects. For example the K-ROP in Kenya supports both group borrowing and individual arrangements with non-government organizations (NGOs) that on-led (Ernest, 1996). The schemes studied by Webster and Fidler (1996) also include both group and individual arrangements.

Irrespective of the level of their development and organization, village bank's terms of loans are known to conform to those of basic informal lenders in terms of collateral and size. To discourage the rich from seeking village bank credit, loans are kept small, ranging from $10 to $160 and averaging $60 (Sara, 2006). K-REP of Kenya has an average loan size of $100 under its Juhudi Scheme (Ernest, 1996). Loan maturities are generally short. For instance, K-REP expects groups that borrow from it for on-lending to repay their loans within a year. Members of small groups are expected to repay their initial loans within four weeks, with the assurance that they can take a further loan from the revolving fund established by the group. Although interest rates are higher than most formal lending rates in Africa, they tend to be lower than rates charged by the money lenders. As at 1994, the nominal interest rate for K-REP loans was 35%, while the real rate was 6.2%. Webster and Fidler (1996) found that effective interest rates on loans for five schemes included in their study were between 19% and 26%, between 32% and 39% for three other schemes and 54% for one scheme. These rates were comparable to those of some of the best known schemes in Asia and Latin America as indicated by Christen, Rhyne and Vogel (1994).

The argument that informal credit markets needed to be integrated into formal money and capital market structure in order to be effective and efficient in providing services to the informal (rural as in Ojo, 1996) and small enterprises is predicated on the need for increased

access to financial services for small and micro enterprises in the rural areas (Ngozi, 2005). Also, Ngozi (2005) noted that the provision of microfinance to the rural poor on a massive scale by commercial enterprises will serve as a critical element in promoting private enterprise that would cut down on rural poverty. In 1996, Ojo had established that due to restrictive and repressive financial policies, lack of innovative measures and instruments; there is a large unmet demand for credit by informal and small borrowers, mainly because of the maladapted formal sector and the poor integration of the formal and informal financial systems. Ojo (1996), then suggested that there is a need to improve the efficiency of institutional finance through higher deposit rates and the granting of subsidies to small borrowers (targeted as the rural poor); the refinancing of informal microcredit markets by formal institutions would help to fill the unmet demand.

In recent times, Ngozi (2005) specified three options for government's role in microfinance:

- Complete laissez-faire or NGO and private sector led microfinance services with complete government withdrawal.
- Government plays a major role in direct provision of services and through other directed policy interventions.
- Government maintains macroeconomic stability and also the enabling policy environment and the essential financial infrastructure but refrains from direct interventions in this sector.

In Nigeria's case, based on the lessons from past government efforts - weak government owned institutions, inefficient corporate culture, crowding out of private sector – Ngozi (2005) showed that government is moving interestingly towards the third option. Government led microfinance programmes in Ngozi's (2005) opinion often charge below market interest rates. This makes microfinance unviable for commercial banks whose primary concern is sustainability. Following this, the 2005 microfinance policy emphasized greater market-orientation in the design of the frame work for the operations of microfinance institutions in Nigeria.

The focus on greater market-orientation would certainly push the matter of sustainability to the forefront for the private participants in the microfinance market. Would the pursuit of sustainability limit access and impose prohibitive cost on the rural poor? If this is so, how would this affect rural poverty alleviation which is the prime target of the 2005 microfinance policy in Nigeria? The need to provide answers to these questions makes the relevance of this study quite obvious.

3.3 The Empirical Literature

The review of empirical literature undertaken covers broadly two main areas: The first area consist of Nigeria case studies, second area deals with experiences of other African countries and emerging economies (Cross-country studies). Included in the framework of the cross-country studies is a review of specific microfinance and poverty alleviation strategies with specialized schemes in some countries.

Table 3.2a Summary of Empirical Literature: Nigerian Case Studies on Microfinance and Rural Poverty Alleviation

AUTHOR/YEAR	COUNTRY	PERIOD COVERED BY STUDY	DEPENDENT VARIABLE	EXPLANATORY VARIABLES	PROBLEMS STUDIED	CONCEPTUAL FRAMEWORK	METHODOLOGY/TOOL OF ANALYSIS	MAJOR FINDINGS
OJO, (1996)	Nigeria	1974-1990	GDP	Informal financial institutions: esusu, input dealers, money lenders, mobile banks etc	1) Limitations of informal financial systems in Nigeria 2) Maladaptation problems of formal financial system vis-à-vis the informal system.	Review of the Nature, characteristics and operations of informal financial system. A high-light of how informal institutions fill the gaps created by malfunctioning formal banks. Outreach approach mutual account and affiliation approach.	Questionnaire survey and Exploratory study	The study found that in Nigeria the potentials of informal financial institutional for enhancing economic growth has not been effectively harnessed. Also, informal financial system due to lack of sufficient funds have not been able to meet the financial needs of the informal sector.
Iniodu and Ukpak (1996)	Nigeria	1978-1995	Agricultural production	Rural Savings Banks, Local Money lenders, Social Clubs, Age grade unions.	The problem of limited financial resources to rural agricultural production. Reconciling increased agricultural credit schemes and new opportunities to rural farmers in post adjustment Nigeria.	Classical theory of demand and supply of credit. The assumption of perfect competition in the credit market where interest rate plays the allocative role.	Comparative analysis, using secondary information.	The study discovered that linking formal financial sector to the informal sector will enhance more access to financial resources by rural farmers. Also, increased credit schemes can only succeed with other programmes that will make available new opportunities to

								farmers.
Umoh (1998)	Nigeria	1987-1996	Rural investment	Daily savings, Enterprises, Choice of financial institutions, occupational groupings.	Relationship between rural financial markets, investment and rural development	The capital accumulation, investment and economic growth nexus. Capital cost adjustment per unit of investment expenditure.	Primary source of data, structured questionnaire, simple random sampling techniques used to select 90 samples. secondary source of data from 30 participating institutions and subjected to descriptive statistical analysis using simple percentages presented in a tabular form.	1) Sole proprietorship in Daily savings Enterprises dominated the rural financial markets in Akwa-Ibom State 2) Occupational groups in rural areas prefer Daily Savings Enterprises financial institutions.
Olomola (2001)	Nigeria	1997-1998	Index of Social Capital (SCI)	Index of Social Homogeneity (SHI) and Index of Extra-group Linkage (IEL)	The need to improve the performance of informal finance groups to boost rural transformation and spatial transfer of savings.	This study employed the framework of social capital and performance of informal financial groups in terms of financial control and accumulation of net mutual benefits. Mutual benefits measured in terms of higher income earning capacity that facilitates repayments, savings mobilization and improved standard of	Both primary and secondary data were collected for this study. A multi-stage stratified random sampling technique was adopted in the case of primary data collection, while existing documented records of sampled institutions were used to obtain secondary data. Regression equations that use the OLS method of estimation were used to analyze the secondary data.	In this study the analysis of the effects of social capital on microfinance group performance showed that there is a variation in its effects across the groups included in the study as well as specific elements of performance such as loan repayment, savings mobilization and standard of living

						living.		
Ngozi (2002)	Nigeria	1982-2001	Women Empowerment	Country Women Association of Nigeria (COWAN), Family Economic Advancement Programme (FEAP) and People's Bank of Nigeria.	The problem of declining women participation in microfinance schemes in Nigeria. The study also raised issues on whether microfinance schemes have helped to alleviate women poverty in Nigeria	The framework for this study is based on two assumptions of emerging theory of microfinance: 1)poor population possess the capacity to implement income generating activities, the main limitation being a lack of access to capital (finance) 2)Once the financial systems are established, the poor people are able to use it (financial tools) for productive purposes and progressively incorporate themselves into the financial milieu, repaying the loans, and accumulating savings	This study simply used the review method of past and existing microcredit model of microfinance institutions in Nigeria for the period 1982-1998. Data source was basically secondary.	The study found that microfinance intermediation aimed at developing the rural poor and women's broad access to financial services provides the most basic conditions for sustainable livelihood for rural women.
Anyanwu (2004)	Nigeria	2001-2004	Growth in Microfinance Institutions	Informal sector activities and commercial banks' lending activities	The problem of poor outreach performance of Microfinance Institutions (MFI).	The framework used in the study is the evaluation system using institutional criteria such as	The study adopted the field survey method to evaluate the activities of ten major microfinance institutions across Nigeria.	The study revealed that the operations of MFIs have grown phenomenally within ten years

						policy conformity, ethics and potential capacity.		due to expanding informal sector activities. The study also revealed that the microfinance sub sector faces limited access to long term sustainable commercial sources of fund that has impacted negatively on the outreach to target groups.
Adewale (2006)	Nigeria	Feb-July 2006.	Access to credit	Age, education, occupation and awareness	1) Problem of chronic poverty conditions of average family in Ilorin. 2) Assessing the impact of access to microfinance on standard of living of households in Ilorin metropolis.	The framework that formed the basis for this study is the concept of outreach of microfinance institutions. Outreach measured in terms of sex, poverty of borrowers, number of borrowers, etc.	The study used primary data obtained through field survey with the aid of structured questionnaires. Inferential and descriptive statistics were employed in analyzing the data obtained. However, the logit regression tool was used to determine the level of access to microcredit.	The study found that households in Ilorin are experiencing inadequate access to conventional microfinance due to inadequate institutional arrangement.

Ailemen and Adeniyi (2007)	Nigeria	Undefined	Unemployment	Micro credit	The problem of mass unemployment in Niger-Delta due to land degradation by oil exploring companies.	The framework for this study is the Grameen Bank of Bangladesh pilot group-lending scheme for the landless people. The experiences of traditional microfinance institution such as ROSCA in Nigeria that has provided credit to rural low income earners.	Methodology in this study was not clearly defined. We could only assume it was a theoretical presentation.	The study established that microfinance will generate employment for about 28% of the Niger-Delta population which will significantly reduce poverty.

Table 3.2b Cross-Country Studies on Microfinance and Poverty Alleviation

AUTHOR/YEAR	COUNTRY	COUNTRY INCIDENCE OF POVERTY	STUDY METHODOLOGY	SIZE, STRUCTURE AND COMPOSITION OF MICROFINANCE SYSTEM	FRAMEWORK AND IMPLEMENTATION STRATEGY	PRODUCTS/SERVICES DELIVERY METHODOLOGY	IMPACT ON POVERTY REDUCTION/FINDINGS
Alegieuno (2007)	Indonesia	Not Available	Country field survey; on the spot assessment and documented evidence evaluation and analysis.	The structure of micro financing in Indonesia is comprised of two distinct sectors. The government owned and controlled institutions and the private owned institutions. Government programme on micro financing through the Interim Poverty Reduction Strategy Paper (IPRSP). Bank of Indonesia (BI). Involved in Small and Medium Enterprises (MSMEs), Credit Bureaus, etc. private institutions dominates micro financing with about 75% control of micro –lending as at 2004 there were 2157 private rural banks with a network of 3442 offices.	1)Government Initiatives: Interim Poverty Reduction Strategy Paper (IPRSP): Activities: provision of small loans, access to opportunities, etc. 2)Bank of Indonesia Initiatives: - ensuring exchange rate stability -capacity building for microfinance lenders - operation of credit bureau for the rural poor. 3) Private Sector Initiative: - private providers of microfinance services. - rural banks servicing rural credit demand on commercial basis.	Savings, time deposits, micro credit, fund placement in commercial banks by the microfinance institutions, farm loans, etc. each microfinance institutions operates as profit centers especially the privately owned. Product delivery is majorly through the dictate of the market system. - Group lending - Cash flow as basis for credit worthiness. - Group pressure applied to achieve repayment.	Between 2001 and 2004, the MSME the main benefactor of micro lending has grown to become the largest employer of labour (99.4%) - Loan portfolio of rural microfinance banks have increased from $544,444.4 in 2001 to $1.2 million (114.4%) in 2004. - Rural microfinance branch has a customer base of 750 borrowers and 7400 savers with a total of $388,888 outstanding portfolio and $744,444 savings. About 50% of its loans were granted to petty rural traders. The default rate was 6.7%, while

							5.8% of the loans were non-performing
Attah, (2005)	Philippines	40% of 86.2 million people (2004)	Country field survey; on the spot assessment and documented evidence evaluation and historical analysis.	The Philippines banking system comprised the Bangko Sentral Ng Phillippinas (BSP), Universal Banks, Thrift Banks, Rural Banks, Microfinance Banks and specialized government banks. - Microfinance activities dominated by the Thrift Banks, Microfinance Banks, and cooperative Banks. - Government owned banks such as Land Bank and Development Bank of Philippines provide wholesale funds to microfinance offering institutions	Employs institutional framework which emphasizes non-participation of government line agencies in the implementation of credit/guarantee programmes. - A distinction is made between credit and welfare policy in microfinance programmes with those who need welfare helped through appropriate department of government. - Credit to the economically actively poor households/micro enterprises met through a variety of innovative products provided by private microfinance institutions.	Micro savings and credit, and other microfinance intermediation products and processes are provided by private microfinance institutions through the market system. -Microfinance policy provided by the National Credit Council (NCC). -Wholesale funds and financial services provided by both government commercial and other private banks to MFIs. -NGOs and Donors provide technical assistance and clientele base.	As at January 2005, a group micro client of a microfinance bank who started by borrowing $91.0 had increased the loan sum over a five year period to $300.0. The production level had increased from two to six fish ponds and fingerlings in the ponds had increased from 4500 to 5500. Another customer's loan also increased from $455 in 2003 to $2727 in 2005, purchased a vehicle, cassava processing machine and increased the farm size. A graduate of one group who started with $36.4 initial loan in 1996 had about $2,727.3 personal loan as at 2005. The number of staff in the bakery business increased from 2 to 13 in the same period. In another case, a microfinance oriented bank customer who was on the ninth loan cycle began with $91.0 with the ninth loan amounting to $818.0. The family business has grown as at 2005 that they could afford a tricycle an important means of transport in Philippines.
Olaitan, (2005)	Pakistan	33% of 132 million	Country field survey; on the spot	The structure of microfinance in	Pakistan uses the framework of	Public-Private partnership credit to be	Pakistan has made progress towards the

		people (2000)	assessment, documented evidence evaluation and analysis.	Pakistan is categorized into three: a) policy b) institutions/programme c) Endowment funds. - The State Bank of Pakistan is solely responsible for proactive and supportive policies to microfinance banks. - Institutions of microfinance developed in response to the State Bank of Pakistan's policy framework. Programmes are developed and implemented by the government to facilitate access to small loans by poor households.	institutional development in direct response to policy/initiatives of the State Bank of Pakistan. -Government initiatives in terms of poverty alleviation programmes that heavily incorporate credit schemes directed at poor households. -Private initiatives in institutional development. -State Bank of Pakistan policy allowed for three types of MFBs/MFIs i)District based MFIs/MFBs ii)Province based MFIs iii)Country wide MFIs -Mobile banks -Transformation of NGOs into MFBs.	provided by a microfinance bank with a mix ownership. Micro investment at the group, household village level to be provided by private institutions with minimum government participation through specialized programmes: -Social safety net funds to be provided through the endowment funds to deepen the outreach of microfinance to the hardcore poor using the following: a)Rural Finance Sector Development Program (NFSDP) b)Pakistan Poverty Alleviation Fund (PPAF).	achievement of MDGs. In 2000 Pakistan which was ranked 138th country on the Human Development Index (HDI) moved up to 135th in 2005 on the HDI. The 138th ranking of Pakistan in 2000 was before the implementation of Pakistan's Microfinance Ordinance (MFO) in 2001. While the 135th ranking was after about five years of the implementation of the MFO.
Eluhaiwe, (2005)	India	30% of 1.1 billion people (2004)	Country field study/survey. Evaluation and Analysis of documented evidence.	The Indian financial sector comprises the Reserve Bank of India, which is the apex regulatory body. There are 560 banks comprising of 48 commercial banks 196 regional rural banks (RRB), 316 cooperative banks, 5 non-bank financial centers (NBFC) and 1	There are government and private initiatives institutional arrangements for the provision of microfinance services. -The Self Help Group (SHG). This is a bank linkage programme; this is the main platform for the intervention of formal	Microfinance services delivery is mainly through the policies enunciated by the Reserve Bank of India (RBI) and executed through the (NABARD). -Banks' lending to the weaker sectors are categorized under three Acts viz, Banking Reforms Acts, Cooperative Societies	By 2004 over 1 million SHGs of 100 million active poor persons in 70 million households had been reached with majority coming from the most vulnerable group, the womenfolk. Report from SHARE, a microfinance institution show that 75% of clients in India who participated in the programme for

				rating agency. There are a total of 46,700 branches as at 2004. There are several NGOs providing financial services to the poor. There are over 500 NGO-MFIs.	banking sector viz National Bank for Agricultural and Rural Development (NABARD), Commercial and Rural Development Banks in banking with the poor. Others are: Cooperative banks, Regional Rural Banks (RRB), Not-For-Profit MFI public Trusts, NGOs.	and Regional Rural Banks Acts. -Microcredit special cell unit in RBI help to mainstream microcredit to ensure outreach and augment the flow of microcredit. -NABARD extends grants to NGOs to encourage Self Help Group (SHG) formation etc.	longer periods saw significant improvements in their economic well-being based on sources of income, ownership of productive assets, housing conditions and household dependency ratio. Half of the clients graduated from poverty.
Ukeje, (2005)	Uganda	Defined within the context of sub-Saharan Africa to be 419. (2003 estimates)	Country field, survey, Analysis and evaluation of documented evidence.	Microfinance Institutions (MFIs) in Uganda consist of money lenders, microfinance agencies, NGOS, Rural Farmers' Schemes and Savings Societies. There are estimated 1400 MFIs operating in Uganda with an active portfolio of over $53.3 million, over 340,000 borrowers and over 900,000 active savers. Majority of MFIs are Community Based Organizations (CBO) who are unaware of best MF practices and are outside the MF information loop. -5.8 number of MFI with well documented operational procedures who apply best MF practices.	The main framework is the government developed Poverty Eradication Action Plan (PEAP) it was established to among others create a framework for economic growth and transformation. In conjunction with the Medium Term Competitive Strategy for the private sector (MTCS). PEAP was mandated to develop long-term financial services and professionalization of microfinance. -Through various microcredit scheme government and private microcredit providers interact.	MFIs provide two main financial products viz: credit and savings. These are further categorized into the size of loans and type of deposits. Most MFIs mainly used two methods of delivery: Group Lending and Individual Lending. However, a potential borrower is required to become a member of a group. The borrower must also save a percentage of the expected loan directly with the MFI or with a link bank or any other formal banking institution.	Since 1992, there has been healthy economic development. GDP during the last decade has increased by 6% a year on average. As at 2004 economic growth rate is 5.5%. the proportion of people living on less than $1.0 a day fell from 56% in 1992 to 38% in 2003. Participation in MF programmes has contributed to reducing the vulnerability of their members to economic risks such as health problems, crop failure, etc. MF clients have been able to build houses, invest in child education and freeing household capital for other investments.

3.4 Implication of Literature for the Study

Generally, the theoretical literature reviewed provided a robust discussion about the current debate on issues of microfinance-poverty linkage and the design of anti-poverty programmes that focuses on microfinance as a choice strategy for poverty alleviation. The question that arises from the theoretical debate borders mainly on the cost implications and sustainability of institutional microfinance as an anti-poverty strategy which has consequences for the sustainability of poverty alleviation as a target for the choice strategy. This provided a clear guide to the conduct of the deductive and inductive analysis in this study.

The review of empirical studies on Nigeria provides the history of poverty alleviation by means of microfinance, the relevance of this lies in the fact that Nigeria's history of poverty alleviation is useful for appreciating the data that document that history. Also, no study on Nigeria focused on the issue of sustainability of microfinance and poverty alleviation; the major concern has been with performance evaluation in terms of sustained outreach and accomplishments by microfinance beneficiaries as a measure of poverty alleviation. This provides further justification for this study.

Again the methodological approach in the empirical literature surveyed is clearly dominated by the qualitative approach. This provided the basis for the use of a combination of the quantitative and the qualitative approach in this study to achieve the stated objectives.

CHAPTER FOUR

METHODOLOGY OF THE RESEARCH

4.1 Conceptual Framework

The government and donors have sponsored and supported supply-led (the provision of institutions and financial products and services with the demand following) micro finance to improve rural growth. In 2005 there was a policy shift from supply-led to demand-led (the demand for financial products and services leading to the creation of institutions) microfinance. The change in policy was intended to address the issues of financial self-sustainability for microfinance institutions and to provide the platform for the sustainability of rural poverty alleviation. Thus, the claim is that the sustainability of rural poverty alleviation is a function of the sustainability of microfinance banks. The focus of this study is to find out if microfinance banks have achieved financial self-sustainability and if this has led to the sustainability of rural poverty alleviation in Nigeria.

The Research Hypothesis

Sustainable rural poverty alleviation depends on the financial self-sustainability of microfinance banks; thus,

Null hypothesis: Microfinance banks' financial self-sustainability is not significant for sustainable rural poverty alleviation.

Alternative hypothesis: Microfinance banks' financial self-sustainability helps to achieve sustainable rural poverty alleviation.

The Study Area

The area covered by this study comprises of selected five local government areas in Kaduna state namely; Giwa, Makarfi, Kudan, Zaria and Sabon Gari. They are located in the northern part of Kaduna state. Giwa, Makarfi and Kudan are typical rural local government areas; while Zaria and Sabon Gari are semi-urban local government areas both from the social and economic perspectives, with largely rural communities. The choice of these local

government areas in Kaduna state is based on; first, Kaduna state was ranked as one of the states with higher incidence of poverty in Nigeria in 2007 (see Abdu Raufu, 2007; Soludo, 2007); second, Isah (2008) indicated that Giwa is one of the most impoverished areas with severe income and opportunities inequality (vertical and horizontal) in Kaduna state. Makarfi and Kudan share the same poverty characteristics with Giwa as well as the largely rural communities of Zaria and Sabon Gari local government areas. Also, the selection of the local government areas was based on the fact that there were in existence functional Microfinance banks as the time of commencement of the study.

The selected five local government areas are about eighty to one hundred kilometers away from Kaduna metropolis, which serves as the capital of Kaduna state. These areas fall within the jurisdiction of a famous monarchical traditional institution known as the Zazzau Emirate, ruled by the Emir of Zazzau whose palace is located in Zaria city. The Zazzau Emirate comprises of about seven local government areas with as many chiefdoms presided over by the 'Sarki' or 'Mai Angwar' as the case may be. The Zazzau Emirate has a place of pride in the history of northern Nigeria because of the heroics of one of the most popular leaders in northern Nigeria, Queen Amina of Zaria.

Note that in research circles all the selected five local government areas are regarded as 'Zaria area' because of the common socioeconomic features. This is arguably so, because Zaria area is home to a wide range of major tertiary institutions such as Ahmadu Bello University, Nigerian College of Aviation Technology (NCAT), National Institute of Transport Technology (NITT), College of Chemical and Leather Technology (CHELTECH), National Research Institute for Chemical Technology (NARICT), Federal College of Education (FCE), etc. Zaria and Sabon Gari are the central commercial areas within the study area where semi-urban markets for agricultural produce and a wide range of finished consumer products are readily available. The 2006 census puts the population of the selected local government areas at 286,427, 146,259, 138,992, 408,198 and 286,871 for Giwa, Makarfi, Kudan, Zaria and Sabon Gari respectively.

The study area possesses rich cultural, social and economic history especially in commerce and agriculture, with agriculture being the predominant economic activity among

the people who are about 90% Hausas by tribe. About 75% of the people are engaged in small farming, while 25% are engaged in the many hand craftsmanship (blacksmith, weaving, cloth dying, etc) and off-farm activities in the study area. According to Abdu Raufu (2007) average income per day around these areas is less than $1 (US dollar). This clearly indicates that many of the population are living below the poverty line. Thus it became imperative for this study to investigate the impact of private sector led and market driven institutional microfinance credit as a strategy for sustainable rural poverty alleviation in the selected five local government areas of Kaduna state.

Sample Design and Data Collection

The sampling technique used in this study is the purposive sampling technique. This was considered appropriate due to the specific characterization of borrowers required to provide a framework for the design of the instrument of data collection in order to meet the objectives of the study. There are five licensed microfinance banks in the study area, with one located in each of the local government areas. This implies that the sample banks are five and the sample local government areas are five. Because of the critical need to seek out specific borrowers from the five microfinance banks located in the selected five local government areas, a sample size of 50 borrowers from each microfinance bank located in the five local government areas was chosen based on the willingness of the microfinance banks to provide needed data and information on borrowers as well as the availability of minimum business financial records on the part of the borrowers. This brings the total sample size to 250. Three sets of structured questionnaires were designed; two sets were administered to the selected five microfinance banks, and one set was administered to the purposively selected 250 borrowers of the selected five microfinance banks located in the selected five local government areas. The first set of data collected from the microfinance banks centered on performance indicators of outreach such as loans and deposits, target coverage, target clients, gender of clients, number of borrowers and number of loans, etc; accounting profit, paid-in capital (public and private), start and end equity, revenue from lending, revenue grants, direct grants, average soft debt, opportunity cost on equity, opportunity cost of soft debt, discount on operating expenses, etc. The second set of data collected from the microfinance banks are

ownership structure, target business beneficiaries, sources of funds, credit products offered, requirements for loan, minimum loan amount, reasons advanced by borrowers for loans, problems encountered in serving poor clients, loan tenor, general rate of interest, repayment conditions, method of loan pricing, determinants of loan concentration, number and value of non-performing loans, number of active borrowers, portfolio at risk for more than 90 days, etc. The data collected from the borrowers are nature of business activity, reasons why loan was needed, range of credit products needed, loan amount, collateral used, interest rate paid, earnings before and after the loan, accomplishment after the loan, impact of loan on borrowers' business, etc. Based on these, instruments (questionnaires) were designed and used to elicit the data and information that helped to accomplish the study objectives.

4.2 Empirical Framework

The three problems of the study are mainly empirical. Therefore an appropriate inductive method is necessary. However, the deductive and the historical methods provide a foundation for the inductive method (see Jibril, 2008). This is because economic theories developed deductively from assumptions about the phenomena of interest enable us to derive theories that give clear guide to the conduct of inductive analysis. Theories of microfinance-poverty alleviation linkage we have shown are clearly relevant. The history of poverty alleviation by means of microfinance in Nigeria has been presented. The relevance of this lies in the fact that Nigeria's history of poverty alleviation is useful for appreciating the data that documents that history.

Specifically, the study used performance indicators of Outreach and Repeated Use models to evaluate the performance of microfinance banks in rural poverty alleviation; and the operations and services of microfinance banks and the implications for sustainable rural poverty alleviation; while a modified and adjusted standard Subsidy Dependent Index (SDI) were used to measure financial self- sustainability of microfinance banks in terms of private profitability from the investor's point of view.

Purposive Sampling Technique

Purposive sampling technique is a non-probability sampling method used where sample randomness cannot be guaranteed in view of the fact that the elements of the population may not have the privilege of equal chance or definite probability of being selected in the sampling process (Asika, 1990). However, randomness may occur by chance. But it is of little significance whether randomness occurs or not in non-probability sampling process since the population elements are not deliberately given equal chances of selection.

Based on Asika's (1990) view, in certain population, some characteristics or features are easily identifiable. These characteristics or features may need to be represented in the sampling process in order that the required information may be isolated in a manner that will be representative of the entire population. Therefore the selection of some sample elements will then be guided by what is considered to be typical cases which are most likely to provide the required data or information (see Ferber and Verdoorn, 1962). Samples chosen in this way are known as purposive or judgment samples.

Note that under normal circumstances probability sampling is preferred. But non-probability sampling is used in situations where probability sampling is not feasible. Generally, there sampling situations where non-probability sampling method is best suited to generate the required data and information outcome; such as:

- Where there is a case of infinite population in which most sample subjects cannot be reached or the population elements can only be imagined
- Where random sampling technique is not likely to guarantee the inclusion of typical cases or objects
- Where generalization of results is not intended
- Associated costs and time required to conduct a study using probability sampling may be prohibitive (Yates, 1971).

This study was confronted with the fact that random sampling of rural borrowers would not have guaranteed the inclusion of the required number of borrowers from microfinance banks with minimum business financial records needed to measure change in income after loan. Also, it would have required the study of all the rural borrowers of the selected five microfinance banks in the five local government areas if random sampling was employed,

which would have been too expensive and would have taken a considerable length of time to complete.

Performance Measure: Repeated Use by Poor Customers.

A poor customer will use an MFI just as long as the gains to the customer exceed the costs to the customer. A customer could make a mistake and borrow or make a deposit with an MFI once but then find out that the gain was less than the cost. But economists assume customers would not make the same mistake twice (Schreiner, 1997). Thus repeated use means that gains exceed costs from the point of view of the poor customer. Repeated use tells whether gains exceed costs for customers but it does not tell by how much.

Repeated use matters since it answers the question of whether the gains got by the poor customers of an MFI exceed their costs. Schreiner (1997) suggested some simple and cheap measures of repeated use by poor customers and confirmed that a complicated and costly measure may not be necessary unless it tells not only whether gains exceed costs but also by how much gain exceed costs.

According to Schreiner (1997), there are three basic measures of repeated use by poor customers: Loans per borrower since birth, the drop-out Rate and Repayment. In this study, we shall use the loans per borrower since birth to measure repeated use by poor customers. In this study "since birth" refers to that period from 2005 when the microfinance policy became effective in Nigeria. The measure uses T years of data on the flow number of all loans disbursed and on the flow number of new borrowers.

Performance Measure: Outreach

Microfinance institutions have often had different stated objectives for providing credit and other financial services to the rural populace and sometimes to particularly disadvantaged population segments. Outreach is assessed on the basis of type of clientele served and the variety of financial services offered. The differences in the business objectives of the participating microfinance institutions and in the working definitions of targeted clientele also form a critical platform for outreach assessment of MFIs.

Outreach as a performance indicator for a microfinance institution with respect to rural poverty alleviation concerns itself with the ability of an MFI to develop large rolls of members or customers who are eventually converted into large numbers of borrowers and savers.

Generally, outreach is assessed on the basis of the following criteria:

- The value and number of loans extended
- The value and number of savings accounts
- The type of financial services offered
- The number of branches and village sub-branches
- The percentage of total the rural population served
- The real annual growth of the MFI's assets over recent years
- The participation of women as clients.

It is noteworthy that the growth rate of an MFI's assets might, given certain conditions also serve as a crude proxy for new clients' access to financial services (Yaron, 1994). Again, it is important to note that these criteria for outreach assessment are modifiable for each microfinance institution in recognition of the differences in the stated objectives and the working definition of targeted clientele. For instance, the 2005 microfinance policy target clientele is mainly the poor who are economically active; especially those in the rural areas. But the objectives of the different MFIs could range from financing off-farm income-generating activities; general improvement in economic conditions through the provision of financial and non financial services. Others still, could be focused to provide credit and savings facilities for targeted rural farming population.

The Standard Subsidy Dependence Index (SDI)

This study is aimed at evaluating how the drive to achieve financial self-sustainability by microfinance institutions will impact on the cost of and access to microfinance loans by

the economically active rural poor and its implications for sustainable rural poverty alleviation. Financial self-sustainability has to do with meeting goals now and in the long term. The concept underlying financial self-sustainability is its focus on future continuity based on private profitability from the point of view of an investor. Why does it matter that achieving financial self-sustainability should be consistent with the goal of poverty alleviation? It matters since there are poor now as well as in the future. Financial self-sustainability of a microfinance institution affects at least six groups: society, poor customers, investors, workers, donors, and the poor. Each group has its own goals, thus each group asks its own questions about the potential outcome of the pursuit of financial self-sustainability. Each group has its own opportunity cost since each group has its constraints, wealth, timeframe, discount rate and taste for risk. Some group look at sustainability only from "now onward" while others look at sustainability from "inception onward". This framework thus suggests quantitative measures of financial sustainability from the point of view of all six groups of stakeholders except society. It is however obvious that the analysis of financial self-sustainability of microfinance institutions is more of qualitative than quantitative analysis (Schreiner, 1997). This is because quantitative measures uses set methods to answer questions with numbers and does not necessarily depend on the analyst. In contrast, qualitative analysis uses the raw numbers from quantitative analysis, but also uses theory, logic, and judgment of observation, experience and values. With qualitative analysis, all else is not constant.

This study used a modified and adjusted Subsidy Dependence Index (SDI) as a measure of financial self-sustainability of microfinance institutions in terms of private profitability from the point of view of an investor (see Yaron, 1992a and 1992b). The framework of the standard SDI is the most common way to assess a microfinance institution in terms of sustainability (e.g. Gonzalez-Vegal, et al., 1997a; Alfaro, 1996; etc).

The Standard SDI measures whether a microfinance institution could compensate for subsidies with market funds. For an investor this means to replace public funds with market funds without reducing net worth or size and scope of services to the rural poor. A microfinance institution that can compensate for subsidies with market funds is potentially self-sustainable from private profitability point of view. The heart of the SDI is the

measurement of subsidy. For an investor, subsidies are the unpaid opportunity cost of the equity of a microfinance institution less what it could pay for the use of equity from profit without grants and discounts.

The standard SDI is a ratio. The numerator is the unpaid opportunity cost of equity for the market less true profit. The denominator is revenue from lending. The SDI answers the following question: Could a microfinance institution replace all its funds with market funds and keep the same size and scope of service to its market niche (in this case the rural poor)? The standard SDI as specified by Yaron (1992a and 1992b) ignores taxes. Because of this, Schreiner (1997) argued that Yaron's (1992a and 1992b) standard SDI uses a wrong numerator and by implication a wrong denominator. The numerator of the standard SDI is the subsidy. Again, Schreiner (1997) argued that Yaron's (1992a) definition of subsidy as the sum of the opportunity cost of the equity of a Microfinance institution (MFI) and the type of profit grants less the accounting profit the MFI could use to pay for opportunity costs is faulty. Schreiner (1997) showed that subsidy is the opportunity cost of equity for the market less true profit. This measure the opportunity cost of the equity used by an MFI less what an MFI stripped of grants could pay for that equity. Schreiner's (1997) definition affects the numerator and the denominator of Yaron's (1992a) standard SDI. Thus an adjustment becomes necessary first, to account for taxes and second, to correct for true profits instead of accounting profit in the determination of subsidy. This is because we cannot measure sustainability in terms of private profitability from the investor's angle without the necessary adjustment for taxes on profits. It is certain that an MFI owned by private investors would not be tax-exempt. From economists' point of view, when investors contemplate ownership of MFI it will be clear to them that with profit comes taxes.

A) Types of Subsidized Funds

From Schreiner (1997) it is clear that subsidized funds come in six forms. Three forms are equity grants. Equity grants increase net worth but not change accounting profit. The other three forms are profit grants. Profit grants increase net worth through their effect on accounting profit. Profit grants inflate revenue and/or depress expenses.

1. **Equity Grants**.

The first two forms of subsidized funds are equity grants (EG) and profit grants (PG). They are mainly in form of cash which increase net worth with zero effect on accounting profit. Equity grants are the sum of direct grants (DG) and two kinds of paid –in capital, Public (PC_{pub}) and private (PC_{pri}):

Equity grants = Direct grants + Public paid-in capital + private paid-in capital,

$EG = DG + PC_{pub} + PC_{pri}$ …….. (1)

a) Direct Grants

Direct grants (DG) are cash gifts or donations not exchanged for shares. Direct grants increase net worth, but they do not pass through the income statement, and therefore do not lead to increase in accounting profit. Direct grants do not only include cash but such other gifts in kind as computers or trucks that get marked down as assets on the balance sheet.

a. Public Paid-in Capital.

Public paid-in capital (PC_{pub}) comes from sales of shares to members of the public who may be selected. Private paid-in capital derives from sale of shares to specific private entities. Total paid-in capital (PC) is the sum of public and private paid-in capital:

$PC = PC_{pub} + PC_{pri}$ …….. (2)

2 Profit Grants.

Profit grants are the third forms of subsidized funds. All forms of profit grants (PG) increase net worth through their effect on accounting profit. All profit grants, like all equity grants, end up in the net worth. Profit grants are the sum of revenue grants (RG), discounts on soft debt D.(m-c), and discounts on expenses (DX):

Profit grants = Rev. grants+ Discount on soft debt+ Discount on expenses,

PG = RG + D. (m-c) + DX …….. (3)

a. Revenue Grants

Revenue grants are cash gifts. They are just like equity grants except for the accounting choice of how to record them. Revenue grants increase net worth. Since they pass through the income statement, they also inflate accounting profit. But grants are not revenue since they are not the product of the business of the microfinance institution (MFI).

If they are counted as revenue, profit will be overestimated and thus could be misleading for the users of financial statements.

b. Discounts.

Discounts are costs the MFI does not record as expenses since share holders absorb them. Discounts are non cash gifts which increase the cash of an MFI since it saves the MFI the burden of having to spend cash.

i. Discounts on Soft Debt

Discount on soft debt is the opportunity cost of soft debt less what the MFI paid. This is D.(m-c), where D is average soft debt, c is the rate the MFI paid for soft debt, and m is the opportunity cost of soft debt for the market:

Discount on soft debt = Ave. soft debt. (Opp.cost soft debt – Rate paid),

= D. (m-c)

Like all discounts, discounts on soft debt are subsidized funds. They inflate profit and boost net worth since they cut expenses. In contrast, the soft debt itself is not subsidized. For an MFI, soft debt is not equity but liability. Soft debt is like market debt linked to a grant of D.(m-c); (see IADB, 1994). Unlike discounts on soft debt, soft debt itself does not wind up in net worth. If a share holder acting in

the interest of an MFI pays *m* to borrow *D* in the market and re lends it to an MFI at a rate of *c*, then the budget earmarked for the poor loses not *D* but D.(m-c).

The rate paid on soft debt *c* is the ratio of the expenses for interest on soft debt to the average soft debt *D*:

$$c = \frac{\text{Expense for interest for soft debt}}{\text{Ave. soft debt}} \qquad \text{..... (4)}$$

From Schreiner's (1997) point of view, the best way to estimate soft debt D is to track the dates and the amounts of each inflow and outflow and then to find the average daily balance. But it's obvious that MFIs would not be willing to release such data. It might be possible to access data on the loan portfolio per quarter. We could also assume that the stock of debt changes in step with the stock of the loan portfolio (see Gonzalez, et al 1997). This carry with it the implication that average soft debt D is a multiple α of half the sum of the soft debt at the start of the year D_o and the soft debt at the end of the year D_1:

$$D = \alpha . (D_0 + D_1)/2 \qquad \text{..... (5)}$$

The conversion factor α is the ratio of the average loan portfolio with frequent data to the average loan portfolio with just year-end data (as in Schreiner, 1997). However, if available data is only the year-end data or if the rate of growth of loan portfolio was constant, then α = 1.

ii Discounts on Expenses.

Discounts on expenses (DX) are costs absorbed by private and public shareholders that the Microfinance Institution does not record as expenses. Classic examples are technical help, exemptions from reserve requirements, free deposit insurance, coverage of organization costs or feasibility studies, debt guarantees, fees for consultants, classes for loan officers, and travel for workers. Exemption from taxes is not a discount in the framework of the SDI (Yaron, 1992b). Grants in kind of assets recorded in the accounts, such as gifts of computers or trucks, must be linked to direct grants, not discounts on expenses. Much of the work is to

track discounts on expenses. The discounts are common and take a variety of forms. The financial statements of most MFI do not leave traces of discount on expenses. We could infer from available information from general expense record.

3. True Profit.

The true profit (TP), a non-cash equity grant form of subsidized funds. The poor own true profit, but they let the MFI keep it instead of withdrawing it to use elsewhere. True profit is accounting profit (AP) less profit grants:

True profit = Accounting profit – Profit grants,

$$TP = AP - [RG + D.(m-c) + DX]. \quad \ldots\ldots\ldots\ldots (6)$$

True profit is what an MFI without profit grants would earn for owners. The poor, through shareholders own a portion of true profit. If shareholders choose not to withdraw this claim, then true profit is a grant injected in net worth. Positive true profit increases net worth and thus increases the claim of the poor on an MFI. Negative true profit (true loss) decrease net worth and thus decrease the claim of the poor on an MFI.

4.3 Model Specification

4.3.1 Repeated Use by Poor Customers: Loans per Borrower since Birth and the Drop-out Rate

a) Repeated Use

Repeated use tells whether gains got by poor customers exceed costs (McCloskey, 1983). The measure of repeated use that is employed in this study is the loans per borrower since birth. According to McCloskey (1983) the measure uses *T* years of data on the flow number of all loans disbursed and on the flow number of new borrowers:

$$\text{Loans per borrower since birth}_T = \frac{\sum_{t=1}^{T} \text{Num. Loans disbursed}_t}{\sum_{t=1}^{T} \text{Num. New borrowers}_t}$$

To imply repeated use, the ratio must be at least 1.5. Like all measures, this measure must be used with care. In Yaron's (1994) and Schreiner's (1997) opinion repeated use comes with three main caveats:

First, we must judge what the estimate means carefully. For instance, a ratio of 1.5 means the number of repeat loans was the same as the number of new loans. Again, we must be watchful to observe if the gains to repeaters likely outweigh the losses to one-timers.

Second, borrowers might benefit from their first loan but still not repeat. Not all people may want constant debt and thus may not want to repeat. Some may wish to switch to their own savings or to some other source of funds such as normal banks as soon as they can.

Third, the estimate is assumed to be too low. The numerator omits loans to the borrowers in the denominator after time *T*.

b) The Drop-out Rate

A second measure of repeated use is the drop-out rate. The drop-out rate tells what part of those who could drop out for whatever reasons did in fact dropped out from further borrowing. Its time frame may not necessarily start at the inception of an MFI. It is important to first assume that no borrower has received more than one loan at a time. The drop-out uses the stock number of loans at the start and at the end of the time frame Out_o and Out_T and the flow number of new loans disbursed to new borrowers New_T in the time frame:

$$\text{Drop-out Rate} = \frac{\text{Num. of drop-outs}}{\text{Num. who could drop-out}} = \frac{New_T - (Ou_T - Out_o)}{Out_o + New_T}$$

As common with all measures, each circumstance and the end in view determines to a large extent what percentage value is considered as high. The drop-out value may be judged on the basis of the total number of loans and borrowers since the MFI's inception or from-now-on basis. The drop-out rate can grow as the MFI increase in the number of years in existence without necessarily implying poor performance. This is because the rate of borrowers who drop out for reasons unrelated to the worth of the loan service may exceed the rate of replacement regardless of how well the MFI is performing. Generally, as in this study; the drop-out rate shares the caveats of the number of loans per borrower since birth.

It is important to note that short entry period, rapid growth, or long term loans could distort both the repeated use and drop-out rate since old borrowers could be swamped by new ones who have not yet had the chance to drop out or to borrow more than once. Also, neither measure distinguishes between someone who decided to rest from borrowing, someone who defaults and someone who drops out. The repeated use and drop-out rate measures do not tell why a borrower dropped out.

4.3.2 Outreach Measure.

Outreach as a performance indicator for a microfinance institution (MFI) with respect to rural poverty alleviation concerns itself with the ability of an MFI to develop large rolls of members or customers who are eventually converted into large numbers of borrowers and savers.

Generally, outreach is assessed on the basis of the following criteria:

- The value and number of loans extended
- The value and number of savings accounts
- The type of financial services offered
- The number of branches and village sub-branches
- The percentage of the total rural population served
- The real annual growth of the MFI's assets over recent years

- The participation of women as clients.

In this study, we have designed structured questionnaires as instrument for extracting information on the basis of the criteria stated above in order to adequately measure the performance of microfinance banks performance in terms of sustainable rural poverty alleviation in Nigeria with special focus on Five Local Government Areas of the northern part of Kaduna state namely: Zaria, Sabon Gari, Soba, Makarfi and Giwa Local Governments. The questionnaires will be administered to microfinance institutions located in these local governments and rural poor customers of the MFIs.

4.3.3 The Standard Subsidy Dependence Index (SDI)

The standard SDI is a ratio. The numerator is subsidy in a year. The denominator is revenue from lending in a year. The full ratio is the percentage change in the yield on lending that all else constant, would let a microfinance bank replace subsidized funds with market funds (Yaron, 1992). The standard SDI adjusted for taxes answers a key question: Would a microfinance bank shrink if it replaced subsidized funds with market funds? If the SDI is zero or less, then the microfinance bank would not shrink and is financially self-sustainable from the privately profitable point of view.

Yaron (1992a) defined the standard SDI as subsidy (S) divided by the revenue from lending LP.i, where LP is the average loan portfolio and i is the yield on lending:

$$\text{Standard SDI} \quad \frac{\text{Subsidy}}{\text{Revenue from lending}} \qquad \ldots\ldots\ldots\ldots\ldots\ldots (7)$$

$$= \frac{S}{LP.i}$$

Yaron (1992a) defined the numerator of the standard SDI as subsidy S:

$$S = r.E + D.(m-c) + K - AP \qquad \ldots\ldots\ldots\ldots\ldots\ldots (8)$$

Where;

S = subsidy received by a microfinance bank

r = opportunity cost of equity for the market

E = average equity

D = average soft debt

m = opportunity cost of soft debt for the market

c = rate paid for soft debt

K = sum of revenue grants and discount on other expenses

AP = accounting profit

The standard SDI ignores tax. It takes subsidy as the sum of opportunity cost of the equity of an MFI and

the types of profit grants less the accounting profit the MFI could use to pay for opportunity costs. Average equity includes public and private equity since an MFI splits its return among all share holders.

The term K in equation (2) above must then encompass both revenue grants and discounted expenses:

$$K = RG + DX \quad \text{---------- (9)}$$

Where;

RG = Revenue Grants

DX = Discounted Expenses

We note that Yaron (1992b) defined K as "the sum of all other annual subsidies received by an MFI (e.g. partial or complete coverage of the MFI's operational costs by the state); it includes all other miscellaneous subsidies that an MFI might receive. These include subsidization of training costs, full or partial exemption from the deposit reserve requirement, and full or partial guarantee by the state of loan repayment by sub borrowers in default." This

definition clearly excludes revenue grants in K. Without revenue grants in K, the SDI would depend on the form of subsidized funds, and the SDI would be too low.

With revenue grants included in K, we can then rewrite subsidy (S) to show its economic logic. Subsidy from the point of view of an investor is the opportunity cost of equity less what an MFI without grants could pay. The opportunity cost of equity is the product of average equity (E) and the opportunity cost for the market (r). An MFI without grants could use its true profit (TP) to pay for its use of net worth. We can then put forward a simple formula for subsidy in the standard SDI (S=r.E + D. (m-c) + K-AP), the formula for K (K=RG – DX) and the formula for true profit TP (AP - [RG + D. (m-c) + DX]).

$$S = r.E + D.(m-c) + K - AP$$

$$= r.E + D.(m-c) + RG + Dx - [TP + D.(m-c + RG + DX] \ldots\ldots. (10)$$

$$= r.E - TP$$

This shows that subsidy is the opportunity cost of equity for the market less true profit. This measure the opportunity cost of the equity used by an MFI less what an MFI stripped of grants could pay for that equity.

a) How Subsidized Funds affects the SDI.

The simple formula of subsidy (equation 10) does not show how grants and equity affects the SDI. Subsidized funds enter through their effects on average equity (E). That is:

$$\text{Ave. equity} = \alpha.(E_o + E_1)/2 \quad \ldots\ldots\ldots\ldots\ldots\ldots (11)$$

Note:

α = a factor that uses a stock measure to estimate an average measured at the start and at the end of year.

E_o = Start equity

E_1 = End equity

Most studies (e.g. Sacay, 1996; Khandker and Khalily, 1996 etc) have used only year end stocks in which case, $\alpha = 1$.

The change in equity in the year ΔE is end equity E_1 less start equity E_o as:

$$\Delta E = E_1 - E_o \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (12)$$

If we assume dividend are paid at the end of the year and therefore do not affect average equity. The change in equity ΔE is the sum of private paid – in capital and public paid-in capital as well as the forms of subsidized funds injected in the year:

$$\Delta E = E_1 - E_o,$$

$$= DG + PC_{pub} + PC_{pri} + RG + D.(m\text{-}c) + DX + TP \ldots\ldots\ldots\ldots\ldots (13)$$

We can now show how all the forms of subsidized funds matter for subsidy through their effects on average equity E. We put the formula for the change in equity in a year ($\Delta E = E_1 - E_o$) into the general formula for average equity from year-end stocks [$\alpha.(E_o + E_1)/2$]. We then put the results into the simple formular for write subsidy in the standard SDI as (r.E + D. (m-c) + RG + DX - [TP + D. (m-c) + RG + DX]

Thus:

$$S = r.E - TP$$

$$= r.\alpha.(E_o + E_1)/2 - TP$$

$$= r.\alpha.(E_o + E_o + \Delta E)/2 - TP$$

$$= r.\alpha.E_o + r.\alpha/2.[DG + PC_{pub} + PC_{pri} + RG + D.(m\text{-}c) + DX + TP] - TP \ldots. (14)$$

Equation (14) above breaks down the logic of the subsidy in the standard SDI in three terms.

The first term r.α.Eo:

This is the opportunity cost of the subsidized funds received before the start of the year and thus used through the whole year.

The second term:

r.α/2. [DG + PC_{pub} + PC_{pri} + RG + D. (m-c) + DX + TP] is the opportunity cost of the fresh funds injected in the MFI in the course of the year. The average from these new funds was α /2 of the change in the year-end stock of equity.

The third term TP:

This is the true profit that the MFI could use to pay for the opportunity costs in the first two terms. Recall that in the standard SDI subsidy is the unpaid cost less ability to pay cost.

The redefined formula of the logic of subsidy in the standard SDI has the following advantages over Yaron (1992a and 1992b) formula:

First, the redefined formula shows that an MFI compensates for the costs of its net worth not with accounting profit but with true profit (as in Schreiner, 1997). The Yaron (1992a and 1992b) formula hides this since K hides revenue grants (RG) and discount on expenses (DX) and since accounting profit AP hides RG, DX and the discount on soft debt (D. (m-c).

Second, the new formula shows that subsidy from soft debt is not the discount on soft debt D. (m-c) itself but rather the opportunity cost of the use of the discount, r. α /2.D. (m-c). In Yaron (1992a and 1992b) formula soft debt were treated as subsidy.

Third the new formula shows that all the forms of subsidized funds affect subsidy in the same way. This means the Standard SDI is invariant to the forms of subsidized funds. All forms of subsidized fund injected in the current year are in starting equity (E_o) and get multiplied by r.α. All forms of subsidy injected in the current year are in the change in equity and get multiplied by r.α /2. The measure of subsidy does not change regardless of the label put on subsidized funds. Unlike the new formula, Yaron's (1992a and b) formula does not show that profit grants affect accounting profit and that all forms of subsidized funds affect equity and thus subsidy the same way.

b) The Denominator of the Standard SDI

In Yaron (1992a) formula the standard SDI was intended to tell the percentage change in the yield on lending that, all else constant would drive subsidy to zero. Thus the denominator was defined as revenue from lending, the product of the average loan portfolio (LP) and the yield on the loan portfolio (i):

Revenue Lending = Ave. Loan portfolio. Yield on loan portfolio

= LP.i …….. (15)

The yield on the loan portfolio is the ratio on interest and fee or revenue from lending over the average loan portfolio outstanding:

$$i = \frac{\text{interest and fees from lending}}{\text{Ave. loan portfolio outstanding}} \quad \ldots\ldots\ldots\ldots (16)$$

Recall in Yaron (1992b), the standard SDI is explained to be a ratio of subsidy to revenue from lending defined as

$$SDI = \frac{r.E + D.(m-c) + k - AP}{LP.\,i} = \frac{S}{LP.\,i} \quad \ldots\ldots\ldots\ldots (17)$$

Again in Yaron (1992b), the standard SDI is explained to be ratio that measures the percentage increase in the average on-lending interest rate required to compensate an MFI for the elimination of subsidies in a given year. However, Schreiner (1997) argued that this is wrong on the basis that standard SDI ignores the fact that more revenue lending means profit and thus more opportunity costs of equity. We can only interpret this to mean that an MFI that increased revenue from lending by the amount of the standard SDI would not all else constant, drive subsidies to zero. The obvious reason for which subsidy will not be zero is likely because of a possible larger value of the denominator of the standard SDI.

To resolve this problem, there is the need to show how the standard SDI is derived:

First, we write the formula of the logic of the subsidy of the standard SDI so that revenue from lending appears alone as its own term. To accomplish this, let FF be the Fresh Funds injected in an MFI in a year except from true profits (TP):

$$FF = [DG + PC_{pub} + PC_{pri} + RG + D.(m-c) + DX + TP]$$

$$= DG + PC_{pub} + PC_{pri} + RG + D.(m-c) + DX \quad \ldots\ldots\ldots \quad (18)$$

Let true expenses (TE) be the sum of expenses in the income statement, the discount on soft debt, and the discount on expenses, less revenues in the income statement except for revenue from lending and revenue from grants:

$$TE = [\text{Exp. Income stmt} + D.(m-c) + Dx] - (\text{Rev. income stmt} - RG - LP.i) \ldots (19)$$

Now true profit (TP) is revenue from lending LP.i less true expenses (TE):

$$LP.i - TE = Lp.i - \{[\text{Exp. Income stmt} + D.(m-c) + DX] - (\text{Rev.income stmt} - RG - LP.i)\}$$

$$= (\text{Rev.income stmt} - RG) - [\text{Exp.income stmt} + D.(m-c) + DX] \ldots\ldots\ldots (20)$$

$$= \text{Rev.without profit grants} - \text{Exp.without profit grants} = TP$$

To isolate revenue from lending in the formula of the logic of the subsidy of the standard SDI (equation14), use the formula for fresh funds except for true profit FF (as in equation 18) and the formula for true profit in terms of revenue from lending LP.i and true expenses (TE) as in equation (19):

$$S = r.\alpha.Eo + r.\alpha/2[DG + PCpub + PCpri + RG + D.(m-c) + DX + TP] - TP$$

$$= r.\alpha.Eo + r.\alpha/2.(FF + LP.i - TE) - (LP.i - TE) \ldots\ldots\ldots\ldots (21)$$

$$= r.\alpha.Eo + r.\alpha\ /2.FF - (1 - r.\alpha/2).(LP.i - TE)$$

Equation (21) above defines subsidy as the sum of the opportunity cost of net worth at the start of the year and the opportunity cost of fresh funds added in the year, less true profit after

using some to compensate for the opportunity cost of the net worth added by true profit itself in the year.

Since SDI is the percentage increase in revenue from lending that makes subsidy (S) zero; if we multiply revenue from lending in equation (21) by (1 + SDI) and set S to zero, we can then solve for SDI thus:

$$0 = r.\alpha.Eo + r.\alpha/2.FF – (1 – r.\alpha/2). [LP.i.(1 + SDI) - TE]$$

$$SDI = \frac{r.\alpha.Eo + r.\alpha/2.FF – (1-r.\alpha/2).(LP.i – TE)}{LP.i.(1-r.\alpha/2)}$$

$$SDI = \frac{S}{LP.i.(1-r.\alpha/2)} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (22)$$

When compared to equation (7), the denominator of equation (22) above is smaller by a factor of (1-r.α/2). Since $r > 0$ and $\alpha > 0$, the factor (1-r.α/2) is less than 1. The SDI as in equation (22) above has a small numerator but a smaller denominator than the standard SDI in equation 7. Thus the standard SDI is too low to wipe out subsidy.

Note that the standard SDI as in Yaron (1992a) assumes that all of the increase in true profit caused by an increase in revenue from lending can go to pay for the cost of equity injected in the past E_o and in the course except true profits FF. But true profit itself has an opportunity cost (Schreiner, 1997) of r. α/2.TP; so just a portion (1-r.α/2) of true profit can compensate for the other opportunity costs. An MFI that changes revenue from lending in accord with the standard SDI will still have a subsidy but an MFI that uses the amended SDI will not.

c) The Standard SDI Leaves Out Taxes.

Sustainability of an MFI from the point of view of society could omit taxes since taxes are transfer payments between two parts of society (Gittinger, 1982; Schreiner, 1997). In sustainability analysis it is important to focus on an SDI not from the point of view of society but from the point of view of a private investor. This is because it is certain that an MFI

owned by private investors would not be tax – exempt. When investors contemplate ownership of an MFI, it will clearly appear to them that with profits come taxes.

While it is true that a subsidized MFI or an unsubsidized MFI with losses would not pay taxes, the question then is how far is an MFI from being sustainable with zero public funds? The adjusted SDI (as in equation 22) will tell the change in revenue from lending that all else constant, would make profit as big as the unpaid opportunity cost of market funds. This requires positive profits and thus taxes are expected. If the adjusted SDI (equation 22) omits taxes, then the increase in revenue from lending will not be enough to wipe out subsidies since some of the increase will go to pay for increased taxes.

The adjusted SDI (equation22) would be more complex with the introduction of taxes. But wise investors consider taxes since taxes can cut down returns. An MFI on its own in the market would not last long without profit. If such an MFI made profit, then it would pay taxes. Most governments would not give approval for a profitable MFI owned by private investors to keep its tax-exempt, not- for-profit status.

Note that Schreiner (1997) has established that for an MFI without public funds, accounting profit is the same as true profit. If true profit in such an MFI were more than zero, then it would pay a portion τ as tax. If true profit were less than zero (true losses), then the MFI would pay no taxes at all.

Thus tax for a for-profit MFI is:

$$Tax = \tau .\max (0,TP), \quad \ldots\ldots\ldots\ldots\ldots\ldots (23)$$

Where;

$$\text{Max } (0, TP)\begin{cases} 0 \text{ if } 0>TP, \\ TP \text{ if } TP>0. \end{cases}$$

The tax paid (*Tax*) is not the same as tax rate τ. The tax paid (*Tax*) depends on true profit. It could be zero or more than zero. The tax rate τ does not depend on true profit. It is a constant, $\tau > 0$. With true profit; true profit net of tax is $TP.(1-\tau)$.With negative true profit, true profit net of taxes is just TP and not $TP.(1-\tau)$.

Subsidy with tax subtracts the tax paid (*Tax*) from true profit in the formula with revenue from lending as its own term (see equation 21).

$S = r.\alpha.Eo + r.\alpha /2.FF – (1-r.\alpha /2). (LP.i – TE – Tax)$ ……. (24)

Again, we state here that the adjusted SDI is the percentage change in revenue from lending that would wipe out subsidies even though the MFI pays tax as soon as profits exceed zero. Thus the adjusted SDI with taxes is derived just like the standard SDI. For subsidy to be zero, true profit must be positive since the opportunity cost of equity is positive. If true profit is positive then

$Tax = TP.\tau$, in turn, $TP – Tax = TP – TP.\tau = TP.(1-\tau)$.

Since $TP = LP.i – TE$ (equation 20)

$$TP – Tax = (LP.i – TE).(1-\tau).$$

Set subsidy (S) equation 24 to zero. Then multiply revenue from lending by (1 + SDI), and solve for the SDI:

$$0 = r.\alpha.Eo + r.\alpha/2.FF – (1-r.\alpha/2).[LP.i.(1+SDI) - TE].(1-\tau)$$

$$SDI = \frac{r.\alpha.E0 + r.\alpha/2.FF – (1-r.\alpha/2).TP.(1-\tau)}{LP.i.(1-r.\alpha/2).(1-\tau)} \quad \text{……. (25)}$$

To check that the Adjusted SDI (equation 25) drives subsidy to zero, we put equation 25 into equation 24, while we take into account that *Tax* is $\tau.(LP.i – TE)$, since $TP>0$ from the constructed increase in revenue from lending:

$$S = r.\alpha.E_0 + r.\alpha/2.FF – (1-r.\alpha/2).\{LP.i.(1+SDI)-TE- \tau.[LP.i.(1+SDI).TE] \}$$

$$= r.\alpha.E_0 + r.\alpha/2.FF – (1-r.\alpha/2).(1-\tau). [LP.i.(1 + SDI) - TE]$$

$$= r.\alpha.E_0 + r.\alpha/2.FF - (1-r.\alpha/2).(1-\tau) \quad \mathbf{x}$$

$$\left[LP.i\left[1 + \frac{r.\alpha E_o + r.\alpha / 2.FF - (1 - r.\alpha / 2).(LP.i - TE).(1-\tau)}{LP.i(1 - r.\alpha / 2).(1-\tau)} \right] - TE \right]$$

$$= r.\alpha.E_0 + r.\alpha/2.FF - (1-r.\alpha/2).(1-\tau).(LP.i-TE) -$$

$$r.\alpha.E_0 - r.\alpha /2.FF + (1-r.\alpha/2).(1-\tau).(LP.i - TE) = 0$$

In this study all reference to SDI (adjusted) henceforth imply equation 25. We used equation 25 to measure financial self-sustainability of the selected five microfinance banks in the study area participating in the process of financial intermediation for rural poverty alleviation in Nigeria.

The logic behind the adjusted SDI (equation 25) is that true profits compensate not only for the opportunity cost of E_0, FF, and true profit itself, but also for taxes. If true profits are less than zero, then increased revenue decreases subsidy one-for-one. Once true profits are more than zero, increased revenue decreases subsidy less than one-for-one since part goes to pay for increased taxes as well as for increased opportunity costs.

d) Interpretation of the SDI

The SDI helps to measure the percentage change in the yield on lending that would permit an MFI to replace subsidized funds with market funds. Thus an SDI of zero means that an MFI is financially self-sustainable. An SDI of 100% indicates that a doubling of the MFI's average on-lending rate is required if subsidies are to be completely eliminated. A negative SDI indicates that the MFI not only has achieved financial self-sustainability, but that its annual profits, minus its imputed return on capital as calculated by applying the approximate market interest rate, exceed the total annual value of subsidies, and the return on equity exceeds the cost of imputed capital. A negative SDI also implies that the MFI could have lowered its average on-lending rate while simultaneously eliminating any subsidies received in the same year (Yaron, 1994).

The subsidy-free yield is the yield that would bring the SDI to zero:

Subsidy-free yield = Current yield. (1+SDI) …….. (26)

The change in the current yield is the subsidy-free yield less the current yield. This is also a product of the current yield and the SDI.

Change in Current Yield = Current Yield.SDI ……. (27)

To use the adjusted SDI to the fullest, we must look not only at the SDI but also at the Current Yield, the Change in the Current Yield, and the subsidy-free Yield. These three numbers have a simple relation:

Subsidy-free Yield = Current Yield. (1+ SDI)

= Current Yield + Change in Current Yield ……. (28)

Note that the SDI is a relative measure; that relates the subsidy-free yield to current yield. The current yield changes between years and between MFIs. Therefore, the combined use of the current yield and the subsidy –free yield can provide a hint about how an MFI can improve or it used its subsidy .For instance, a low subsidy-free yield combined with a low current yield suggest that prices are too low. In contrast, a high current yield and a low change in the current yield suggest that an MFI might need to cut costs to improve. A high current yield and a high change in the current yield suggest a weak MFI unless it is young in operation and can improve fast. An MFI that has reduced its subsidy-free yield in each year for a long time likely invested a lot of its subsidy in its own development instead of giving more to customers through lower prices.

The SDI is a part of a two-pronged framework for measuring the performance of MFIs (see Yaron, 1992a). The first prong is outreach- the depth, breath, and quality of the output of an MFI from the point of view of customers. The framework does not suggest a formal way to compare costs with outreach.

The second prong is sustainability. For Yaron (1992b) SDI of zero implies full sustainability. However, Schreiner (1997) have noted that an SDI of less than zero means an

MFI could replace public funds with market funds and still break even. Such an MFI is privately profitable, but it may or may not be sustainable. Sustainability requires much more than private profitability. It also requires a strong organization and a flexible structure of incentives to prod stakeholders to maintain good performance as the market environment changes in view of differences in the risk profiles of rural poor customers.

4.4 Method of Estimation

The equations of the model for the study are of simple mathematical relations that were solved and computed directly using adding machines and computers.

4.5 Sources of Data

The study employed a combination of primary and secondary sources to collect data to accomplish the stated objectives. Primary data was sourced by the use of structured questionnaires administered to microfinance banks and their loan beneficiary customers located in Giwa, Makarfi, Kudan, Zaria and Sabon Gari local government areas of Kaduna state; through field survey. Oral interviews with microfinance banks Managers and other personnel as well as specific borrowers were also conducted to source for undocumented information and or where official restrictions could not permit access to required data. Secondary sources have included but not limited to Statistical Bulletin of Central Bank of Nigeria, published financial statement of accounts of microfinance banks, journals and academic publications.

This study notes that much of the required data were not kept by the selected microfinance banks operating in the study area, in the form specified in the study model. Where data were not available in the form that the study model demanded, demonstration trainings were embarked upon to define variables, terms and functional representations in terms that are familiar to the microfinance banks' personnel and borrowers. On this basis, data were retrieved and assembled to suit and meet the requirements for providing answers to the questions raised to meet the stated objectives. For this reason a typical financial statement of a microfinance bank may not carry most of the information and data in the form and manner found in this study.

CHAPTER FIVE

ANALYSIS OF DATA, INTERPRETATION AND DISCUSSION OF RESULTS

The presentation, analysis of data, interpretation and discussion of the results of this study is carried out with the view to provide a platform for the evaluation of the operations, activity focus and services of microfinance banks as a basis for evaluating their financial self-sustainability. Also, the sequence of presentation is intended to enable us assess the performance of microfinance banks in rural poverty alleviation in Nigeria as measured by outreach and repeated use.

5.1 Evaluation of the Operations and Services of Microfinance Banks

Five microfinance banks located in five local government areas in the northern part of Kaduna state were purposively selected for evaluation in terms of their operations, services, credit products, etc. The selected local government areas are: Giwa, Makarfi, Kudan, Zaria and Sabon-Gari. To maintain anonymity and security as strongly requested by the selected microfinance banks and subscribed to by this study; the microfinance banks are referred to as GWA, MKR, KUD, ZAR and SAB microfinance bank in the above order of their local government of domicile.

GWA microfinance bank was licensed to operate fully as a microfinance bank in 2008; having operated as community bank before 2005. It actually commenced operations as a microfinance bank in 2006 with an approval-in-principle. Thus, the evaluation takes off from 2006. MKR microfinance bank commenced operation in 2006. KUD microfinance bank commenced operations in 2007 as a microfinance bank with approval-in-principle, but had existed as a community bank before 2005 offering microfinance services. ZAR microfinance bank received approval-in-principle in 2006 and had existed as a community bank before 2005. Also, SAB microfinance bank had existed as a community bank long before 2005 but received approval-in-principle to operate as microfinance bank in 2007.

The important issue to note about approval-in-principle is the fact that it is granted with about 75% meeting of the requirements for any existing community bank to transform into a microfinance bank in the appropriate category. There are two categories of

microfinance banks: those licensed to operate as community-based unit banks and microfinance banks licensed to operate in a state. The five microfinance banks (MFB) above fall within the category of MFBs licensed to operate as community-based unit banks with a minimum paid-up capital of N20million. The ownership structure of the five MFBs is that of Limited Liability Company.

Access to loans in any MFB is predicated upon meeting certain requirements. The main requirements for accessing loans in the selected MFBs in the area of study are shown in Table 5.1a below. The requirement that is common to the selected MFBs is a loan Guarantor. A loan Guarantor is defined differently by each MFB. For instance, the GWA defines a guarantor in terms of standing in society, level of income and physical assets. While MKR and KUD insist on a Guarantor being either a local government Chairman or at the least a Councilor, depending on the amount of the loan; ZAR and SAB accepts a Guarantor on the basis of how much he or she has in his or her bank account. Statutorily, small loans given by MFBs are not expected to be given on the basis of assets based collateral. Each MFB delimits what a small loan is in terms of the amount, terms and tenor. In the area of study, a Guarantor is about the easiest form of collateral a potential economically active poor borrower can present.

Table 5.1a: Requirements for obtaining Loan and Reasons Advanced for need of Loan.

MFBs	Requirements for obtaining Loan
GWA	Cash in account, Landed property, Guarantor, Salary account
MKR	Guarantor, Salary account, Collateral Negotiable
KUD	Cash in account, Landed property, Certificate of Occupancy, Guarantor, Salary account, Negotiable
ZAR	Guarantor, Salary account, Negotiable
SAB	Cash in account, Landed property, Certificate of Occupancy, Guarantor, Salary account, Negotiable
	Reasons Advanced by Borrowers for need of Loan
GWA	To stabilize consumption, To grow small business, Subsistence farming, Buying and Selling
MKR	To stabilize consumption, To grow small business, Commercial farming
KUD	To stabilize consumption, To grow small business, Subsistence farming
ZAR	To grow small business, Commercial farming, Buying and selling
SAB	To purchase equipment, To grow small business, Subsistence farming, Comm. Farming, Buy & Sell

Source: Field Survey, 2010.

Other requirements for accessing loans from the selected MFBs as indicated in Table 5.1a above are cash in account, landed property, salary account, certificate of occupancy and negotiable collateral. This is against the backdrop of the fact that small loans which the 2005 Microfinance Policy envisaged that the economically active poor especially in the rural area would need; do not necessarily warrant the need for assets based collaterals to access (Ngozi, 2005). When this issue was raised with some of the selected MFBs, they simply pointed out the notoriety for non-repayment of loans obtained from institutional finance agencies by average Nigerian borrowers, especially in the rural area. However, it is worth noting that some of the MFBs actually negotiate with some of the poor customers on what form of collateral that could easily be available to them.

In view of the target business beneficiaries and the range of credit/banking facilities provided by the MFBs, the study sought to find out from the banks what reasons borrowers often advanced for their need of loan. The results are presented in Table 5.1a above; and it

shows that the reason mostly advanced to the MFBs by borrowers for their need of loan is, to grow small business, stabilize consumption, subsistence and commercial farming, buying and selling, purchase of equipment What is clear, both from observation and the opinion of the MFBs is the fact that differences in the nature and level of poverty of borrowers, nature of business or economic activity, size of family, etc determine the reasons they advance for loan application. A staff in one of the MFBs noted that a sizeable number of borrowers only state growing a small business as a reason for loan on paper to attract approval; that underlying this reason is the big problem of instability in subsistence household consumption. Many of the small loan beneficiaries use such loans for household consumption which have led to huge non-performing loans in the MFBs portfolios.

The rate of interest for each tenor as charged by each of the selected MFBs is presented in Table 5.1b (in page 142). The lowest average rate of interest charged is 16% by ZAR; this is closely followed by SAB with an average rate of interest of 18.8%. The highest average rate of interest was 23% charged by GWA. However, some customers of the MFBs noted that these are official figures usually displayed in the banking hall of the MFBs. They affirm that the rate of interest is usually negotiable and much higher than the official figures in Table 5.1b (in page 142). In fact, a particular customer of KUD stated that he was not aware of the rate of interest charged and that they are often told to pay a lump sum in addition to the principal. All the selected MFBs in the study area apply multiple repayment schedules depending on the loan tenor and amount.

Table 5.1b: Rate of Interest per Loan Tenor

	Rate of Interest per loan tenor					
Period/MFBs	**GWA**	**MKR**	**KUD**	**ZAR**	**SAB**	**Average rate**
Less than three months	**negotiable**	**21%**	**20%**	**10%**	**5%**	**14%**
Three months	**21%**	**n.a.**	**23%**	**n.a.**	**12%**	**18.7%**
Six months	**25%**	**21%**	**23%**	**15%**	**22%**	**21.2%**
One year	**negotiable**	**21%**	**23%**	**23%**	**25%**	**23%**
Above one year	**negotiable**	**n.a.**	**n.a.**	**n.a.**	**30%**	**30%**
Average rate	**23%**	**21%**	**22.3%**	**16%**	**18.8 %**	**20.2%**

	Method of Loan Pricing
GWA	**Tenor based, Individual negotiation**
MKR	**Individual negotiation, Tenor based,**
KUD	**Market based, Tenor based, Individual negotiation**
ZAR	**Tenor based, Individual negotiation**
SAB	**Market based, Tenor based, Individual negotiation**

Source: Field Survey, 2010.

The methods of loan pricing adopted by the selected MFBs in the study area are based on tenor of loan, individual borrower's negotiation and credit market conditions (see table 5.1b above). Individual negotiation is the commonly used method of loan pricing among the selected MFBs. Thus, it is common place to find borrowers paying different rates for the same amount of loan.

Table 5.1c: Loan concentration by Business activities and Credit Methodology

	Loan Concentration by Business Activities
GWA	Services related businesses, farm inputs sales, small holding farming, salary overdraft
MKR	Farm produce marketing, small holding farming, petty trading, salary overdraft
KUD	Farm produce marketing, small holding farming, salary overdraft
ZAR	Services related businesses, farm produce marketing, petty trading, salary overdraft
SAB	Services related businesses, farm produce marketing, farm inputs sales
	Credit Methodology
GWA	Individual Lending and Group lending
MKR	Individual Lending, Co-operative lending
KUD	Individual lending, Group lending
ZAR	Individual lending, Co-operative lending
SAB	Individual lending, Group lending

Source: Field Survey, 2010.

The results of the survey on loan concentration by business activities among the selected MFBs in the study area are shown in table 5.1c above. All the selected MFBs operating in the study area prefers short term lending to long term lending. This has serious implications for wealth creating and employment generating asset building that could help to alleviate rural poverty on a sustainable basis. Income and wealth generating assets are critical to alleviating poverty on a sustained basis; but it certainly takes a considerable length of time to build such assets particularly in a rudimentary economy as prevalent in the rural area of Nigeria.

As indicated in table 5.1c above, loan concentration by business activities was predominantly in the services related businesses such as GSM accessories selling, farm produce marketing and salary overdraft in the selected five microfinance banks in the study area. This has serious implications for sustainable wealth creation and employment generation as well as asset build-up which are critical to poverty alleviation.

The credit methodology common to the selected MFBs in the study area is individual lending. This is reflected in the field survey report presented in table 5.1c above. The MFBs prefers individual lending because it gives them a leverage to negotiate different interest rates

for the same amount of loan with each individual. The preference is irrespective of the high level of loan default and the cost of lending, especially to individual borrower.

The minimum amount of loan in cash that any borrower can access as set by each of the selected MFBs in the study area is a range. Whatever amount any borrower wishes to apply for is expected to fall within the given range. For instance in GWA, the minimum loan in cash is expected to fall within the range #5,000-#7,000; #7,500-#10,000 and #12,000-#20,000 (see table 5.1d below). The lowest average minimum loan in cash is #5,000 and the highest average minimum loan in cash in all the selected MFBs in the study area is #20,000. The lowest and highest average minimum loan in cash helps to determine unofficially the major constituents of the client structure of microfinance banks (see Swope, 2005).

Table 5.1d: Minimum amount of Loan in cash and Non-performing Loans

MFBs	Minimum amount of Loan in Cash	
GWA	#5,000 - #7000; #7,500 - #10,000; #12,000 - #20,000	
MKR	#5,000 - #7,000; #7,500 - #10,000	
KUD	#5,000 - #7,000; #7,500 - #10,000	
ZAR	#5,000 - #7,000; #7,500 - #10,000; #12,000 - #20,000	
SAB	#5,000 - #7,000; #7,500 - #10,000	
	Number and Value of Non-performing Loan in Credit Portfolio	
	Number of Non-performing Loans	Value* (million)
GWA	38	#28,200,000.00
MKR	58	#36,580,000.00
KUD	40	#30,469,560.00
ZAR	62	#42,582,100.00
SAB	72	#49,256,000.00
Total	270	#187,087,660.00

Source: Field Survey, 2010.

One of the major difficulties that has confronted and hampered the operations and development of microfinance banks in Nigeria is the case of rising non-performing loans. Table 5.1d (in page 144) provides information on the number and value of non-performing loans in the credit portfolio of the selected MFBs in the study area. This study notes that these values provided by the selected MFBs during the field survey are estimates from oral interviews; as such, the values must be treated with a careful exercise of caution as none of the MFBs selected permitted direct access to its loan portfolio. However, this study believes that these values help to provide a reasonable guide and insight into the critical difficulties faced by microfinance banks, especially those which operate in the rural area. From Table 5.1d (page 144), there are approximately 270 non-performing loans over a period of four years (2006-2009) valued at approximately #187,087,660.00 shared among the selected MFBs operating in the study area.

5.2 Assessment of the Performance of Microfinance Banks in Rural Poverty Alleviation in Nigeria using Outreach

Outreach in this study is measured on the basis of target coverage, the type and structure (composition) of clientele served; activity focus, type of financial services offered and percentage of target coverage population served. Critical to the outreach measure are Volume of outstanding loans, number of active loans, minimum loan size, average outstanding loans, number of savings account, value of savings account, number of active borrowers, number of staff, town/semi-urban branches, village posts/units and portfolio at risk greater than 90 days.

The results of the field survey as presented in Table 5.2(I) in page 150) indicates the target clients and activity focus of the selected microfinance banks in the study area. For instance, GWA has the objective of reaching small holding farmers and rural poor located in Giwa, Dandume, Danja and Shika; focusing on financing off-farm income generating activities, produce marketing, retail trading and commercial transport. It offers small loans, savings opportunity, salary payment and skeletal money transfer as financial services to its

customers. Out of the 3,108 clients of the GWA between 2006 and 2009; 2,050 are males while 158 are females, which represents about 0.25% of target coverage population. The MKR has the objective of reaching and financing economically active poor and low income earners located in Makarfi, Ikara and Kubau; whose business activities involve petty retail kiosks, commercial bus transportation and Okada (motor cycle) transport system. Between 2006 and 2009, there were about 1,204 clients of the MKR out of which 1,120 are male and 84 females, representing about 0.40% of target coverage population (See Table 5.2(I) in page 150). All the selected microfinance banks in the study area have shouldered a considerable level of nonfinancial activities such as farm produce buying and selling alongside its primary activity of extending small loans. Also, they are involved in the operation of inter-state commercial transport businesses ranging from fleet of passenger buses to haulage truck services.

The SAB microfinance bank is focused to reach micro traders, small holding and commercial farmers, commercial transport owners, small holding supermarkets and salary remittance accounts; who are involved in micro businesses such as spare parts traders, farm produce marketing, retail kiosks/shops, etc; located in Sabon-gari, Kongo, Tudunwada, Dakace, Maigana and Soba. As shown in Table 5.2(I) in page 150), there were about 1,933 clients of SAB between 2006 and 2009, out of which 1,508 were male clients and 125 female clients, representing a meager 0.010% of target population served. Among the selected MFBs in the study area, SAB was more involved in a wide array of nonfinancial activities along with the primary activity of providing credit. SAB is known to have been involved in hire purchase/lease of equipment to small farmers, vulcanizers/ mechanics, small fashion designers and own commercial passenger buses in partnership with others; financing of government LPOs and supply of grains to multinational beverage makers.

The results of the field survey on the selected MFBs performance indicators outreach in terms of loans and deposits between 2006 and 2009 are presented in Table 5.2(II) pages 151 & 152). The results indicate that the volume of loans outstanding for all the five MFBs grew significantly within a four year period of 2006-2009. For instance, SAB's volume of loans outstanding which stood at #20.12million at the end of 2006 grew sharply to #70million

at the end of 2008 before falling to #45.72million at the end of 2009 as indicated in Table 5.2(II) in pages 151 & 152). On the other hand, volume of loans outstanding to GWA which stood at #3.50million at the end of 2006 grew slowly to #14.9million at the end of 2009.

As at the end of 2006 GWA's number of savings accounts stood at 1,020, this figure more than doubled itself at the end of 2007 when it grew to 2,750; declining to 1,500 in 2008, before rising to 2000 at the end of 2009; making GWA the microfinance bank with the highest number of savings account in the study area, as shown in Table 5.2(II) in pages 151 & 152). From 1,100 in 2006, the number of savings account with MKR marginally increased to 1,300 in 2007, rising slightly to 1,350 in 2008 and rose again to 1,400 at the end of 2009. This makes MKR the microfinance bank with the second highest number of savings account in the study area.

GWA's value of savings account at the end of 2006 stood at #5million; this figure grew slowly to #12million at the end of 2009. The value of savings account with MKR was #3.86million in 2006, it rose sharply to #16.72million at the end of 2007, this dropped sharply to #9.20million in 2008 before falling drastically to #2.04million at the end of 2009 (see Table 5.2(II) in pages 151 & 152). The value of savings account with KUD which stood at #2.58million at the end of 2006 rose sharply to #12.45million in 2007, before falling to #7.32million in 2008. It fell further to #5.20million at the end of 2009. The SAB microfinance bank holds the highest volume of savings among the selected five MFBs operating in the area of study.

With respect to number of active borrowers, Table 5.2(II) pages 151 & 152) shows that GWA had 360 active borrowers in 2006, which rose to 550 in 2007 and further grew to 958 in 2008 and peaked at 1329 at the end of 2009. There were 1,250 active borrowers doing business with MKR in 2006, this figure dropped to 1,050 in 2007, it fell drastically to 245 at the end of 2008. This figure fell again to 205 at the end of 2009 as shown in Table 5.2(II) pages 151 & 152).

The number of staff in all the selected MFBs operating in the study area increased slowly during the four year period of 2006-2009 as indicated on Table 5.2(II) in pages 151 &

152). SAB microfinance bank had the highest number of staff throughout the four year period (2006-2009). All the five selected MFBs have one branch which doubles as headquarters, sited at the headquarters of the local government in which it is located. Only MKR and KUD had village posts/units that serve only as cash disbursing centers. Table 5.2(II) in pages 151 & 152) reveals that portfolio at risk for more than 90 days in all the five selected MFBs increased considerably throughout the four year period of 2006-2009. All the five selected MFBs had very low percentage asset growth rate during the period 2006-2009, which cast a measure of suspicion on their ability to sustain the lending capacity as reflected in Table 5.2(II) in pages 151 & 152).

For all the five selected MFBs the data on volume of loans outstanding, number of savings account and number of active borrowers in Table 5.2(II) in pages 151 & 152) indicate a significant level of outreach from the general point of view. However, it is instructive to note that an increasing volume of loans outstanding could imply two possible cases. First, it may imply attractiveness of loan cost and terms, as well as availability with relative ease of access. Consequently, growth in investment and output is expected. Second, it could imply poor loan repayment/high rate of default on the part of borrowers, especially with the rate of sharp increases in the volume of loans outstanding as indicated in Table 5.2(II) in pages 151 & 152). With the decrease in the number of active borrowers, value of savings account and sharp rise in portfolio at risk for more than 90 days in some (e.g. MKR, KUD, SAB) of the selected MFBs, the latter might be the case. The number and value of savings accounts is relevant to understanding the level and rate of savings mobilization of the MFBs in their financial intermediation roles in the communities in which they operate. The selected MFBs, judging by the data on number and value of savings accounts provided in Table 5.2(II) in pages 151 & 152), appear to have done reasonably well. However, this study notes that most of the selected MFBs have it as one of the requirements for obtaining a loan; that a savings account must be opened with it in the beneficiaries name or business. A number of such savings accounts became dormant as soon as business failure occurred. This brings to question the reliability of the use of the number of savings accounts as a basis for measuring the rate and level of savings mobilization by microfinance banks. Also, it is possible that a

small percentage of the active savings accounts might be responsible for a considerable amount of the value of savings in any given microfinance bank.

It is interesting to note that critical to outreach is the matter of branch or village post/units. It is obvious that from the data provided in Table 5.2(II) in pages 151 & 152), the MFBs could not have effectively reached most of the economically active poorer rural populace who certainly need small loans to leverage their micro business activities. Increasing the number of staff with a single branch, as it was the case with some of the selected MFBs; could only but lead to increase in overhead cost in terms of salaries and wages with its attendant consequences.

Table 5.2(I): Microfinance Banks Performance Indicators: Outreach (2006 – 2009).

Indicators/MFBs	GWA	MKR	KUD	ZAR	SAB
Target Coverage.	Giwa, Dandume, Danja, Shika.	Makarfi, Ikara, kubau	Kudan, Hunkuyi, Makarfi, Giwa, Basawa	Zaria city, Gaskiya, Tudunwada,	Sabon-gari, Maigana, Soba, Dakace, Kongo
Target Clients.	Small holding farmers and Rural poor.	Economically active poor and Low Income earners.	Local govt. workers, petty traders, small holding farmers, farm produce merchants.	Rural and semi-urban poor, small holding farmers, farm produce merchants.	Micro traders, small holding and commercial farmers, commercial transport owners, salary accounts.
Business activity focus.	Off-farm income generating activities produce marketing, retail trading, and commercial transport.	Off-farm small businesses, petty retail trade, commercial transport, okada transport.	Petty retail trade, farm produce marketing, GSM kiosk owners.	Small supermarkets, retirees accounts, retail shops, commercial transport owners, Okada.	Micro businesses, Spare parts traders, farm produce marketing, petty retail trading etc.
Type of Financial Services Offered.	Small loans, savings opportunity, salary payment, money transfer.	Savings opportunity, small loans, hire purchase financing, salary payment, transfer	Small loans, savings opportunity, money transfer, Local govt. LPO financing.	Small loans, savings opportunity, hire purchase, retiree accounts, and transfers.	Small loans, savings opportunity, LPO financing, Bank Guarantee bond.
Structure of Clients.	**Male**: 2,050/ **Female**: 158	**Male:** 1,120/**Female**: 84	**Male**:1,203/**Female**:139	**Male**:1,405/**Female**:40	**Male:**1,508/**Female:**425
Percentage of Target population served.	0.25%	0.40%	0.60%	0.15%	0.10%

Source: Field Survey, 2010.

Table 5.2(IIa): Microfinance Banks Performance Indicators: Outreach (Loans and Deposits: 2006 – 2009).

INDICATOR	2006					2007				
		GWA	MKR	KUD	ZAR	SAB	GWA	MKR	KUD	ZAR	SAB
Volume of loans outstanding	3,508,450	5,260,000	5,000,000	4,248,000	20,120,000	6,458,400	12,340,000	10,000,000	18,000,000	55,650,000
Number of active loans	360	1,250	215	152	335	420	1850	172	200	387
Minimum loan size	5,000	5,000	5,000	5,000	7,000	7,500	7,000	7,500	9,000	7,500
Average loans outstanding	9,745.69	4,208.00	23,225.81	27,947.37	60,059.70	15,377.14	6,670.27	58,139.54	90,000.00	143,798.45
Number of savings accounts	1,020	1,100	507	159	995	2,750	1,300	1,215	279	1,245
Value of savings accounts	5,000,000	3,860,000	2,585,450	2,087,500	10,845,000	7,900,000	16,726,000	12,456,203	1,540,000	52,580,000
Average value of savings a/c	4,901.96	3,509.09	5,099.51	13,128.93	10,899.50	2,877.72	12,866.15	10,252.02	19,497.50	42,232.93
Number of active borrowers	360	1,250	215	152	218	550	1,050	845	580	615
Number of staff	7	9	8	8	8	6	12	10	6	13
Town/semi-urban branches	1	1	1	1	1	1	1	1	1	1
Village posts/units	--	--	--	--	--	--	--	--	--	--
Portfolio at risk > 90 days	6,950,000	7,450,000	5,495,000	3,445,000	8,750,000	12,520,500	13,850,000	10,840,000	14,454,000	13,548,540
Annual growth rate of assets	n.a.	n.a	n.a.	n.a.	n.a.	0.3%	0.5%	0.2%	3%	5%.

Source: Field Survey, 2010.

Table 5.2(IIb) continued: Microfinance Banks Performance Indicators: Outreach (Loans and Deposits: 2006 – 2009).

INDICATOR	2008					2009				
	GWA	MKR	KUD	ZAR	SAB	GWA	MKR	KUD	ZAR	SAB
Volume of loans outstanding	8,800,000	35,005,000	45,000,000	12,000,000	70,000,000	14,900,000	28,450,000	40,000,000	27,380,000	45,720,000
Number of active loans	305	460	148	341	265	459	470	225	497	438
Minimum loan size	7,500	10,000	10,000	20,000	10,000	15,000	10,000	10,000	20,000	10,000
Average loans outstanding	28,852.46	76,097.83	27,027.03	35,190.62	266,339.62	32,461.87	60,531.91	6,666.67	55,090.00	104,384.56
Number of savings accounts	1,500	1,350	856	124	1,184	2,000	1400	756	309	1,342
Value of savings accounts	10,500,000	9,206,438	7,325, 405	1,870,200	42,530,000	12,000,000	2,045,378	5,205,215	5,700,246	6,326,000
Average value of savings a/c	7,000.00	6,819.58	8,557.72	15,082.25	35,920.00	6,000.00	1,460.98	6,885.20	18, 447.39	4,713.86
Number of active borrowers	958	245	406	445	1,025	1,329	205	750	497	1,578
Number of staff	10	14	13	7	17	12	16	12	8	24
Town/semi-urban branches	1	1	1	1	1	1	1	1	1	1
Village posts/units	--	1	1	--	--	--	1	1	--	--
Portfolio at risk > 90 days	49,000,000	15,448,000	14,320,000	23,000,000	18,390,000	40,000,000	29,000,000	18,850,000	35, 4500,000	28,430,000
Annual growth rate of assets	n.a.	0.25%	2.5%	1.5%.	2%	0.25%	n.a.	5%	n.a.	n.a.

Source: Field Survey, 2010.

1. Performance Indicator: Impact of Loans on the Poverty Level of Borrowers.

The task of this section of the study is to assess using field survey the impact of loans on the poverty level of borrowers from the five selected microfinance banks located in selected five local government areas (Giwa, Makarfi, Kudan and Zaria) of Kaduna state.

a) Accomplishment after Loan, Impact of Loan on borrower's Business, Expectations about future Repeat of Loan and Disincentives to borrowers of Microfinance Banks.

Micro finance is believed to have been playing critical roles in the implementation of rural poverty alleviation programmes (see Jacob, 1994). This is because the provision of microfinance to the economically active poor has assumed universal acceptance and adoption in rural poverty reduction models (see Attah, 2005). The underlying thought is that economically active rural poor needs only a sustained access to credit to unleash their potentials to enable them create, own and accumulate assets and ensure smooth consumption pattern. It is further argued that when access to micro finance is sustained, it would help to alleviate poverty through entrepreneurship endeavors that could fast-track employment creation, generate income, fund children education, enable families to obtain health care and empower the active rural poor to make choices that best serves their interests or needs. In recent discuss, especially within the United Nations Development Programme (UNDP), issues have been raised with respect to the need for paradigm shift from Human Poverty Index (HDI) which measures poverty in terms of the income of an individual to a Multidimensional Poverty Index (MPI) which assesses dimensions and extent of individual poverty in areas of health, education, shelter and access to portable water as well as in terms of more general standard of living (see Oyesola, 2010). This study investigated the accomplishment of borrowers after taking microfinance credit in terms of the Multidimensional Poverty Index (MPI) through field survey of sample borrowers of selected five MFBs located in the study area. The survey report is presented in Appendix I and II (page and).

About 28.8% of the sample borrowers of the selected five MFBs in the study area were able to pay school fees for their children. 20.8% have been able to adequately feed their families, while 13.5% built small personal houses. 11.6% were able to accumulate personal

savings. 10% could afford hospital bills; while 6.8% of the sample borrowers of the selected MFBs acquired a bicycle, motor cycle or car. 5.2% started small businesses, while 3.6% changed from pit latrine to lavatory. Specifically, the most accomplishment by the sample borrowers of MKR was the payment of school fees for children (52%); while the most accomplishment of ZAR, SAB, GWA and KUD are payment of school fees for children (40%), accumulation of personal savings (40%), able to adequately feed family (30%) and built a small personal house (22%) respectively as indicated in Appendix I (page 191).

The field report on the impact of loan on the businesses of sample borrowers of the selected five MFBs in the study area as presented in Appendix I (page 191) reveal that about 45.6% of the sample borrowers experienced changes in average monthly income. 19.2% experienced business expansion. About 15.2% of the sample borrowers of the selected five MFBs confirmed that they were still in business but not making profit. However, 12.8% have experienced business closures, while 7.2% experienced no change at all. Over 55% of borrowers from the selected microfinance banks in the study area are expecting to borrow an increased amount (see Appendix I in page 209 and210).

The most frequently encountered disincentive by the sample borrowers (22.8%) of the selected five MFBs in the study area has to do with the problem of risk averse behavior of microfinance banks with respect to lending to rural poor borrowers. 20.8% of the sample borrowers indicated high interest rate as a strong disincentive to them (see Appendix II in page 210).

Borrowers' level of satisfaction with the services of the selected five microfinance banks in the study area was assessed through field survey. The report is presented in Appendix II (page 210). About 56%, 33.6% and 10.4% of the sample borrowers indicated that the range of credit products offered by the selected five microfinance banks in the study area are satisfactory, poor and unsatisfactory respectively. In the same vein 48.4%, 35.2% and 16.4% indicated that the quality of services provided were satisfactory, poor and unsatisfactory respectively. About 38.4%, 36.4% and 25.2% indicated that repayment schedules were satisfactory, poor and unsatisfactory respectively. With respect to loan monitoring, 20.8%, 30.8% and 48.4% of the sample borrowers of the selected five MFBs

showed that they were satisfied with loan monitoring, poor loan monitoring and unsatisfactory loan monitoring respectively.

The accomplishments by borrowers after loan are significant for poverty alleviation in terms of access to education (educational poverty), changes in calorie in-take (nutritional poverty), access to accommodation (shelter poverty), accumulation of financial asset (own-asset poverty) and access to health (poverty in terms of health). However, in real terms these results could only be adjudged significant if the level and depth of the incidence of poverty in the study area can be adequately determined. It is instructive to note that the engine of growth and sustained income string, employment generation, wealth creation, asset build-up, etc as far as sustainable rural poverty alleviation is concerned lies in the development of small/micro businesses. The sustainability of private sector led microfinance credit depends to a very large extent on the growth of small/micro business start-ups. This is because loan repayment is a function of returns from investment and not from consumption. Note that the risk factor such as poor yield, depressed prices, vagaries of weather conditions, etc; in small holding agricultural production which constitute the main stay of rural economy is quite high. Over 90% of non-performing loans in MFBs portfolio in the study area that have resulted in their insolvency and eventual failure are claimed to be in the small holding farming investments. The field report is not significant for start a small business at 5.2%. Again, it could be argued that the field report of the sample borrowers of the selected MFBs who were able to have personal savings (11.6%) is not sufficient to generate savings to be mobilized by microfinance banks for expanded credit creation; which obviously threatened their survival. Overall, the results showed that some level of social and economic progress has been made. The question that is obvious to be asked is, is the level of progress made by the borrowers economically, sufficient to sustain MFBs in business? Given the field report, the obvious answer is no. The relevance of this consideration lies in the fact that in a typical neo-classical economic sense a private investor has low consideration for social goals as against the economic goal of profit.

Change in average monthly income takes the lead in the impact of loan on the borrowers' businesses at 45.6% in the study area. This is significant for poverty alleviation.

Again, it is important to evaluate the sources of the change in the average income. Are the sources of change stable and sustainable over a defined period of time? Or are they subject to instability as other factors or variables are affected. It is clear that the main source of change which is small holding farming is unstable. Thus, a onetime change in average monthly income may not necessarily engender sustained poverty alleviation especially where the level and depth of the incidence of poverty is considered to be significant. The report also showed that some level of business expansion (19.2%) had taken place among the sample borrowers' businesses in the study area. The major expansion in businesses as observed during the field survey is in small holding farming which is susceptible to instability. A number of businesses of the borrowers were no longer making profit (15.2%) and 12.8% of the borrowers experienced business closures after the loan. The major reasons adduced for these, were insufficiency of loan amount approved, high cost of doing business in the rural area, lack of infrastructure such as electricity, etc.

The field report was significant for borrowers' expectations about future repeat of loan. The report showed that most of the sample borrowers desired to repeat the loan at the same amount and at increased amount. This could be an indication that the previous loans had the desired effects on the poverty levels and businesses of the sample borrowers. However, a significant number of the sample borrowers did not wish to repeat loans at all. The main reason for their desire not to repeat was because they have been unable to repay previous loans and do not wish to increase their indebtedness. Their inability to repay arises from business failure due to huge outstanding debts owe them by their business customers. The impact of non repayment of loans by borrowers is enormous on the MFBs as they also had to cut down drastically on number and amount of loans to borrowers; thus impacting negatively on their total earnings.

A major disincentive to the sample borrowers of the selected five MFBs in the study area was the risk aversion behavior of the banks towards poor borrowers. This is understandable because the characteristics of poor borrowers and their risk profile are unique. Therefore their credit methodology is completely different from that of conventional commercial banks. A significant number cited high interest rates charged by MFBs as a

disincentive. This negates the claims of Kimotha (2005) that most rural active poor are willing to accept the higher rates of interest charged by MFBs which are higher than commercial bank rates; on the ground that rural informal credit sources charge a lot higher rates than MFBs. High interest rates would always serve as a disincentive to an 'economic man' as long as he has access to information concerning available options and associated cost implications. High interest rates would certainly shrink opportunity for accessing credit to vast rural potential borrowers; which, going by the statutory goals of the 2005 microfinance policy would impose a limitation on sustained rural poverty alleviation in Nigeria. Poor branch network would further limit access to credit. The uneducated rural borrower would always find any extensive documentation process unattractive. This could shift their credit demand to informal sources where documentation is sometimes zero. The same goes for bank charges. High charges are considered by rural borrowers as bank "wayo". This could also significantly affect the demand for MFBs credit products by rural borrowers in the study area.

2. Performance Indicator: Repeated Use of Loans and Drop-Out Rate by Borrowers of Microfinance Banks

Repeated Use of loans and Drop-Out Rate by borrowers of microfinance bank is important because it essentially provides an answer to the question of whether the gains got by the rural poor borrowers of a microfinance bank exceed their costs. A poor borrower will use a microfinance bank as long as the gains to the borrower are in excess of the costs to the borrower. Note that it is possible for a borrower to make a mistake and borrow or make a deposit with a MFB once but then discovers that the gain was less than the cost. But economists assume that borrowers are not likely to make the same mistake twice (Schreiner, 1997). Therefore, repeated use means that the gains made by the borrower are greater than the associated costs from the rural poor borrower's point of view. The gains from a onetime use of loan by a rural poor borrower, though in excess of the costs of the loan and the cost of investment for which the loan was sought; may not be sufficient to establish sustained rural poverty alleviation. As far as sustainable rural poverty alleviation is concerned, the gains made from investing credit must be in excess of the associated cost of the credit and

investment; and that such positive excess of gains over costs is sustained over a considerable period of time sufficient to impact the indices of the living standard of the rural active poor. It is generally accepted that before gains from loan to rural poor borrowers would be sufficient to impact poverty sustainably, repeated use of such a loan for a definite length of time becomes inevitable.

There are two basic measures of repeated use in assessing the performance and the worth of a microfinance bank. These are loans per borrower since birth and the drop-out rate. Loans per borrower measures the flow number of all loans disbursed per borrower since birth and the flow number of new borrowers; while the drop-out rate tells what part of those who could drop out did in fact drop out. The drop-out rate would certainly affect the extent to which the use of loan by a borrower will alleviate poverty on a sustainable basis. This study used the two measures above to evaluate the performance of the selected five MFBs in the study area, by repeated use of loan by rural active poor borrowers. Note that the measures are based on all the borrowers in the selected five MFBs and not the sample borrowers. This is because it would not have been possible to isolate the individual elements of the sample borrowers from the pool of all the borrowers in the selected MFBs. The results of the measures for each of the selected five MFBs are presented and discussed below.

a) Repeated Use of Loans and Drop-Out Rate by all Borrowers of GWA and MKR Microfinance Banks (2006-2009)

At the end of 2006 when GWA commenced operations as microfinance bank, the number of loans per borrower since birth was 1, and it maintained the same trend through to 2009 (line h of Table 5.2a in page 160). The yearly drop-out rate in a year which was 81% at the end of 2006 fell to 55% in 2008 before rising slightly to 62% at the end of 2009 (line f). The drop-out rate since birth was 76% at the end of 2006, it rose slightly to 81% in 2007; declined to 79% in 2008 before rising again to 82% at the end of 2009(line g). The results for MKR are not significantly different from those of GWA. MKR number of loans per borrower since birth was 1 in 2006, (see line h of table 5.2b, page 161); it maintained the same value through to 2009. The yearly drop-out rate in a year for MKR which stood at 66% in 2006 remained the same by the end of 2009 (see line f in table 5.2b).

There are several possible reasons for this; with respect to GWA, many of the borrowers were not willing to repeat their loans as they did not want to increase their debt. Some switched to other sources of credit as soon as they were able to repay previous loan. Others were outright bad debtors, while majority are genuine defaulters due to the fact that their gains from the first use of the loan were far less than the loan. With a high drop-out rate and non-repeat of loans, the gains of poverty alleviation got through a one-time loan by the borrowers of GWA were not sustained. For MKR, one major reason behind the high rate of yearly drop-out by borrowers was the fact that by 2007 its net worth had become negative. MKR could not honor its obligations drawn against it due to insolvency. Insolvency had set in mainly due to growing default in loan repayment and the inability of MKR to attract viable depositors order than the very rural active poor that mandatorily had to meet the requirement of opening a savings account with MKR before loan application was granted. Such savings accounts were not funded regularly as the rural poor could hardly generate enough surplus to meet household consumption needs, thus there was nothing left to save. The low savings capacity of many of the clients of MKR could not support sufficient deposits mobilization to fund lending activities. Based on findings from the field, more than two-third of the new loans were actually overdraft facilities given to local government workers whose salary accounts were with MKR; mainly for the purpose of funding household consumption instead of investing in income generating ventures. During one of the field visits to MKR, a local government staff came to seek for overdraft of #10,000.0. The MFB Manager said that there was practically no such amount to give him, unless he had to wait for deposits to add up to the amount. As at 12noon the Manager confirmed that not a single depositor had shown up. This is an incentive for drop-out. This would most certainly jeopardize sustainable rural poverty alleviation through the microfinance option.

Table 5.2a: Performance Indicator: Repeated Use of Loans and Drop-Out Rate by all Borrowers from GWA Microfinance Bank (2006-2009)

line	Year Ending December 31	Source	2006	2007	2008	2009
a	No. of new Loans in a year	Data from MFB	360	220	205	320
b	**No. of new Loans since birth**	**b(t-1) + a**	**360**	**580**	**785**	**1,105**
c	No. of repeat Loans in year	Data from MFB	60	105	5	13
d	**No. of repeat Loans since birth**	**d(t - 1) + c**	**60**	**165**	**171**	**184**
e	No. of Loans outstanding at year end	Data from MFB	85	108	165	198
f	**Drop-out rate in year**	$\frac{\{a-[e-e(t-1)]\}}{[a + e(t-1)]}$	**0.81**	**0.60**	**0.55**	**0.62**
g	**Drop-out rate since birth**	$\frac{(b - e)}{b}$	**0.76**	**0.81**	**0.79**	**0.82**
h	**Loans per borrowers since birth**	$\frac{(b + e)}{b}$	**1.2**	**1.3**	**1.2**	**1.2**

Source: Field Survey, 2010

Table 5.2b: Performance Indicator: Repeated Use of Loans and Drop-Out Rate by all Borrowers from MKR Microfinance Bank (2006-2009)

line	Year Ending December 31	Source	2006	2007	2008	2009
a	No. of new Loans in a year	Data from MFB	1,250	540	210	185
b	**No. of new Loans since birth**	**b(t-1) + a**	**1,250**	**1,790**	**2,000**	**2,185**
c	No. of repeat Loans in year	Data from MFB	200	158	175	80
d	**No. of repeat Loans since birth**	**d(t - 1) + c**	**200**	**358**	**533**	**613**
e	No. of Loans outstanding at year end	Data from MFB	642	305	106	95
f	**Drop-out rate in year**	$\frac{\{a-[e-e(t-1)]\}}{[a + e(t-1)]}$	**0.66**	**0.64**	**0.66**	**0.66**
g	**Drop-out rate since birth**	$\frac{(b - e)}{b}$	**0.49**	**0.83**	**0.95**	**0.96**
h	**Loans per borrowers since birth**	$\frac{(b + e)}{b}$	**1.2**	**1.2**	**1.3**	**1.3**

Source: Field Survey, 2010

b) Repeated Use of Loans and Drop-Out Rate by all Borrowers from KUD and ZAR Microfinance Banks

At the end of 2009, the number of loans per borrower since birth for KUD was 1.3 (line h in table 5.2c, page 163). The yearly drop-out rate increased slightly from 53% in 2008 to 55% at the end of 2009 (line f in table 5.2c); while the drop-out rate since birth climbed from 32% in 2006 to a peak of 79% in 2008 before falling marginally to 73% at the end of 2009 (line g of Table 5.2c, page 163). Note that the measure does not provide the details of the borrowers who drop out and at what point they do drop-out. But the loans per borrowers since birth (line h) suggest that most of the drop-outs of KUD normally would leave after the first loan. This confirms the fact that KUD and most of the MFBs do not screen new borrowers in terms of previous credit records with similar lending agencies. Instead new borrowers screen themselves. KUD like every other MFB screens repeat borrowers based on previous repayment records. It is expected that this would lead to a high percentage drop-out rate since birth as indicated in line g of Table 5.2c (in page 163). This is because defaults rate were quite high for KUD as at the end of 2009. This portends grave consequences for rural poverty alleviation both in its process and in terms of outcome of poverty alleviation through the microfinance option. Most cases of defaults were said to be a function of gains from loans being far less than the associated costs of loans and investment. As the default cases increased KUD became insolvent early in 2009 and became terminally distressed by the third quarter of 2010.

The yearly drop-out rate in ZAR was 81% in 2006, it fell to 76% in 2007 and declined sharply to 28% at the end of 2008 before rising steeply to 97% at the end of 2009 (line f of Table 5.2d in page 164). Drop-out rate since birth rose steadily from 81% in 2006 to 94% at the end of 2009 (line g). These are very high drop-out rates. In 2009, loans per borrowers was 1.1 (line h of Table 5.2d in page 164). The number of yearly repeat loans stood at 105 in 2009 (line c); while repeat loans since birth was cumulatively 526 (line d of Table 5.2d, page 164). This was quite significant for ZAR. However, when viewed against the drop-out rate since birth it raises the question; how could the number of new loans since birth be 981 in 2009 (line b) with repeat loans since birth of 526 in 2009 (line d) record a

drop-out rate since birth of 94% in 2009 (line g). The likely response may be that many of the borrowers drop-out after two loans.

Table 5.2c: Performance Indicator: Repeated Use of Loans and Drop-Out Rate by all Borrowers from KUD Microfinance bank (2006-2009)

line	Year Ending December 31	Source	2006	2007	2008	2009
a	No. of new Loans in a year	Data from MFB	215	105	100	200
b	**No. of new Loans since birth**	**b(t-1) + a**	**215**	**320**	**420**	**620**
c	No. of repeat Loans in year	Data from MFB	60	67	48	25
d	**No. of repeat Loans since birth**	**d(t - 1) + c**	**60**	**127**	**175**	**200**
e	No. of Loans outstanding at year end	Data from MFB	145	85	90	165
f	**Drop-out rate in year**	$\frac{\{a-[e-e(t-1)]\}}{[a + e(t-1)]}$	**0.60**	**0.55**	**0.53**	**0.55**
g	**Drop-out rate since birth**	$\frac{(b - e)}{b}$	**0.32**	**0.73**	**0.79**	**0.73**
h	**Loans per borrowers since birth**	$\frac{(b + e)}{b}$	**1.3**	**1.4**	**1.4**	**1.3**

Source: Field survey, 2010

Table 5.2d: Performance Indicator: Repeated Use of Loans and Drop-Out Rate by all Borrowers from ZAR Microfinance bank (2006-2009)

line	Year Ending December 31	Source	2006	2007	2008	2009
a	No. of new Loans in a year	Data from MFB	335	428	120	98
b	**No. of new Loans since birth**	**b(t-1) + a**	**335**	**763**	**883**	**981**
c	No. of repeat Loans in year	Data from MFB	203	140	178	105
d	**No. of repeat Loans since birth**	**d(t - 1) + c**	**203**	**343**	**421**	**526**
e	No. of Loans outstanding at year end	Data from MFB	62	103	87	54
f	**Drop-out rate in year**	$\frac{\{a-[e-e(t-1)]\}}{[a + e(t-1)]}$	**0.81**	**0.76**	**0.28**	**97.4**
g	**Drop-out rate since birth**	$\frac{(b - e)}{b}$	**0.81**	**0.86**	**0.90**	**0.94**
h	**Loans per borrowers since birth**	$\frac{(b + e)}{b}$	**1.2**	**1.1**	**1.1**	**1.1**

Source: Field survey, 2010

c) Repeated Use of Loans and Drop-Out Rate by all Borrowers from SAB Microfinance Bank

Loans per borrowers since birth averaged 1.2 for SAB in 2009 (line h table 5.2e in page 166); the drop-out rate since birth was 78% at the end of 2009 (line g). The yearly drop-out rate stood at 81% in 2009 (line f of Table 5.2e,). The number of repeat loans in a year increased from 100 in 2006 to 120 and 162 in 2007 and 2008 respectively; before falling to 99 at the end of 2009 (line c); while the number of repeat loans since birth grew cumulatively from 100 in 2006 to 481 in 2009 (line d). A yearly drop-out rate of 81% in 2009 is considerably too high. It sent the obvious message that the rural active poor borrowers might have got gains that were grossly less than the cost of borrowing from SAB. With the number of yearly repeat loans falling consistently from 2007 to 2009 the present net worth of SAB became suspicious to the rural active borrowers. This first affected the willingness of savers to deposit their surplus consistently with SAB; second, if the drop-out rate was induced by repayment defaults on the part of the borrowers, it might have led SAB to cut down on new loans thus limiting access to credit to a few active poor borrowers. At the beginning of 2009 deposit mobilization was very low in SAB to support increased lending to borrowers, thus many borrowers had to drop-out.

Overall, the results of the repeated use of loans by borrowers from the selected five microfinance banks in the study area are not significant for good performance requisite for sustainable rural poverty alleviation. All the selected five microfinance banks in the study area were characterized by very low repeat loans and very high yearly drop-out rates. Low repeat loans and high drop-out rates are indicators of negative present net worth.

Table 5.2e: Performance Indicator: Repeated Use of Loans and Drop-Out Rate by all Borrowers from SAB Microfinance bank (2006-2009)

line	Year Ending December 31	Source	2006	2007	2008	2009
a	No. of new Loans in a year	Data from MFB	218	225	520	770
b	**No. of new Loans since birth**	**b(t-1) + a**	**218**	**443**	**623**	**843**
c	No. of repeat Loans in year	Data from MFB	100	120	162	99
d	**No. of repeat Loans since birth**	**d(t - 1) + c**	**100**	**220**	**382**	**481**
e	No. of Loans outstanding at year end	Data from MFB	88	200	150	185
f	**Drop-out rate in year**	$\frac{\{a-[e-e(t-1)]\}}{[a + e(t-1)]}$	**0.71**	**0.53**	**0.78**	**0.81**
g	**Drop-out rate since birth**	$\frac{(b - e)}{b}$	**0.60**	**0.55**	**0.76**	**0.78**
h	**Loans per borrowers since birth**	$\frac{(b + e)}{b}$	**1.4**	**1.5**	**1.2**	**1.2**

Source: Field survey, 2010

5.3: Measure of Financial Self-Sustainability of Microfinance Banks

We present and discuss below the results of the computations of the standard SDI and the adjusted SDI for the selected five Microfinance Banks in the study area.

i) The Standard SDI and the Adjusted SDI for GWA Microfinance Bank

The standard SDI for GWA which was 0.91 in 2006 when it began operations as a microfinance bank grew sharply to 9.30 and 10.20 in 2007 and 2008 respectively before falling to 5.95 in 2009 (line s of Table 5.3a in page 169). What this means is that as at 2009 a change of about 595% in the current nominal yield of 10% (line t of Table 5.3a,) is needed to drive subsidies to zero. The change would be two percentage points (line u of Table 5.3a; 5.95 x 0.59 =3.51), and the nominal subsidy-free yield would be 69% (line v, 0.10+0.59 = 0.69). The real subsidy-free yield would be 49% (line x). It is obvious that a yield of 69% would not have been sufficient to make subsidy to be zero for GWA. This is more so as GWA had become substantially insolvent as at the end of 2009 and terminally distressed by the third quarter of 2010.

From Table 5.3a (in page 169), it is clear that though the various forms of subsidized funds to GWA began to decline marginally from 2008, they non-the less formed major sources of funds. This generally implied that without any form of subsidy, the market value (r) for all funds would have been 9% as against 5% in 2006, 24% and 11% as against 6% and 5% in 2007 and 2008% respectively. Note that the market value (r) was lower at 4% than the subsidy rate of 5% in 2009. The global financial crisis had sufficiently affected the market rate as well as the fact that lending to MFBs was considered very risking as at 2009 given the rate of failure recorded in the microfinance sub-sector.

The standard subsidy for GWA calculated for each year of the study period are #423,850.0, #5,361,303.2, #5,28,089.9 and #3,012,299.9 in 2006, 2007, 2008 and 2009 respectively (line o of Table 5.3a, page 169). Note that accounting profit, revenue from lending and loan portfolio all started declining two years after commencing operations as a microfinance bank. These are very clear evidence that GWA could not replace subsidized

funds with market funds irrespective of the fact as revealed by the study field survey that average lending rate was 23% (Field survey, 2010).

The adjusted SDI at the end of 2009 was 170% (line w of Table 5.3b in page 170). This means that if all else is held constant, an increase of about 170% in the yield from lending would move the subsidy-adjusted return on equity above the benchmark rate of the opportunity cost of equity (r) for the market. The major difference between the standard SDI and the adjusted SDI is the adjustment for taxes and the opportunity cost of net worth from the accrual of true profit in the year. The current nominal yield in 2009 was 10% (line x of Table 5.3b, page 170), thus the change required to reach the subsidy-free yield was 0.10x1.70 = 0.17 (line y). The nominal subsidy-free yield was then 0.10+0.17 = 0.27 (line z). With inflation at 13%, the real subsidy-free yield was actually 12% (line bb).

This implied that GWA was not financially self-sustainable and could not replace subsidized funds with market funds. For GWA to achieve financial self-sustainability it required to more than double its interest rates.

Table 5.3a: GWA Financial Self-Sustainability Measure by Standard Subsidy Dependence Index (2006 – 2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	Opportunity cost on equity, (r)	Data from bank	0.09	0.24	0.11	0.04
b	Alpha (α)	Data from bank	1.00	1.00	1.00	1.00
c	Start equity (Eo)	Data from bank	0.00	2,879,160.0	25,277,356.0	18,611,363.0
d	End equity (E1)	Data from bank	2,879,160.0	25,277,356.0	18,611,363.0	1,403, 970.0
e	**Average equity (E)**	**b*(c+d)/2**	**1,439580.0**	**14,078,258.0**	**21,944,359.5**	**10,007,666.5**
f	Expenditure on interest for soft debt	Data from bank	35,000.0	110,000.0	25,000.0	25,000.0
g	Average soft debt (D)	Data from bank	750,000.0	2,000,000.0	500,000.0	500,000.0
h	**Rate paid on soft debt (c)**	**f/g**	**0.05**	**0.06**	**0.05**	**0.05**
i	Opportunity cost on soft debt (m)	Data from bank	0.35	0.40	0.25	0.30
j	**Discount on soft debt (D*(m-c)**	**g*(i-h)**	**225,000.0**	**680,000.0**	**100,000.0**	**125,000.0**
k	Revenue grants (RG)	Data from bank	0.00	1,500,000.0	250,000.0	100,000.0
l	Discount on operating expenses (DX)	Data from bank	45,000.0	12,000.0	11,000.0	50,000.0
m	**Revenue grants + discount on expenses (K)**	**K+1**	**45,000.0**	**1,512,000.0**	**261,000.0**	**150,000.0**
n	Accounting profit (AP)	Data from bank	305,000.0	2,450,000.0	550,000.0	215, 000.0
o	**Standard subsidy (S)**	**i*e + j + k - n**	**423,853.0**	**5,361,303.2**	**5,286,089.9**	**3,012,299.9**
p	Revenue from lending (LP*i)	Data from bank	464,127.0	578,956.0	517,989.0	506,603.0
q	End loan portfolio (LP)	Data from bank	1,500,000.0	2,450,000.0	875,000.0	450,000.0
r	**Average loan portfolio**	**b*[q(t-1)+q]/2**	**225,000.0**	**490,000.0**	**87,500.0**	**22,500.0**
s	**Standard SDI**	**o/p**	**0.91**	**9.30**	**10.20**	**5.95**
t	Nominal yield from lending per annum	Data from bank	0.30	0.40	0.20	0.10
u	Change in yield	**s*t**	**0.27**	**3.72**	**2.04**	**0.59**
v	**Subsidy-free nominal yield in year**	**t+u**	**0.57**	**4.12**	**2.24**	**0.69**
w	Inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
x	**Subsidy-free real yield in year**	**(v-w)/(1+w)**	**0.44**	**3.78**	**1.81**	**0.49**

Source: Own calculations based on data from GWA, 2010.

Table 5.3b: GWA Financial Self-Sustainability Measure by the Adjusted Subsidy Dependence Index (2006 – 2009)

Line	**Year Ending December 31**		**2006**	**2007**	**2008**	**2009**
a	r* α	Data from bank	0.09	0.24	0.11	0.04
b	r* α/2	a/2	0.045	0.12	0.055	0.02
c	1-r* α/2	1-b	0.955	0.88	0.945	0.98
d	Tax rate	Data from bank	0.05	0.05	0.05	0.05
e	Start equity (Eo)	Data from bank	0.00	2,879,160.0	25,277,356.0	18,611,363.0
f	Revenue from lending (LP*i)	Data from bank	464,127.0	578,956.0	517,989.0	506,603.0
g	Direct grants (DG)	Data from bank	50,000.0	25,000.0	35,000.0	25,000.0
h	Paid-in capital: public (PCpub)	Data from bank	1,781,700.0	1,781,700.0	1,781,700.0	1,781,700.0
i	Paid-in capital: private (PCpri)	Data from bank	0.00	0.00	250,000.0	150,000.0
j	Change in reserves	Data from bank	0.00	10,000	15,000.0	5,000.0
k	Discount on soft debt, D*(m-c)	Data from bank	225,000.0	680,000.0	100,000.0	125,000.0
l	Revenue grants (RG)	Data from bank	0.00	1,500,000.0	250,000.0	100,000.0
m	Discount on operating expenses (DX)	Data from bank	45,000.0	12,000.0	11,000.0	5,000.0
n	**Fresh funds (FF)**	**g+h+i+j+k+l+m**	**2,101,700.0**	**4,008,700.0**	**2,442,700.0**	**2,191,700.0**
o	Accounting profit	Data from bank	305,000.0	2,450,000.0	550,000.0	215,000.0
p	Discount on soft debt, D*(m-c)	k	225,000.0	689,000.0	100,000.0	125,000.0
q	Revenue grants (RG)	l	0.00	1,500,000.0	250,000.0	100,000.0
r	Discount on operating expenses (DX)	m	45,000.0	12,000.0	11,000.0	5,000.0
s	**True profit (TP)**	**o-(p+q+r)**	**35,000.0**	**249,000.0**	**189,000.0**	**(15,000.0)**
t	Tax	**d*max(0, s)**	**1,750.0**	**12,450.0**	**9,450.00**	**(750.0)**
u	**True profit less tax (TP- Tax)**	**s-t**	**33,250.0**	**236,550.0**	**179,550.0**	**(14,250.0)**
v	**Subsidy (S)**	**a*e + b*n - c*u**	**62,822.8**	**952,922.4**	**2,745,182.9**	**802,373.5**
w	**SDI**	**[a*e +b*n-c*s*(1-d)]/[f*c*(1-d)]**	**0.15**	**1.99**	**5.90**	**1.70**
x	Nominal yield from lending per annum	Data from bank	0.30	0.40	0.20	0.10
y	Change in yield	**w*x**	**0.045**	**0.78**	**1.18**	**0.17**
z	**Subsidy-free nominal yield per annum**	**x+y**	**0.345**	**1.20**	**1.38**	**0.27**
aa	inflation (weighted average)		**0.09**	**0.07**	**0.151**	**0.13**
bb	**Subsidy-free real yield per annum**	**(z-aa)/(1+aa)**	**0.23**	**1.10**	**1.07**	**0.12**

Source: Own calculations based on data from GWA, 2010. **Note: Negative values in parenthesis**

ii) The Standard SDI and the Adjusted SDI for MKR Microfinance Bank

The standard SDI for MKR in 2006 was 0.83, this rose gradually to 2.39 in 2007 and 6.46 in 2008; before falling to 3.58 in 2009 (line s of Table 5.3c in page 172). This implies that as at 2009 a change of about 358% in the current nominal yield of 15% (line t) was needed to drive subsidies of whatever form to zero. The change would be two percentage points (line u of Table 5.3c in page 172; 3.58x0.15 = 0.54), and the nominal subsidy-free yield was 69% (line v, 0.15+0.54= 0.69). The real subsidy-free yield was 50% (line x). A 69% change in real subsidy free yield would certainly not have been enough to drive subsidy to zero for MKR.

The standard SDI for the four years under consideration by interpretation does not suggest that MKR was financially self-sustainable. As at 2009 with standard SDI at 358%, MKR would have needed to increase the price of its loans by more than five times to be able to pay a market return on its equity without any form of subsidy. Accounting profit (line n) fell consistently throughout the four years under review. These are evidences that MKR could have been able to replace subsidized funds with market funds despite the fact that MKR's average lending rate was 22%.

The adjusted SDI for MKR at the end of 2009 was 140% (line w of Table 5.3d in page 173). This implies that if all else is held constant an increase of about 140% in the yield from lending would shift the subsidy-adjusted return on equity above the benchmark rate of the opportunity cost of equity (r) for the market. The change in the current yield was 1.40x0.15 = 0.21 (line y of Table 5.3d, page 173), and the nominal subsidy-free yield was 0.15+0.21 = 0.36 (line z). With inflation at 13%, the real subsidy-free yield was 20% (line bb). The adjusted SDI of 140% at the end of 2009 clearly indicates that MKR was not financially self-sustainable.

Table 5.3c: MKR Financial Self-Sustainability Measure by Standard Subsidy Dependence Index (2006-2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	Opportunity cost on equity, (r)	Data from bank	0.22	0.20	0.09	0.05
b	Alpha (α)	Data from bank	0.30	0.60	1.00	0.40
c	Start equity (Eo)	Data from bank	0.00	12,000,000.0	15,000,000.0	10,000,000.0
d	End equity (E1)	Data from bank	12,000,000.0	15,000,000.0	10,000,000.0	8,000,000.0
e	**Average equity (E)**	**b*(c+d)/2**	**1,800,000.0**	**8,100,000.0**	**12,500,000.0**	**3,600,000.0**
f	Expenditure on interest for soft debt	Data from bank	40,000.0	85,000.0	20,000.0	22,000.0
g	Average soft debt (D)	Data from bank	1,000,000.0	1,750,000.0	450,000.0	500,000.0
h	**Rate paid on soft debt (c)**	**f/g**	**0.04**	**0.05**	**0.04**	**0.04**
i	Opportunity cost on soft debt (m)	Data from bank	0.30	0.45	0.35	0.25
j	**Discount on soft debt (D*(m-c)**	**g*(i-h)**	**260,000.0**	**700,000.0**	**139,500.0**	**105,000.0**
k	Revenue grants (RG)	Data from bank	100,000.0	750,000.0	400,000.0	150,000.0
l	Discount on operating expenses (DX)	Data from bank	40,000.0	10,000.0	8,000.0	12,000
m	**Revenue grants + discount on expenses (K)**	**K+1**	**140,000.0**	**760,000.0**	**408,000.0**	**162,000.0**
n	Accounting profit (AP)	Data from bank	450,000.0	3,000,000.0	750,000.0	350,000.0
o	**Standard subsidy (S)**	**i*e + j + k - n**	**450,000.0**	**2,095,000.0**	**4,164,500.0**	**805,000.0**
p	Revenue from lending (LP*i)	Data from bank	540,000.0	875,000.0	645,000.0	225,000.0
q	End loan portfolio (LP)	Data from bank	1,250,000.0	1,650,000.0	1,000,000.0	750,000.0
r	**Average loan portfolio**	**b*[q(t-1)+q]/2**	**172,500.0**	**346,500.0**	**100,000.0**	**22,500.0**
s	**Standard SDI**	**o/p**	**0.83**	**2.39**	**6.46**	**3.58**
t	Nominal yield from lending per annum	Data from bank	0.46	0.35	0.20	0.15
u	Change in yield	**s*t**	**0.38**	**0.84**	**1.29**	**0.54**
v	**Subsidy-free nominal yield in year**	**t+u**	**0.84**	**1.20**	**1.49**	**0.69**
w	Inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
x	**Subsidy-free real yield in year**	**(v-w)/(1+w)**	**0.67**	**1.05**	**1.16**	**0.50**

Source: Own calculations based on data from MKR, 2010.

Table 5.3d: MKR Financial Self-Sustainability Measure by the Adjusted Subsidy Dependence Index (2006 – 2009)

Line	**Year Ending December 31**		**2006**	**2007**	**2008**	**2009**
a	r* α	Data from bank	0.066	0.12	0.09	0.02
b	r* α/2	a/2	0.033	0.06	0.045	0.01
c	1-r* α/2	1-b	0.967	0.94	0.955	0.99
d	Tax rate	Data from bank	0.05	0.05	0.05	0.05
e	Start equity (Eo)	Data from bank	0.00	12,000,000.0	15,000,000.0	10,000,000.0
f	Revenue from lending (LP*i)	Data from bank	540,000.0	875,000.0	645,000.0	225,000.0
g	Direct grants (DG)	Data from bank	150,000.0	70,000.0	40,000.0	55,000.0
h	Paid-in capital: public (PCpub)	Data from bank	17,013,500.0	17,013,500.0	17,013,500.0	17,013,500.0
i	Paid-in capital: private (PCpri)	Data from bank	0.00	0.00	0.00	0.00
j	Change in reserves	Data from bank	0.00	105,000.0	75,000.0	25,000.0
k	Discount on soft debt, D*(m-c)	Data from bank	250,000.0	647,500.0	144,000.0	105,000.0
l	Revenue grants (RG)	Data from bank	200,000.0	750,000.0	400,000.0	150,000.0
m	Discount on operating expenses (DX)	Data from bank	40,000.0	10,000.0	8,000.0	12,000.0
n	**Fresh funds (FF)**	**g+h+i+j+k+l+m**	**17,653,500.0**	**18,596,000.0**	**17,680,500.0**	**17,360,500.0**
o	Accounting profit	Data from bank	450,000.0	3,000,000.0	750,000.0	350,000.0
p	Discount on soft debt, D*(m-c)	k	250,000.0	647,500.0	144,000.0	105,000.0
q	Revenue grants (RG)	l	100,000.0	750,000.0	400,000.0	150,000.0
r	Discount on operating expenses (DX)	m	40,000.0	10,000.0	8,000.0	12,000.0
s	**True profit (TP)**	**o-(p+q+r)**	**60,000.0**	**1,592,500.0**	**198,000.0**	**83,000.0**
t	**Tax**	**d*max(0, s)**	**3,000.0**	**79,625**	**9,900.0**	**4,150.0**
u	**True profit less tax (TP- Tax)**	**s-t**	**57,000.0**	**1,512,875.0**	**188,100.0**	**78,850.0**
v	**Subsidy (S)**	**a*e+b*n-c*u**	**527,446.5**	**1,133,657.5**	**1,965,987.0**	**295,543.5**
w	**SDI**	**[a*e+b*n-c*s*(1-d)]/[f*c*(1-d)]**	**1.06**	**1.45**	**3.36**	**1.40**
x	Nominal yield from lending per annum	Data from bank	0.46	0.35	0.20	0.15
y	Change in yield	**w*x**	**0.49**	**0.51**	**0.67**	**0.21**
z	**Subsidy-free nominal yield per annum**	**x+y**	**0.95**	**0.86**	**0.87**	**0.36**
aa	inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
bb	**Subsidy-free real yield per annum**	**(z-aa)/(1+aa)**	**0.79**	**0.74**	**0.62**	**0.20**

Source: Own calculations based on data from MKR, 2010.

iii) The Standard SDI and the Adjusted SDI for KUD Microfinance Bank

With a standard SDI of 1.25 at the end of 2009 (line s of Table 5.3e in page 175) KUD was clearly not financially self-sustainable. The implication of this is that as at 2009 a change of about 125% in the current nominal yield of 20% (line t of Table 5.3e in page 175) was needed to achieve zero subsidies. A yield of 45% would require KUD to increase the price of its credit thrice and it would still not be sufficient to bring subsidy to zero. The subsidy amount of #9,799,840.0 at the end of 2009 confirms the standard SDI of 1.25 which implies that KUD was not financially self-sustainable.

The adjusted SDI for KUD at the end of 2009 was 141% (line w of Table 5.3f in page 176). This implies that holding all else constant, 141% increase in yield from lending is what was required to move the subsidy adjusted return on equity above the benchmark rate of the opportunity cost of equity (r) for the market. Note that the difference between the standard SDI and the adjusted SDI is the adjustment for taxes and the opportunity cost of net present worth from the accrual of true profit in the year. As at the end of 2008 and 2009 true profit, tax, and true profit less tax were negative (lines s, t, and u of Table 5.3f in page 176); but subsidy was positive at #10,419,570.0 at the end of 2009 (line v). The change in the current yield was 1.41x0.20 = 0.28 (line y) and the nominal subsidy-free yield was 0.20+0.28 = 0.48 (line z). With a 13% inflation real subsidy-free yield was 23% (line bb). It is obvious that there was a short fall in KUD's real subsidy-free yield of about 113%. The implication of this was that KUD would have needed to at least triple its yield to be able to pay a market return on its equity without help from donors or host government. With market return on equity at 18% in 2009, KUD was expected to charge around 54% for its loan to rural poor borrowers. KUD did charged actual interest rate that was close to the expected which only a few rural poor borrowers could afford.

This study believes that KUD charged higher interest rates on its loans in order to achieve financial self-sustainability; which the rural poor could not afford. This carried with it two consequences; it significantly reduced the number of rural poor borrowers that could afford its credit and this reduced KUD's profit while business prospects became dimmed; with little or no access to credit there was gain reversal as the poverty alleviation achieved so far could not be sustained.

Table 5.3e: KUD Financial Self-Sustainability Measure by Standard Subsidy Dependence Index (2006 – 2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	Opportunity cost on equity, (r)	Data from bank	0.46	0.30	0.21	0.18
b	Alpha (α)	Data from bank	0.25	0.20	0.60	0.40
c	Start equity (Eo)	Data from bank	0.00	15,000.000.0	22,000,000.0	45,990,000.0
d	End equity (E1)	Data from bank	12,000,000.0	22,000,000.0	45,990,000.0	38,700,000.0
e	**Average equity (E)**	**b*(c+d)/2**	**1,500,000.0**	**3,700,000.0**	**20,397,000.0**	**16,938,000.0**
f	Expenditure on interest for soft debt	Data from bank	750,000.0	100,000.0	60,000.0	30,000.0
g	Average soft debt (D)	Data from bank	2,000,000.0	3,000,000.0	1,500,000.0	500,000.0
h	**Rate paid on soft debt (c)**	**f/g**	**0.04**	**0.03**	**0.04**	**0.04**
i	Opportunity cost on soft debt (m)	Data from bank	0.23	0.25	0.21	0.18
j	**Discount on soft debt (D*(m-c)**	**g*(i-h)**	**380,000.0**	**660,000.0**	**510, 000.0**	**70,000.0**
k	Revenue grants (RG)	Data from bank	0.00	205,000.0	110,000.0	95,000.0
l	Discount on operating expenses (DX)	Data from bank	30,000.0	40,000.0	25,000.0	20,000.0
m	**Revenue grants + discount on expenses (K)**	**K+1**	**30,000.0**	**245, 000.0**	**135,000.0**	**115,000.0**
n	Accounting profit (AP)	Data from bank	875,000.0	2,345,000.0	(2,520,000.0)	(6,586,000.0)
o	**Standard subsidy (S)**	**i*e + j + k - n**	**(150,000.0)**	**(555,000.0)**	**7,423,370.0**	**9,799,840.0**
p	Revenue from lending (LP*i)	Data from bank	205,230.0	435,000.0	7,195,000.0	7,859,000.0
q	End loan portfolio (LP)	Data from bank	5,000,000.0	10,000,000.0	4,000,000.0	1,500,000.0
r	**Average loan portfolio**	**b*[q(t-1)+q]/2**	**1,800,000.0**	**4,000,000.0**	**1,200,000.0**	**300,000.0**
s	**Standard SDI**	**o/p**	**(0.73)**	**(1.27)**	**1.03**	**1.25**
t	Nominal yield from lending per annum	Data from bank	0.36	0.40	0.30	0.20
u	Change in yield	**s*t**	**(0.26)**	**(0.51)**	**0.31**	**0.25**
v	**Subsidy-free nominal yield in year**	**t+u**	**0.10**	**(0.11)**	**0.61**	**0.45**
w	Inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
x	**Subsidy-free real yield in year**	**(v-w)/(1+w)**	**0.0039**	**(0.40)**	**0.41**	**0.28**

Source: Own calculation based on data from KUD, 2010. **Note: Negative values in parenthesis**

Table 5.3f: KUD Financial Self-Sustainability Measure by the Adjusted Subsidy Dependence Index (2006 – 2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	r* α	Data from bank	0.115	0.06	0.126	0.072
b	r* α/2	a/2	0.057	0.03	0.063	0.036
c	1-r* α/2	1-b	0.94	0.97	0.94	0.96
d	Tax rate	Data from bank	0.05	0.05	0.05	0.05
e	Start equity (Eo)	Data from bank	0.00	15,000,000.0	22,000,000.0	45,990,000.0
f	Revenue from lending (LP*i)	Data from bank	205,230.0	435,000.0	7,195,000.0	7,857,000.0
g	Direct grants (DG)	Data from bank	50,000.0	100,000.0	20,000.0	7,500.0
h	Paid-in capital: public (PCpub)	Data from bank	0.00	0.00	0.00	0.00
i	Paid-in capital: private (PCpri)	Data from bank	0.00	0.00	0.00	0.00
j	Change in reserves	Data from bank	2,000,000.0	10,000.000.0	23,990,000.0	16,700,000.0
k	Discount on soft debt, D*(m-c)	Data from bank	380,000.0	660,000.0	510,000.0	70,000.0
l	Revenue grants (RG)	Data from bank	0.00	205,000.0	110,000.0	95,000.0
m	Discount on operating expenses (DX)	Data from bank	30,000.0	40,000.0	25,000.0	20,000.0
n	**Fresh funds (FF)**	**g+h+i+j+k+l+m**	**2,460,000.0**	**11,005,000.0**	**24,655,000.0**	**16,892,500.0**
o	Accounting profit	Data from bank	875,000.0	2,345,000.0	(2,520,000.0)	(6,586,000.0)
p	Discount on soft debt, D*(m-c)	k	380,000.0	660,000.0	510,000.0	70,000.0
q	Revenue grants (RG)	l	0.00	205,000.0	110,000.0	95,000.0
r	Discount on operating expenses (DX)	m	30,000.0	40,000.0	25,000.0	20,000.0
s	**True profit (TP)**	**o-(p+q+r)**	**465,000.0**	**1,440,000.0**	**(3,165,000.0)**	**(6,771,000.0)**
t	**Tax**	**d*max(0, s)**	**23,250.0**	**72,000.0**	**(158,250.0)**	**(338,550.0)**
u	**True profit less tax (TP- Tax)**	**s-t**	**441,750.0**	**1,368,000.0**	**(3,006,750)**	**(6,432,450.0)**
v	**Subsidy (S)**	**a*e+b*n-c*u**	**(275,025.0)**	**(96,810.0)**	**7,077,645.0**	**10,419,570.0**
w	**SDI**	**[a*e+b*n-c*s*(1-d)]/[f*c*(1-d)]**	**(1.50)**	**(0.24)**	**1.11**	**1.41**
x	Nominal yield from lending per annum	Data from bank	0.36	0.40	0.30	0.20
y	Change in yield	**w*x**	**(0.54)**	**(0.10)**	**0.33**	**0.28**
z	**Subsidy-free nominal yield per annum**	**x+y**	**(0.18)**	**0.30**	**0.63**	**0.48**
aa	inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
bb	**Subsidy-free real yield per annum**	**(z-aa)/(1+aa)**	**(0.25)**	**0.24**	**0.42**	**0.31**

Source: Own calculations based on data from KUD, 2010. **Note: Negative values in parenthesis**

iv) The Standard SDI and the Adjusted SDI for ZAR Microfinance Bank.

The standard SDIs for ZAR in 2006, 2007, 2008 and 2009 are 7.74, 2.10, 4.53 and 1.46 respectively (line s of Table 5.3g in page 178). This shows that ZAR never achieved financial self-sustainability within the period 2006-2009. With standard SDI of 1.46 in 2009 a change of about 146% in the current nominal yield of 10% (line t) was needed to drive subsidy to zero. The requirement of 146% change in current nominal yield in order to drive subsidy to zero meant that ZAR needed to more than triple its lending rate before it can afford to pay the market rate for equity. Thus from investors' point of view ZAR was not privately profitable and therefore not financially self-sustainable.

The results of the adjusted SDI at the end of 2009 were also indicative of the fact that ZAR was not financially self-sustainable between 2006 and 2009. The adjusted SDI showed that if all else was held constant, an increase of about 379% in the yield from lending required to move the subsidy-adjusted return on equity above the benchmark rate of the opportunity cost of equity (r) for the market (line a). Recall that the difference between the standard SDI and the adjusted SDI is the adjustment for taxes and the opportunity cost of net worth from the accrual of true profit in the year. Note that true profit (line s of table 5.3h in page 179) though positive was too meager in 2008 (#173,000.0) and 2009 (#111,950.0) to sustain any meaningful lending activities required to keep it in business and at the same time help the rural poor sufficiently to alleviate their poverty in a sustained manner.

The adjusted SDI of 379% (see table 5.3h in page 179) was too high in the sense that the only possible market based decision to achieve such level of increase is to raise interest rates by a multiple of 5. Obviously, ZAR could not raise lending rates to such a level. Following this ZAR, could not sustain its business before it eventually became terminally distressed by the beginning of the third quarter of 2010.

Table 5.3g: ZAR Financial Self-Sustainability Measure by Standard Subsidy Dependence Index (2006-2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	Opportunity cost on equity, (r)	Data from bank	0.20	0.18	0.15	0.12
b	Alpha (α)	Data from bank	1.00	0.60	0.40	0.30
c	Start equity (Eo)	Data from bank	0.00	10,000,000.0	18,000,000.0	12,000,000.0
d	End equity (E1)	Data from bank	10,000.000.0	18,000,000.0	12,000,000.0	4,000,000.0
e	**Average equity (E)**	**b*(c+d)/2**	**5,000,000.0**	**8,400,000.0**	**6,000,000.0**	**2,400,000.0**
f	Expenditure on interest for soft debt	Data from bank	25,000.0	100,000.0	75,000.0	35,000.0
g	Average soft debt (D)	Data from bank	1,000,000.0	5,000,000.0	2,000,000.0	500,000.0
h	**Rate paid on soft debt (c)**	**f/g**	**0.025**	**0.02**	**0.0375**	**0.07**
i	Opportunity cost on soft debt (m)	Data from bank	0.35	0.25	0.20	0.15
j	**Discount on soft debt (D*(m-c)**	**g*(i-h)**	**325,000.0**	**1,150,000.0**	**325,000.0**	40,000.0
k	Revenue grants (RG)	Data from bank	0.00	750,000.0	25,000.0	40,000.0
l	Discount on operating expenses (DX)	Data from bank	25,000.0	7,500.0	7,000.0	6,500.0
m	**Revenue grants + discount on expenses (K)**	**K+1**	**25,000.0**	**757,500.0**	**32,000.0**	**46,500.0**
n	Accounting profit (AP)	Data from bank	450,000.0	3,000,000.0	530,000.0	198,450.0
o	**Standard subsidy (S)**	**i*e + j + k - n**	**1,625,000**	**1,000,000.0**	**1,020,000.0**	**241,550.0**
p	Revenue from lending (LP*i)	Data from bank	210,000.0	475,000.0	225,000.0	165,315.0
q	End loan portfolio (LP)	Data from bank	2,000,000.0	5,000,000.0	1,400,000.0	750,000.0
r	**Average loan portfolio**	**b*[q(t-1)+q]/2**	**1,290,000.0**	**2,085,000.0**	**333,200.0**	**122,625.0**
s	**Standard SDI**	**o/p**	**7.74**	**2.10**	**4.53**	**1.46**
t	Nominal yield from lending per annum	Data from bank	0.30	0.40	0.20	0.10
u	Change in yield	**s*t**	**2.32**	**0.84**	**0.91**	**0.15**
v	**Subsidy-free nominal yield in year**	**t+u**	**2.62**	**1.24**	**1.11**	**0.25**
w	Inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
x	**Subsidy-free real yield in year**	**(v-w)/(1+w)**	**2.32**	**1.09**	**0.83**	**0.11**

Source: Own calculations based on data from ZAR, 2010.

Table 5.3h: ZAR Financial Self-Sustainability Measure by Adjusted Subsidy Dependence Index (2006-2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	r* α	Data from bank	0.20	0.10	0.06	0.04
b	r* α/2	a/2	0.10	0.05	0.03	0.02
c	1-r* α/2	1-b	0.90	0.95	0.97	0.98
d	Tax rate	Data from bank	0.05	0.05	0.05	0.05
e	Start equity (Eo)	Data from bank	0.00	10,000,000.0	18,000.000.0	12,000,000.0
f	Revenue from lending (LP*i)	Data from bank	210,000.0	475,000.0	225,000.0	165,315.0
g	Direct grants (DG)	Data from bank	200,000.0	350,000.0	150,000.0	0.00
h	Paid-in capital: public (PCpub)	Data from bank	10,255,000.0	10,255,000.0	10,255,000.0	10,255,000.0
i	Paid-in capital: private (PCpri)	Data from bank	0.00	0.00	0.00	0.00
j	Change in reserves	Data from bank	0.00	25,000.0	40,000.0	20,000.0
k	Discount on soft debt, D*(m-c)	Data from bank	325,000.0	1,150,000.0	325,000.0	40,000.0
l	Revenue grants (RG)	Data from bank	0.00	750,000.0	25,000.0	40,000.0
m	Discount on operating expenses (DX)	Data from bank	25,000.0	7,500.0	7,000.0	6,500.0
n	**Fresh funds (FF)**	**g+h+i+j+k+l+m**	**10,805,000.0**	**12,537,500.0**	**10,802,000.0**	**10,361,500.0**
o	Accounting profit	Data from bank	450,000.0	3,000,000.0	530,000.0	198,450.0
p	Discount on soft debt, D*(m-c)	k	325,000.0	1,150,000.0	325,000.0	40,000.0
q	Revenue grants (RG)	l	0.00	750,000.0	25,000.0	40,000.0
r	Discount on operating expenses (DX)	m	25,000.0	7,500.0	7,000.0	6,500.0
s	**True profit (TP)**	**o-(p+q+r)**	**100,000.0**	**1,092,500.0**	**173,000.0**	**111,950.0**
t	**Tax**	**d*max(0, s)**	**5,000.0**	**54,625.0**	**8,650.0**	**5,597.5**
u	**True profit less tax (TP- Tax)**	**s-t**	**95,000.0**	**1,037,875.0**	**164,350.0**	**106,352.5**
v	**Subsidy (S)**	**a*e+b*n-c*u**	**995,000.0**	**640,893.7**	**1,244,640.5**	**583,004.5**
w	**SDI**	**[a*e+b*n-c*s*(1-d)]/[f*c*(1-d)]**	**5.54**	**1.50**	**6.00**	**03.79**
x	Nominal yield from lending per annum	Data from bank	0.30	0.40	0.20	0.10
y	Change in yield	**w*x**	**1.66**	**0.60**	**1.20**	**0.38**
z	**Subsidy-free nominal yield per annum**	**x+y**	**1.96**	**1.00**	**1.40**	**0.48**
aa	inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
bb	**Subsidy-free real yield per annum**	**(z-aa)/(1+aa)**	**1.72**	**0.87**	**1.10**	**0.31**

Source: Own calculations based on data from ZAR, 2010.

v) The Standard SDI and the Adjusted SDI for SAB Microfinance Bank

From the standard SDI results presented in table 5.3i (page 181, SAB required a change of about 143%, 78%, 400% and 1,985% in the current nominal yield of 30%, 35%, 20% and 15% as at the end of 2006, 2007, 2008 and 2009 respectively (line s) to drive subsidies to zero in the respective years. The standard SDI of 1,985% for 2009 is unacceptably too high, in fact the highest for the selected five MFBs in the study area in the period 2006-2009. The standard SDI value of 19.85 showed that SAB was not privately profitable from the investors' point of view and therefore not financially self- sustainable. By these results, SAB was expected to raise its lending rate by more than 1000% for it to be able to pay the market return (r) on its equity.

The adjusted SDI at the end of 2009 was 2120%% (line w of Table 5.3j in page 181). The results of the adjusted SDI were not substantially different from those of the standard SDI, except that the adjusted SDI results have provided further clear insight to the depth of the financial crisis of SAB right from its inception as a microfinance bank. After adjusting for taxes and the opportunity cost of net worth from the accrual of true profit in the year, the results revealed that true profit, tax and true profit less tax were substantially negative for the period 2006-2009 (see lines s, t and u of Table 5.3j in page 181). The worst case scenario was in 2008 when actual losses stood at #7,625,000.0 (line s of Table 5.3j; page 182). It is clear that it would have required massive reinvestment by private investors to return SAB to a privately profitable microfinance bank that is financially self-sustainable; and or massive subsidy from donors or the host local government to keep SAB in business beyond 2010 when it became terminally distressed and to be able to finance the credit needs of rural active poor at interest rates less than the benchmark rate of the opportunity cost of equity (r) for the market in order to help achieve target rural poverty alleviation on a sustainable basis.

[Table 5.3i: SAB Financial Self-Sustainability Measure by Standard Subsidy Dependence Index (2006-2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	Opportunity cost on equity, (r)	Data from bank	0.25	0.40	0.18	0.16
b	Alpha (α)	Data from bank	0.70	0.35	0.90	0.40
c	Start equity (Eo)	Data from bank	0.00	1,200,000.0	10,000,000.0	12,000,000.0
d	End equity (E1)	Data from bank	1,200,000.0	10,000,000.0	12,000,000.0	8,000,000.0
e	**Average equity (E)**	**b*(c+d)/2**	**420,000.0**	**1,960,000.0**	**9,900,000.0**	**4,000,000.0**
f	Expenditure on interest for soft debt	Data from bank	75,000.0	110,000.0	40,000.0	42,000.0
g	Average soft debt (D)	Data from bank	2,000,000.0	4,000,000.0	1,000,000.0	1,000,000.0
h	**Rate paid on soft debt (c)**	**f/g**	**0.04**	**0.03**	**0.04**	**0.04**
i	Opportunity cost on soft debt (m)	Data from bank	0.25	0.40	0.18	0.16
j	**Discount on soft debt (D*(m-c)**	**g*(i-h)**	**420,000.0**	**1,480,000.0**	**140,000.0**	**120,000.0**
k	Revenue grants (RG)	Data from bank	0.00	0.00	6,000,000.0	0.00
l	Discount on operating expenses (DX)	Data from bank	55,000.0	40,000.0	0.00	25,000.0
m	**Revenue grants + discount on expenses (K)**	**K+1**	**55,000.0**	**40,000.0**	**6,000,000.0**	**25,000.0**
n	Accounting profit (AP)	Data from bank	205,000.0	1,225,000.0	(1,485,000.0)	(4,010,000.0)
o	**Standard subsidy (S)**	**i*e + j + k - n**	**320,000.0**	**1,039,000.0**	**9,407,000.0**	**4,770,000.0**
p	Revenue from lending (LP*i)	Data from bank	223,540.0	1,580,000.0	2,348,480.0	240,210.0
q	End loan portfolio (LP)	Data from bank	8,000,000.0	20,850,000.0	70,580,000.0	45,720,000.0
r	**Average loan portfolio**	**b*[q(t-1)+q]/2**	**840,000.0**	**1,277,062.5**	**1,411,600.0**	**1,371,600.0**
s	**Standard SDI**	**o/p**	**1.43**	**0.65**	**4.00**	**19.85**
t	Nominal yield from lending per annum	Data from bank	0.30	0.35	0.20	0.15
u	Change in yield	**s*t**	**0.43**	**0.23**	**0.80**	**2.98**
v	**Subsidy-free nominal yield in year**	**t+u**	**0.73**	**0.58**	**1.00**	**3.13**
w	Inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
x	**Subsidy-free real yield in year**	**(v-w)/(1+w)**	**0.59**	**0.48**	**0.74**	**2.65**

Source: Own calculations based on data from SAB, 2010. **Note: Negative values in parenthesis**

Table 5.3j: SAB Financial Sustainability Measure by Adjusted Subsidy Dependence Index (2006-2009)

Line	Year Ending December 31		2006	2007	2008	2009
a	r* α	Data from bank	0.175	0.14	0.162	0.064
b	r* α/2	a/2	0.09	0.07	0.08	0.03
c	1-r* α/2	1-b	0.91	0.93	0.92	0.97
d	Tax rate	Data from bank	0.05	0.05	0.05	0.05
e	Start equity (Eo)	Data from bank	0.00	1,200,000.0	10,000,000.0	12,000,000.0
f	Revenue from lending (LP*i)	Data from bank	223,540	1,580,000.0	2,348,480.0	240,210.0
g	Direct grants (DG)	Data from bank	0.00	0.00	1,000,000.0	2,000,000.0
h	Paid-in capital: public (PCpub)	Data from bank	0.00	0.00	0.00	0.00
i	Paid-in capital: private (PCpri)	Data from bank	0.00	0.00	0.00	0.00
j	Change in reserves	Data from bank	750,000.0	5,000,000.0	2,500,000.0	1,000,000.0
k	Discount on soft debt, D*(m-c)	Data from bank	420,000.0	1,480,000.0	140,000.0	120,000.0
l	Revenue grants (RG)	Data from bank	0.00	0.00	6,000,000.0	0.00
m	Discount on operating expenses (DX)	Data from bank	55,000.0	40,000.0	0.00	25,000.0
n	**Fresh funds (FF)**	**g+h+i+j+k+l+m**	**1,225,000.0**	**6,520,000.0**	**9,640,000.0**	**3,145,000.0**
o	Accounting profit	Data from bank	205,000.0	1,025,000.0	(1,485,000.0)	(4,010,000.0)
p	Discount on soft debt, D*(m-c)	k	420,000.0	1,480,000.0	140,000.0	120,000.0
q	Revenue grants (RG)	l	0.00	0.00	6,000,000.0	0.00
r	Discount on operating expenses (DX)	m	55,000.0	40,000.0	0.00	25,000.0
s	**True profit (TP)**	**o-(p+q+r)**	**(270,000.0)**	**(495,000.0)**	**(7,625,000.0)**	**(4,155,000.0)**
t	**Tax**	**d*max(0, s)**	**(13,500.0)**	**(24,750.0)**	**(381,250.0)**	**(207,750.0)**
u	**True profit less tax (TP- Tax)**	**s-t**	**(256,500.0)**	**(470,250.0)**	**(7,243,370.0)**	**(3,947,250.0)**
v	**Subsidy (S)**	**a*e+b*n-c*u**	**343,665.1**	**1,061,732.5**	**9,055,100.4**	**4,691,182.5**
w	**SDI**	**[a*e+b*n-c*s*(1-d)]/[f*c*(1-d)]**	**1.80**	**0.76**	**4.41**	**21.20**
x	Nominal yield from lending per annum	Data from bank	0.30	0.35	0.20	0.15
y	Change in yield	**w*x**	**0.54**	**0.27**	**0.88**	**3.18**
z	**Subsidy-free nominal yield per annum**	**x+y**	**0.84**	**0.62**	**1.08**	**3.33**
aa	inflation (weighted average)	Data from bank	0.09	0.07	0.151	0.13
bb	**Subsidy-free real yield per annum**	**(z-aa)/(1+aa)**	**0.68**	**0.51**	**0.81**	**2.83**

Source: Own calculations based on data from SAB, 2010. **Note: Negative values in parenthesis**

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary of Major Findings

The summary of the major findings of this study are presented below.

1. The Operations and Services of Microfinance Banks

With respect to the target business beneficiaries of MFB credit, the predominant beneficiaries were small holding farmers, farm produce merchants and a few other non-farm related small businesses such as petty retail trade, GSM accessories kiosks/shops, etc. The predominance of small holding farmers and farm produce merchants is expected since farming is the major economic activity in the rural area. About two-third of the selected five MFBs' small loans were made to Small holding farmers, small scale commercial farmers and farm produce merchants.

The study field report indicated that the selected microfinance banks' sources of funds were clearly dominated by subsidy based funds such as direct grants from government (local) and private donors. Microfinance banks also borrowed from commercial banks for on-lending.

The range of facilities and products offered by the selected MFBs in the study area consist mainly of small loans, savings opportunity, money transfer, local government LPO financing, and limited parallel market foreign exchange services to their customers. The reasons mostly advanced to the MFBs by borrowers for their need of loan as indicated by the field report were to grow small business, to stabilize consumption, subsistence farming, and buying and selling, commercial farming and the purchase of equipment.

The various tenors of loans provided by the selected MFBs showed a preference for short term lending to long term lending as is the case with conventional commercial banks.

With respect to loan pricing; the selected MFBs, loan pricing was based on a mix of tenor of loan, individual borrower's negotiation and credit market conditions. Individual

negotiation was the commonly used method of loan pricing among the selected MFBs. Thus, it is common place to find borrowers paying different rates for the same amount of loan. Loan concentration by business activities was predominated by farm related activities such as farm inputs sale, small holding farming, farm produce marketing; and services related businesses and salary accounts overdraft. Services related businesses such as GSM accessories selling enjoy access to MFBs credit facilities as a result of quick turn-over and daily cash flow. Apart from cash, most of the selected MFBs also offered other forms of loans such as farm inputs (e.g. fertilizers, insecticides, herbicides, etc), hire purchase of equipments and or lease of equipments (e.g. farm implements, insecticide sprayers, tractor hire/lease, steel kiosks for GSM accessories sale, sewing machines, etc).

2. Assessment of the Performance of Microfinance Banks in Rural Poverty Alleviation in Nigeria using Outreach and Repeated Use Approach

a) Performance Indicator: Outreach

The results of the field survey indicated that the selected MFBs have the objective of reaching small holding farmers and focusing on financing off-farm income generating activities, produce marketing, retail trading and commercial transport; low income earners in local government councils, small scale commercial farmers, services related businesses. They offered small loans, savings opportunity, salary payment and skeletal money transfer as financial services to their customers. The difference in their objectives is a matter of semantics. This is so in the sense that their statutory operational position in terms of the overall 2005 Microfinance Policy framework pre-suppose that their objectives be the same (poverty reduction, economic growth and development; CBN, 2005). Some of the microfinance banks have shouldered a considerable level of nonfinancial activities such as farm produce buying and selling, hire purchase/lease alongside its primary activity of extending small loans. Also, they were practically involved in the operation of inter-state commercial transport businesses ranging from fleet of passenger buses to haulage truck services.

The study field report does not indicate a significant level of outreach with respect to client structure in terms of women participation. The client structure of the selected MFBs in the study area is skewed significantly in favour of the male borrowers. Some staff of these MFBs pointed out that there are no discriminatory tendencies in granting approval to any loan application. These staff members were of the opinion that some other socio-cultural reasons (e.g. religious beliefs, customary social status of women, etc) could best explain the skewed structure of clients in favour of the males in the study area. The percentage of the target population served by the selected MFBs is not significant in relation to the population of the areas they are located. With respect to target clients, business activity focus and type of financial services offered, the data from the field report indicated a significant level of outreach. The field report showed that the degree of involvement in a wide range of nonfinancial activities alongside the primary activity of providing credit by some of the selected MFBs created a measure of distraction that led to mission drift. Most of the nonfinancial activities are quite risky involving heavy cash investment, such that their failure completely crippled the lending capacity of the MFBs involved and brought about insolvency.

For all the five selected MFBs in the study area the data on volume of loans outstanding, number of savings account and number of active borrowers indicated a significant level of outreach from the general point of view.

The selected MFBs, judging by the data on number and value of savings accounts provided in the study field report appeared to have done reasonably well. However, this study notes that most of the selected MFBs have it as one of the requirements for obtaining a loan; that a savings account must be opened with it in the beneficiaries name or business. A number of such savings accounts became dormant as soon as business failure occurred.

It is interesting to note that critical to outreach is the matter of branch or village post/units. The study field report showed that the MFBs could not effectively reach most of the economically active poorer rural populace who need small loans to leverage their micro business activities. Increasing the number of staff with a single branch, as it was the case with some of the selected MFBs; led to increase in overhead cost in terms of salaries and

wages. This limited access to microfinance credit by a vast majority of the economically active rural poor.

b) Performance Indicator: Impact of Loans on the Poverty Level of Borrowers.

i) Accomplishment after Loan

The significant accomplishments of the sample borrowers of the selected five MFBs based on the report of the field survey of the study area were payment of school fees for children, able to adequately feed family, built a small personal house, have personal savings and afford hospital bills. These results are significant for poverty alleviation in terms of access to education (educational poverty), changes in calorie in-take (nutritional poverty), access to accommodation (shelter poverty), accumulation of financial asset (own-asset poverty) and access to health (poverty in terms of health). Overall, the results showed that some levels of social and economic progress have been made.

ii) Impact of Loan on borrower's Business

Change in average monthly income takes the lead in the impact of loan on the borrowers' businesses in study area. This is significant for poverty alleviation. The field report also showed that some level of business expansion had taken place among the sample borrowers' businesses in the study area. The major expansion in businesses is in small holding farming. A number of businesses of the borrowers were no longer making profit, while a good number of the borrowers experienced business closures after the loan.

iii) Performance Indicator: Repeated Use of Loans

All the selected five microfinance banks in the study area were characterized by very low repeat loans and very high yearly drop-out rates. Low repeat loans and high drop-out rates are indicators of negative present net worth. This usually send signals to depositors to withdraw funds and switch to other financial services agencies such as conventional commercial banks or informal credit sources in the case of rural borrowers. With such performance by the selected five microfinance banks in the study area, rural poverty alleviation through the microfinance option may not be sustainable in Nigeria.

3. Financial Self-Sustainability of Microfinance Banks

Overall, the results of the standard SDI and the adjusted SDI for the selected microfinance banks in the study area during the four years under consideration (2006-2009) showed that they were not financially self-sustainable as at the end of 2009. The various standard SDI and adjusted SDI for each of the selected microfinance banks were very high which clearly indicated that they were not capable of replacing subsidized funds with market funds.

6.2 Conclusions

Information asymmetry grossly undermined the target access to credit products and services of the selected microfinance banks in the study area, leading to adverse selection problem. Consequently, there was a disconnection between the product and services of microfinance banks and poverty alleviation in the study area.

In terms of outreach, the percentage of the target population served by the selected MFBs and women participation were not significant in relation to the population of the areas they are located. The client structure of microfinance banks in the study area was skewed significantly in favour of male borrowers. There was a significant level of outreach with respect to target clients, business activity focus and type of financial services offered. For all the five selected MFBs in the study area there was a significant level of outreach in terms of volume of loans outstanding, number of savings account and number of active borrowers in the study area.

The significant accomplishments of the sample borrowers of the selected five MFBs in the study area are payment of school fees for children, ability to adequately feed family, built a small personal house, have personal savings and afford hospital bills. These results are significant for poverty alleviation in terms of access to education (educational poverty), changes in calorie in-take (nutritional poverty), access to accommodation (shelter poverty), accumulation of financial asset (own-asset poverty) and access to health (poverty in terms of health). Many of the economically active poor were not able to start new small businesses that constitute the engine of growth which sustain income string, employment generation,

wealth creation, asset build-up, etc as far as sustainable rural poverty alleviation is concerned.

Overall, the repeated use of loans by borrowers from the selected five microfinance banks in the study area were not significant for good performance in terms of generating gains to the borrower over time requisite for sustainable rural poverty alleviation.

The estimated standard SDI and the adjusted SDI for all the selected MFBs in the study area were significantly too high; indicating that the MFBs were not privately profitable and showed that their drive towards financial self-sustainability was unsuccessful and counter-productive. The drive towards financial self-sustainability led to a reduction in lending capacity as only few loans could be provided to few borrowers at prohibitive interest rates. This wiped out the gains of the few that borrowed, leaving them worse-off in poverty.

The findings of this study uphold the hypothesis that sustainable rural poverty alleviation does not depend on the achievement of financial self-sustainability by microfinance banks in Nigeria. Therefore, this study concludes that there is a disconnection between the operations and services of microfinance banks and rural poverty alleviation. Following from the results of the SDI for all the selected microfinance banks, the microfinance banks could not sustain themselves financially. Thus, microfinance as conceived and constituted presently cannot be used to alleviate rural poverty sustainably in Nigeria.

6.3 Policy Implications of the Findings

It is obvious from the field survey that the disconnection between the operations and services of microfinance institutions and rural poverty alleviation could be traced to the problem of poor corporate and governance structure. Policies should be directed to focus on addressing basic corporate governance requirements for microfinance with for-profit and social goals.

Given the results of the standard SDI and adjusted SDI which have shown that demand-led microfinance is not sustainable and consequently rural poverty alleviation is not sustainable; it is clear that credit may not be a sufficient but necessary condition for sustainable rural poverty alleviation. This is because there are other socio-economic factors and considerations that are critical to sustainable rural poverty alleviation. This study posits that even if the microfinance institutions were sustainable, rural poverty alleviation would still not be sustainable. This is in view of the fact that the framework for the demand-led microfinance policy failed to take into cognizance the different segments of the rural poor. Therefore, an alternative microfinance policy that would factor into the socio-economic welfare matrix, different segments of the rural poor becomes imperative.

6.4 Policy Recommendations

Based on the findings of the study, the following policy recommendations are put forward.

I) Corporate Structure and Governance

Microfinance banks are obviously institutions that combine a social mission that is focused to provide financial services to the low-income population with profitability objective that drives the institution to seek to achieve financial self-sustainability. The extent to which a microfinance bank seeks to maintain the dual focus of social goals and profitability is directly shaped by the corporate structure and governance framework by which it was established. To this end it is strongly recommended that a microfinance bank's corporate and governance structure should be based on both for-profit and social goals structure to be determined by the sources of capital prospective owners hope to represent. The implementation of this recommendation should be based on the following caveats:

- Willingness and capability of potential investors/owners to perform their duties responsibly
- Balance of ability and diversity of industry focus skills
- Commitment to the dual mission of microfinance
- Strict performance evaluation procedure.

II) Assets Portfolio Diversification

It is recommended that the asset portfolio of microfinance banks operating in the rural area should contain a pre-determined amount of off-farm activities such as small holding supermarket, GSM accessories retailing, petty retail trading, vulcanizers/mechanics, commercial taxi/bus transport system, Okada transport system, etc. This is expected to provide a wider assets portfolio base that could ensure sustained business services both for the MFB and the rural clients credit needs fundamental to sustained assets build-up for poverty exit.

III) Microfinance Loan Guarantee and Technical Support for Rural Borrowers

As a matter of policy this study recommends that along-side a credible loan Guarantor, only specialized skills, industry-focus personnel with bias for strategic discretion and business will to cope with the meticulous process of rural borrowers' personal and business information verification should be recruited by MFBs serving rural borrowers. This will go a long way to address the problem of high mortality rate of rural borrowers' businesses, repayment default, poor investment decision, poor or non-existent financial record and monitoring that often pose a formidable threat to sustainable rural poverty alleviation.

IV) Loan pricing and Risk Focus

Individual borrower negotiation as a single method of loan pricing is an indication of the imbalance between the social and profitability objectives; and it encourages arbitrage and rent seeking behavior which is detrimental to sustained assets build-up by rural borrowers for poverty exit. It is recommended as a matter of policy that loan pricing by MFBs operating in the rural area must be guided by tenor, loan amount, market indicators (by market indicator; the rural formal and informal financial market is primarily implied) and individual

negotiation. This is expected to generate a measure of efficiency in the allocation of productive capital to its varied uses as well as statutorily curtail arbitrage and rent seeking.

V) Women Participation in Institutional Microfinance

Women participation in institutional microfinance credit is very weak in the study area. These require pro active actions on the part of both the regulators and the MFBs to improve outreach both in terms of target client structure and target population coverage. This study recommends that as a matter of policy certain incentives structure (such as women board members and managers, women loan officers, etc) that are women-participation focused should be built into the corporate structure and governance; and credit guidelines of MFBs in rural areas. This would serve as a bargaining chip to allow women to interact with their folks and help them to access other opportunities other than financial empowerment available through institutional microfinance such as skills trainings or functional education and health inputs.

VI) Alternative Microfinance Model and Approach

That rural MFBs are not privately profitable and therefore not financially self-sustainable; also, that Loan repeat by borrowers are not significant for generating surplus for sustained poverty alleviation makes the urgent consideration of alternative microfinance models and or approaches best suited to Nigerian rural area, that would ensure the survival of MFBs in the rural areas in order to bring about their profitability and keep balance with the desired social impact of rural poverty alleviation, an imperative. This study therefore advocates an alternative microfinance model termed SEGMENTED RURAL POOR MICROFINANCE MODEL. This model identifies the different segments of the rural poor. Note that there are various levels of the rural poor. In this model, the rural poor are categorized to fall into three segments of poverty namely the destitute poor (the homeless, landless, without food and skills, no income and beggars), the extreme poor (inadequate shelter, limited access to food and clothing, limited semi-skills) and the moderate poor (shelter, access to subsistence income but below the poverty line, economically active,

limited access to land, not able to adequately feed family, cannot afford education and hospital bills, etc). It is of critical importance to separate these segments, as well as others such as formerly poor and vulnerable non-poor; because each segment is faced with different circumstances, challenges and needs. Microfinance banks must therefore develop different approaches to reach or serve them. For instance, the rural destitute and the rural extreme poor are still outside the current scope of microfinance institutions. These groups of persons are left without any access to financial means for some obvious reasons as self-exclusion from fear of incurring debt, exclusion from loan groups unwilling to take on a potentially risky member, or exclusion from MFBs so they can better control their loan portfolio and default rates. But it is obvious that the most important reason why these segment are without access to credit or other financial products is that most of the segments members need other forms of assistance in their daily lives such as food, shelter, training for skills and education, access to health care before they can make any sustainable progress with a microfinance loan.

The SEGMENTED RURAL POOR MICROFINANCE MODEL (SRPMM) recognizes this critical success factors and takes them into account in the design of approach to leverage microfinance as a rural poverty alleviation tool. In view of this, SRPMM proposes the MICRO-RETAIL ENTERPRISE (MRE) as an approach that focuses on the first two segments. Generally, the fundamentals of SRPMM presuppose that the nature and size of loan to any of the three segments should be different from the generic institutional microfinance loans. For instance a typical loan to the destitute and extreme poor segments must not be in excess of #5,000.00 which should be collateral and interest free; with flexible repayment installments that will depend on the beneficiary's convenience and earning capacity. Arrangement could be made with local consumer items distribution shops to provide items of the loan amount equivalent to sell and make installment repayments to the shop.

Another complimentary approach of the SRPMM is LINKING FOOD AND TRAINING WITH MICROFINANCE (LFTM). This essentially has to do with a collaborative efforts and partnership between MFBs and local government authorities of the communities where MFBs operates. Rural clients in the first two segments are expected to

receive minimum quantities of basic food items such as free grains, free skills training and interest free microloans for a medium range time period. This is expected to graduate beneficiaries from being destitute and absolute poverty to microfinance clients who may not slip back into requiring further relief assistance.

SRPMM also, proposes the INTEGRATED SERVICES APPROACH (ISA). MFBs in the rural area mainly serve the moderate poor segment. This comprises of individuals living below poverty line who earn less than $1 per day. Unlike the first two segments, individuals within the moderate poor segment may not necessarily worry much about the basic necessities of life such as food, water, shelter, and clothing throughout the year; yet they may still be vulnerable to adverse effects that could impact on their income levels such as ill health, lack of adequate education and specialized production skills. The ISA will focus on the provision of rural moderate poor clients with limited Essential Health Care alongside microfinance loans. This is in recognition of the fact that health is important for the well-being of clients and for building a strong support and solidarity network among rural moderate poor clients of MFBs. This could help to increase productivity and consequently enhance income flow that will encourage repayment. ISA is also focused to integrate microfinance with educating individuals to become self sustaining and possess the required adaptability to best practices applications especially in farm related and off-farm income activities. Formal education is expected to consist of four modules: Reading and Writing skills, Business Practices Skills, Reproductive Health and Environmental Protection. These integrated services, coupled with diversified microfinance products is expected to provide the rural moderate poor with increased knowledge, enhance confidence and provide basic tools needed to surmount all dimensions of poverty confronting the economically active rural poor.

This study believes that the adoption and full implementation of the SRPMM will help to ensure the survival of MFBs in the rural areas; bring about their profitability and keep balance with the desired social impact of sustainable rural poverty alleviation in Nigeria.

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Appendix I:

Accomplishment after Loan, Impact of Loan on Borrower's Business, Expectations about future Repeat of Loan and Disincentives to Borrowers of Microfinance Banks.

Accomplishment after taking the Loan							
Accomplishment/MFB	**GWA**	**MKR**	**KUD**	**ZAR**	**SAB**	**f**	**%**
Pay school fees for children	13	26	5	20	8	72	28.8
Built a small personal house	6	12	11	2	2	33	13.2
Afford hospital bills	3	7	8	5	2	25	10.0
Acquired bicycle/motorcycle/car	5	0	8	4	0	17	6.8
Have personal savings	3	1	4	1	20	29	11.6
Change from pit latrine to lavatory	3	0	2	2	2	9	3.6
Start a small business	2	4	3	1	3	13	5.2
Able to adequately feed family	15	0	9	15	13	52	20.8
Total	**50**	**50**	**50**	**50**	**50**	**250**	**100**
Impact of Loan on borrower's Business							
Impact/MFB	**GWA**	**MKR**	**KUD**	**ZAR**	**SAB**	**f**	**%**
Change in average monthly income	16	20	16	39	23	114	45.6
In business but not making profit	4	12	2	6	14	38	15.2
No Longer in business	5	12	10	2	3	32	12.8
Business expansion	13	6	17	3	9	48	19.2
No change	12	0	5	0	1	18	7.2
Total	**50**	**50**	**50**	**50**	**50**	**250**	**100**
Expectations about future Repeat of Loan							
Expectation/MFB	**GWA**	**MKR**	**KUD**	**ZAR**	**SAB**	**f**	**%**
Same amount	12	20	11	3	4	50	20.0
Increased amount	25	19	20	40	35	139	55.6
Lower amount	2	5	6	3	1	17	6.8
Does not wish to repeat	11	6	13	4	10	44	17.6
Total	**50**	**50**	**50**	**50**	**50**	**250**	**100**
Disincentives to borrower's of Microfinance Banks							
Disincentives/MFB	**GWA**	**MKR**	**KUD**	**ZAR**	**SAB**	**f**	**%**
Too much bank charges	4	18	4	2	9	37	14.8
Tedious process of loan documentation	6	7	9	6	8	36	14.4
High interest rate	14	14	11	8	6	52	20.8
MFBs are too risk averse to the poor	9	8	11	16	13	57	22.8
Inflexibility of mfbs to the prob. of borrowers	7	2	10	8	9	36	14.4
Poor branch network	10	2	5	10	5	32	12.8
Total	**50**	**50**	**50**	**50**	**50**	**250**	**100**

Source: Field Survey, 2010.

Appendix II:

Borrowers' Level of satisfaction with the services of Microfinance Banks.

Microfinance Banks	GWA			MKR			KUD			ZAR			SAB			Frequency			%		
Services of MFBs/Level of satisfaction	Sa	Po	Un	Sa	Po	Un	Sa	Po	Un	Sa	Po	Un	Sa	Po	Un	Sa	Po	Un	Sa	Po	Un
Range of credit products offered by MFBs	28	18	4	13	31	6	29	17	4	47	3	0	23	15	12	140	84	26	56.0	33.6	10.4
Quality of services provided	30	15	5	10	32	8	31	7	12	20	18	12	30	16	4	121	88	41	48.4	35.2	16.4
Interest rate	19	16	15	14	26	10	14	2	34	17	5	28	24	15	11	88	64	98	35.2	25.6	39.2
Repayment schedule	21	20	9	9	35	6	12	8	30	25	14	11	29	14	7	96	91	63	38.4	36.4	25.2
Loan monitory and technical support	12	8	30	14	32	4	11	11	28	5	10	35	10	16	24	52	77	121	20.8	30.8	48.4
Ease and cost of doing business with MFB	10	35	5	9	32	9	21	9	20	8	14	28	9	13	28	57	103	90	22.8	41.2	36.0

Source: Field Survey, 2010

Note: Sa = Satisfactory; Po = Poor; Un = Unsatisfactory

Appendix III: Sample Questionnaire I

(MFB)

Microfinance for Sustainable Rural Poverty Alleviation in Nigeria.

Dear Respondent,

This questionnaire is purely for academic purpose. It is specifically designed for a Doctorate degree research programme (PhD) in the Department of Economics, Ahmadu Bello University; Zaria. Your response shall be treated with utmost sense of responsibility, respect and the highest level of confidentiality. At your discretion, anonymity in terms of individual and institutional identity is guaranteed.

Please, your sincere response is highly solicited; while I thank you most sincerely for your valued co-operation.

S.J. Mohammed.

PERFORMANCE INDICATOR: OUTREACH: LOANS AND DEPOSITS: 2006 - 2009

MICROFINANCE INSTITUTION CODE_____

LOCATION/L.G.A_____

INDICATOR	**2006**	**2007**	**2008**	**2009**
Volume of loans outstanding				
Annual Real Growth Rate of Assets in %				
Number of loans				
Minimum loan size				
Average outstanding loan				
Number of Savings Accounts				
Value of Savings Accounts				
Value of Average Savings Account				
Volume of savings				

PERFORMANCE INDICATOR: OUTREACH

MICROFINANCE INSTITUTION CODE_____ LOCATION/L.G.A_____

INDICATOR	
Target coverage	
Target clients	
Activity focus	
Number of borrowers	
Number of staff	
Town/semi-urban branches	
Village posts/units	
Type of financial services offered	
Structure of clients: Male/Female	Male: Female:
Percentage of total rural population served	

CODE_____ LOCATION/L.G.A _____

Line	Year Ending December 31	Source	2006	2007	2008	2009
a	Opportunity cost on equity	Data				
b	Rate of change in loan portfolio	Data				
c	Start equity	Data				
d	End equity	Data				
e	Tax rate	Data				
f	Revenue from lending	Data				
g	Expenditure on interest on soft debt	Data				
h	Average soft debt	Data				
i	Opportunity cost of soft debt	Data				
j	Direct grants	Data				
k	Paid-in capital (public)	Data				
l	Paid-in capital (private)	Data				
m	Change in reserves	Data				
n	Revenue grants	Data				
o	Discount on operating expenses	Data				
p	Accounting profit	Data				
q	Nominal yield on lending in a year	Data				
r	Inflation rate (weighted average)	Data				

Note: Operational definition of variables is on the next page

a) Opportunity cost on equity= Present market interest rate on total value of equity
b) Rate of change in loan portfolio= value of portfolio in current year divided by the value of portfolio in previous year multiplied by 100
c) Start equity= value of operating capital at the beginning of the year
d) End equity= value of operating capital at the end of the year
e) Tax rate= tax rate paid on total earning
f) Revenue from lending= pool of earning accruable from lending to borrowers
g) Expense for interest on soft debt= rate paid for soft debt (soft debt defined as funds obtained at less than market rate)
h) Average soft debt= total soft debt divided by 12 months
i) Opportunity cost of soft debt= this is the market rate of interest on the value of soft debt
j) Direct grants= cash gifts or donations that are not necessarily in exchange for shares and could include gift items such as computers, office equipment, cars, etc
k) Paid-in capital (public)= this is capital subscription by members of the public
l) Paid-in capital (private)= this is capital subscription by private placement for selected individuals or corporate organizations
m) Change in reserves= measured in terms of the percentage directed by the monetary authorities
n) Revenue grants= cash gifts or soft loans that are converted into shares thus forms part of equity
o) Discount on operating expenses= costs that were absorbed by private and public shareholders not recorded ass formal expenses
p) Accounting profit= this is profit that does not take into account the cost of own resources e.g. it excludes the cost of office rent in the accounting year if own building is used
q) Nominal yield on lending in a year= this yield is computed without taking into account the rate of inflation
r) Inflation rate (weighed average)= this is the general rate of inflation for the year under review

MICROFINANCE INSTITUTION CODE_____ page 5
LOCATION/L.G.A_____

INFORMATION ON REPEATED USE OF LOANS BY POOR CUSTOMERS

S/No.	YEAR ENDING DECEMBER 31	2006	2007	2008	2009
1	Value of New Loans in year				
2	Number of new Borrowers in year				
3	Value of loans outstanding at year				
4	Number of repeat loans in year				

PERFORMANCE INDICATOR: REPEATED USE OF LOANS BY POOR CUSTOMERS (page 6)

MICROFINANCE INSTITUTION CODE_____LOCATION/L.G.A_____

LINE	YEAR ENDING DECEMBER 31		2006	2007	2008	2009
A	No. of New loans in year					
B	No. of new loans since birth					
C	No. of repeat loans in year					
D	No. of repeat loans since birth					
E	No. of loans outstanding at year end					
F	Drop-out rate in year					
G	Drop-out rate since birth					
H	Loans per borrower since birth					

Appendix IV: Sample Questionnaire II (MFB)

Microfinance for Sustainable Rural Poverty Alleviation in Nigeria.

Dear Respondent,

This questionnaire is purely for academic purpose. It is specifically designed for a Doctorate degree research programme (PhD) in the Department of Economics, Ahmadu Bello University; Zaria. Your response shall be treated with utmost sense of responsibility, respect and the highest level of confidentiality. At your discretion, anonymity in terms of individual and institutional identity is guaranteed.

Please, your sincere response is highly solicited; while I thank you most sincerely for your valued co-operation.

S.J. Mohammed.

Objective: Evaluation of the operations and services of Microfinance Institutions in Nigeria.

1. When did you commence operations as a microfinance bank? (tick)
   ☐ 2006 ☐ 2007 ☐ 2008 ☐ 2009

2. Which of the ownership structure below is applicable to your bank? (tick)
   ☐ Sole proprietorship ☐ Partnership ☐ Limited Liability ☐ Public Liability Company ☐ others (specify) ----------

3. Who are your target business beneficiaries? (please select)
   ☐ Small holding farmers

☐ Petty traders

☐ Farm produce merchants (page 2)

☐ Vulcanizers/Motor mechanics

☐ GSM accessories sellers

☐ Taxi/bus drivers

☐ Supermarket shops

☐ Commercial farmers

☐ Manufacturing activities

☐ Services related businesses

☐ Others (specify) ----------

4. What are your sources of funds? (please select)

☐Borrowing from commercial banks ☐Grants from CBN ☐Direct grants from government☐ Private donors ☐ Share holders' funds

☐Others (specify) ----------

5. What is the range of facilities or products offered by your bank? (please select)

☐Small loans☐ Large loans☐Savings opportunities☐ Insurance

☐ Money transfer☐ Foreign exchange transaction ☐others (specify) ----------

6. What are the requirements for obtaining a loan from your bank? (please select)

☐ Cash-in-account☐ Landed property ☐statement of financial accounts

☐Certificate of occupancy ☐Guarantor ☐ Level of education

☐others (specify) ----------

7. In what other way do you provide loans apart from cash? (please select)

☐Inputs ☐ICT ☐Technical support☐Client training

☐Consultancy☐others (specify) --------- (page 3)

8. What is the minimum amount you provide as loan in cash? (tick)

☐N5, 000-N7, 000 ☐N7, 500-N10, 000☐ N12, 000-N20, 000☐N25, 000-N50, 000 ☐N55, 000-N100, 000 ☐ N150, 000 and above

9. What are the reasons often advanced by your clients for their need of loan? (please select)

☐to be able to build assets

☐to purchase equipment/machineries

☐stabilize consumption

☐protect against risk

☐to grow small business

☐subsistence farming

☐commercial farming

☐buying and selling business

☐others (specify) ----------

10. What problems have you encountered in the course of providing services to your clients? (please select)

☐ High rate of repayment default ☐ High over head cost ☐Difficulty in loan monitoring☐ High clients' business mortality ☐ Growing incidence of nonperforming loans☐ Instability in monetary policy☐ others (specify) ---------

11. What is the tenure of loans? (tick) (page 4)

☐Less than three months

☐Three months

☐Six months

☐One year

☐Above one year

12. What is the rate of interest on the above tenure? (Please specify)

☐Less than three months ---------- %

☐Three months ---------- %

☐Six months ----------%

☐One year ---------- %

☐Above one year ---------- %

13. What is the general rate of interest on any loan? (tick)

☐ 5%

☐ 7%

☐ 10%-12%

☐ 20% and above

14. Which of the following repayment condition do you apply? (tick)

☐Weekly installment repayment

☐Monthly installment repayment

☐Quarterly installment repayment (page 5)

☐Annual installment repayment

☐Single weekly repayment

☐Single monthly repayment

☐Single quarterly repayment

☐Single annual repayment

15. What method do you adopt for credit/loan pricing?

☐Market based

☐Tenure based

☐Monetary policy based

☐Individual customer negotiation

16. What is the determinant of your loan concentration in terms of:

i) Tenure

☐ Less than three months ☐ Three months

☐ Six months ☐ One year ☐ Above one year

ii) Business Activities

☐ Services related businesses ☐ Manufacturing activities

☐ Farm produce merchants ☐ Small holding farmers

☐ Petty traders ☐ Farm input sellers

☐ Others (specify) ----------

17. How many non-performing loans are there in your credit portfolio?

(Please specify) Number ----------

Value N----------

18. Which of the credit methodology below do you use? (tick) (page 6)

☐ Group lending ☐ Individual lending ☐Co-operative lending

☐Use of village money lenders ☐ others (specify) ----------

19. Please, provide the following information.

	2006	2007	2008	2009
Number of Staff				
Number of active borrowers				
Number of active loans				
Minimum loan size				
Borrower per loan officer				
No of savings accounts				
Average value of savings account				
Volume of savings				
Town/Semi-urban branches				
Village post/Units				
Portfolio at risk > 90 days				

Appendix V: Sample Questionnaire III **(page 1)**

(Customers)

Microfinance for Sustainable Rural Poverty Alleviation in Nigeria.

Dear Respondent,

This questionnaire is purely for academic purpose. It is specifically designed for a Doctorate degree research programme (PhD) in the Department of Economics, Ahmadu Bello University; Zaria. Your response shall be treated with utmost sense of responsibility, respect and the highest level of confidentiality. At your discretion, anonymity in terms of individual and institutional identity is guaranteed.

Please, your sincere response is highly solicited; while I thank you most sincerely for your valued co-operation.

S. J. Mohammed

REPEATED USE OF LOANS BY CUSTOMERS OF MICROFINANCE BANKS.

A. General Information

Please tick as appropriate

1. Sex: Male ☐ Female ☐

2. Marital Status: Married ☐ Single ☐

3. Age: 18-25 ☐ 26-30 ☐ 32-40 ☐ 41 and above ☐

4. Educational Qualification: Primary ☐ Secondary ☐ OND ☐ HND ☐

University Degree ☐

B. Nature of Business Activity (Please select)

☐ Vulcanizer

☐ Petty trading

☐ Small scale farming

☐ Commercial farming

☐ Motor/motor cycle mechanic

☐ Okada (motor cycle) express rider

☐ Buying and selling of farm produce

☐ Small holding Supermarkets

☐ Small scale Poultry farming

☐ Fish farming

☐ Photography

☐ Taxi/commercial bus operator

☐ GSM accessories kiosk

☐ Others (specify) ----------

1. What are the reasons why you needed a loan? (tick) (page 3)

☐Household consumption

☐To protect against farm risks

☐To start a small business

☐To purchase equipment

☐Small scale commercial farming

☐Subsistence farming

☐To repay debt

☐Others (specify) ----------

2. Which of the following range of credit product do you really need? (tick)
   ☐ Loans

   ☐ Savings opportunities

   ☐ Insurance

   ☐ Money transfer

   ☐ Others (specify) ----------

3. How much did you collect as loan?
   (please specify) N ----------

4. What did you use as collateral to collect the loan? (select)
   ☐ Certificate of occupancy

   ☐ Cultivated farm land

   ☐ Guarantor

   ☐ Landed property

   ☐ Collateral not required

   ☐ Others (specify)

5. How was the loan collected? (tick)
   ☐ Group loan

   ☐ Individual loan (page 4)

   ☐ Village money lender

   ☐ Co-operative society

   ☐ Others (specify) ----------

6. What is the duration of the loan? (tick)
   ☐ Less than three months

   ☐ Three months

   ☐ Six months

   ☐ One year

   ☐ Above one year

7. What was the rate of interest on the loan (tick)
   ☐ 5%

   ☐ 7%

   ☐10%-12%

   ☐20% and above

8. How do you consider the interest rate above? (tick)
   ☐ High

   ☐ Low

   ☐ Moderate

9. What was your total earning? (specify)
   ☐ Before the loan N ----------

   ☐ After the loan N ----------

10. How far have you gone with the loan repayment? (tick)

   ☐ Paid all

☐ Paid part (page 5)

☐ Paid nothing

11. What are the things you have been able to achieve since taking the loan? (please select)

☐ Pay school fees for children

☐ Built a small personal house

☐ Afford hospital bills

☐ Acquire a bicycle/motor cycle/motor car

☐ Have personal savings

☐ Change from pit latrine to lavatory

☐ Able to adequately feed family

☐ Others (specify)

12. What is the direct impact of the loan on your business? (Please select)

☐ Change in average monthly income

☐ In business but not making profit

☐ No longer in business

☐ Business expansion

☐ Others (specify) ----------

13. Would you like to repeat the loan in the same amount or increased amount? (tick)

☐ Same amount

☐ Increased amount

☐ Does not wish to repeat (page 6)

14. Which of the following most serves as a disincentive to you with Micro-Finance banks (please select)

☐ Too much bank charges

☐ Tedious process of loan documentation

☐ High interest rate

☐ MFBs are too risk averse to the poor

☐ Inflexibility of MFBs to the problem of small borrowers

15. Customers' satisfaction with the services of Microfinance Banks (select)

i) Range of credit products offered
☐ Satisfactory ☐ Poor ☐ Unsatisfactory

ii) Quality of services provided
☐ Satisfactory ☐ Poor ☐ Unsatisfactory

iii) Interest rate level
☐ Satisfactory ☐ Low ☐ High

iv) Repayment Schedule
☐ Satisfactory ☐ Tight ☐ Unsatisfactory

v) Loan monitory and Technical support
☐ Satisfactory ☐ Poor ☐ Unsatisfactory

vi) Ease and cost of doing business with Microfinance Bank

☐ Satisfactory ☐ Poor ☐ Unsatisfactory